CHAPTER 1200-3-15
EMERGENCY EPISODE REQUIREMENTS

1200-3-15-.01 PURPOSE

It is the purpose of this Chapter to establish criteria so as to prevent undesirable levels of air contaminants during adverse meteorological conditions. Primary responsibility to initiate activity required by this Chapter during stagnant atmospheric periods rests with the Technical Secretary according to Tennessee Code Annotated, Section 68-25-105.

Authority: *T.C.A. Section 68-25-105. Administrative History. Original Rule certified June 7, 1974. Amended effective February 9, 1977*

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1200-3-15-.02 EPISODE CRITERIA

(1) Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist when the Technical Secretary determines that the accumulation of air pollutants 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 Technical Secretary will be guided by the criteria in the remaining paragraphs of this rule.

(2) **"AIR POLLUTION FORECAST"**: An Internal watch by the Division of Air Pollution Control shall be actuated by a National Weather Service advisory that Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric conditions.

(3) **"AIR POLLUTION ALERT"**: The Alert level is that concentration of pollutants at which emissions reductions must begin. An Alert will be declared when any one of the following levels is reached at any monitoring site:

(a) SO_2-800 ug/m^3 (0.3 ppm), 24-hr. average.

(b) PM_{10}-350 ug/m^3, 24-hour average.

(c) Reserved

(d) CO--17 mg/m^3 (15 ppm), 8-hour average.

(e) Ozone (O_3) -- 400 ug/m^3 (0.2 ppm) -- 1 hr. average.

(f) NO_2--1130 ug/m^3 (0.6 ppm), 1-hr. average; 282 ug/m^3 (0.15 ppm), 24-hour average.

And meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase unless control actions are taken, or in the case of ozone, the situation is likely to reoccur within the next 24 hours unless control actions are taken.

(4) **"AIR POLLUTION WARNING"**: The 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 the monitoring site:

(a) SO_2 - 1600 ug/m^3 (0.6 ppm), 24-hr average.

(b) PM_{10} - 420 ug/m^3, 24-hour average.

(c) Reserved

(d) CO-34 mg/m^3 (30 ppm), 8-hr. average.

(e) Ozone (O_3) - 800 ug/m^3 (0.4 ppm), 1-hr. average.

(f) NO - 2,260 ug/m^3 (1.2 ppm)--1-hr. average; 565 ug/m^3 (0.3 ppm), 24-hr. average

And meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase unless control actions are taken, or in the case of ozone, the situation is likely to reoccur within the next 24 hours unless control actions are taken.

(5) **"AIR POLLUTION EMERGENCY"**: The emergency level indicates that air quality is continuing to degrade to a level which could cause an unreasonable risk to public health 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:

(a) SO_2-2, 100 ug/m^3 3 (0l8 ppm), 24-hr. average.

(b) PM_{10} - 500 ug/m^3, 24-hour average.

(c) Reserved

(d) CO-46 mg/m^3 (40 ppm), 8-hr. average.

(e) Ozone (O^3) - 1,000 ug/m^3 (0.5 ppm), 1-hr. average.

(f) NO_2--3,000 ug/m^3 (1.6 ppm) 1-hr. average; 750 ug/m^3 (0.4 ppm), 24-hr. average.

And meteorological conditions are such that this condition can be expected to continue for twelve (12) or more hours, or in the case of ozone, the situation is likely to reoccur within the next 24 hours unless control actions are taken.

(6) **"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.

Authority: *T.C.A. 68-201-105 and T.C.A. 4-5-202. Administrative History. Original Rule certified June 7, 1974. Amended effective February 9, 1977. Amended effective November 14, 1994.*

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1200-3-15-.03 REQUIRED EMISSIONS REDUCTIONS

(1) When the Technical Secretary has declared that an air pollution alert, an air pollution warning, or an air pollution emergency exists, all persons must follow the requirements for that episode level as outlined in Tables 1, 2, or 3 or the air pollution episode emissions reduction plan approved in accordance with paragraphs (2), (3), (4), (5) or (6) of this rule. If a plan has been approved, emissions must be reduced at that level or lower.

(2) Major sources in or significantly impacting a nonattainment area must submit to the Technical Secretary an acceptable air pollution episode emissions reduction plan to be followed during the alert, warning, and emergency levels of an air pollution episode. The term "Major source" as used above means any of the following types of stationary sources of air pollutants which emit, or have the potential to emit, one hundred tons per year or more of any air pollutant from the following types of stationary sources: fossil fuel fired steam electric plants of more than two hundred fifty million British thermal units per hour heat input, coal cleaning plants (thermal dryers), draft pulp mills, Portland Cement plants, primary zinc smelters, iron and steel mill plants, primary copper smelters, municipal incinerators capable of charging more than two hundred and fifty tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, coke oven batteries, sulfur plants, phosphate rock processing plants, sulfur recovery plants, carbon black plants, (furniture process) primary lead smelters, fuel conversion plants, sintering plants, secondary metal production facilities, chemical process plants, fossil-fuel boilers of more than two hundred and fifty million British thermal units per hour heat input, petroleum storage and transfer facilities with a capacity exceeding three hundred thousand barrels, taconite ore processing facilities, glass fiber processing plants, charcoal production facilities. Such term also includes any other sources with the potential to emit two hundred and fifty tons per year or more of any air pollutant. Only the pollutants for which the area is nonattainment are considered in determining whether a source is a major source.

(3) Any source subject to paragraph (2) above must submit a revised air pollution episode emissions reduction plan at the request of the Technical Secretary should the nature and quantity of the source's emissions change or the original plan be deemed inadequate.

(4) The owners and operators of other air contaminant sources, having a smaller potential for emissions than one hundred tons per year, may file an acceptable air pollution episode emissions reduction plan for use during an air pollution episode if they feel they can contribute through other measures as much or more benefit to the reduction of the health hazard in the area at a much lower cost to themselves.

(5) Where specific actions may be necessary to relieve a health hazard by sources emitting at lower levels than that indicated in paragraph (2) above the Technical Secretary may require the submittal of an acceptable plan from the owners or operators of that source.

The owner or operator will have thirty (30) days to submit the plan, once it has been required.

(6) If the owners or operators of any source required to have an approved air pollution episode emissions reduction plan on file with the Technical Secretary by paragraphs (2), (3), or (5) above, fails to submit an approvable plan to the Technical Secretary, the Technical Secretary may schedule an Administrative Hearing to set an approved air pollution episode emissions reduction plan for that air pollution source.

TABLE 1

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 12:00 noon and 4:00 p.m.

3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 noon and 4:00 p.m.

4. The Tennessee Air Pollution Control Division encourages persons operating motor vehicles to eliminate all unnecessary operation.

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 reduction by generating facilities	a. Substantial utilization of fuels having low ash and sulfur content. b. Maximum utilization of mid-day (12:00 p.m. to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.
2. Coal and oil-fired process steam generating facilities	a. Substantial reduction by utilization of fuels having low ash and sulfur content. b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Substantial reduction of steam load demands consistent with continuing plant operations.
3. Manufacturing industries of the following classifications: Primary Metals Industry	a. Substantial reduction of air contaminants from contaminants from manufacturing operations by curtailing, postponing, or deferring production and all operations. b. Maximum reduction by deferring trace waste disposal

Petroleum Refining Operations		operations which emit solid particles, gases, vapors. or malodorous substance.
Chemical Industries	c.	Maximum reduction of heat load demands for processing.
Paper and Allied Products	d.	Maximum utilization of mid-day (12:00 noon to 4:00 p.m.)
Grain Industry		atmospheric turbulence for boiler lancing or soot blowing.

TABLE 2

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 fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 noon and 4:00 p.m.

4. The Tennessee Air Pollution Control Division encourages persons operating motor vehicles to reduce operations by the use of car pools and increase use of public transportation and the elimination of unnecessary operation.

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 Level
1. Coal or oil-fired electric power generating facilities	a. Maximum reduction by utilization of fuels having lowest ash and sulfur content.

b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

c. Maximum reduction by diverting electric power generation to facilities outside of Warning Area.

2.	steam generating facilities	Coal and oil-fired process	a. Maximum reduction by utilization of fuels having the lowest ash and sulfur content. b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Making ready for use a plan of action to be taken if an emergency develops.
3.	require considerable lead time for shut-down including the following classifications: Petroleum Refining Chemical Industries Primary Metal Industries Glass Industry	Manufacturing industries which economic operation.	a. Maximum reduction if air contaminants from manufacturing operations if necessary, assuming reasonable hardship by postponing production and allied b. Maximum reduction by deferring which emit solid particles, gases, vapors, or malodorous substances. c. Maximum reduction of heat load demands for processing. d. Maximum utilization of mid-day (12:00 noon to 4:00 pm) Paper and Allied Products atmospheric turbulence for boiler lancing and soot blowing.
4.	require relatively short lead	Manufacturing industries which	a. Elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing, or deferring

time for shut-down including production and allied operations to the extent possible
the following classifications: without causing injury to persons or damage.

Primary Metal Industries

b. Elimination of air contaminants from trade waste disposal

Chemical Industries processes which emit solid particulates, gases, vapors, or malodorous substances.

Mineral Processing Industries

c. Maximum reduction of heat load demands for processing.

Grain Industry

d. Maximum utilization of mid-day (12:00 noon to 4:00 pm) atmospheric turbulence for boiler lancing and soot blowing.

TABLE 3

EMISSION REDUCTION PLANS

EMERGENCY LEVELS

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 non-metallic minerals

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

   c. All air contaminant sources except those required to have in force an air pollution emergency plan.

4. Any commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their

operations 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 Tennessee Air Pollution Control Division encourages the users of motor vehicles to cease usage except in emergencies.

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 sulfur and ash content.
	b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.
	c. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
2. Coal and oil-fired process demands to steam generating facilities.	a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.
	b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
	c. Taking the action called for in the emergency plan.
3. Manufacturing industries of the following classifications: Primary Metals Industries	a. Elimination of air contaminants 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.

Petroleum Refining	b. Elimination of air contaminants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances.
Chemical Industries	
Grain Industry	c. Maximum reduction of heat load demands for processing.
Paper and Allied Products	d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

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