## **36.0 EMERGENCY REGULATIONS**

# 36.1 Episode Criteria

The pollutant concentrations in the ambient air which would trigger these control actions were selected primarily from expected changes in air quality that would result from accumulation and dispersal processes acting at the same time during a period of continued stagnation. The episode air quality criteria are presented below:

- A. Air Pollution Forecast: An internal watch by the Department of Air pollution Control shall be actuated by a National Weather Service Advisory that an Atmospheric Stagnation Advisory is in effect or the equivalent forecast of stagnant atmospheric condition.
- B. Alert: The alert level is that concentration of pollutants at which first stage control actions are to begin. An alert will be declared when any one of the following levels is reached at any monitoring site:

Sulfur Dioxide (S0<sub>2</sub>) - 800 ug/m<sup>3</sup> (0.3 ppm), 24-hour average

PM  $_{10}$  - 350 ug/m<sup>3</sup>, 24-hour average

(Reserved)

Carbon Monoxide (CO) - 17 mg/m<sup>3</sup> (15 ppm), 8-hour average

Oxidant  $(O_3)$  -  $400 \text{ ug/m}^3$  (0.2 ppm), 1 hour average

Nitrogen Dioxide (NO<sub>2</sub>) - 1,130ug/m<sup>3</sup> (0.6 ppm), 1-hour average; 282 ug/m<sup>3</sup> (0.15 ppm), 24-hour average

and meteorological conditions are such that the pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase unless control actions are taken.

C. 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 any monitoring site:

Sulfur Dioxide (S0<sub>2</sub>) - 1,600 ug/m<sup>3</sup> (0.6 ppm), 24-hour average

PM<sub>10</sub> - 420 ug/m<sup>3</sup>, 24-hour average

(Reserved)

Carbon Monoxide (CO) - 34 mg/m<sup>3</sup> (30 ppm), 8-hour average

Oxidant (O<sub>3</sub>) - 800 ug/m<sup>3</sup> (0.4 ppm), 1 hour average

Nitrogen Dioxide (NO<sub>2</sub>) - 2,260 ug/m<sup>3</sup> (1.2 ppm), 1-hour average; 565 ug/m<sup>3</sup> (0.3 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.

D. Emergency: The emergency level indicates that air quality is continuing to degrade toward a level of significant harm to the health of persons 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:

Sulfur Dioxide (S0<sub>2</sub>) - 2,100 ug/m<sup>3</sup> (0.8 ppm), 24-hour average

 $PM_{10}$  - 500 ug/m<sup>3</sup>, 24 hour-average

(Reserved)

Carbon Monoxide (CO) - 46 mg/m<sup>3</sup> (40 ppm), 8-hour average

Oxidant  $(O_3)$  - 1,200 ug/m<sup>3</sup> (0.6 ppm), 1-hour average

Nitrogen Dioxide ( $NO_2$ ) - 3,000 ug/m³ (1.6 ppm), 1-hour average; 750 ug/m³ (0.4 ppm), 24-hour average

and meteorological conditions are such that this condition can be expected to continue for twelve (12) or more hours.

- 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 lowest status will be assumed.
- 36.2 Emission Reduction Plans Alert Level
  - A. General

- 1. There shall be no open burning by any persons.
- 2. The use of incinerators shall not be permitted.
- 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. Persons operating motor vehicles should eliminate all unnecessary operation.

## 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.

#### 1. Source of Air Pollution

Coal or oil-fired electric power generating facilities.

#### Control Action:

- 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 by diverting electric power generation to facilities outside of alert area.

#### 2. Source of Air Pollution

Coal and oil-fired process steam generating facilities.

#### Control Action:

- 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. Source of Air Pollution

Manufacturing industries of the following classifications:

Primary metal industry Chemical industries Paper and allied products Petroleum refining operations Mineral processing industries Grain industry

#### Control Action:

- a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and all operations.
- b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substance.
- c. Maximum reduction of heat load demands for processing.
- d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

## 36.3 Emission Reduction Plans - Warning Levels

## A. General

- 1. There shall be no open burning by any person.
- 2. The use of incinerators shall not be permitted.
- 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. Persons operating motor vehicles must reduce operations by the use of car pools, increase use of public transportation, and the elimination of unnecessary operation.

#### 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.

# 1. Source of Air Pollution

Coal or oil-fired electric power generating facilities.

## Control Action:

- 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. Source of Air Pollution

Coal and oil-fired process steam generating facilities.

#### Control Action

- a. Maximum reduction by utilization of fuels having the lowest available ash and sulfur content.
- b. Maximum utilization of mid-day (12:00 noon to 4:0 0 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. Source of Air Pollution

Manufacturing industries which require considerable lead time for shutdown including the following classifications:

Petroleum refining Chemical industries Primary metals industry Glass Industries

## Paper and Allied Products

## Control Action

- a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operation.
- b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances.
- c. Maximum utilization of mid-day (12:00 noon to 4:00 p.m) atmospheric turbulence for boiler lancing or soot blowing.

## 4. Source of Air Pollution

Manufacturing industries which require relatively short lead times for shutdown including the following classifications:

Primary metals industries Chemical industries Mineral Processing Industries Grain Industry

## Control Action

- 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.
- b. Elimination of air contaminants from trade waste disposal processes 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 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

## 36.4 Emission Reduction Plans - Emergency Level

#### A. General

- 1. There shall be no open burning by any persons.
- 2. The use of incinerators shall not be permitted.
- 3. All places of employment described below shall immediately cease operation:
  - a. Mining and quarrying of non-metallic minerals.
  - b. All construction work except that which must proceed to avoid imminent physical harm.
  - c. All manufacturing establishments except those required to have in force an air pollution emergency plan.
  - d. Wholesale trade establishments; i.e., places of business primarily engaged in selling merchandise to retailers, to 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 excepting some 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, and real estate offices.
  - h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, and shoe repair shops.
  - i. Advertising offices; consumer credit reporting, adjustment and collection agencies; duplicating, addressing, blue-printing; photocopying, mailing, mailing lists and stenographic services; equipment rental services, commercial testing laboratories.

- j. Automobile repair, automobile services, garages.
- k. Establishments rendering amusement and recreation services including motion picture theaters.
- 1. 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 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 use of motor vehicles is prohibited except in emergencies with the approval of local and/or state police.

#### 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.

## 1. Source of Pollution

Coal or oil-fired electric power generating facilities.

## Control Action:

- 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 emergency area.

#### 2. Source of Air Pollution

Coal and oil-fired process steam generating facilities.

## Control Action:

- 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. Source of Air Pollution

Manufacturing industries of the following classifications:

Primary metals industries Chemical industry Grain industry Petroleum refining Mineral processing industries Paper and allied products

#### Control Action

- 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.
- b. Elimination of air contaminants from trade waste disposal processes 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 P.M.) atmospheric turbulence for boiler lancing and soot blowing.

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