Chapter 109: EMERGENCY EPISODE REGULATIONS

SUMMARY: This regulation is intended to prevent air pollution from reaching levels that would cause eminent and substantial harm to the health of persons, by restricting emissions during periods of air pollution emergencies.

1. **Scope.** This regulation shall apply in any region in which the ambient air quality reaches those levels defined in Section 2.

2. **Criteria.** Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Commissioner 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 the determination, the Commissioner will be guided by the following criteria:

   A. Air Pollution Forecast. An internal watch by the Department shall be actuated by a National Weather Service advisory that an Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnation atmospheric condition.

   B. Alert. The Alert level is that concentration of pollutants at which first stage control actions is to begin. An Alert will be declared by the Commissioner when:

   (1) Any one of the following levels is reached at any monitoring site:

   SO_2- ~~800 ug/m^3 (~~0.3<u>05</u> p~~.~~p~~.~~m~~.~~~~)~~, 24-hour average,

   PM_{10}- 35~~0~~<u>5</u> ug/m^3, 24-hour average,

   <u>PM2.5-150.5 ug/ m^3, 24-hour average</u>,

   CO- ~~17 mg/m3 (~~15.<u>5</u> p~~.~~p~~.~~m~~.~~~~)~~, 8-hour average,

   Ozone (0_3)- ~~400 ug/m$_3$ (~~0.2<u>05</u> p~~.~~p~~.~~m~~.~~~~)~~, 1-hour average,

   <u>Ozone (0_3)- 0.116 ppm, 8-hour average,</u>

   NO_2- ~~1130 ug/m^3 (~~0.65 p~~.~~p~~.~~m~~.~~~~)~~, 1-hour average, ~~282 ug/m^3 (0.15 p.p.m.), 24 hour average,~~ and

   (2) Meteorological conditions are such the pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase, or in the case of ozone, the situation is likely to reoccur within the next 24-hour 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 by the Commissioner when:

   (1) Any one of the following levels is reached at any monitoring site:

SO_2- ~~1,600 ug/m^3 (~~0.6~~0~~5 p~~.~~p~~.~~m~~.~~)~~, 24-hour average,

PM_{10}- 42~~0~~5 ug/m^3, 24-hour average,

PM2.5-250.5 ug/ m^3, 24-hour average,

CO- ~~34 mg/m^3 (~~30.5 p~~.~~p~~.~~m~~.~~)~~, 8-hour average,

Ozone (0_3)- ~~800 ug/m^3 (~~0.40~~5 ppm~~)~~, 1-hour average,

NO_2- ~~2,260 ug/m^3 (~~1.25 p~~.~~p~~.~~m~~.~~)~~ - 1-hour average~~; 565 ug/m^3 (0.3 p.p.m.), 24 hour average~~, and

(2) Meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase, or in the case of ozone, the situation is likely to reoccur within the next 24-hour 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 by the Commissioner when:

(1) Any one of the following levels is reached at any monitoring site:

SO_2~~– 2100 ug/m^3 (~~0.805 p~~.~~p~~.~~m~~.~~)~~, 24-hour average,

PM_{10}- 50~~0~~5 ug/m^3, 24-hour average,

PM2.5- 350.5 ug/ m^3, 24-hour average

CO- ~~46 mg/m^3 (~~40.5 p~~.~~p~~.~~m~~.~~)~~, 8-hour average,

Ozone (O_3~~) – 1,000 ug/m^3 (~~0.505 p~~.~~p.m.~~)~~, 1-hour average,

NO_2- ~~3,000 ug/m^3 (~~1.65 p~~.~~p~~.~~m~~.~~)~~, 1-hour average~~; 750 ug/m^3. (0.4 p.p.m.), 24-hour average~~, and

(2) Meteorological conditions are such that this condition can be expected to remain at the above levels for twelve (12) or more hours or increase, or in the case of ozone, the situation is likely to reoccur within the next 24-hour unless control actions are taken.

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.

3. Emission Reduction Plans

A. Forecast Stage. There is no specific emission reduction required during the forecast stage, however, the Department will monitor the atmospheric concentrations of the pollutants listed in Section 2 of this Chapter and the meteorological conditions on a 24-hour basis.

B. Air Pollution Alert. When the Commissioner declares an Air Pollution Alert, any person responsible for the operation of the sources listed below shall take all Air Pollution Alert actions as required for that source.

(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) Persons 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) Persons 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 this Alert Level.

(a) Coal or oil-fired electric power generating facilities.

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

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

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

(b) Coal and oil-fired process steam generating facilities.

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

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

(iii) 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.

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

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

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

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

C. **Air Pollution Warning** When the Commissioner declares an Air Pollution Warning, any person responsible for the operation of the sources listed below shall take all Air Pollution Warning actions as required for that source.

(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) 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.

(d) Persons 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 this Warning Level.

(a) Coal or oil-fired electric power generating facilities.

(i) Maximum reduction by utilization of fuels having lowest ash and sulfur content.

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

(iii) Maximum reduction by diverting electric power generation to facilities outside of Warning Area.

(b) Oil and oil-fired process steam generating facilities.

(i) Maximum reduction by utilization of fuels having lowest available ash and sulfur content.

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

(iii) Making ready for use a plan of action to be take if an emergency develops.

(c) 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.

(i) Maximum reduction of air contaminants from manufacturing operations .by, if necessary, assuming reasonable economic hardships by postponing production and allied operation.

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

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

(iv) 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.

(i) 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.

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

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

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

D. Air Pollution Emergency. When the Commissioner declares an Air Pollution Emergency, any person responsible for the operation of the sources listed below shall take all Air Pollution Emergency actions required for that source.

(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.

(i) Mining and quarrying of nonmetallic minerals.

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

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

(iv) 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.

(v) 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.

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

(vii) Banks, credit agencies other than banks, securities and commodity brokers, dealers, exchanges and services; offices of insurance carriers, agents brokers, real estate offices.

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

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

(x) Automobile repair, automobile services, garages.

(xi) Establishment rendering amusement and recreational services including motion picture theaters.

(xii) 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

(i) Maximum reduction by utilization of fuels .having lowest ash and sulfur content.

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

(iii) Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.

(b) Coal and oil-fired process steam generating facilities.

(i) Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.

(ii) 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.

(i) 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.

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

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

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

4. Notification of Malfunction or Breakdown. Any person operating equipment that is permitted to operate during an emergency episode, that malfunctions or breaks down causing any emission standard, regulation or standby emergency episode plan to be violated, shall notify the Department within 4 hours by telephone.

5. Additional Orders. In addition to the emission reduction and source curtailments required above, the Commissioner may, pursuant to 38 M.R.S.A., Section 347-A, issue such additional emergency orders as he deems necessary.

AUTHORITY: 38 M.R.S.A., Section 343-A

EFFECTIVE DATE: January 31, 1972 (Filed Oct. 10, 1979)
Amended: September 16, 1991

BASIS STATEMENT

The basis of the regulation is to protect public health by taking special emission reducing measures to limit the severity of ambient air pollution episodes.

BASIS STATEMENT FOR AMENDMENT OF AUGUST 14, 1991

The Department needed to revise this regulation to reflect the changes from measurement of total suspended particulate to fine particulate (PM_{10}) and to conform to the U. S. EPA model regulation found in 40 CFR Part 51, Appendix L. No comments were received on the proposed amendments.