

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

**REGULATIONS FOR THE PREVENTION OF AIR POLLUTION EMERGENCY
EPISODES**

APC-S-3

Amended April 25, 1988

SECTION 1. GENERAL

- (1) Authority. Pursuant to the authority granted by Section 49-17-17, Mississippi Code of 1972, Recompiled, the following regulations are adopted to prevent the excessive buildup of air pollutants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these pollutants on the health of persons.

SECTION 2. DEFINITIONS

- (1) "Air Standards." The maximum allowable concentration of any air contaminant existing in the ambient air during a stated period of time, as adopted by the Commission.
- (2) "Director." The Director of the Mississippi Department of Natural Resources.

SECTION 3. EPISODE CRITERIA

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:

- (a) "Air Pollution Forecast": An internal watch by the Office of 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 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:

- . The SO₂ level is equal to or greater than 0.3 ppm (800 µg/m³) for a 24-hour average.
 - . The PM₁₀ level is equal to or greater than 350 µg/m³ for a 24-hour average.
 - . The CO level is equal to or greater than 15 ppm (17 mg/m³) for an 8-hour average.
 - . The ozone (O₃) level is equal to or greater than 0.2 ppm (400 µg/m³) for 1-hour average.
 - . The NO₂ level is equal to or greater than 0.6 ppm (1130 µg/m³) for a 1-hour average or 0.15 ppm (282 µg/m³) for a 24-hour average.
 - . In addition to the levels listed for the above pollutants, 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-hours 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:
- . The SO₂ level is equal to or greater than 0.7 ppm (1600 µg/m³) for a 24-hour average.
 - . The PM₁₀ level is equal to or greater than 420 µg/m³ for a 24-hour average.
 - . The CO level is equal to or greater than 30 ppm (34 mg/m³) for an 8-hour average.
 - . The ozone (O₃) level is equal to or greater than 0.4 ppm (800 µg/m³) for a 1-hour average.
 - . The NO₂ level is equal to or greater than 1.2 ppm (2260 µg/m³) for a 1-hour average.
 - . In addition to the levels listed for the above pollutants, 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-hours unless control actions are taken.

- (d) "Emergency". The 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:
- . The SO₂ level is equal to or greater than 0.8 ppm (2100 µg/m³) for a 24-hour average.
 - . The PM₁₀ level is equal to or greater than 500 µg/m³ for a 24-hour average.
 - . The CO level is equal to or greater than 40 ppm (46 mg/m³) for an 8-hour average.
 - . The ozone (O₃) level is equal to or greater than 0.5 ppm (1000 µg/m³) for a 1-hour average.
 - . The NO₂ level is equal to or greater than 1.6 ppm (3000 µg/m³) for a 1-hour average or 0.4 ppm (750 µg/m³) for a 24-hour average.
 - . In addition to the levels listed for the above pollutants, 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-hours 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. At such time, the next lower status will be assumed.

SECTION 4. EMISSION CONTROL ACTION PROGRAMS

- (1) Any person responsible for the operation of a source of air contaminant which emits 0.25 tons per day or more of air contaminants for which air standards have been adopted shall prepare emission control action programs, consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the outdoor atmosphere during periods of an AIR POLLUTION ALERT, AIR POLLUTION WARNING, AND AIR POLLUTION EMERGENCY. Emission control action programs shall be designed to reduce or eliminate emissions of air contaminants into the outdoor atmosphere in accordance with the objectives set forth in Tables 1-5 which are made a part of this Section.
- (2) Emission control action programs as required under Section 4(1) shall be in writing and show the source of air contamination, the approximate amount of

reduction of contaminants, the approximate time required to effect the program, a brief description of the manner in which the reduction will be achieved during each stage of an air pollution episode, and such other information as the Commission shall deem pertinent.

- (3) During a condition of AIR POLLUTION ALERT, AIR POLLUTION WARNING, AND AIR POLLUTION EMERGENCY, emission control action programs as required by Section 4(1) shall be made available on the premises to any person authorized to enforce the provisions of the Commission's emergency procedure.
- (4) Emission control action programs as required by Section 4(1) shall be submitted to the Commission in accordance with procedures described in Regulation APC-S-2; such emission control action programs shall be subject to review and approval by the Commission. If, in the opinion of the Commission, such emission control action programs do not effectively carry out the objectives as set forth in Tables 1-5, the Commission may disapprove said emission control action programs, state its reason for disapproval and order the preparation of amended emission control action programs within the time period specified in the order. Any person aggrieved by the order requiring the preparation of a revised program is entitled to a hearing in accordance with Section 49-17-41, Mississippi Code of 1972. If the person responsible fails within the time period specified in the order to submit an amended emission control action program which in the opinion of the Commission meets the said objectives, the Commission may revise the emission control action program to cause it to meet these objectives. Such revised program will thereafter be the emission control action program which the person responsible will put into effect upon the issuance of an appropriate order by the Commission.

SECTION 5. EMERGENCY ORDERS

- (1) Following are emergency orders which may be appropriate for use by the Director upon his declaration that an Air Pollution Emergency Episode exists for any air contaminants for which air standards have been adopted:
 - (a) Air Pollution Alert
 1. Any one or combination of air contaminants:
 - a. Any person responsible for the operation of a source of air contaminants as set forth in Section 4(1) shall take all AIR POLLUTION ALERT actions as required for such source of air contamination, and shall particularly put into effect the emission control action programs for an AIR POLLUTION ALERT.

2. PM_{10}
 - 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 12:00 Noon and 4:00 P.M.
 - c. 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.
3. Nitrogen Oxides
 - 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 12:00 Noon and 4:00 P.M.

(b) Air Pollution Warning

1. Any one or combination of air contaminants
 - a. Any person responsible for the operation of a source of air contamination as set forth in Section 4(1) shall take all AIR POLLUTION WARNING actions as required for such source of air contamination; and shall particularly put into effect the emission control action programs for an AIR POLLUTION WARNING.
2. PM_{10}
 - 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. 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.
3. Nitrogen oxides

- 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) Air Pollution Emergency

1. Any one or combination of contaminants:

- a. Any person responsible for the operation of a source of air contamination as described in Section 4(1) shall take all AIR POLLUTION EMERGENCY actions as listed as required for such source of air contaminants; and shall particularly put into effect the emission control action programs for an AIR POLLUTION EMERGENCY.
- b. All manufacturing establishments except those included in Section 5(1)(c)1.a. will institute such action as will result in maximum reduction of air contaminants from their operations by ceasing, curtailing, or postponing operations which emit air contaminants to the extent possible without causing injury to persons or damage to equipment.
- c. All places of employment described below shall immediately cease operations:
 1. Mining and quarrying of non-metallic minerals.
 2. All contract construction work except that which must proceed to avoid physical harm.
 3. 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.
 4. All offices of local, county, and state government including authorities, joint meetings, and any other public body; except to the extent that such office must continue to operate in order to enforce the requirements of this order pursuant to statute.

5. All retail trade establishments except pharmacies and stores primarily engaged in the sale of food.
 6. Banks; credit agencies other than banks; securities and commodities brokers, dealers, exchanges and services; office of insurance carriers, agents and brokers; real estate offices.
 7. Wholesale and retail laundries; laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops.
 8. 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.
 9. Automobile repair, automobile services, garages.
 10. Establishments rendering amusement and recreation services including motion picture theaters.
 11. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.
- d. There shall be no open burning by any person of tree waste, vegetation, refuse, or debris in any form.
 - e. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.
 - f. The use of motor vehicles is prohibited except in emergencies with the approval of local or state police.
- (2) When the Director determines that an Air Pollution Emergency Episode condition exists at one or more monitoring sites solely because of emissions from a limited number of sources, he may order such source or sources to put into effect the emission control action programs which are applicable for each episode stage.

**Table 1. EMISSION REDUCTION OBJECTIVES
FOR PM₁₀**

Source of Air Contamination	Level	Action Required
1. Coal or oil-fired electric power generating facilities.	Alert	a. Substantial reduction by utilization of fuels having lowest available ash 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.
	Warning	a. Maximum reduction by utilization of fuels having lowest available ash 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.
	Emergency	a. Maximum reduction by utilization of fuels having lowest available ash content.

Source of Air Contamination	Level	Action Required
		<ul style="list-style-type: none"> 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. Coal or oil-fired process steam generating facilities.	Alert	<ul style="list-style-type: none"> a. Substantial reduction by utilization of fuels having lowest available ash content. b. Maximum utilization of mid-day (12:00 Noon to 4:00 P.M.) atmospheric turbulence for boiler lancing and soot blowing. c. Reduction of steam load demands consistent with continuing plant operations.
	Warning	<ul style="list-style-type: none"> a. Maximum reduction by utilization of fuels having lowest available ash content. b. Maximum utilization of mid-day (12:00 Noon to 4:00 P.M.) atmospheric turbulence for boiler lancing and soot blowing. c. Reduction of steam load demands consistent with continuing plant operations.

Source of Air Contamination

Level**Action Required**

- d. Making ready for use a plan of action to be taken if an emergency develops.

Source of Air Contamination	Level	Action Required
	Emergency	<ul style="list-style-type: none"> 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. A - Manufacturing, processing, and mining industries.	Alert	<ul style="list-style-type: none"> a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations.
AND		
B - Other persons required by the Commission to prepare standby plans.		<ul style="list-style-type: none"> b. Maximum reduction by deferring trade waste disposal operations which emit particles, gases, vapors or malodorous substances. c. Reduction of heat load demands for processing consistent with continuing plant operations.

Source of Air Contamination	Level	Action Required
	Warning	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations.
	Emergency	<p>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.</p> <p>b. Elimination of air contaminants from trade waste disposal processes which emit particles, gases, vapors or malodorous substances.</p> <p>c. Maximum reduction of heat load demands for processing.</p>
4. Refuse disposal operations	Alert	<p>a. Maximum reduction by prevention of open burning.</p> <p>b. Substantial reduction by limiting burning of refuse in incinerators to the hours between 12:00 Noon and 4:00 P.M.</p>
	Warning	<p>a. Maximum reduction by prevention of open burning.</p> <p>b. Complete elimination of the use of incinerators.</p>

Source of Air Contamination	Level	Action Required
	Emergency	<ul style="list-style-type: none"> a. Maximum reduction by prevention of open burning. b. Complete elimination of the use of incinerators.

**Table 2. EMISSION REDUCTION OBJECTIVES
FOR SULFUR OXIDES**

Source of Air Contamination	Level	Action Required
1. Coal or oil-fired electric power generating facilities.	Alert	<ul style="list-style-type: none"> a. Substantial reduction by utilization of fuels having lowest available sulfur content. b. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.
	Warning	<ul style="list-style-type: none"> a. Maximum reduction by utilization of fuels having lowest available sulfur content. b. Maximum reduction by diverting electric power generation to facilities outside of Warning Area.
	Emergency	<ul style="list-style-type: none"> a. Maximum reduction by utilization of fuels having lowest available sulfur content. b. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
2. Coal or oil-fired process	Alert	<ul style="list-style-type: none"> a. Substantial reduction by

Source of Air Contamination	Level	Action Required
steam generating facilities.		utilization of fuels having lowest available sulfur content.
	Warning	<ul style="list-style-type: none"> b. Reduction of steam load demands consistent with continuing plant operations. a. Maximum reduction by utilization of fuels having the lowest available sulfur content. b. 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.
	Emergency	<ul style="list-style-type: none"> a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage. b. Taking the action called for in the emergency plan.

Source of Air Contamination	Level	Action Required
3. A - Manufacturing and Processing Industries	Alert	<ul style="list-style-type: none"> a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations.
AND		
B - Other persons required by the Commission to prepare standby plans.		<ul style="list-style-type: none"> b. Maximum reduction by deferring trade waste disposal operations which emit particles, gases, vapors, or malodorous substances. c. Reduction of heat load demands for processing consistent with continuing plant operations.
	Warning	<ul style="list-style-type: none"> a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship postponing production and allied operations. b. Maximum reduction by deferring trade waste disposal operations which emit particles, gases, vapors, or malodorous substances. c. Reduction of heat load demands for processing consistent with continuing plant operations.

Source of Air Contamination	Level	Action Required
	Emergency	<ul style="list-style-type: none"> 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 particles, gases, vapors or malodorous substances. c. Maximum reduction of heat load demands for processing.

TABLE 3. EMISSION REDUCTION OBJECTIVES FOR NITROGEN OXIDES

Source of Air Contamination	Level	Action Required
1. Steam-electric power generating facilities.	Alert	<ul style="list-style-type: none"> a. Substantial reduction by utilization of fuel which results in the formation of less air contaminant. b. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.
	Warning	<ul style="list-style-type: none"> a. Maximum reduction by utilization of fuel which results in the formation of less air contaminant.

Source of Air Contamination	Level	Action Required
		<ul style="list-style-type: none"> b. Maximum reduction by diverting electric power generation to facilities outside of Warning Area.
	Emergency	<ul style="list-style-type: none"> a. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
2. Process steam generating facilities.	Alert	<ul style="list-style-type: none"> a. Substantial reduction by utilization of fuel which results in the formation of less air contaminant. b. Reduction of steam load demands consistent with continuing plant operations.
	Warning	<ul style="list-style-type: none"> a. Maximum reduction by utilization of fuel which results in the formation of less air contaminant. b. 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.
	Emergency	<ul style="list-style-type: none"> a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.

Source of Air Contamination	Level	Action Required
3. A - Manufacturing and processing industries. AND B - Other persons required by the Commission to prepare standby plans.	Alert	a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations. b. Maximum reduction by deferring trade waste disposal operations which emit particles, gases, vapors, or malodorous substances. c. Reduction of heat load demands for processing consistent with continuing plant operations.
	Warning	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations. b. Maximum reduction by deferring trade waste disposal operations which emit particles, gases, vapors, or malodorous substances. c. Reduction of heat load demands for processing consistent with continuing plant operations.
	Emergency	a. Elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent

Source of Air Contamination	Level	Action Required
4. Stationary internal combustion engines.		possible without causing injury to persons or damage to equipment.
		b. Elimination of air contaminants from trade waste disposal processes which emit particles, gases, vapors or malodorous substances.
		c. Maximum reduction of heat load demands for processing.
	Alert	a. Reduction of power demands for pumping consistent with continuing operations.
	Warning	a. Reduction of power demands or pumping consistent with continuing operations.
		b. Maximum reduction by utilization of fuels or power source which results in the formation of less air contaminants.
5. Refuse disposal operations.	Alert	a. Maximum reduction by prevention of open burning.
		b. Substantial reduction by limiting burning of refuse in incinerators to the hours between 12:00 Noon and 4:00 P.M.
	Warning	a. Maximum reduction by prevention of open burning.
		b. Complete elimination of the use of incinerators.
	Emergency	a. Maximum reduction by prevention of open burning.
.		b. Complete elimination of the

Source of Air Contamination**Level****Action Required**

use of incinerators.

**Table 4. EMISSION REDUCTION OBJECTIVES
FOR HYDROCARBONS**

Source of Air Contamination	Level	Action Required
1. Petroleum products storage and distribution.	Alert	a. Substantial reduction of air contaminants by curtailing, postponing, or deferring transfer operations.
	Warning	a. Maximum reduction of air contaminants by assuming reasonable economic hardship by postponing transfer operations.
	Emergency	a. Elimination of air contaminants by curtailing, postponing, or deferring transfer operations to the extent possible without causing damage to equipment.
2. Surface coating and preparation.	Alert	a. Substantial reduction of air contaminants by curtailing, postponing, or deferring transfer operations.
	Warning	a. Maximum reduction of air contaminants by assuming reasonable economic hardship by postponing transfer operations.
	Emergency	a. Elimination of air contaminants by curtailing, postponing, or deferring transfer operations to the extent possible without causing damage to equipment.

Source of Air Contamination	Level	Action Required
3. A - Manufacturing and processing industries. AND B - Other persons required by the Commission to prepare standby plans.	Alert	a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations.
	Warning	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations.
	Emergency	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.

TABLE 5. EMISSION REDUCTION OBJECTIVES FOR CARBON MONOXIDE

Source of Air Contamination	Level	Action Required
1. A - Manufacturing industries. AND B - Other persons required by the Commission to prepare standby plans.	Alert	a. Substantial reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and allied operations.

Source of Air Contamination	Level	Action Required
	Warning	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and allied operations.
	Emergency	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.
2. Refuse disposal operations.	Alert	a. Maximum reduction by prevention of open burning.
	Warning	a. Maximum reduction by prevention of open burning.
	Emergency	a. Maximum reduction by prevention of open burning.