

# LANE REGIONAL AIR PROTECTION AGENCY

## TITLE 51

### AIR POLLUTION EMERGENCIES

#### **Section 51-005 Introduction**

Sections 51-010, 51-015, 51-020 and 51-025 are effective within priority I and II air quality control regions (AQCR) as defined in 40 CFR part 51, subpart H (1995), when the AQCR contains an AQMA as defined in title 29, or a nonattainment area listed in 40 CFR part 81. All other rules in this title are equally applicable to all areas of the Lane County. Notwithstanding any other regulation or standard, this title is designed to prevent the excessive accumulation of air contaminants during periods of atmospheric stagnation or at any other time, which if allowed to continue to accumulate unchecked could result in concentrations of these contaminants reaching levels which could cause significant harm to the health of persons. This title establishes criteria for identifying and declaring air pollution episodes at levels below the level of significant harm and are adopted pursuant to the requirements of the FCAA as amended and 40 CFR part 51.151. Levels of significant harm for various regulated pollutants listed in 40 CFR part 51.151 are:

- (1) For sulfur dioxide (SO<sub>2</sub>) – 1.0 ppm, 24-hour average.
- (2) For particulate matter:
  - (a) PM<sub>10</sub> – 600 µg/m<sup>3</sup>, 24-hour average.
  - (b) PM<sub>2.5</sub> – 350.5 µg/m<sup>3</sup>, 24-hour average.
- (3) For carbon monoxide (CO):
  - (a) 50 ppm, 8-hour average.
  - (b) 75 ppm, 4-hour average.
  - (c) 125 ppm, 1-hour average.
- (4) For ozone (O<sub>3</sub>) – 0.6 ppm, 1-hour average.
- (5) For nitrogen dioxide (NO<sub>2</sub>):
  - (a) 2.0 ppm, 1-hour average
  - (b) 0.5 ppm, 24-hour average

#### **Section 51-007 Definitions**

The definitions in title 12, section 29-0010, and this section apply to this title. If the same term is defined in this section and title 12 or section 29-0010, the definition in this section applies to this title.

### **Section 51-010 Episode Stage Criteria for Air Pollution Emergencies**

Three stages of air pollution episode conditions and a pre-episode standby condition are established to inform the public of the general air pollution status and provide a management structure to require preplanned actions designed to prevent continued accumulation of regulated pollutants to the level of significant harm. The three episode stages are: Alert, Warning, and Emergency. LRAPA is responsible to enforce the provisions of this division which requires actions to reduce and control emissions during air pollution episode conditions. An air pollution alert or air pollution warning must be declared by the Director or appointed representative when the appropriate air pollution conditions are deemed to exist. When conditions exist which are appropriate to an air pollution emergency, LRAPA must notify the Governor and declare an air pollution emergency pursuant to ORS 468.115. The statement declaring an air pollution Alert, Warning or Emergency must define the area affected by the air pollution episode where corrective actions are required. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency must be deemed to exist whenever LRAPA determines that the accumulation of air contaminants in any place is increasing or has increased to levels which could, if such increases are sustained or exceeded, lead to a threat to the health of the public. In making this determination, LRAPA will be guided by the following criteria for each regulated pollutant and episode stage:

- (1) "Pre-episode standby" condition indicates that ambient levels of regulated pollutants are within standards or only moderately exceed standards. In this condition, there is no imminent danger of any ambient regulated pollutant concentrations reaching levels of significant harm. LRAPA must maintain at least a normal monitoring schedule but may conduct additional monitoring. An air stagnation advisory issued by the National Weather Service, an equivalent local forecast of air stagnation or observed ambient air levels in excess of ambient air standards may be used to indicate the need for increased sampling frequency. The pre-episode standby condition is the lowest possible air pollution episode condition and may not be terminated.
- (2) "Air pollution alert" condition indicates that air pollution levels are significantly above standards, but there is no immediate danger of reaching the level of significant harm. Monitoring must be intensified and readiness to implement abatement actions must be reviewed. At the air pollution alert level the public is to be kept informed of the air pollution conditions and of potential activities to be curtailed should it be necessary to declare a warning or higher condition. An air pollution alert condition is a state of readiness. When the conditions in both paragraphs (a) and (b) are met, an air pollution alert will be declared and all appropriate actions described in Table I must be implemented.
  - (a) Meteorological dispersion conditions are not expected to improve during the next 24 hours;

- (b) Monitored pollutant levels at any monitoring site exceed any of the following:
  - (A) Sulfur dioxide – 0.3 ppm, 24-hour average;
  - (B) Particulate matter:
    - (i) PM<sub>10</sub> – 350 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), 24-hour average;
    - (ii) PM<sub>2.5</sub> – 140.5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) -- 24-hour average;
  - (C) Carbon monoxide – 15 ppm, 8-hour average;
  - (D) Ozone – 0.2 ppm, 1-hour average;
  - (E) Nitrogen dioxide:
    - (i) 0.6 ppm, 1-hour average; or
    - (ii) 0.15 ppm, 24-hour average.
- (3) "Air pollution warning" condition indicates that pollution levels are very high and that abatement actions are necessary to prevent these levels from approaching the level of significant harm. At the air pollution warning level substantial restrictions may be required limiting motor vehicle use and industrial and commercial activities. When the conditions in both paragraphs (a) and (b) are met, an air pollution warning will be declared by LRAPA and all appropriate actions described in Table II must be implemented:
  - (a) Meteorological dispersion conditions are not expected to improve during the next 24 hours.
  - (b) Monitored regulated pollutant levels at any monitoring site exceed any of the following:
    - (A) Sulfur dioxide – 0.6 ppm, 24-hour average;
    - (B) Particulate matter:
      - (i) PM<sub>10</sub> – 420  $\mu\text{g}/\text{m}^3$ , 24-hour average;
      - (ii) PM<sub>2.5</sub> – 210.5  $\mu\text{g}/\text{m}^3$ , 24-hour average;
    - (C) Carbon monoxide – 30 ppm, 8-hour average;
    - (D) Ozone – 0.4 ppm, 1-hour average;
    - (E) Nitrogen dioxide:

- (i) 1.2 ppm, 1-hour average; or
  - (ii) 0.3 ppm, 24-hour average.
- (4) "Air pollution emergency" condition indicates that regulated pollutants have reached an alarming level requiring the most stringent actions to prevent these levels from reaching the level of significant harm to the health of persons. At the air pollution emergency level, extreme measures may be necessary involving the closure of all manufacturing, business operations and vehicle traffic not directly related to emergency services. Pursuant to ORS 468.115, when the conditions in both paragraphs (a) and (b) are met, an air pollution emergency will be declared by LRAPA, and all the appropriate actions described in Table III must be implemented:
  - (a) Meteorological conditions are not expected to improve during the next 24 hours.
  - (b) Monitored pollutant levels at any monitoring site exceed any of the following:
    - (A) Sulfur dioxide – 0.8 ppm, 24-hour average;
    - (B) Particulate matter:
      - (i) PM<sub>10</sub> – 500 µg/m<sup>3</sup>, 2-hour average;
      - (ii) PM<sub>2.5</sub> – 280.5 µg/m<sup>3</sup> -- 2-hour average;
    - (C) Carbon monoxide – 40 ppm, 8-hour average;
    - (D) Ozone – 0.5 ppm, 1-hour average;
    - (E) Nitrogen dioxide:
      - (i) 1.6 ppm, 1-hour average;
      - (ii) or 0.4 ppm, 24-hour average.
- (5) "Termination": Any air pollution episode condition (alert, warning or emergency) established by these criteria may be reduced to a lower stage when the elements required for establishing the higher conditions are no longer observed.

**Section 51-011 Special Conditions**

- (1) LRAPA must issue an "ozone advisory" to the public when monitored ozone values at any site exceed the ambient air quality standard of 0.12 ppm but are less than 0.2 ppm for a one hour average. The ozone advisory must clearly identify the area where the ozone values have exceeded the ambient air standard and must state that significant health effects are not expected at these levels, however, sensitive individuals may be affected by some symptoms.
- (2) Where particulate is primarily soil from windblown dust or fallout from volcanic activity,

episodes dealing with such conditions must be treated differently than particulate episodes caused by other controllable sources. In making a declaration of air pollution alert, warning, or emergency for such particulate, LRAPA must be guided by the following criteria:

- (a) "Air pollution alert for particulate from volcanic fallout or windblown dust" means particulate values are significantly above a standard but the source is a volcanic eruption or dust storm. In this condition there is no significant danger to public health but there may be a public nuisance created from the dusty conditions. It may be advisable under these circumstances to voluntarily restrict traffic volume and/or speed limits on major thoroughfares and institute cleanup procedures. LRAPA will declare an air pollution alert for particulate from volcanic fallout or wind-blown dust when particulate values at any monitoring site exceed or are projected to exceed  $800 \mu\text{g}/\text{m}^3$  – 24-hour average and the particulate is primarily from volcanic activity or dust storms, meteorological conditions not withstanding;
  - (b) "Air pollution warning for particulate from volcanic fallout or windblown dust" means particulate values are very high but the source is volcanic eruption or dust storm. Prolonged exposure over several days at or above these levels may produce respiratory distress in sensitive individuals. Under these conditions staggered work hours in metropolitan areas, mandated traffic reduction, speed limits and cleanup procedures may be required. LRAPA will declare an air pollution warning for particulate from volcanic fallout or wind-blown dust when particulate values at any monitoring site exceed or are expected to exceed  $2,000 \mu\text{g}/\text{m}^3$  – 24-hour average and the particulate is primarily from volcanic activity or dust storms, meteorological conditions not withstanding;
  - (c) "Air pollution emergency for particulate from volcanic fallout or windblown dust" means particulate values are extremely high but the source is volcanic eruption or dust storm. Prolonged exposure over several days at or above these levels may produce respiratory distress in a significant number of people. Under these conditions cleaning procedures must be accomplished before normal traffic can be permitted. An air pollution emergency for particulate from volcanic fallout or wind-blown dust will be declared by the Director, who must keep the Governor advised of the situation, when particulate values at any monitoring site exceed or are expected to exceed  $5,000 \mu\text{g}/\text{m}^3$  – 24-hour average and the particulate is primarily from volcanic activity or dust storms, meteorological conditions notwithstanding.
- (3) Termination: Any air pollution condition for particulate established by these criteria may be reduced to a lower condition when the criteria for establishing the higher condition are no longer observed.
  - (4) Action: Municipal and county governments or other governmental agency having jurisdiction in areas affected by an air pollution alert, warning or emergency for particulate from volcanic fallout or windblown dust must place into effect the actions

pertaining to such episodes which are described in section 51-030.

### **Section 51-015 Source Emission Reduction Plans**

Tables I, II and III set forth specific emission reduction measures which must be taken upon the declaration of an air pollution alert, air pollution warning, or air pollution emergency. Any person responsible for a source of air contamination within a Priority I AQCR must, upon declaration of an episode condition affecting the locality of the air contamination source, take all appropriate actions specified in the applicable table and must take all appropriate actions specified in an LRAPA-approved preplanned abatement strategy for such condition which has been submitted and is on file with LRAPA.

### **Section 51-020 Preplanned Abatement Strategies**

- (1) Any person responsible for the operation of any point source of air pollution located in a Priority I AQCR, located within an AQMA or located within a nonattainment area listed in 40 CFR, part 81, and emits 100 tons or more of any regulated pollutant specified by paragraph (a) or (b) must file a Source Emission Reduction Plan (SERP) with LRAPA in accordance with the schedule described in subsection (3). Such plans must specify procedures to implement the actions required by Tables 1 through 3 and must be consistent with good engineering practice and safe operating procedures. Source emission reduction plans specified by this section are mandatory only for those sources which:
  - (a) Emit 100 tons per year or more of any regulated pollutant for which the nonattainment area, AQMA, or any portion of the AQMA is designated nonattainment; or
  - (b) Emit 100 tons per year or more of volatile organic compounds when the nonattainment area, AQMA or any portion of the AQMA is designated nonattainment for ozone.
- (2) Municipal and county governments, or other governmental body, having jurisdiction in nonattainment areas where ambient levels of carbon monoxide, ozone or nitrogen dioxide qualify for Priority I AQCR classification, must cooperate with LRAPA in developing a traffic control plan to be implemented during air pollution episodes of motor vehicle related emissions. Such plans must implement the actions required by Tables 1 through 3 and must be consistent with good traffic management practice and public safety.
- (3) LRAPA must periodically review the source emission reduction plans to assure that they meet the requirements of this title. If deficiencies are found, LRAPA must notify the persons responsible for the source. Within 60 days of such notice the person responsible for the source must prepare a corrected plan for approval by LRAPA. Source emission reduction plans must not be effective until approved by LRAPA.
- (4) During an air pollution alert, warning or emergency episode, source emission reduction plans required by this rule must be available on the source premises for inspection by any person authorized to enforce the provisions of this title.

## **Section 51-025 Implementation**

- (1) LRAPA and DEQ must cooperate to the fullest extent possible to insure uniformity of enforcement and administrative action necessary to implement this title. With the exception of sources of air contamination retained by DEQ, all persons within the territorial jurisdiction of LRAPA must submit source emission reduction plans prescribed in section 51-020 to LRAPA. LRAPA must submit copies of approved source emission reduction plans to DEQ.
- (2) Declarations of air pollution alert, air pollution warning and air pollution emergency must be made by LRAPA. In the event conditions warrant and such declaration is not made by LRAPA, DEQ must issue the declaration and LRAPA must take appropriate remedial actions as set forth in this title.
- (3) Additional responsibilities of LRAPA include, but are not limited to:
  - (a) Securing acceptable preplanned abatement strategies;
  - (b) Measurement and reporting of air quality data to DEQ;
  - (c) Informing the public, news media and persons responsible for air contaminant sources of the various levels set forth in these rules and required actions to be taken to maintain air quality and the public health;
  - (d) Surveillance and enforcement of source emission reductions plans.

**TABLE I**  
**AIR POLLUTION EPISODE, ALERT CONDITION**  
**EMISSION REDUCTION PLAN**

Part A – Pollution Episode Conditions for Carbon Monoxide or Ozone

For Alert conditions due to excessive levels of carbon monoxide or ozone, persons operating motor vehicles will be requested to voluntarily curtail or eliminate all unnecessary operations within the designated Alert Episode area, and public transportation systems will be requested to provide additional services in accordance with a preplanned strategy.

Part B – Pollution Episode Conditions for Particulate Matter

For Alert conditions resulting from excessive levels of particulate matter, the following measures will be taken in the designated Alert Episode area:

1. There will be no open burning by any person of any material.
2. Persons operating fuel burning equipment which requires boiler lancing or soot blowing will perform such operations only between the hours of 12 noon and 4 p.m.
3. Persons responsible for the operation of any source of air contaminants listed below will take all required actions for the Alert level, in accordance with the preplanned strategy:

<u>Sources of Air Contamination</u>	<u>Control Actions - Alert Level</u>
(A) Coal, Oil or wood-fired electric generating facilities	(A) Utilization of fuels having low ash and sulfur content.  (B) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.  (C) Diverting electric power generation to facilities outside of Alert Area.
(B) Coal, oil or wood-fired process steam generating facilities.	(A) Utilization of fuel having low ash and sulfur content.  (B) Utilization of mid-day (12:00 noon to 4:00 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 Ind.
- Grain Industries
- Paper and Allied Products
- Wood Processing Industry

- (C) Substantial reduction of steam load demands consistent with continuing plant operations.
- (A) Reduction of air contaminants from manufacturing operations by curtailing, postponing, or deferring production and all operations.
- (B) Reduction by deferring trade waste disposal operations which emit solid particle gas vapors or malodorous substances.
- (C) Reduction of heat load demands for processing.
- (D) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

**TABLE II**  
**AIR POLLUTION EPISODE, WARNING CONDITIONS**  
**EMISSION REDUCTION PLAN**

Part A – Pollution Episode Conditions for Carbon Monoxide or Ozone

For Warning conditions, resulting from excessive levels of carbon monoxide or ozone, the following measures must be taken:

1. Operating of motor vehicles carrying fewer than three (3) persons will be prohibited within designated Warning Episode areas during specified hours. Exceptions from this provision are:
  - A. Public transportation and emergency vehicles
  - B. Commercial vehicles
  - C. Through traffic remaining on Interstate or primary highways.
2. At the discretion of the Agency, operations of all private vehicles within designated areas or entry of vehicles into designated Warning Episode areas, may be prohibited for specified periods of time.
3. Public transportation operators will, in accordance with a pre-planned strategy, provide the maximum possible additional service to minimize the public's inconvenience as a result of (1) or (2) above.
4. For ozone episodes the following additional measures will be taken:
  - A. No bulk transfer of gasoline without vapor recovery from 2:00 a.m. to 2:00 p.m.
  - B. No service station pumping of gasoline from 2:00 a.m. to 2:00 p.m.
  - C. No operation of paper coating plants from 2:00 a.m. to 2:00 p.m.
  - D. No architectural painting or auto finishing;
  - E. No venting of dry cleaning solvents from 2:00 a.m. to 2:00 p.m. (except perchloroethylene).
5. Where appropriate for carbon monoxide episodes during the heating season, and where legal authority exists, governmental agencies will prohibit all use of woodstoves and fireplaces for domestic space heating, except where such devices provide the sole source of heat.

Part B – Pollution Episode Conditions for Particulate Matter

For Warning conditions resulting from excessive levels of particulate matter, the following measures will be taken:

1. There will be no open burning by any person of any material.
2. The use of incinerators for the disposal of solid or liquid wastes will be prohibited.
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing will perform such operations only between the hours of 12 noon and 4 p.m.
4. Where legal authority exists, governmental agencies will prohibit all use of woodstoves and fireplaces for domestic space heating, except where such devices provide the sole source of heat.
5. Persons responsible for the operation of any source of air contaminants listed below will take all required actions for the Warning level, in accordance with a preplanned strategy:

Source of Air Contamination

Air Pollution Warning

(A) Coal, oil or wood-fired electric power generating facilities

(A) Maximum utilization of fuels having lowest ash and sulfur content.

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

(C) Diverting electric power generation to facilities outside of Warning Area.

(D) Prepare to use a plan of action if an Emergency Condition develops.

(E) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.

(B) Coal, oil or wood-fired process steam generating facilities

(A) Maximum utilization of fuels having the lowest ash and sulfur content.

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

(C) Prepare to use a plan of action if an Emergency Condition develops.

(D) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.

(C) Manufacturing industries which require considerable lead time for shut-down including the following classifications:

Petroleum Refining  
Chemical Industries  
Primary Metals Industries  
Glass Industries  
Paper and Allied Products

(D) Manufacturing industries which require relatively short time for shut-down

(A) Reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations.

(B) Reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances.

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

(D) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence of boiler lancing or soot blowing.

(A) Elimination of air contaminants from manufacturing operations by ceasing, 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) Reduction of heat load demands for processing.

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

**TABLE III**  
**AIR POLLUTION EPISODE, EMERGENCY CONDITIONS**  
**EMISSION REDUCTION PLAN**

1. There will be no open burning by any person of any material.
2. The use of incinerators for the disposal of solid or liquid wastes will be prohibited.
3. All places of employment, commerce, trade, public gatherings, government, industry, business, or manufacture will immediately cease operation, except the following:
  - A. Police, fire, medical and other emergency services;
  - B. Utility and communication services;
  - C. Governmental functions necessary for civil control and safety;
  - D. Operations necessary to prevent injury to persons or serious damage to equipment or property;
  - E. Food stores, drug stores and operations necessary for their supply;
  - F. Operations necessary for evacuation of persons leaving the area;
  - G. Operations conducted in accordance with an approved preplanned emission reduction plan on file with the Agency.
4. All commercial and manufacturing establishments not included in these rules will institute such actions as will result in maximum reduction of air contaminants from their operations which emit air contaminants, to the extent possible without causing injury or damage to equipment.
5. The use of motor vehicles is prohibited except for the exempted functions in 3, above.
6. Airports will be closed to all except emergency air traffic.
7. Where legal authority exists, governmental agencies will prohibit all use of woodstoves and fireplaces.
8. Any person responsible for the operation of a source of atmospheric contamination listed below will take all required control actions for this Emergency Level.

Source of Air Contamination

(A) Coal, oil or wood-fired electric power generating facilities

(B) Coal, oil or wood-fired process steam generating facilities

(C) Manufacturing industries of following classifications:

Primary Metals Industry  
Petroleum Refining Operations  
Chemical Industries  
Mineral Processing Industries  
Paper and Allied Products  
Grain Industry  
Wood Processing Industry

Air Pollution Emergency

(A) Maximum utilization of fuels having lowest ash and sulfur content.

(B) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

(C) Diverting electric power generation to facilities outside of Emergency area.

(D) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.

(A) Reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.

(B) 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.

(D) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.

(A) The 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) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

