

REGULATION 4.04 Particulate and Sulfur Dioxide Reduction Requirements

Air Pollution Control District of Jefferson County Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control

Pursuant To: KRS Chapter 77 Air Pollution Control

Necessity And Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purpose of KRS Chapter 77. This regulation establishes the requirements for reduction of particulates and sulfur dioxide emissions under certain conditions.

SECTION 1 Alerts

To curtail particulates and/or sulfur dioxide sources when an alert is declared, based on reaching the criteria level for particulates and/or sulfur dioxide, the following control actions shall be implemented:

- 1.1 When the source of air contaminant is fuel-fired electric power generating facilities: substantial reduction of emissions shall be accomplished by utilization of fuels having low ash and sulfur content; maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing; and diverting electric power generation to facilities outside of the alert area.
- 1.2 When the source of air contaminant is fuel-fired process steam generating facilities: substantial reduction of emissions shall be accomplished by utilization of fuels having low ash and sulfur content; maximum utilization of midday atmospheric turbulence for boiler lancing and soot blowing; and substantial reduction of steam load demands consistent with continuing plant operations.
- 1.3 When the source of air contaminant is manufacturing industries including but not limited to the following classifications: primary metals industry, petroleum refining operations, chemical industries, mineral processing industries, paper and allied products and grain industry, the following action shall be taken:
 - 1.3.1 All operations that emit particulates or sulfur dioxide shall curtail, postpone, or defer production to the extent necessary to effect at least a 25% reduction of the instantaneous particulate and/or sulfur dioxide emission levels existing at the time the alert is declared unless such reduction of the operation is demonstrated to the District's satisfaction to be impractical because of some physical limitation of the operation.
 - 1.3.2 In addition, maximum reduction of emissions shall be accomplished by deferring trade waste disposal operations which emit solid particles, gas vapors, or malodorous substances; maximum reduction of heat load demands for processing consistent with section 1.3.1; and maximum utilization of midday atmospheric turbulence for boiler lancing or soot blowing.

SECTION 2 Warnings

Curtailement of particulate and/or sulfur dioxide sources. When a warning is declared based on reaching the criteria level for particulates and/or sulfur dioxide, the following control actions shall be implemented:

- 2.1 When the source of air contaminant is fuel-fired electric power generating facilities: maximum reduction of emissions shall be accomplished by utilization of fuels having lowest ash and sulfur content; maximum utilization of midday atmospheric turbulence for boiler lancing and soot blowing; and diverting electric power generation to facilities outside of the warning area.
- 2.2 When the source of air contaminant is fuel fired process steam generating facilities associated with manufacturing industries subject to section 2.4: maximum reduction of emissions shall be accomplished by utilization of fuels having lowest available ash and sulfur content; maximum utilization of mid-day atmospheric turbulence for boiler lancing and soot blowing; making ready for use a plan of action to be taken if an emergency develops; and maximum reduction of steam load demands consistent with continuing plant operations.
- 2.3 When the source of air contaminant is fuel fired process steam generating facilities not subject to section 2.2: maximum reduction of emissions shall be accomplished by reducing heat and steam demands to absolute necessities consistent with preventing injury to persons or damage to equipment; and maximum utilization of midday atmospheric turbulence for boiler lancing and soot blowing.
- 2.4 When the source of air contaminant is manufacturing industries that may require considerable lead time for shutdown including, but not limited to, the following classifications: petroleum refining, chemical industries, primary metals industries, glass industries, paper and allied products, the source shall initiate action required to accomplish the following objectives:
 - 2.4.1 Cease, curtail, postpone or defer production and all operations as is necessary to prepare for an immediate shut-down if an emergency is declared;
 - 2.4.2 Effect a maximum reduction of emissions of air contaminants from manufacturing operations during the time period the warning is in effect by ceasing, curtailing, postponing, or deferring production and all operations; and
 - 2.4.3 Effect a maximum reduction of emissions by deferring trade waste disposal operations that emit solid particles, gases, vapors, or malodorous substances; maximum reduction of heat load demands for processing consistent with sections 2.4.1 and 2.4.2; and maximum utilization of midday atmospheric turbulence for boiler lancing and soot blowing.
- 2.5 When the source of air contaminant is manufacturing industries that may require relatively short lead times for shutdown including, but not limited to, the following classifications: primary metals industries, chemical industries; mineral processing industries and grain industry, the source shall initiate action required to accomplish the following objectives:
 - 2.5.1 Elimination of air contaminants from manufacturing operations by ceasing, as expeditiously as possible, all operations that are not necessary for the prevention of injury to persons or damage to equipment; and by curtailing, as expeditiously as possible, all operations that are necessary for the prevention of injury to persons or damage to equipment to the maximum extent possible such that the curtailment does not cause injury to persons or damage to equipment; and
 - 2.5.2 Elimination of the emission of air contaminants by ceasing trade waste disposal processes that emit solid particles, gases, vapors, or malodorous substances; maximum reduction of heat load demands consistent with section 2.5.1; and maximum utilization of midday atmospheric turbulence for boiler lancing or soot blowing.

SECTION 3 Emergencies

During emergencies, the procedures in Regulation 4.03 *General Abatement Requirements* Section 5 shall be implemented.

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