

## **REGULATION 4.02     Episode Criteria**

### **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 purposes of KRS Chapter 77. This regulation establishes the criteria to determine air pollution episodes.

#### **SECTION 1   Air Pollution Forecast**

**Air Pollution Meteorological Forecast:** An internal watch by the District shall be actuated by a National Weather Service Advisory that an Atmospheric Stagnation Advisory is in effect or that atmospheric conditions are conducive to the accumulation of air contaminants.

#### **SECTION 2   Air Pollution Alerts**

- 2.1     An alert level is that concentration of pollutants at which initial stage control actions are to begin. An alert will be declared when any one of the pollutant alert levels is reached at any monitoring site and meteorological conditions are such that the pollutant concentrations can be expected to remain at these levels for 12 or more hours or to increase, or in the case of oxidants, the situation is likely to recur within the next 24 hours, unless control actions are taken.
- 2.2     Pollutant alert levels.
  - 2.2.1     Sulfur dioxide: 800 micrograms per cubic meter (0.3ppm), 24-hour average.
  - 2.2.2     Particulates, measured as PM<sub>10</sub>: 350 micrograms per cubic meter, 24-hour average.
  - 2.2.3     Carbon monoxide: 17 milligrams per cubic meter (15 ppm), 8-hour average.
  - 2.2.4     Oxidants (ozone): 392 micrograms per cubic meter (0.20 ppm), 1-hour average.
  - 2.2.5     Nitrogen Dioxide:
    - 2.2.5.1     1130 micrograms per cubic meter (0.6 ppm) 1-hour average
    - 2.2.5.2     282 micrograms per cubic meter (0.15 ppm) 24-hour average.

#### **SECTION 3   Air Pollution Warnings**

- 3.1     A 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 and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for 12 or more hours or to increase, or, in the case of oxidants, the situation is likely to recur within the next 24 hours, unless control actions are taken.
- 3.2     Pollutant warning levels.
  - 3.2.1     Sulfur dioxide: 1600 micrograms per cubic meter (0.6 ppm), 24-hour average.
  - 3.2.2     Particulates, measured as PM<sub>10</sub>: 420 micrograms per cubic meter, 24-hour average.
  - 3.2.3     Carbon monoxide: 34 milligrams per cubic meter (30 ppm) 8- hour average.

- 3.2.4 Oxidants (ozone): 800 micrograms per cubic meter (0.4 ppm), 1-hour average.
- 3.2.5 Nitrogen dioxide: 2,260 micrograms per cubic meter (1.2 ppm), 1-hour average; 565 micrograms per cubic meter (0.3 ppm), 24-hour average.

#### **SECTION 4 Air Pollution Emergencies**

- 4.1 An 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 and meteorological conditions are such that pollutant concentrations can be expected to continue for 12 or more hours or to increase, or, in the case of oxidants, the situation is likely to recur within the next 24 hours, unless control actions are taken.
- 4.2 Pollutant emergency levels.
  - 4.2.1 Sulfur dioxide: 2,100 micrograms per cubic meter (0.8 ppm), 24-hour average.
  - 4.2.2 Particulates, measured as PM<sub>10</sub>: 500 micrograms per cubic meter, 24-hour average.
  - 4.2.3 Carbon monoxide: 46 milligrams per cubic meter (40 ppm) 8-hour average.
  - 4.2.4 Oxidants (ozone): 1,000 micrograms per cubic meter (0.5 ppm), 1-hour average.
  - 4.2.5 Nitrogen dioxide: 3,000 micrograms per cubic meter (1.6 ppm), 1-hour average; 750 micrograms per cubic meter (0.4 ppm), 24-hour average.

#### **SECTION 5 Episode Termination**

Any status declared by the application of these criteria will remain in effect until the criteria for that level are no longer met. At such time, the next lower appropriate status will be assumed.

#### **SECTION 6 Declaration of Episodes**

- 6.1 An episode status based on the deterioration of air quality alone may be declared. An air stagnation advisory or special dispersion statement need not be in effect.
- 6.2 An appropriate episode status shall be declared when any monitoring site records ambient air quality levels as designated in the episode criteria herein, and conditions are expected to remain as in section 4.1. The criteria shall be applied to individual monitoring sites and not to area wide air quality.

Adopted v1/4-19-72; effective 4-19-72; amended v2/9-1-76, v3/6-13-79, v4/11-28-79, v5/2-16-83, v6/4-20-88.

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