

**Chapter 173-435 WAC**  
**EMERGENCY EPISODE PLAN**  
(Formerly chapter 18-08 WAC)

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**WAC**

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**WAC 173-435-010 Purpose.** These rules implement chapter 70.94 RCW, the Washington State Clean Air Act.

Air pollution episodes occur under meteorological conditions that reduce the effective volume of air into which air contaminants are introduced. When these conditions occur, there is a possible danger that normal operations at air contaminant sources will be detrimental to public health and safety. The avoidance of high contaminant concentrations reaching significant harm levels during an episode requires a plan which will provide for rapid short-term emission reduction. This chapter sets up such an episode avoidance plan.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. WSR 89-02-055 (Order 88-39), § 173-435-010, filed 1/3/89; Order DE 77-21, § 173-435-010, filed 10/31/77.]

**WAC 173-435-015 Significant harm levels.** Significant harm levels are reached when any one of the following pollutant concentrations are measured:

- (1) Sulfur dioxide - 2,620  $\mu\text{g}/\text{m}^3$  (1.0 ppm), 24-hour average.
- (2) PM-10 - 600 micrograms/cubic meter, 24-hour average.
- (3) Carbon monoxide - 57.5  $\text{mg}/\text{m}^3$  (50 ppm), 8-hour average, 86.3  $\text{mg}/\text{m}^3$  (75 ppm) 4-hour average, 144  $\text{mg}/\text{m}^3$  (125 ppm) 1-hour average.
- (4) Ozone - 1,200  $\mu\text{g}/\text{m}^3$  (0.6 ppm) - 2-hour average.
- (5) Nitrogen dioxide - 3,750  $\mu\text{g}/\text{m}^3$  (2.0 ppm) 1-hour average, 938  $\mu\text{g}/\text{m}^3$  (0.5 ppm) 24-hour average.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. WSR 89-02-055 (Order 88-39), § 173-435-015, filed 1/3/89.]

**WAC 173-435-020 Definitions.** Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings, general terms common with other chapters as defined in chapter 173-403 WAC, and terms specific to the emergency episode plan as defined below.

(1) "Air quality control region" means an area designated as an air quality control region by the federal environmental protection agency.

(2) "Episode stage" means a prescribed level of air contaminants or meteorological conditions where certain control actions are required to prevent ambient pollutant concentrations from reaching levels which could cause significant harm to the health of persons.

(3) "Emergency action center" means the headquarters for all department actions during an episode stage.

(4) "Hour" means a 60 minute period, beginning and ending on a clock hour.

(5) "8 hours" means any consecutive 8 hours, starting at any clock hour.

(6) "Major source" means any source which is estimated to emit at an annual rate of twenty-five tons per year or more of SO<sub>2</sub>, particulates, or carbon monoxide.

(7) "Source emission reduction plan (SERP)" means a plan developed for an individual air pollution source and approved by the director, which sets forth the actions to be taken at that source upon the declaration of various stages of an episode.

(8) "24 hours" means any consecutive 24 hours, starting at any clock hour.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. WSR 89-02-055 (Order 88-39), § 173-435-020, filed 1/3/89; Order DE 77-21, § 173-435-020, filed 10/31/77.]

**WAC 173-435-030 Episode stage criteria.** The declaration of episode stages shall be in accordance with the following criteria:

(1) **Stage:** "First or forecast" - the forecast stage indicates the presence of meteorological conditions conducive to the accumulation of air contaminants. A forecast stage may be declared when an air stagnation advisory is issued by the national weather service or there is equivalent indication of stagnant atmospheric conditions and conditions are forecast to persist for 24 hours. Declaration of this stage will activate increased air quality surveillance.

(2) **Stage:** "Second or alert" - the alert stage is that concentration of pollutants at which control actions are to begin. An alert will be declared when any one of the following levels is reached:

(a) SO<sub>2</sub> - 800 µg/m<sup>3</sup> (0.3 ppm), 24-hour average.

(b) PM-10 - 350 µg/m<sup>3</sup>, 24-hour average.

(c) CO - 17 mg/m<sup>3</sup> (15 ppm), 8-hour average.

(d) Oxidant (O<sub>3</sub>) - 400 µg/m<sup>3</sup> (0.2 ppm) - 1-hour average.

(e) NO<sub>2</sub> - 1130 µg/m<sup>3</sup> (0.6 ppm) 1-hour average, 282 µg/m<sup>3</sup> (0.15 ppm) 24-hour average; and meteorological conditions are such that the pollutant concentrations can be expected to remain at or above the alert levels for 12 or more hours or can be expected to recur within 24 hours unless control actions are taken.

(3) **Stage:** "Third or warning" - the warning stage 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:

(a) SO<sub>2</sub> - 1,600 µg/m<sup>3</sup> (0.6 ppm), 24-hour average.

(b) PM-10 - 420 µg/m<sup>3</sup>, 24-hour average.

(c) CO - 34 mg/m<sup>3</sup> (30 ppm), 8-hour average.

(d) Oxidant (O<sub>3</sub>) - 800 µg/m<sup>3</sup> (0.4 ppm), 1-hour average.

(e) NO<sub>2</sub> - 2,260 µg/m<sup>3</sup> (1.2 ppm), 1-hour average; 565 µg/m<sup>3</sup> (0.3 ppm), 24-hour average; and meteorological conditions are such that pollutant concentrations can be expected to remain at or above the

warning levels for 12 or more hours or can be expected to recur within 24 hours unless control actions are taken.

(4) **Stage:** "Fourth or emergency" - the emergency stage 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 when any one of the following levels is reached at any monitoring site:

(a) SO<sub>2</sub> - 2,100 µg/m<sup>3</sup> (0.8 ppm), 24-hour average.

(b) PM-10 - 500 µg/m<sup>3</sup>, 24-hour average.

(c) CO - 46 mg/m<sup>3</sup> (40 ppm), 8-hour average.

(d) Oxidant (O<sub>3</sub>) - 1,200 µg/m<sup>3</sup>, (0.6 ppm), 1-hour average.

(e) NO<sub>2</sub> - 3,000 µg/m<sup>3</sup> (1.6 ppm), 1-hour average; 750 µg/m<sup>3</sup> (0.4 ppm), 24-hour average; and meteorological conditions are such that this condition can be expected to remain at or above emergency levels for 12 or more hours, or can be expected to recur within 24 hours.

(5) **Stage:** "Termination" - once declared, any stage reached by applying these criteria will remain in effect until the criteria for that level are no longer met. At that time, the next lower stage will be declared. When conditions improve to where the criteria are no longer met for any episode stage, the episode will be terminated.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. WSR 89-02-055 (Order 88-39), § 173-435-030, filed 1/3/89; Order DE 77-21, § 173-435-030, filed 10/31/77.]

**WAC 173-435-040 Source emission reduction plans.** (1) Any person responsible for the operation of a major source, when requested in writing by the director, shall prepare, in consultation with the department, a source emission reduction plan (SERP). This SERP shall be consistent with good industrial practice and safe operating procedures for reducing the emissions of air contaminants into the ambient air during periods of air pollution alert, warning, and emergency.

(2) SERPs shall be in writing and shall show the source of air contamination, describe the manner in which the reduction of air contaminant emissions will be achieved during periods of air pollution alert, warning, and emergency, and give the amount of reduction for each stage.

(3) During periods of air pollution alert, warning, or emergency, SERPs shall be made available, on the premises of sources required under this section to have them, to any person authorized to enforce the provisions of this episode avoidance plan.

(4) SERPs shall be submitted to the director within 30 days after receipt of a request thereof.

(5) SERPs shall be reviewed and approved by the director. If, in the opinion of the director, and SERP does not, in whole or in part, provide for satisfactory emission reduction during an episode, the director may disapprove such SERP, give the reason for disapproval, and require the resubmittal of same within a specified time period.

If within the time period specified, the person responsible fails to submit a SERP satisfactory to the director, the director may revise the SERP to cause it to meet episode avoidance objectives. This revised plan will then be the SERP for the source to which it applies.

(6) SERPs may be amended after submission to the director of a revised SERP. This revised SERP will be processed in the same manner as the originally submitted SERP.

(7) An emission reduction plan for the purpose of reducing motor vehicle emissions during episode stages, will be developed or approved by the department. These plans may include actions to be taken by other governmental units, citizens, and businesses.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. WSR 89-02-055 (Order 88-39), § 173-435-040, filed 1/3/89; Order DE 77-21, § 173-435-040, filed 10/31/77.]

**WAC 173-435-050 Action procedures.** (1) Whenever applicable criteria are met, the director may declare and terminate the forecast, alert, and warning stages of an episode. This declaration shall constitute an order for action in accordance with applicable SERPs.

(2) No open fires shall be ignited during any stage of an episode. Any person responsible for an open fire already ignited shall extinguish that fire when informed that an episode has been declared. Open fires conducted under the auspices of the department of natural resources for the purpose of burning forest slash pursuant to RCW 70.94.660 through 70.94.700 are to be extinguished by withholding new fuel and allowing the fire to burn down.

(3) Whenever applicable criteria are met, the governor may declare and terminate the emergency stage of an episode. This declaration shall constitute an order for action in accordance with applicable SERPs.

(4) Adverse air quality need not be region-wide for any episode stage to be declared. Action procedures may be taken for any area affected or likely to be affected by episode conditions. The declaration of any episode stage shall specify the area to which it applies.

(5) The broadest publicity practicable shall be given to the declaration of any episode stage. Such declaration shall, as soon as possible, be directly communicated to all persons responsible for the carrying out of SERPs within the affected area.

(6) Regardless of whether any episode stages have previously been declared, whenever the governor finds that emissions are causing imminent danger to public health or safety, the governor may declare an air pollution emergency and order the persons responsible for the operation of sources causing the danger, to reduce or discontinue emissions consistent with good operating practice, safe operating procedures, and SERPs, if any.

(7) Whenever an episode stage is declared on the basis of contaminant levels of carbon monoxide, oxidant, or nitrogen dioxide, the director shall take such action as may be required to reduce emissions from motor vehicles. These actions may include, but are not limited to, the rerouting or detouring of traffic. Actions to be taken by cities and businesses will be established and implemented according to plans developed by them and approved by the department. These plans must meet criteria for emission reduction established by the department.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. WSR 89-02-055 (Order 88-39), § 173-435-050, filed 1/3/89; Order DE 77-21, § 173-435-050, filed 10/31/77.]

**WAC 173-435-060 Enforcement.** (1) Whenever any episode stage has been declared, the department shall establish an emergency action center, which shall be the headquarters for all department actions during the episode.

(2) The department shall develop an operations manual, which shall set forth a plan for the receipt, processing, and dissemination of information and data during an episode.

(3) Enforcement with respect to any episode shall be directed from the emergency action center by the director in consultation with the governor's office.

(4) Authorized personnel of the department, the department of social and health services, and the state police shall have the authority to enforce orders of the director or the governor, issued under this chapter, as directed from the emergency action center. In addition, authorized personnel of any local air pollution control agency or local police force shall have the authority to enforce such orders against sources within the area over which that agency or police force has jurisdiction, as directed from the emergency action center.

(5) To determine compliance with any SERP, those persons authorized to enforce orders, hereunder, shall have the authority to enter upon any private or public property, excepting nonmultiple unit private dwellings, housing two families or less. No person shall refuse entry or access to enforcement personnel who request entry and present appropriate credentials.

(6) Whenever it appears that action being taken in compliance with SERPs will not avert imminent danger to public health and safety, the governor may order the following additional measures:

(a) Stopping and prohibiting motor vehicle travel and traffic;

(b) Closing down or restricting the use of any business, commercial, industrial or other establishment or activity which contributes to the emission of contaminants to the air.

(7) Any declaration or order issued in accordance with WAC 173-435-050 shall be effective immediately and shall not be stayed, pending completion of review.

(8) Whenever any order has been issued hereunder, the attorney general, upon the request of the governor or authorized representative, or the director shall petition the superior court of the county in which a source is located for a temporary restraining order for the immediate reduction or discontinuance of emissions from that source.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. WSR 89-02-055 (Order 88-39), § 173-435-060, filed 1/3/89; Order DE 77-21, § 173-435-060, filed 10/31/77.]

**WAC 173-435-070 Sampling sites, equipment, and methods.** (1) Data from all stations shall be considered when determining episode conditions. The department shall specify PM-10 monitoring stations to be operated continuously during any episode stage for episode management purposes. Stations from which episode declarations are based must be located in such a manner that the area represented by that station and the sources contributing to the episode condition can reasonably be determined and corrective actions taken.

(2) Sampling and analysis will be done by federal reference or federal equivalent methods; except the department may approve other sampling and analysis methods for PM-10 if reasonable site specific

equivalency with the federal reference method has been demonstrated. This equivalency must be reestablished biennially.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. WSR 89-02-055 (Order 88-39), § 173-435-070, filed 1/3/89; Order DE 77-21, § 173-435-070, filed 10/31/77.]