401 KAR 59:001. Definitions for 401 KAR Chapter 59.

RELATES TO: KRS 224.1-010, 224.20-100, 224.20-110, 224.20-120, 40 C.F.R. Chapter I, Appendices A-K of 50, 51.100(s), 53, 60, Appendices A and B of 60, Appendix B of 61, 42 U.S.C. 7410, 7411(a)(8)

STATUTORY AUTHORITY: KRS 224.10-100(5)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) requires the Environmental and Public Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation defines the terms used in 401 KAR Chapter 59. The definitions contained in this administrative regulation are neither more stringent nor otherwise different than the corresponding federal definitions.

Section 1. Definitions. (1) "Affected facility" means an apparatus, building, operation, road, or other entity or series of entities that emits or may emit an air contaminant into the outdoor atmosphere.

(2) "Air contaminant" is defined in KRS 224.1-010(1).

(3) "Air pollutant" means an air contaminant.

(4) "Air pollution" is defined in KRS 224.1-010(3).

(5) "Air pollution control equipment" means a mechanism, device or contrivance used to control or prevent air pollution, that is not, aside from air pollution control laws and administrative regulations, vital to production of the normal product of the source or to its normal operation.

(6) "Alteration" means:

(a) The installation or replacement of air pollution control equipment at a source; or

(b) A physical change in or change in the method of operation of an affected facility that increases the potential to emit a pollutant (to which a standard applies) emitted by the facility or that results in the emission of an air pollutant (to which a standard applies) not previously emitted.

(7) "Alternative method" means a method of sampling and analyzing for an air pollutant that is not a reference method or equivalent method and has been demonstrated to the cabinet's and the U.S. EPA's satisfaction to produce adequate results for its determination of compliance.

(8) "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.

(9) "Ambient air quality standard" means a numerical expression of a specified concentration level for a particular air contaminant and the time averaging interval over which that concentration level is measured and is a goal to be achieved in a stated time through the application of appropriate preventive or control measures.

(10) "AOAC" means Association of Official Analytical Chemists.

(11) "ANSI" means American National Standards Institute.

(12) "ASTM" means American Society for Testing and Materials.

(13) "BOD" means biochemical oxidant demand.

(14) "BTU" means British Thermal Unit.

(15) "°C" means degree Celsius (centigrade).

(16) "Cabinet" is defined in KRS 224.1-010(9)224.01-010.

(17) "Cal" means calorie.

(18) "Capital expenditure" is defined in 40 C.F.R. 60.2.

(19) "cfm" means cubic feet per minute.

(20) "CH_4" means methane.

(21) "CO" means carbon monoxide.

(22) "CO_2" means carbon dioxide.

(23) "COD" means chemical oxidant demand.

(24) "Commence" means that an owner or operator has undertaken a continuous program of construction, modification, or reconstruction of an affected facility, or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction, modification, or reconstruction of an affected facility.

(25) "Compliance schedule" means a time schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with a limitation or standard.

(26) "Construction" means fabrication, erection, installation or modification of an air contaminant source.

(27) "Continuous monitoring system" means the total equipment, required under the applicable administrative regulations used to sample, to condition (if applicable), to analyze and to provide a permanent record of emissions or process parameters.

(28) "Design capacity" means the maximum rate at which a unit was designed to operate.

(29) "Director" means Director of the Division for Air Quality of the Environmental and Public Protection Cabinet.

(30) "District" is defined in KRS 224.1-010(11).

(31) "dscf" means dry cubic feet at standard conditions.

(32) "dscm" means dry cubic meter at standard conditions.

(33) "Emission standard" means that numerical limit which fixes the amount of an air contaminant or air contaminants that may be vented into the atmosphere from an affected facility or from air pollution control equipment installed in an affected facility.

(34) "Equivalent method" means a method of sampling and analyzing for an air pollutant that has been demonstrated to the cabinet's and the U.S. EPA's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

(35) "Exempt compound" or "exempt solvent" means an organic compound listed in the definition of volatile organic compound as not participating in atmospheric photochemical reactions.

(36) "Existing source" means a source that is not a new source.

(37) "Extreme nonattainment county" or "extreme nonattainment area" means a county or portion of a county designated extreme nonattainment in 401 KAR 51:010.

(38) "°F" means degree Fahrenheit.

(39) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(40) "ft" means feet.

(41) "Fuel" means natural gas, petroleum, coal, wood, or a form of solid, liquid, or gaseous fuel derived from these materials for the purpose of creating useful heat.

(42) "Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(43) "g" means gram.

(44) "gal" means gallon.

(45) "gr" means grain.

(46) "HCl" means hydrochloric acid.

(47) "Hg" means mercury.

(48) "HF" means hydrogen fluoride.

(49) "hr" means hour.

(50) "Hydrocarbon" means an organic compound consisting predominantly of carbon and hydrogen.

(51) "H_2O" means water.

(52) "H_2S" means hydrogen sulfide.

(53) "H_2SO_4" means sulfuric acid.

(54) "in" means inch.

(55) "Incineration" means the process of igniting and burning solid, semisolid, liquid, or gaseous

combustible wastes.

(56) "Intermittent emissions" means emissions of particulate matter into the open air from a process that operates for less than any six (6) consecutive minutes.

(57) "J" means joule.

(58) "Kg" means kilogram.

(59) "l" means liter.

(60) "lb" means pound.

(61) "m" means meter.

(62) "m^3" means cubic meter.

(63) "Major source" means a source with a potential emission rate is equal to or greater than 100 tons per year of any one (1) of the following pollutants: particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds or carbon monoxide.

(64) "Malfunction" means a failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner that is not caused entirely or in part by poor maintenance, careless operation, or other preventable upset condition or preventable equipment breakdown.

(65) "Marginal nonattainment county" or "marginal nonattainment area" means a county or portion of a county designated marginal nonattainment in 401 KAR 51:010.

(66) "μg" means microgram.

(67) "mg" means milligram.

(68) "min" means minute.

(69) "MJ" means megajoules.

(70) "mm" means millimeter.

(71) "MM" means million.

(72) "mo" means month.

(73) "Moderate nonattainment county" or "moderate nonattainment area" means a county or portion of a county designated moderate nonattainment in 401 KAR 51:010.

(74) "Modification" means any physical change in, or a change in the method of operation of, an affected facility that:

(a) Increases the amount of an air pollutant to which a standard applies) emitted into the atmosphere by that facility or that results in the emission of an air pollutant (to which a standard applies) into the atmosphere not previously emitted; and

(b) Is not solely:

1. Maintenance, repair, and replacement that the cabinet determines to be routine for a source category;

2. An increase in production rate of an affected facility, if that increase can be accomplished without a capital expenditure on that facility;

3. An increase in the hours of operation;

4. Use of an alternative fuel or raw material if, prior to the date a standard becomes applicable to that source type, the affected facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change.

5. Conversion to coal required for energy considerations, as specified in 42 U.S.C. 7411(a)(8);

6. The addition or use of a system or device the primary function of which is the reduction of air pollutants, unless an emission control system is removed or replaced by a system that the cabinet determines to be less environmentally beneficial; or

7. The relocation or change in ownership of an existing facility.

(75) "Monitoring device" means the total equipment required in applicable administrative regula-

tions, used to measure and record, if applicable, process parameters.

(76) "New source" means a source, the construction, reconstruction, or modification of which commenced on or after the classification date as defined in the applicable administrative regulation irrespective of a change in emission rate.

(77) "Ng" means nanograms.

(78) "N_2" means nitrogen.

(79) "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as measured by test methods specified by the cabinet.

(80) "NO" means nitric oxide.

(81) "NO_2" means nitrogen dioxide.

(82) "NO_X" means nitrogen oxides.

(83) "O_2" means oxygen.

(84) "O_3" means ozone.

(85) "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

(86) "Owner or operator" means a person who owns, leases, operates, controls, or supervises an affected facility or a source to which an affected facility is a part.

(87) "oz" means ounce.

(88) "Particulate matter" means a material, except uncombined water, that exists in a finely divided form as a liquid or a solid as measured by an approved test method.

(89) "Particulate matter emissions" means, except as used in 40 C.F.R. Part 60, all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the approved state implementation plan.

(90) "Person" means an individual, public or private corporation, political subdivision, government agency, municipality, industry, copartnership, association, firm, trust, estate, or other entity.

(91) "$PM_{2.5}$" means particulate matter with an aerodynamic diameter less than or equal to a nominal two-and-a-half (2.5) micrometers as measured by a reference method in 40 C.F.R. Part 50, Appendix L, and designated in accordance with 40 C.F.R. Part 53, or by an equivalent method designated in accordance with 40 C.F.R. Part 53.

(92) "PM_{10}" means particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured by a reference method in 40 C.F.R. Part 50, Appendix J and designated in accordance with 40 C.F.R. Part 53, or by an equivalent method designated in accordance with 40 C.F.R. Part 53.

(93) "PM_{10} emissions" means finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method, specified in 40 C.F.R. Chapter I, or by a test method specified in the approved state implementation plan.

(94) "Potential to emit" or "PTE" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design, and shall:

(a) Include air pollution control equipment and restrictions on the hours of operation or on the type or amount of material combusted, stored, or processed, if the limitation or its effect on emissions is federally enforceable; and

(b) Not include secondary emissions.

(95) "ppb" means parts per billion.

(96) "ppm" means parts per million.

(97) "ppm(w/w)" means parts per million (weight by weight).

(98) "psia" means pounds per square inch absolute.

(99) "psig" means pounds per square inch gage.

(100) "Reconstruction" means the replacement of components of an existing affected facility to the extent that:

(a) The fixed capital cost of the new components exceeds fifty (50) percent of the fixed capital cost that would be required to construct a comparable entirely new affected facility;

(b) The estimated life of the affected facility after the replacement exceeds fifty (50) percent of the life of a comparable entirely new affected facility;

(c) The components being replaced cause or contribute to the emissions from the affected facility; and

(d) It is technologically and economically feasible to meet the applicable requirements of 401 KAR Chapters 50 to 65.

(101) "Reference method" means a method of sampling and analyzing for an air pollutant as published in 40 C.F.R. Part 50, Appendices A to N; 40 C.F.R. Part 53; 40 C.F.R. Part 60, Appendices A and B; 40 C.F.R. Part 61, Appendix B; or 40 C.F.R. Part 63, Appendices A to D.

(102) "Run" means the net period of time, either intermittent or continuous within the limits of good engineering practice, when an emission sample is collected.

(103) "S" means at standard conditions.

(104) "sec" means second.

(105) "Secondary emissions" means emissions that:

(a)1. Occur as a result of the construction or operation of a major stationary source or major modification; and

2. Do not come from the major stationary source or major modification itself;

(b) Are specific, well defined, quantifiable, and impact the same general area as the stationary source modification that causes the secondary emissions;

(c) Include emissions from an offsite support facility that would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification; and

(d) Do not include emissions that come directly from a mobile source, including emissions from the tailpipe of a motor vehicle, a train, or a vessel.

(106) "Serious nonattainment county" or "serious nonattainment area" means a county or portion of a county designated serious nonattainment in 401 KAR 51:010.

(107) "Severe nonattainment county" or "severe nonattainment area" means a county or portion of a county designated severe nonattainment in 401 KAR 51:010.

(108) "Shutdown" means the cessation of an operation.

(109) "SO_2" means sulfur dioxide.

(110) "Source" means one (1) or more affected facilities contained within a given contiguous property line, which means the property is separated only by a public thoroughfare, stream, or other right of way.

(111) "sq" means square.

(112) "Stack or chimney" means a flue, conduit, or duct arranged to conduct emissions to the atmosphere.

(113) "Standard" means an emission standard, a standard of performance, or an ambient air quality standard promulgated in the administrative regulations of the Division for Air Quality or the emission control requirements necessary to comply with 401 KAR Chapter 51.

(114) "Standard conditions" means:

(a) For source measurements, twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) and a pressure of 760 mm Hg (29.92 in. of Hg);

(b) For air quality determinations, twenty-five (25) degrees Celsius (seventy-seven (77) degrees Fahrenheit) and a reference pressure of 760 mm Hg.

(115) "Start-up" means the setting in operation of an affected facility.

(116) "State implementation plan" or "SIP" means the most recently prepared plan or revision required by 42 U.S.C. 7410 that has been approved by the U.S. EPA.

(117) "TAPPI" means Technical Association of the Pulp and Paper Industry.

(118) "Total suspended particulates" or "TSP" means particulate matter as measured by the method described in 40 C.F.R. Part 50, Appendix B.

(119) "tpy" means ton per year.

(120) "TSS" means total suspended solids.

(121) "Uncombined water" means water that can be separated from a compound by ordinary physical means and that is not bound to a compound by internal molecular forces.

(122) "Urban county" means a county that is a part of an urbanized area with a population greater than 200,000 based upon the 1980 census. If a portion of a county is a part of an urbanized area, then the entire county shall be classified as urban for the administrative regulations of the Division for Air Quality.

(123) "Urbanized area" means an area defined by the U.S. Department of Commerce, Bureau of Census.

(124) "U.S. EPA" means United States Environmental Protection Agency.

(125) "UTM" means Universal Transverse Mercator.

(126) "Volatile organic compound" or "VOC" is defined in 40 C.F.R. 51.100(s).

(127) "yd" means yard. (18 Ky.R. 2741; Am. 2933; 3337; eff. 6-24-92; 21 Ky.R. 1761; 2140; eff. 4-6-95; 22 Ky.R. 1695; 2014; eff. 6-6-96; 1446; 2844; eff. 6-9-99; 33 Ky.R. 213; eff. 11-8-2006; TAm eff. 9-16-2013.)