Rules of
Department of Natural Resources
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

Title 10—DEPARTMENT OF NATURAL RESOURCES
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10 CSR 10-6.010 Ambient Air Quality Standards

PURPOSE: This rule provides long-range goals for ambient air quality throughout Missouri in order to protect the public health and welfare.

Pollutant	Method	Concentration	Remarks
1. Particulate matter 10 micron (PM_{10})	As specified in 10 CSR 10-6.040(4)(J)	50 micrograms per cubic meter annual arithmetic mean	
		150 micrograms per cubic meter 24-hour average concentration	As determined 10 CSR 10-6.040(4)(K)
2. Sulfur dioxide	As specified in 10 CSR 10-6.040(4)(A)	0.03 ppm (80 micrograms per cubic meter)	Annual arithmetic mean
		0.14 ppm (365 micrograms per cubic meter)	24-hour average not to be exceeded more than once per year
		0.5 ppm (1300 micrograms per cubic meter)	3-hour average not to be exceeded more than once per year
3. Carbon monoxide	As specified in 10 CSR 10-6.040(4)(C)	9 ppm (10,000 micrograms per cubic meter)	8-hour average not to be exceeded more than once per year
		35 ppm (40,000 micrograms per cubic meter)	1-hour average not to be exceeded more than once per year
4. Photochemical oxidants (ozone)	As specified in 10 CSR 10-6.040(4)(D)	0.12 ppm (235 micrograms per cubic meter)	1-hour average not to be exceeded more than one day per year (see 10 CSR 10-6.040(4)(H))
5. Nitrogen dioxide	As specified in 10 CSR 10-6.040(4)(F)	0.05 ppm (100 micrograms per cubic meter)	Annual arithmetic mean not to be exceeded
6. Hydrogen sulfide	As specified in in 10 CSR 10-6.040(5)	0.05 ppm (70 micrograms per cubic meter)	1/2-hour average not to be exceeded over 2 times per year
		0.03 ppm (42 micrograms per cubic meter)	1/2-hour average not to be exceeded over 2 times in any 5 consecutive days
7. Sulfuric acid	As specified in 10 CSR 10-6.040(6)	10 micrograms per cubic meter	24-hour average not to be exceeded more than once in any 90 consecutive days
		30 micrograms per cubic meter	1-hour average not to be exceeded more than once in any 2 consecutive days
8. Lead	As specified in 10 CSR 10-6.040(4)(G)	1.5 micrograms per cubic meter	Calendar quarter arithmetic mean not to be exceeded

AUTHORITY: section 643.050, RSMo Supp. 1992. Original rule filed Aug. 16, 1977, effective Feb. 11, 1978. Amended: Filed Dec. 10, 1979, effective April 11, 1980. Amended: Filed Jan. 5, 1988, effective April 28, 1988.*

**Original authority: 643.050, RSMo 1965, amended 1972, 1992.*

10 CSR 10-6.020 Definitions and Common Reference Tables

PURPOSE: This rule defines key words and expressions used in chapters 1 through 6 and provides common reference tables.

(1) Application. This rule shall apply throughout Missouri defining terms and expressions used in all Title 10, Division 10—Air Conservation Commission rules.

(2) Definitions.

(A) All terms beginning with "A."

1. Abatement project designer—An individual who designs or plans Asbestos Hazard Emergency Response Act (AHERA) asbestos abatement.

2. Accumulator—The reservoir of a condensing unit receiving the condensate from the condenser.

3. Act—The Clean Air Act, 42 U.S.C. 7401. References to the word Title pertain to the titles of the Clean Air Act Amendments of 1990, P.L. 101-595.

4. Actual emissions—The actual rate of emissions of a pollutant from a source operation is determined as follows: 1) actual emissions as of a particular date shall equal the average rate, in tons per year, at which the source operation or installation actually emitted the pollutant during the previous two (2)-year period and which represents normal operation. A different time period for averaging may be used if the director determines it to be more representative. Actual emissions shall be calculated using actual operating hours, production rates and types of materials processed, stored or combusted during the selected time period; 2) the director may presume that source-specific allowable emissions for a source operation or installation are equivalent to the actual emissions of the source operation or installation; and 3) for source operations or installations which have not begun normal operations on the particular date, actual emissions shall equal the potential emissions of the source operation or installation on that date.

5. Adequately wet—To sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

6. Administrator—The regional administrator for Region VII, United States Environmental Protection Agency (EPA).

7. Adsorption cycle—The period during which the adsorption system is adsorbing and not desorbing.

8. Adverse impact on visibility—The visibility impairment which interferes with the protection, preservation, management or enjoyment of the visitor's visual experience of a Class I area, which is an area designated as Class I in 10 CSR 10-6.060(11)(A)2. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairments, and how these factors correlate with the times of visitor use of the Class I area and the frequency and timing of natural conditions that reduce visibility.

9. Aerospace assembly and components—The fabricated part, assembly of parts or completed unit of aircraft, helicopter, missile or space vehicle or associated equipment.

10. Affected source—A source that includes one (1) or more emission units subject to emission reduction requirements or limitations under Title IV of the Act.

11. Affected states—All states contiguous to the permitting state whose air quality may be affected by the modification, renewal or issuance of, or is within fifty (50) miles of, a source subject to permitting under Title V of the Act.

12. Affected unit—A unit that is subject to emission reduction requirements or limitations under Title IV of the Act.

13. Aggressive air sampling—Sweeping of floors, ceilings and walls and other surfaces with the exhaust of a minimum of one (1) horsepower leafblower or equivalent immediately prior to air monitoring.

14. Agricultural incinerator—An incinerator which is located on a farm or ranch and which has a rated burning capacity of less than one hundred pounds (100 lbs.) per hour of Type IV waste as defined by the Incinerator Standards of the Incinerator Institute of America (11A—STDS66) and is located more than fifteen hundred feet (1500') from the nearest inhabited dwelling not on the farm or ranch.

15. AHERA—Asbestos Hazard Emergency Response Act of 1986 (P.L. 99-519).

16. Air cleaning device—Any method, process or equipment which removes, reduces or renders less obnoxious air contaminants discharged into the ambient air.

17. Air contaminant—Any particulate matter or any gas or vapor or any combination of them.

18. Air contaminant source—Any and all sources of emission of air contaminants whether privately or publicly owned or operated.

19. Air-dried coating—The coatings which are dried by the use of air or forced warm air at temperatures up to ninety degrees Celsius (90°C) (one hundred ninety-four degrees Fahrenheit (194°F)).

20. Air pollution—The presence in the ambient air of one (1) or more air contaminants in quantities, of characteristics and of a duration which directly and approximately cause or contribute to injury to human, plant or animal life or health, or to property or which unreasonably interfere with the enjoyment of life or use of property.

21. Allowable emissions—The emission rate calculated using the maximum rated capacity of the installation (unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both) and the most stringent of the following: 1) emission limit established in any applicable emissions control rule including those with a future compliance date or 2) the emission rate specified as a permit condition.

22. Allowance—An authorization, allocated to an affected unit by the administrator under Title IV of the Act, to emit, during or after a specified calendar year, one (1) ton of sulfur dioxide (SO_2).

23. Alternate site analysis—An analysis of alternative sites, sizes, production processes and environmental control techniques for the proposed source which demonstrates that benefits of the proposed installation significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

24. Ambient air—All space outside of buildings, stacks or exterior ducts.

25. Ambient air increments—The limited increases of pollutant concentrations in ambient air over the baseline concentration.

26. Anode bake plant—A facility which produces carbon anodes for use in a primary aluminum reduction installation.

27. Applicable requirement—All of the following listed in the Act:

A. Any standard or requirement provided for in the implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the relevant requirements, including any revisions to that plan promulgated in 40 CFR part 52;

B. Any term or condition of any preconstruction permit issued pursuant to regulations approved or promulgated through rulemaking under Title I, including parts C or D of the Act;

C. Any standard or requirement under section 111 of the Act, including section 111(d);

D. Any standard or requirement under section 112 of the Act, including any

requirement concerning accident prevention under section 112(r)(7);

E. Any standard or requirement of the acid rain program under Title IV of the Act or the regulations promulgated under it;

F. Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act;

G. Any standard or requirement governing solid waste incineration, under section 129 of the Act;

H. Any standard or requirement for consumer and commercial products, under section 183(e) of the Act;

I. Any standard or requirement for tank vessels under section 183(f) of the Act;

J. Any standard or requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the Act;

K. Any standard or requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the administrator has determined that these requirements need not be contained in a Title V permit;

L. Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the Act, but only as it would apply to temporary sources permitted pursuant to section 504(e); and

M. Any standard or requirement established in sections 643.010–643.190, RSMo of the Missouri Air Conservation Law and rules adopted under them.

28. Appropriate warning sign—Any asbestos hazard warning sign that complies with the regulations of the United States Occupational Safety and Health Administration (OSHA) or the EPA rules.

29. Approved source—A source of fuel which has been found by the department director, after the tests as s/he may require, to be in compliance with these rules.

30. Approved waste disposal site—A solid waste disposal area that is authorized by the department to receive friable asbestos containing solid wastes.

31. Area of the state—Any geographical area designated by the commission.

32. Asbestos—The asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite and actinolite.

33. Asbestos abatement—The encapsulation, enclosure or removal of asbestos-containing materials, in or from a building, or air contaminant source; or preparation of friable asbestos-containing material prior to demolition.

34. Asbestos abatement contractor—Any person who by agreement, contractual or otherwise, conducts asbestos abatement projects at a location other than his/her own place of business.

35. Asbestos abatement project—An activity undertaken to encapsulate, enclose or remove ten (10) square feet or sixteen (16) linear feet or more of friable asbestos-containing materials from buildings and other air contaminant sources, or to demolish buildings and other air contaminant sources containing ten (10) square feet or sixteen (16) linear feet or more.

36. Asbestos abatement supervisor—An individual who directs, controls or supervises others in asbestos abatement projects.

37. Asbestos abatement worker—An individual who engages in asbestos abatement projects.

38. Asbestos air sampling professional—An individual who by qualifications and experience is proficient in asbestos abatement air monitoring. The individual shall conduct, oversee or be responsible for air monitoring of asbestos abatement projects before, during and after the project has been completed.

39. Asbestos air sampling technician—An individual who has been trained by an air sampling professional to do air monitoring. That individual conducts air monitoring of an asbestos abatement project before, during and after the project has been completed.

40. Asbestos caution label—A label that complies with applicable EPA, Department of Transportation (DOT) and OSHA rule requirements and is to be securely affixed to a waste container that contains friable asbestos materials.

41. Asbestos-containing material (ACM)—Any material or product which contains more than one percent (1%) asbestos, by weight.

42. Asbestos debris—Material that results from removal or deterioration of asbestos-containing material.

43. Asbestos dismantling project—An asbestos abatement project that includes the disassembling, handling and moving of the components of any structural or equipment item that has been coated with friable asbestos-containing material without first removing this material.

44. Asbestos encapsulation project—An asbestos abatement project involving the coating of a friable asbestos-containing surface material with a sealing substance with the intended purpose of preventing the continued release of asbestos fibers from the material into the air. This definition shall not include:

A. The repainting of a previously painted asbestos-containing surface primarily for the purpose of improving appearance;

B. The application of a sealing material to a surface subsequent to the removal of asbestos from it;

C. The application of an encapsulant to asbestos-containing material while the material is being removed;

D. The application of a sealing substance to less than ten (10) square feet or less than sixteen (16) linear feet of friable asbestos-containing material that is contiguous to other types of material;

E. The application of a sealing substance to asbestos-containing material that has previously been enclosed or encapsulated; or

F. The painting of nonfriable asbestos-containing material.

45. Asbestos enclosure project—An asbestos abatement project that involves the construction of an airtight impact resistant barrier to isolate a surface coated with asbestos-containing material.

46. Asbestos Hazard Emergency Response Act—(AHERA) of 1986 (P.L. 99-519).

47. Asbestos maintenance operation—Any operation that involves the removal or cleanup of less than ten (10) square feet or less than sixteen (16) linear feet of friable asbestos-containing material from any type of structural or equipment item in order to repair, replace or maintain the item and anything attached to it.

48. Asbestos projects—An activity undertaken to remove or encapsulate one hundred sixty (160) square feet or two hundred sixty (260) linear feet or more of friable asbestos-containing materials or demolition of any structure or building or a part of it containing the previously mentioned quantities of asbestos-containing materials.

49. Asbestos removal project—An asbestos abatement project consisting of activities that involve, and are required, to take out friable asbestos-containing materials from any facility. This definition includes, but is not limited to, activities associated with the cleanup of loose friable asbestos-containing debris or refuse, or both, from floors and other surfaces.

50. ASME—American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017.

51. Asphalt prime coat—Application of low-viscosity liquid asphalt to an absorbent surface such as a previously untreated surface.

52. Asphalt seal coat—An application of a thin asphalt surface treatment used to waterproof and improve the texture of an absorbent surface or a nonabsorbent surface such as asphalt or concrete.

53. ASTM—American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

54. Automobile—A four (4)-wheel passenger motor vehicle or derivative capable of seating no more than twelve (12) passengers.

55. Automobile and light duty truck surface coating operations—The application, flashoff and curing of prime, primer-surfacer, topcoat and final repair coatings during the assembly of passenger cars and light duty trucks excluding the following operations:

A. Wheel coatings;

B. Miscellaneous antirust coatings;

C. Truck interior coatings;

D. Interior coatings;

E. Flexible coatings;

F. Sealers and adhesives; and

G. Plastic parts coatings. (Customizes, body shops and other repainters are not part of this definition.)

56. Automotive underbody deadeners—Any coating applied to the underbody of a motor vehicle to reduce the noise reaching the passenger compartment.

(B) All terms beginning with "B."

1. Base year—The year chosen in the state implementation plan to directly correlate emissions of the nonattainment pollutant in the nonattainment area with ambient air quality data pertaining to the pollutant. From the base year, projections are made to determine when the area will attain and maintain the ambient air quality standards.

2. Baseline area—The continuous area in which the source constructs as well as those portions of the intrastate area which are not part of a nonattainment area and which would receive an air quality impact equal to or greater than one microgram per cubic meter (1 $\mu g/m^3$) annual average (established by modeling) for each pollutant for which an installation receives a permit under 10 CSR 10-6.060(8) and for which increments have been established in 10 CSR 10-6.060(11)(B), Table 2. Each of these areas are references to the standard United States Geological Survey (USGS) County-Township-Range-Section system. The smallest unit of area for which a baseline date will be set is one (1) section (one (1) square mile).

3. Baseline concentration—That ambient concentration level which exists at locations of anticipated maximum air quality impact or increment consumption within a baseline area at the time of the applicable baseline date, minus any contribution from installations, modifications and major modifications subject to 10 CSR 10-6.060(8) or subject to 40 CFR 52.21 on which construction commenced on or after January 6, 1975, for sulfur dioxide and particulate matter and February 8, 1988, for nitrogen dioxide. The baseline concentration shall include contributions from:

A. The actual emissions of other installations in existence on the applicable baseline date; and

B. The potential emissions of installations and major modifications which commenced construction before January 6, 1975, but were not in operation by the applicable baseline date.

4. Baseline date—The date, for each baseline area, of the first complete application after August 7, 1977, for sulfur dioxide and particulate matter, and February 8, 1988, for nitrogen dioxide for a permit to construct and operate an installation subject to 10 CSR 10-6.060(8) or subject to 40 CFR 52.21.

5. Best available control technology (BACT)—An emission limitation (including a visible emission limit) based on the maximum degree of reduction for each pollutant which would be emitted from any proposed installation or major modification which the director on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for the installation or major modification through application of production processes or available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of the pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable emissions control regulation, including New Source Performance Standards established in 10 CSR 10-6.070 and 40 CFR part 60 and National Emissions Standards for Hazardous Pollutants established in 10 CSR 10-6.080 and 40 CFR part 61. If the director determines that technological or economic limitations on the application of measurement methodology to a particular source operation would make the imposition of an emission limitation infeasible, a design, equipment, work practice, operational standard or combination of these may be prescribed instead to require the application of BACT. This standard, to the degree possible, shall set forth the emission reduction achievable by implementation of the design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results.

6. Building—Any structure excluding single-family, owner-occupied dwellings, and vacant public or privately owned residential structures of four (4) dwelling units or less being demolished for the sole purpose of public health, safety or welfare. Excluded structures must be geographically disbursed, demolished pursuant to a public safety determination, and must pose a threat to public safety.

(C) All terms beginning with "C."

1. Can coating—A surface coating applied to a cylindrical steel or aluminum container. The container can be two (2) pieces (made by a drawn and wall-ironed shallow cup with only one (1) end) or three (3) pieces (made by a rectangular material rolled into a cylinder and the attachment of two (2) end pieces).

2. Carbon adsorption system—A device containing adsorbent material (for example, activated carbon, aluminum, silica gel); an inlet and outlet for exhaust gases; and a system to regenerate the saturated adsorbent. The carbon adsorption system must provide for the proper disposal or reuse of all volatile organic compounds (VOC) adsorbed.

3. Carbon bed breakthrough—A concentration of VOC in the carbon adsorption device exhaust that exceeds ten percent (10%) by weight of the inlet VOC concentration.

4. Catalytic incinerator—A control device using a catalyst to allow combustion to occur at a lower temperature.

5. Category I nonfriable ACM—Asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR part 763, subpart F, Appendix A, section 1, Polarized Light Microscopy.

6. Category II nonfriable ACM—Any material, excluding category I nonfriable ACM, containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR part 763, subpart F, Appendix A, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

7. Circumvention—Building, erecting, installing or using any article, machine, equipment, process or method which, when used, would conceal an emission that would otherwise constitute a violation of an applicable standard or requirement. That concealment includes, but is not limited to, the use of gaseous adjutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specific size.

8. Clean room—An uncontaminated area or room which is a part of the worker decontamination enclosure system.

9. Clear coat—A coating which lacks color and opacity or is transparent and uses

the undercoat as a reflectant base or undertone color. This term also includes corrosion preventative coatings used for the interior of drums or pails.

10. Closed container—A container with a cover fastened in place so that it will not allow leakage or spilling of the contents.

11. Coating applicator—An apparatus used to apply a surface coating.

12. Coating line—One (1) or more apparatus or operations which include a coating applicator, flash-off area and oven where a surface coating is applied, dried or cured, or a combination of these.

13. Coil coating—The coating of any flat metal sheet or strip that comes in rolls or coils.

14. Cold cleaner—A type of degreaser which consists of a tank of organic solvent used for cleaning or degreasing metal parts at or near room temperature.

15. Commenced—An owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete within a reasonable time, a continuous program of construction or modification.

16. Commenced operation—The initial setting into operation of any air pollution control equipment or process equipment.

17. Commercial vehicle—A motor vehicle designed or regularly used for carrying freight and merchandise or more than eight (8) passengers.

18. Commission—The Missouri Air Conservation Commission established pursuant to section 643.040, RSMo.

19. Condensate (hydrocarbons)—A hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

20. Condenser—Any heat transfer device used to liquefy vapors by removing their latent heats of vaporization including, but not limited to, shell and tube, coil, surface or contact condensers.

21. Conservation vent—Any valve designed and used to reduce evaporation losses of VOC by limiting the amount of air admitted to, or vapors released from, the vapor space of a closed storage vessel.

22. Construction—Fabricating, erecting, reconstructing or installing a source operation. Construction shall include installation of building supports and foundations, laying of underground pipe work, building of permanent storage structures and other construction activities related to the source operation.

23. Containment—The area where an asbestos abatement project is conducted. The area must be enclosed either by a glove bag or plastic sheeting barriers.

24. Control curtain—Any of the three (3) following types of closure devices that are to be constructed of not less than four (4) mil thick plastic sheeting material and installed in an entryway of an area that is considered to be contaminated with free asbestos fibers.

A. A ventilation curtain that allows unrestricted air flow movement into a contaminated area when it is being ventilated with an exhaust fan. This curtain consists of a single flap that opens into the contaminated area and is securely fastened across the top of the entryway framework so that it overlaps both sides of the entryway by not less than twelve inches (12") and the base of the entryway by not less than three inches (3");

B. A confinement curtain that restricts the movement of air into, and from, an unventilated and contaminated area. This curtain consists of three (3) constructed baffles that cover the entire area of the entryway and are securely fastened along the top of the entryway framework and along alternate sides of locations in a manner that will allow two (2) of the curtains to fully cover the entryway opening while a person passes through the third curtain. An airlock arrangement consisting of two (2) confinement curtain entryways that are located at least three feet (3') apart may be substituted for the triple baffle arrangement; or

C. A closure device for which written department approval is required.

25. Conveyorized degreaser—A type of degreaser in which the parts are loaded continuously.

26. Crude oil—A naturally occurring mixture which consists of hydrocarbons and sulfur, nitrogen or oxygen derivatives, or a combination of these, of hydrocarbons which is a liquid at standard conditions.

27. Custody transfer—The transfer of produced crude oil or condensate, or both, after processing or treating, or both, in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

28. Cutback asphalt—Any asphaltic cement that has been liquefied by blending with VOC liquid diluents.

(D) All terms beginning with "D."

1. Decontamination facility—The serial arrangement of rooms or spaces for the purpose of separating the work site from the building environment upon entering the work site and for the cleaning of persons, equipment and contained waste prior to returning to the clean environment.

2. Degreasing—A solvent metal cleaning in which nonaqueous solvents are used to clean and remove soils from metal surfaces.

3. Delivery vessel—A tank truck, trailer, railroad tank car or drums.

4. *De minimis* levels—Any emissions level less than or equal to the rates listed in Table 1, subsection (3)(A) of this rule.

5. Demolition project—The wrecking, razing, burning or removing of any load-supporting structural member or portion of a structure together with any related handling operation.

6. Department-approved inhouse project—An asbestos abatement project in a person's own facility using their own trained facility employees; the project has received departmental approval as part of planned renovation operations.

7. Designated representative—A responsible individual authorized by the owner or operator of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with subpart B of 40 CFR part 72, to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the Acid Rain Program. Whenever the term "responsible official" is used in 40 CFR part 70, 10 CSR 10-6.065 or in any other regulations implementing Title V of the Act, it shall be deemed to refer to the "designated representative" with regard to all matters under the Acid Rain Program.

8. Diammonium phosphate—A product resulting from the reaction between phosphoric acid and ammonia having the molecular formula $(NH_4)_2HPO_4$.

9. Director or department director—Director of the Department of Natural Resources.

10. Dispersion technique—

A. A dispersion technique is any technique designed to affect the concentration of a pollutant in the ambient air by—

(I) Using that portion of a stack which exceeds good engineering practice stack height;

(II) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

(III) Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters or combining exhaust gases from several existing stacks into one (1) stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise; and

B. This definition does not include:

(I) The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the installation generating the gas stream;

(II) The merging of exhaust gas streams where—

(a) The installation owner or operator demonstrates that the installation was originally designed and constructed with the merged gas streams;

(b) After July 8, 1985, the merging is part of a change in operation at the installation that includes the installation of emissions control equipment and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of dispersion technique shall apply only to the emission limitation for the pollutant affected by a change in operation; or

(c) Before July 8, 1985, the merging was part of a change in operation at the installation that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or in the event that no emission limitation was in existence prior to the merging, the director shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Without a demonstration by the source owner or operator that merging was not significantly motivated by that intent, the director shall deny credit for the effects of merging in calculating the allowable emissions for the source;

(III) Smoke management in agricultural or silvicultural prescribed burning programs;

(IV) Episodic restrictions on residential woodburning and open burning; or

(V) Techniques under part (2)(D)10.A.(III) of this definition which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the installation do not exceed five thousand (5000) tons per year.

11. Draft permit—The version of a permit for which the permitting authority offers public participation or affected state review.

12. Drum—Any cylindrical container of thirteen to one hundred ten (13—110) gallon capacity.

13. Dry cleaning installation—An installation engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one (1) or more washes in solvent, extraction of excess solvent by spinning and drying by tumbling in an airstream. The installation includes, but is not limited to, any washer, dryer, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

(E) All terms beginning with "E."

1. Emergency asbestos abatement project—An asbestos abatement project that must be undertaken immediately to prevent imminent severe human exposure or to restore essential facility operation.

2. Emission—The release or discharge, whether directly or indirectly, into the atmosphere of one (1) or more air contaminants.

3. Emission limitation—A regulatory requirement, permit condition or consent agreement which limits the quantity, rate or concentration of emissions on a continuous basis, including any requirement which limits the level of opacity, prescribes equipment, sets fuel specifications or prescribes operation or maintenance procedures for an installation to assure continuous emission reduction.

4. Emissions unit—Any part or activity of an installation that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act. This term is not meant to alter or affect the definition of the term unit for the purposes of Title IV of the Act.

5. Emulsified asphalt—An emulsion of asphalt cement and water that contains a small amount of an emulsifying agent, as specified in ASTM D (977-77) or ASTM D (2397-73).

6. Enamel—A surface coating that is a mixture of paint and varnish, having vehicles similar to those used for varnish, but also containing pigments.

7. End exterior coating (two (2)-piece)—A surface coating used to cover the outside surface of the end of a two (2)-piece can.

8. End seal compound—The gasket forming coating used to attach the end pieces of a can during manufacturing or after filling with contents.

9. Equipment—Any item that is designed or intended to perform any operation and includes any item attached to it to assist in the operation.

10. Equivalent phosphorous pentoxide feed—The quantity of phosphorous, expressed as phosphorous pentoxide, fed to the process.

11. Excess emissions—The emissions which exceed the requirements of any applicable emission control regulation.

12. Excessive concentration—

A. For installations seeking credit for reduced ambient pollutant concentrations from stack height exceeding that defined in subparagraph (2)(G)3.B., an excessive concentration is a maximum ground level concentration due to emissions from a stack due in whole or part to downwash, wakes or eddy effects produced by nearby structures or nearby terrain features which are at least forty percent (40%) in excess of the maximum concentration experienced in the absence of the downwash, wakes or eddy effects, and that contributes to a total concentration due to emissions from all installations that is greater than an ambient air quality standard. For installations subject to the prevention of significant deterioration program as set forth in 10 CSR 10-6.060(8), an excessive concentration means a maximum ground level concentration due to emissions from a stack due to the same conditions as mentioned previously and is greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this definition shall be prescribed by the new source performance regulation as referenced by 10 CSR 10-6.070 for the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where demonstrations are approved by the director, an alternative emission rate shall be established in consultation with the source owner or operator;

B. For installations seeking credit after October 11, 1983, for increases in stack heights up to the heights established under subparagraph (2)(G)3.B., an excessive concentration is either—

(I) A maximum ground level concentration due in whole or part to downwash, wakes or eddy effects as provided in subparagraph (2)(E)12.A. of this rule, except that the emission rate used shall be the applicable emission limitation (or, in the absence of this limit, the actual emission rate); or

(II) The actual presence of a local nuisance caused by the stack, as determined by the director; and

C. For installations seeking credit after January 12, 1979, for a stack height determined under subparagraph (2)(G)3.B. where the director requires the use of a field study of fluid model to verify good engineering practice stack height, for installations seeking stack height credit after November 9, 1984, based on the aerodynamic influence of cooling towers and for installations seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not represented adequately by the equations in subparagraph (2)(G)3.B., a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects that is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of downwash, wakes or eddy effects.

13. Existing—As applied to any equipment, machine, device, article, contrivance or installation shall mean in being, installed or under construction in the Kansas City metropolitan area on September 25, 1968 (Buchanan County, January 21, 1970), in the St. Louis metropolitan area on March 24, 1967 (Franklin County, January 18, 1972), in the Springfield metropolitan area on September 24, 1971, and in the outstate Missouri area on February 24, 1971, except that if equipment, machine, device, article, contrivance or installation subsequently is altered, repaired or rebuilt at a cost of fifty percent (50%) or more of its replacement cost exclusive of routine maintenance, it shall no longer be existing, but shall be considered new as defined in this regulation. The cost of installing equipment designed principally for the purpose of air pollution control is not to be considered a cost of altering, repairing or rebuilding existing equipment for the purpose of this definition.

14. Exterior coating (two (2)-piece)—A surface coating used to coat the outside face of a two (2)-piece can. Used to provide protection from the lithograph or printing operations.

15. External floating roof—A storage vessel cover in an open top tank consisting of a double-deck or pontoon single deck which rests upon and is supported by petroleum liquid being contained and is equipped with a closure seal(s) to close the space between the roof edge and tank wall.

16. Extreme environmental conditions—The exposure to any of—the weather all of the time, temperatures consistently above ninety-five degrees Celsius (95°C), detergents-abrasive and scouring agents, solvents, corrosive atmospheres or similar environmental conditions.

17. Extreme performance coating—A coat designed for extreme environmental conditions.

(F) All terms beginning with "F."

1. Fabric coating—The coating of a textile substrate with a knife or roller spreader to impart properties that are not initially present, such as strength, stability, water or acid repellency or appearance.

2. Federally enforceable—All limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR parts 55, 60, 61 and 63; requirements within any applicable state implementation plan; requirements in operating permits issued pursuant to 40 CFR parts 70 or 71, unless specifically designated as non-federally enforceable; and any permit requirements established pursuant to 40 CFR sections 52.10, 52.21, or part 55, or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the state implementation plan and expressly requires adherence to any permit issued under such program.

3. Final permit—The version of a part 70 permit issued by the permitting authority that has completed all review procedures as required in part 70 sections 70.7 and 70.8.

4. Final repair—The final coatings applied to correct topcoat imperfections after the complete assembly of the automobile.

5. Firebox—The chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator.

6. Flash off area—The space between the application area and the oven.

7. Flexographic printing—The application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

8. Freeboard height—The distance from the solvent (cold cleaner) or solvent vapor level (vapor degreaser) to the top edge of the solvent container.

9. Freeboard ratio—The freeboard height divided by the width of the degreaser.

10. Friable asbestos-containing material—Any material that contains more than one percent (1%) asbestos, by weight, which is applied to ceilings, walls, structural members, piping, ductwork or any other part of a building or facility and which, when dry, may be crumbled, pulverized or reduced to powder by hand pressure.

11. Fugitive emissions—Those emissions which according to good engineering practice could not pass through a stack, chimney, vent or other functionally equivalent opening.

12. Furnishings—Removable furniture, drapes, rugs and decorative items.

(G) All terms beginning with "G."

1. Gasoline—A petroleum liquid having a Reid vapor pressure four pounds (4 lbs.) per square inch or greater.

2. Glove bag—A manufactured or fabricated device, typically constructed of six (6) mil transparent polyethylene or polyvinyl chloride plastic. This device consists of two (2) inward projecting long sleeves, an internal tool pouch and an attached, labeled receptacle for asbestos waste. The bags are especially designed to contain sections of pipe for the purpose of removing a short length of damaged asbestos material without releasing fibers into the air.

3. Good engineering practice (GEP) stack height—GEP stack height means the greater of—

A. Sixty-five meters (65m), measured from the ground level elevation at the base of the stack;

B. For stacks on which construction commenced on or before January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals required under 40 CFR parts 51 and 52,

$$Hg = 2.5H$$

provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation; and for all other stacks,

$$Hg = H + 1.5L$$

Where:
Hg = GEP stack height, measured from the ground level elevation at the base of the stack;
H = height of nearby structure(s) measured from the ground level elevation at the base of the stack; and
L = lesser dimension, height or projected width of the nearby structure(s). Provided that the director may require the use of a field study or fluid model to verify GEP stack height for the installation; or

C. The height demonstrated by a fluid model or field study approved by the director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as result of atmospheric downwash, wakes or eddy effects created by the source itself, nearby structures or nearby terrain features.

4. Growth increment—The limit on new installation or major modification emissions of a nonattainment pollutant. Growth increment is reserved for use only by installations with no applicable, internally generated, banked emissions reductions.

(H) All terms beginning with "H."

1. Hazardous air pollutant—Any of the air pollutants listed in subsection (3)(C) of this rule.

2. HHV—A higher heating value as determined by 10 CSR 10-6.040(2) (ASTM Standard: D 2015-66, Part 19, 1972, *Standard Method for Determining Gross Heating Values of Solid Fuels*).

3. High efficiency particulate air filter—A HEPA filter found in respirators and vacuum systems capable of filtering three-tenths (0.3) micron particles with at least ninety-nine and ninety-seven hundredths percent (99.97%) efficiency.

4. High terrain—Any area having an elevation nine hundred feet (900') or more above the base of the stack of the installation.

5. Homogeneous area—An area of surfacing material, thermal system insulation material or miscellaneous material that is uniform in color and texture.

6. Hot car—A vehicle which transfers hot coke from the oven to the area of quenching.

7. Hot well—The reservoir of a condensing unit receiving the warm condensate from the condenser.

(I) All terms beginning with "I."

1. Incinerator—Any article, machine, equipment, contrivance, structure or part of a structure used to burn refuse or to process refuse material by burning other than by open burning as defined in this rule.

2. Indirect heating source—A source operation in which fuel is burned for the primary purpose of producing steam, hot water or hot air, or other indirect heating of liquids, gases or solids where, in the course of doing so, the products of combustion do not come into direct contact with process materials.

3. Individual source monitoring—A system as specified in EPA document EPA-450/2-78-036 entitled *Control of Volatile Organic Compound Leaks from Petroleum Refinery Equipment*, which utilizes a portable hydrocarbon monitor to measure levels of volatile hydrocarbons emitted from individual process equipment.

4. Innovative control technology—Any system of air pollution control that has not been adequately demonstrated in practice but would have a substantial likelihood of achieving greater continuous emission reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics or non-air quality environmental impacts.

5. Insignificant activity—All emission units identified by an applicant whose aggregate emission levels for the installation do not exceed that of the *de minimis* levels and do not have any applicable requirements associated with them.

6. Inspector—An individual, under AHERA, who collects and assimilates information used to determine whether asbestos-containing material is present in a building or other air contaminant sources.

7. Installation—All source operations including activities that result in fugitive emissions, that belong to the same industrial grouping (that have the same two (2)-digit code as described in the *Standard Industrial Classification Manual*, 1987), and any marine vessels while docked at the installation, located on one (1) or more contiguous or adjacent properties and under the control of the same person (or persons under common control).

8. Interior body spray (two (2)- and three (3)-piece)—The surface coating for the interior and ends of a two (2)-piece formed can or the surface coating of the side of the rectangular material to be used as the interior and ends of a three (3)-piece can.

9. Internal floating roof—A product cover in a fixed roof tank which rests upon or is floated upon the VOC liquid being contained and which is equipped with a sliding seal(s) to close the space between the edge of the covers and tank shell.

10. Inventory—A quantification of emissions by installation and by source operation.

(J) All terms beginning with "J."

(K) All terms beginning with "K."

1. Kansas City metropolitan area—The geographical area comprised of Jackson, Cass, Clay, Platte, Ray and Buchanan Counties.

2. Knife coating—The application of a coating material to a substrate by means of drawing the substrate between a knife that spreads the coating evenly over the full width of the substrate.

(L) All terms beginning with "L."

1. Lacquers—A surface coating that is basically solutions of nitrocellulose in VOCs, with plasticizers and other resins added to improve the quality of the film.

2. Light-duty truck—Any motor vehicle rated at eight thousand five hundred pounds (8500 lbs.) gross weight or less or a derivation of this vehicle which is designed primarily for the purpose of transportation of property.

3. Liquefied cutback asphalt (LCA)—An asphalt cement which has been liquefied by blending with petroleum solvents (diluents).

4. Liquid-mounted seal—A primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.

5. Low terrain—Any area other than high terrain.

6. Lower explosive limit (LEL)—The lower limit of flammability of a gas or vapor at ordinary ambient temperatures expressed in percent of the gas or vapor in air by volume.

7. Lowest achievable emission rate (LAER)—That rate of emissions which reflects—1) the most stringent emission limitation which is contained in any state implementation plan for a class or category of source, unless the owner or operator of the proposed source demonstrates that the limitations are not achievable or 2) the most stringent emission limitation which is achieved in practice by the class or category of source, whichever is more stringent. LAER shall not be less stringent than the new source performance standard limit.

(M) All terms beginning with "M."

1. MACT (Maximum achievable control technology)—The maximum degree of reduction in emissions of the hazardous air pollutants listed in subsection (3)(C) of this rule (including a prohibition on these emissions where achievable), taking into consideration the cost of achieving emissions reductions and any non-air quality health and environmental impacts and requirements, determines is achievable for new or existing sources in the category or subcategory to which this emission standard applies, through application of measures, processes, methods, systems or techniques including, but not limited to, measures which—

A. Reduce the volume of or eliminate emissions of pollutants through process changes, substitution of materials or other modifications;

B. Enclose systems or processes to eliminate emissions;

C. Collect, capture or treat pollutants when released from a process, stack, storage or fugitive emissions point;

D. Are design, equipment, work practice or operational standards (including requirements for operational training or certification); or

E. Are a combination of subparagraphs (2)(M)1.A.–D.

2. Magnet wire coating—The process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

3. Major modification—Any physical change or change in the method of operation at an installation or in the attendant air pollution control equipment that would result in a significant net emissions increase of any pollutant. A physical change or a change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

A. Routine maintenance, repair and replacement of parts;

B. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, a prohibition under the Power Plant and Industrial Fuel Use Act of 1978 or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

C. Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating the fuel or material, unless the change would be

prohibited under any enforceable permit condition which was established after January 6, 1975;

D. An increase in the hours of operation or in the production rate unless the change would be prohibited under any enforceable permit condition which was established after January 6, 1975; or

E. Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act.

4. Malfunction—A sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal and usual manner. Excess emissions caused by improper design shall not be deemed a malfunction.

5. Management planner—An individual, under AHERA, who devises and writes plans for asbestos abatement.

6. Maskant—A coating applied directly to an aerospace component to protect those areas when etching other parts of the component.

7. Metal furniture coating—The surface coating of any furniture made of metal or any metal part which will be assembled with other metal, wood, fabric, plastic or glass parts to form a furniture piece.

8. Model year—The annual production period of new motor vehicles designated by the calendar year in which the period ends, provided that if the manufacturer does not so designate vehicles manufactured by him/her, the model year with respect to the vehicles shall mean the twelve (12)-month period beginning January 1 of the year specified in this rule.

9. Modification—Any physical change, or change in method of operation of, a source operation or attendant air pollution control equipment which would cause an increase in potential emissions of any air pollutant emitted by the source operation.

10. Modification, Title I—See Title I modification.

11. Motor tricycle—A motor vehicle operated on three (3) wheels, including a motorcycle with any conveyance, temporary or otherwise, requiring the use of a third wheel.

12 Motor vehicle—Any self-propelled vehicle.

13. Motorcycle—A motor vehicle operated on two (2) wheels.

14. Multiple chamber incinerator—Any incinerator consisting of two (2) or more refractory lined combustion furnaces in series, physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate design parameters necessary for maximum combustion of the material to be burned, the refractories having a Pyrometric Cone Equivalent of 31, tested according to the method described in the ASTM Method C-24-56 or other method approved by the department director.

15. Multiple fixed-point monitoring—A system for monitoring VOCs where stationary monitors are placed throughout the petroleum refinery which measure atmospheric concentrations of VOCs.

(N) All terms beginning with "N."

1. Nearby—Nearby as used in the definition GEP stack height in subparagraph (2)(G)2.B. is defined for a specific structure or terrain feature—

A. For purposes of applying the formula provided in subparagraph (2)(G)3.B., nearby means that distance up to five (5) times the lesser of the height or the width dimension of a structure, but not greater than one-half (1/2) mile; and

B. For conducting fluid modeling or field study demonstrations under subparagraph (2)(G)3.C., nearby means not greater than one-half (1/2) mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten (10) times the maximum height of the feature, not to exceed two (2) miles if feature achieves a height one-half (1/2) mile from the stack that is at least forty percent (40%) of the GEP stack height determined by the formula provided in subparagraph (2)(G)3.B. or twenty-six meters (26m), whichever is greater, as measured from the ground level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground level elevation at the base of the stack.

2. Net emissions increase—A condition when the increases in pollutant emissions at an installation exceed the decreases of the same pollutant.

A. In determining whether a net emission increase has occurred, all creditable increases and decreases of actual emissions shall be included occurring at the installation since the most recent permit was issued to the installation pursuant to 10 CSR 10-6.060(1)(C). If no permit has been issued to the installation, then all increases and decreases shall be included occurring since—

(I) The base year inventory used to project attainment in the state implementation plan if the installation is in a nonattainment area and has the potential to annually emit one hundred (100) tons or more of the nonattainment pollutant; or

(II) The date on which the most recent permit was issued pursuant to 40 CFR 52.21, or August 7, 1977, for sulfur dioxide and particulate matter, or February 8, 1988, for nitrogen dioxide, whichever is more recent, if the installation is not subject to part (2)(N)2.A.(I).

B. Rules for determining creditability of increases and decreases.

(I) An increase or decrease in actual emissions is creditable only if the director has not relied on it in issuing a permit for the installation pursuant to 10 CSR 10-6.060(1)(C), which permit is in effect when the increase in actual emissions from the particular change occurs.

(II) An increase or decrease in actual emissions of sulfur dioxide particulate matter or nitrogen oxides which occurs before the applicable baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(III) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(IV) A decrease in actual emissions is creditable only to the extent that the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions; the decrease is enforceable at and after the time that actual construction to bring about the proposed increase begins; and the decrease has approximately the same qualitative significance for public health and welfare as that attributed to the proposed increase.

(V) If credit for a decrease in actual emissions has been banked in accordance with 10 CSR 10-6.060(12)(D), credit must be withdrawn from the bank in order for the decrease to be creditable.

(VI) A decrease in actual emissions is creditable only if the director has not relied on it in demonstrating attainment or reasonable further progress.

C. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires a shakedown period becomes operational only after a reasonable shakedown period not to exceed one hundred eighty (180) days.

3. New tepee burner—One not in existence as of September 18, 1970.

4. NIOSH—National Institute of Occupational Safety and Health.

5. Nonattainment area—The areas of Missouri identified as follows:

A. A moderate nonattainment area for ozone consists of Franklin, Jefferson, St. Charles and St. Louis Counties and the City of St. Louis;

B. Nonattainment areas for lead include the city of Herculaneum in Jefferson County, and the Dent, Liberty and Arcadia townships in Iron County; and

C. A nonattainment area for carbon monoxide consists of the area within the boundaries of Interstate 270 and the Mississippi River in St. Louis City and County.

(O) All terms beginning with "O."

1. Offset—A decrease in actual emissions from a source operation or installation that is greater than the amount of emissions anticipated from a modification or construction of a source operation or installation. The decrease must be of the same pollutant and have substantially similar environmental and health effects on the impacted area. Any ratio of decrease to increase greater than one to one (1:1) constitutes offset. The exception to this are ozone nonattainment areas where VOC and NO_x emissions will require an offset ratio of actual emission reduction to new emissions according to the following schedule: marginal area = 1.1:1; moderate area = 1.15:1; serious area = 1.2:1; severe area = 1.3:1; and extreme area = 1.5:1.

2. Offtake—Any set of piping (for example, standpipes, goosenecks) that interconnects a coke oven with a collecting main which is common to all systems. The offtake system extends from the connection on top of the coke oven to the connection on the collecting main.

3. Open burning—The burning of any materials where air contaminants resulting from combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. For purposes of this definition, a chamber shall be regarded as enclosed, when, during the time combustion takes place, only those apertures, ducts, stacks, flues or chimneys as are necessary to provide combustion air and to permit the escape of exhaust gases are open.

4. Open-top vapor degreaser—A type of degreaser which consists of a tank where solvent is heated to its boiling point which creates a zone of solvent vapor contained by a set of cooling coils. Condensation of the hot solvent vapor cleans or degreases the colder metal parts.

5. Outside air—Air outside the containment area.

6. Owner or operator—Any person who owns, leases, operates, controls or supervises an air contaminant source.

(P) All terms beginning with "P."

1. Pail—Any nominal cylindrical container of one to twelve (1–12) gallon capacity.

2. Paint—A pigmented surface coating using VOCs as the major solvent and thinner which converts to a relatively opaque solid film after application as a thin layer.

3. Part 70—Environmental Protection Agency regulations, codified at 40 CFR part 70, setting forth requirements for state operating permit programs pursuant to Title V of the Act.

4. Particulate matter—Any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions and as specifically defined as follows:

A. PM—any airborne, finely divided solid or liquid material with an aerodynamic diameter smaller than one hundred (100) micrometers as measured in stacks by EPA Method 5, or sampled in the ambient air as specified in 10 CSR 10-6.040(4)(B); and

B. PM_{10}—particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured in stacks by EPA Methods 201/201A and 202; or sampled in the ambient air as specified in 10 CSR 10-6.040(4)(J).

5. Permanent shutdown—The permanent cessation of operation of any air pollution control equipment or process equipment, not to be placed back into service or have a start-up.

6. Permitting authority—Either the administrator or the state air pollution control agency, local agency or other agency authorized by the administrator to carry out a permit program as intended by the Act.

7. Person—Any individual, partnership, association, corporation including the parent company of a wholly-owned subsidiary, municipality, subdivision or agency of the state, trust, estate or other legal entity either public or private. This shall include any legal successor, employee or agent of the previous entities.

8. Petroleum liquid—Petroleum, condensate and any finished or intermediate products manufactured in a petroleum refinery with the exception of Numbers 2–6 fuel oils as specified in ASTM D(396-69), gas turbine fuel oils Number 2-GT—4-GT, as specified in ASTM D(2880-71), and diesel fuel oils Number 2-D and 4-D, as specified in ASTM D(975-68).

9. Petroleum refinery—Any facility which produces gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation, cracking, extraction or reforming of unfinished petroleum derivatives.

10. Pharmaceutical—Any compound or preparation included under the Standard Industrial Classification Codes 2833 (Medicinal Chemicals and Botanical Products) and 2834 (Pharmaceutical Preparations), excluding products formulated by fermentation, extraction from vegetable material or animal tissue or formulation and packaging of the final product.

11. Pilot plants—The installations which are of new type or design which will serve as a trial unit for experimentation or testing.

12. Plant-mix—A mixture produced in an asphalt mixing plant that consists of mineral aggregate uniformly coated with asphalt cement, cutback asphalt or emulsified asphalt.

13. Pollutant—An air contaminant listed in 10 CSR 10-6.020(3)(A), Table 1 without regard to levels of emission or air quality impact.

14. Polyethylene bag sealing operation—Any operation or facility engaged in the sealing of polyethylene bags, usually by the use of heat.

15. Polystyrene resin—The product of any styrene polymerization process, usually involving heat.

16. Portable equipment—Any equipment that is designed and maintained to be movable, primarily for use in noncontinuous operations. Portable equipment includes rock crushers, asphaltic concrete plants and concrete batching plants.

17. Positive crankcase ventilation system—Any system or device which prevents the escape of crankcase emissions to the ambient air.

18. Potential to emit—The emission rates of any pollutant at maximum design capacity. Annual potential shall be based on the maximum annual-rated capacity of the installation assuming continuous year-round operation. Federally enforceable permit conditions on the type of materials combusted or processed, operating rates, hours of operation or the application of air pollution control equipment shall be used in determining the annual potential. Secondary emissions do not count in determining annual potential.

19. Potroom—A building unit which houses a group of electrolytic cells in which aluminum is produced.

20. Potroom group—An uncontrolled potroom, a potroom which is controlled individually or a group of potrooms or potroom segments ducted to a common or similar control system.

21. Primary aluminum reduction installation—Any facility manufacturing aluminum by electrolytic reduction of alumina.

22. Primer—The first surface coating applied to the surface.

23. Primer-surfacer—The surface coatings applied over the primer and beneath the topcoat.

24. Process weight—The total weight of all materials introduced into a source operation including solid fuels, but excluding liquids and gases used solely as fuels and excluding air introduced for purposes of combustion.

25. Production equipment exhaust system—A device for collecting and directing out of the work area fugitive emissions from reactor openings, centrifuge openings and other vessel openings and equipment for the purpose of protecting workers from excessive exposure.

26. Publication rotogravure printing—Rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements and other types of printed materials.

27. Pushing operation—The process of removing coke from the coke oven. The coke pushing operation begins when the coke-side oven door is removed and is completed when the hot car enters the quench tower and the coke-side oven door is replaced.

(Q) All terms beginning with "Q."

(R) All terms beginning with "R."

1. Reactor—A vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.

2. Reconstruction—Where the fixed capital cost of the new components exceeds fifty percent (50%) of the fixed capital cost of a comparable entirely new source of operation or installation; the use of an alternative fuel or raw material by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under Section 125 of the Clean Air Act, shall not be considered reconstruction. In determining whether a reconstruction will occur, the provisions of 40 CFR 60.15, December 1, 1979, shall be considered by the director.

3. Refinery fuel gas—Any gas which is generated by a petroleum refinery process unit and which is combusted including any gaseous mixture of natural gas and fuel gas.

4. Refuse—The garbage, rubbish, trade wastes, leaves, salvageable material, agricultural wastes or other wastes.

5. Regulated air pollutant—All air pollutants or precursors for which any standard has been promulgated.

6. Regulated asbestos-containing material (RACM)—friable asbestos material; category I nonfriable asbestos-containing material (ACM) that has become friable; category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this rule.

7. Regulated pollutant—Any regulated air pollutant except carbon monoxide and pollutants regulated exclusively under section 112(r) or Title VI of the Act.

8. Reid vapor pressure (RVP)—The absolute vapor pressure of a petroleum liquid as determined by "Tests for Determining Reid Vapor Pressure (RVP) of Gasoline and Gasoline-Oxygenate Blends" 40 CFR part 80, Appendix E as in effect July 1, 1990.

9. Renewal—The process by which an operating permit is reissued at the end of its term.

10. Repair—The restoration of asbestos material that has been damaged. Repair consists of the application of rewettable glass cloth, canvas, cement or other suitable material. It may also involve filling damaged areas with nonasbestos substitutes and reencapsulating or painting previously encapsulated materials.

11. Residual fuel oil—The fuel oil variously known as Bunker C, PS 400 and Number 6 as defined in ASTM D(396-487) (1959).

12. Responsible official—Includes one (1) of the following:

A. The president, secretary, treasurer or vice-president of a corporation in charge of a principal business function, any other person who performs similar policy and decision-making functions for the corporation or a duly authorized representative of this person if the representative is responsible for the overall operation of one (1) or more manufacturing, production or operating facilities applying for or subject to a permit and either—

(I) The facilities employ more than two hundred and fifty (250) persons or have a gross annual sales or expenditures exceeding twenty-five (25) million dollars (in second quarter 1980 dollars); or

(II) The delegation of authority to this representative is approved in advance by the permitting authority;

B. A general partner in a partnership or the proprietor in a sole proprietorship;

C. Either a principal executive officer or ranking elected official in a municipality, state, federal or other public agency. For the purpose of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or

D. The designated representative of an affected source insofar as actions, standards, requirements or prohibitions under Title IV of the Act or the regulations promulgated under the Act are concerned and the designated representative for any other purposes under part 70.

13. Retail outlet—Any establishment where gasoline is sold, offered for sale or used as a motor vehicle fuel.

14. Ringelmann Chart—*The Ringelmann's Scale for Grading the Density of Smoke* as published in United States Bureau of Mines Information Circular 8333.

15. Road-mix—An asphalt course produced by mixing mineral aggregate and cutback or emulsified asphalt at the road site by means of travel plants, motor graders, drags or special road-mixing equipment.

16. Roll printing—The application of words, designs and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

17. Roller spreader—The device used for the application of a coating material to a substrate by means of hard rubber or steel rolls.

18. Rotogravure printing—The application of words, designs and pictures to a substrate by means of a roll printing technique which involves an intaglio or recessed image areas in the form of cells.

(S) All terms beginning with "S."

1. Salvage operation—Any business, trade, industry or other activity conducted in whole or in part for the purpose of salvaging or reclaiming any product or material.

2. Sealing material—A liquid substance that does not contain asbestos which is used to cover a surface that has previously been coated with a friable asbestos-containing material for the intended purpose of preventing any asbestos fibers remaining on the surface from being disbursed into the air. This substance shall be distinguishable from the surface to which it is applied.

3. Secondary emissions—The emissions which occur or would occur as a result of the construction or operation of an installation or major modification but do not come from the installation or major modification itself. Secondary emissions must be specific, well-defined, quantifiable and impact the same general area as the installation or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

A. Emissions from trucks, ships or trains coming to or from the installation or modification; and

B. Emissions from any off-site support source which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification.

4. Section 502(b)(10) changes—Changes that contravene an express permit term. These changes do not include those that would violate applicable requirements or contravene federally-enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting or compliance certification requirements.

5. Sheet basecoat—The roll coated primary interior surface coating applied to surfaces for the basic protection of buffering filling material from the metal can surface.

6. Shower room—A room between the clean room and the equipment room in the worker decontamination enclosure. This room shall be equipped with running hot and cold water that is suitably arranged for complete showering during decontamination.

7. Shutdown—The cessation of operation of any air pollution control equipment or process equipment, excepting the routine phasing out of process equipment.

8. Shutdown, permanent—See permanent shutdown.

9. Side seam coating (three (3)-piece)—A can surface coating to seal the connecting edge of a formed metal sheet in the manufacture of a three (3)-piece can.

10. Significant—A net emissions increase or potential to emit at a rate equal to or exceeding the *de minimis* levels or create an ambient air concentration at a level greater than those listed in 10 CSR 10-6.060(11)(D) Table 4, or any emissions rate or any net emissions increase associated with an installation subject to 10 CSR 10-6.060 which would be constructed within ten kilometers (10 km) of a Class I area and have an air quality impact on the area equal to or greater than one microgram per cubic meter (1 $\mu g/m^3$) (twenty-four (24)-hour average).

11. Smoke—Small gas-borne particles resulting from combustion, consisting of carbon, ash and other material.

12. Solvent—Organic materials which are liquid at standard conditions and which are used as dissolves, viscosity reducers or cleaning agents.

13. Solvent metal cleaning—The process of cleaning soils from metal surfaces by cold cleaning or open-top vapor degreasing or conveyorized degreasing.

14. Solvent volatility—Reid vapor pressure.

15. Source gas volume—The volume of gas arising from a process or other source operation.

16. Source operation—See emission unit.

17. Springfield-Greene County area—The geographical area contained within Greene County.

18. St. Louis metropolitan area—The geographical area comprised of St. Louis, St. Charles, Jefferson and Franklin Counties and the City of St. Louis.

19. Stack—Any spatial point in an installation designed to emit air contaminants into ambient air. An accidental opening such as a crack, fissure, or hole is a source of fugitive emissions, not a stack.

20. Stack in existence—The owner or operator had—1) begun, or caused to begin, a continuous program of physical on-site construction of the stack; or 2) entered into binding agreements or contractual operations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.

21. Staff director—Director of the Air Pollution Control Program of the Department of Natural Resources.

22. Standard conditions—A gas temperature of seventy degrees Fahrenheit (70°F) and a gas pressure of 14.7 pounds per square inch absolute (psi).

23. Start-up—The setting into operation of any air pollution control equipment or process equipment, except the routine phasing in of process equipment.

24. State—Any nonfederal permitting authority, including any local agency, interstate association or statewide program. When clear from its context, state shall have its conventional territorial definition.

25. State implementation plan—A series of plans adopted by the commission, submitted by the director, and approved by the administrator, detailing methods and procedures to be used in attaining and maintaining the ambient air quality standards in Missouri.

26. Storage tank—Any tank, reservoir or vessel which is a container for liquids or gases, where no manufacturing process or part of it, takes place.

27. Structural item—Roofs, walls, ceilings, floors, structural supports, pipes, ducts, fittings and fixtures that have been installed as an integral part of any structure.

28. Submerged fill pipe—Any fill pipe the discharge opening of which is entirely submerged when the liquid level is six inches (6") above the bottom of the tank. Submerged fill pipe when applied to a tank which is loaded from the side is defined as any fill pipe, the discharge opening of which is entirely submerged when the liquid level is eighteen inches (18") or twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.

29. Synthesized pharmaceutical manufacturing—Manufacture of pharmaceutical products by chemical synthesis.

(T) All terms beginning with "T."

1. Temporary installation—An installation which operates or emits pollutants less than two (2) years.

2. Third-party air monitoring—Air monitoring conducted in accordance with Chapter 643, RSMo and 10 CSR 10-6.240 and 10 CSR 10-6.250 by a person who is not under the direct control of the person carrying out the asbestos abatement project and who has been selected by the owner or operator of the property on which the project is conducted.

3. Title I modification—Any modification that requires a permit under 10 CSR 10-6.060 section (7) or (8), or that is subject to any requirement under 10 CSR 10-6.070 or 10 CSR 10-6.080.

4. Topcoat—The surface coatings applied for the purpose of establishing the color or protective surface, or both, including groundcoat and paint sealer materials, base coat and clear coat.

5. Total fluoride—The elemental fluorine and all fluoride compounds as measured by reference methods specified in 10 CSR 10-6.030(12) or equivalent or alternative methods.

6. Trade waste—The solid, liquid or gaseous material resulting from construction or the prosecution of any business, trade or industry or any demolition operation including, but not limited to, plastics, cardboard cartons, grease, oil, chemicals or cinders.

7. Transfer efficiency (TE)—Ratio of the amount of coating solids transferred onto a product to the total of coating solids used. In any surface coating operation, TE is the ratio of solids in a coating that adhere on a target surface to the total solids used in the process for coating the target surface.

8. True vapor pressure—The equilibrium partial pressure exerted by a petroleum liquid as determined in American Petroleum Institute Bulletin 2517, *Evaporation Loss from Floating Roof Tanks*, 1962.

(U) All terms beginning with "U."

1. Uncombined water—The visible condensed water which is not bound, physically or chemically, to any air contaminant.

2. Unit—A fossil fuel-fired combustion device.

3. Unit turnaround—The procedure of shutting a refinery process unit down to do

necessary maintenance and repair work and putting the unit back on stream.

4. Unit walk through monitoring—The system for monitoring volatile organic hydrocarbons which utilizes a portable hydrocarbon monitor to measure ambient hydrocarbon levels in the areas of all process equipment.

(V) All terms beginning with "V."

1. Vacuum producing system—Any reciprocating, rotary or centrifugal blower or compressor or any jet ejector device that takes suction from a pressure below atmospheric on a system containing volatile hydrocarbons.

2. Vapor recovery system—A vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing the hydrocarbon vapors and gases so as to limit their emission to the atmosphere.

3. Vapor-mounted seal—A primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface and the floating roof.

4. Vapor tight—When applied to a delivery vessel or vapor recovery system as one that sustains a pressure change of no more than seven hundred fifty (750) pascals (three inches (3") of H_2O) in five (5) minutes when pressurized to a gauge pressure of four thousand five hundred (4,500) pascals (eighteen inches (18") of H_2O) or evacuated to a gauge pressure of one thousand five hundred (1,500) pascals (six inches (6") of H_2O).

5. Varnish—An unpigmented surface coating containing VOC and composed of resins, oils, thinners and driers used to give a glossy surface to wood, metal, etc.

6. Vehicle—Any mechanical device on wheels, designed primarily for use on streets, roads or highways, except those propelled or drawn by human or animal power or those used exclusively on fixed rails or tracks.

7. Vinyl coating—The application of a decorative or protective topcoat, or printing or vinyl coated fabric or vinyl sheet.

8. Visible emission—Any discharge of an air contaminant into the atmosphere which is darker in shade as that designated No. 0 on the Ringelmann Chart, as published by the United States Bureau of Mines, or is of an opacity as to obscure an observer's view to a degree greater than Ringelmann No. 0.

9. Volatile organic compounds (VOC)—For all areas in Missouri VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions to produce ozone. The following compounds will not be considered VOCs because of their known lack of participation in the atmospheric reactions to produce ozone:

1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);
1,1,1,3,3,3-hexafluoropropane (HFC-236fa);
1,1,2,2,3-pentafluoropropane (HFC-245ca);
1,1,2,3,3-pentafluoropropane (HFC-245ea);
1,1,1,2,3-pentafluoropropane (HFC-245eb);
1,1,1,3,3-pentafluoropropane (HFC-245fa);
1,1,1,2,3,3-hexafluoropropane (HFC-236ea);
1,1,1,3,3-pentafluorobutane (HFC-365mfc);
3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);
1-chloro-1-fluorethane (HCFC-151a);
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane (C4FOCH3);
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3) 2CFCF2OCH3);
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5);
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3) 2CFCF2OC2H5);
1,1,1-trichloroethane (methyl chloroform);
acetone;
chlorodifluoroethane (HCFC-142b);
chlorodifluoromethane (HCFC-22);
chlorofluoromethane (HCFC-31);
chloropentafluoroethane (CFC-115);
chlorotetrafluoroethane (HCFC-124);
dichlorodifluoromethane (CFC-12);
dichlorofluoroethane (HCFC-141b);
dichlorotetrafluoroethane (CFC-114);
dichlorotrifluoroethane (HCFC-123);
difluoroethane (HFC-152a);
difluoromethane (HFC-32);
ethane;
ethylfluoride (HFC-161);
methane;
methyl acetate;
methylene chloride (dichloromethane);
parachlorobenzotrifluoride (PCBTF);
pentafluoroethane (HFC-125);
perchloroethylene;
tetrafluoroethane (HFC-134);
tetrafluoroethane (HFC-134a);
trichlorofluoromethane (CFC-11);
trichlorotrifluoroethane (CFC-113);
trifluorodichloroethane (HCFC-123);
trifluoroethane (HFC-143a);
trifluoromethane (HFC-23);
cyclic, branched or linear, completely fluorinated alkanes;
cyclic, branched or linear, completely fluorinated ethers with no unsaturations;
cyclic, branched or linear, completely methylated siloxanes;
cyclic, branched or linear, completely fluorinated tertiary amines with no unsaturations; and
sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorines.

VOC may be measured by a reference method, an equivalent method, an alternative method or by procedures specified in either 10 CSR 10-6.030 or 40 CFR 60. These methods and procedures may measure nonreactive compounds so an owner or operator must exclude these nonreactive compounds when determining compliance.

(W) All terms beginning with "W."

1. Waste generator—The business entity that is directly responsible for the supervision of activities that result in the accumulation of friable asbestos-containing waste materials.

2. Wastewater (oil/water) separator—Any device which constitutes a primary treatment step for separation of free oil from oily waste waters, such as an American Petroleum Institute (API) oil/water separator, and the like, prior to further treatment of the waste water.

3. Waxy, heavy pour crude oil—A crude oil with a pour point of fifty degrees Fahrenheit (50°F) or higher as determined by the ASTM Standard D(97-66), *Test for Pour Point of Petroleum Oils*.

4. Water base paint—A pigmented surface coating using water as a thinner and with the binder an oil-resin combination or a latex.

5. Wet cleaning—The process of using water or other liquid and a wet brush, mop, cloth, sponge or similar wet cleaning device to completely remove any residue of asbestos-containing materials from surfaces on which they may be located. This definition does not include the use of a wet vacuum cleaner.

6. Wetting agent—Any chemical that is added to water to decrease its surface tension and allow it to spread more easily over or penetrate into friable asbestos-containing materials.

7. Work area—A specific room or physically isolated portion of a room, other than the space enclosed within a glove bag, in which friable asbestos-containing material is required to be handled in accordance with

10 CSR 10-6.240. The area is designated as a work area from the time that the room, or portion of it, is secured and access restrictions are in place. The area remains designated as a work area until the time that it has been cleaned in accordance with any requirements applicable to these operations.

(X) All terms beginning with "X."
(Y) All terms beginning with "Y."
(Z) All terms beginning with "Z."

(3) Common Reference Tables.

(A) Table 1—*De Minimis* Emission Levels.

Air Contaminant	Emission Rate
Carbon monoxide	100.0
Nitrogen dioxide	40.0
Particulate Matter	
PM	25.0
PM_{10}	15.0
Sulfur dioxide	40.0
Ozone (to be measured as VOC)	40.0
Lead	0.6
Mercury	0.1
Beryllium	0.0004
Asbestos	0.007
Fluorides	3.0
Sulfur acid mist	7.0
Vinyl chloride	1.0
Hydrogen sulfide	10.0
Total reduced sulfur (including hydrogen sulfide)	10.0
Reduced Sulfur Compounds (including hydrogen sulfide)	10.0
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5×10^{-6}
Municipal waste combustor metals (measured as particulate matter)	15.0
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	40.0
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50.0
Hazardous Air Pollutant (each)	10.0
Sum of Hazardous Air Pollutants	25.0

Note: All rates in tons per year.

(B) Table 2—List of Named Installations.

Named Installations

1. Coal cleaning plants (with thermal dryers);
2. Kraft pulp mills;
3. Portland cement plants;
4. Primary zinc smelters;
5. Iron and steel mills;
6. Primary aluminum ore reduction plants;
7. Primary copper smelters;
8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
9. Hydrofluoric, sulfuric or nitric acid plants;
10. Petroleum refineries;
11. Lime plants;
12. Phosphate rock processing plants;
13. Coke oven batteries;
14. Sulfur recovery plants;
15. Carbon black plants (furnace process);
16. Primary lead smelters;
17. Fuel conversion plants;
18. Sintering plants;
19. Secondary metal production plants;
20. Chemical process plants;
21. Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
22. Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand (300,000) barrels;
23. Taconite ore processing facilities;
24. Glass fiber processing plants;
25. Charcoal production facilities;
26. Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat;
27. Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

(C) Table 3—Hazardous Air Pollutants.

CAS #	Hazardous Air Pollutant
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including from gasoline)
92875	Benzidine
50328	Benzo(a)pyrene
98077	Benzotrichloride
100447	Benzyl chloride
192524	Biphenyl
117817	Bis((2-ethylhexyl))phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1.3-Butadiene
156627	Calcium cyanamide
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl ethyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
108394	m-Cresol
95487	o-Cresol
106445	p-Cresol
98828	Cumene
94757	2,3-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidine
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)

106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (1,2-Bibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen fluoride (hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloromethane)
78933	Methyl ethyl ketone (2-Butanone)
60344	Methyl hydrazine
74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis(2-chloroaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4-Methylenedianiline
91203	Naphthalene
12035722	Nickel subsulfide
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Arochlors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (Chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloromethane
79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4-Trimethylpentane
108054	Vinyl acetate
593602	Vinyl bromide (bromoethene)
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixture)
108383	m-Xylenes
95476	o-Xylenes
106423	p-Xylenes
0	Antimony compounds
0	Arsenic compounds (inorganic)
0	Beryllium compounds
0	Beryllium salts
0	Cadmium compounds
0	Chromium compounds
0	Cobalt compounds
0	Coke oven emissions
0	Cyanide compounds[1]
0	Glycol ethers[2]
0	Lead compounds
0	Manganese compounds
0	Mercury compounds
0	Mineral fibers[3]
0	Nickel compounds
0	Nickel refinery dust
0	Polycyclic organic matter[4]
0	Radionuclides (including radon)[5]
0	Selenium compounds

Note: For all listings in this table that contain the word compounds and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (that is, antimony, arsenic and the like) as part of that chemical's infrastructure.

[1] X'CN where X–H' or any other group where a formal dissociation may occur, for example, KCN or $Ca(CN)_2$.

[2] Includes mono- and diethers of ethylene glycol, diethylene glycol and triethylene glycol R-(OCH_2CH_2)n-OR' where n—1, 2 or 3; R—Alkyl or aryl groups; R'—R, H or groups which, when removed, yield

glycol ethers with the structure R-(OCH_2CH_2)n-OH. Polymers are excluded from the glycol category.

[3] Includes glass microfibers, glass wool fibers, rock wool fibers and slag wool fibers, each characterized as respirable (fiber diameter less than 3.5 micrometers) and possessing an aspect ratio (fiber length divided by fiber diameter) greater than or equal to 3, as emitted from production of fiber and fiber products.

[4] Includes organic compounds with more than one (1) benzene ring, and which have a boiling point greater than or equal to one hundred degrees Celsius (100°C).

[5] A type of atom which spontaneously undergoes radioactive decay.

AUTHORITY: section 643.050, RSMo Supp. 1997 and 643.055, RSMo 1994. Original rule filed Aug. 16, 1977, effective Feb. 11, 1978. Amended: Filed Feb. 27, 1978, effective Dec. 11, 1978. Amended: Filed Aug. 11, 1978, effective April 12, 1979. Amended: Filed Nov. 14, 1978, effective June 11, 1979. Amended: Filed Dec. 15, 1978, effective June 11, 1979. Amended: Filed March 15, 1979, effective Nov. 11, 1979. Amended: Filed Dec. 10, 1979, effective April 11, 1980. Amended: Filed March 13, 1980, effective Sept. 12, 1980. Amended: Filed Sept. 12, 1980, effective April 11, 1981. Amended: Filed Jan. 14, 1981, effective June 11, 1981. Amended: Filed March 11, 1981, effective Aug. 13, 1981. Amended: Filed Nov. 10, 1981, effective May 13, 1982. Amended: Filed Dec. 10, 1981, effective June 11, 1982. Amended: Filed June 14, 1982, effective Dec. 11, 1982. Amended: Filed Aug. 13, 1982, effective Jan. 13, 1983. Amended: Filed Jan. 12, 1983, effective June 11, 1983. Amended: Filed Oct. 13, 1983, effective March 11, 1984. Amended: Filed Oct. 15, 1984, effective May 11, 1985. Emergency amendment filed Nov. 9, 1984, effective Nov. 19, 1984, expired March 19, 1985. Amended: Filed Jan. 15, 1985, effective May 11, 1985. Amended: Filed July 3, 1985, effective Dec. 12, 1985. Amended: Filed Jan. 6, 1986, effective May 11, 1986. Amended: Filed Feb. 4, 1987, effective May 28, 1987. Amended: Filed April 2, 1987, effective Aug. 27, 1987. Amended: Filed Sept. 1, 1987, effective Dec. 24, 1987. Amended: Filed Jan. 5, 1988, effective April 28, 1988. Amended: Filed March 16, 1988, effective Aug. 25, 1988. Amended: Filed Oct. 4, 1988, effective March 11, 1989. Amended: Filed June 30, 1989, effective Nov. 26, 1989. Amended: Filed Jan. 24, 1990, effective May 24, 1990. Amended: Filed Jan. 3, 1991, effective Aug. 30, 1991. Amended: Filed March 31, 1992, effective Feb. 26, 1993. Amended: Filed Dec. 14, 1992, effective Sept. 9, 1993. Amended: Filed Sept. 2, 1993, effective May 9, 1994. Amended: Filed Dec. 15, 1994, effective Aug. 30, 1995. Amended: Filed Sept. 29, 1995, effective May 30, 1996. Amended: Filed Oct 3, 1995, effective June 30, 1996. Amended: Filed Aug. 15, 1997, effective April 30, 1998. Amended: Filed July 29, 1998, effective May 30, 1999.*

**Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995 and 643.055, RSMo transferred 1986, formerly 203.055.*

10 CSR 10-6.030 Sampling Methods for Air Pollution Sources

PURPOSE: This rule defines methods for performing emissions sampling on air pollution sources throughout Missouri, only as specified by the Air Conservation Commission emission rules.

Editor's Note: The secretary of state has determined that the publication of the reference material in this rule in its entirety would be unduly cumbersome or expensive. The entire text of the referenced material has been filed with the secretary of state and is available at the Air Quality Program offices at a cost established by state law.

(1) Samples and velocity traverses for source sampling shall be conducted as specified by 40 CFR part 60 Appendix A Test Methods, *Method 1—Sample and Velocity Traverses for Stationary Sources*.

(2) The velocity of stack gases is to be determined by measuring velocity head using a Type "S" (Stauscheibe or reverse type) pitot tube as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 2—Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)*.

(3) The carbon dioxide, oxygen, excess air and dry molecular weight contained in stack gases shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 3—Gas Analysis for Carbon Dioxide, Oxygen, Excess Air and Dry Molecular Weight*.

(4) The moisture content in stack gases shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 4—Determination of Moisture Content in Stack Gases*.

(5) Particulate Matter Emissions.

(A) The concentration of particulate matter emissions in stack gases shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 5—Determination of Particulate Emissions from Stationary Sources*.

(B) The quantity of particulate matter emissions from certain industrial processes as determined by the director shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 17—Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method)*.

(C) The concentration of particulates of PM_{10} shall be determined as specified by 40 CFR part 51, Appendix M—Test Methods, *Method 201—Determination of PM_{10} Emissions (Exhaust Gas Recycle Procedure)*. When water droplets are known to exist in emissions, use Method 5 as defined in subsection (5)(A) of this rule and consider the particulate catch to be PM_{10} emissions.

(D) The concentration of particulates of PM_{10} shall be determined as specified by 40 CFR part 51, Appendix M—Test Methods, *Method 201A—Determination of PM_{10} Emissions (Constant Sampling Rate Procedure)*. When water droplets are known to exist in emissions, use Method 5 as defined in subsection (5)(A) of this rule and consider the particulate catch to be PM_{10} emissions.

(E) The concentration of condensible particulate matter (CPM) shall be determined as specified by 40 CFR part 51, Appendix M—Test Methods, *Methods 202—Determination of Condensible Particulate Emissions from Stationary Sources*.

(6) The sulfur dioxide emissions from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A Test Methods, *Method 6—Determination of Sulfur Dioxide Emissions from Stationary Sources*.

(7) The nitrogen oxide emissions from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 7—Determination of Nitrogen Oxide Emissions from Stationary Sources*.

(8) The sulfuric acid mist and sulfur dioxide emissions from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 8—Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources*.

(9) Visible Emissions.

(A) The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 9—Visual Determination of the*

Opacity of Emissions from Stationary Sources.

(B) Visible fugitive emissions shall be evaluated as specified by 40 CFR part 60, Appendix A—Test Methods. *Method 22—Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares*.

(10) The carbon monoxide emissions from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 10—Determination of Carbon Monoxide Emissions from Stationary Sources*.

(11) The hydrogen sulfide emissions from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 11—Determination of Hydrogen Sulfide Content of Fuel Gas Streams in Petroleum Refineries*.

(12) The lead emissions from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 12—Determination of Inorganic Lead Emissions from Stationary Sources*.

(13) The total fluoride emissions and the associated moisture content from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 13A—Determination of Total Fluoride Emissions from Stationary Sources—SPADNS Zirconium Lake Method or Method 13B—Determination of Total Fluoride Emissions from Stationary Sources— Specific Ion Electrode Method*. For Method 13A or 13B, the sampling time for each run shall be at least sixty (60) minutes and the minimum sample volume shall be at least 0.85 standard dry cubic meter (thirty (30) standard dry cubic foot) except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the director.

(14) Volatile organic compound emissions from air pollution sources shall be determined—

(A) As specified by 40 CFR part 60, Appendix A—Test Methods, *Method 25—Determination of Total Gaseous Nonmethane Organic Emissions as Carbon*;

(B) As specified by 40 CFR part 60, Appendix A—Test Methods, *Method 27—Determination of Vapor Tightness of Gasoline Delivery Tanks Using Pressure-Vacuum Test*;

(C) As specified by 40 CFR part 60, Appendix A—Test Methods, *Method 24—Determination of Volatile Matter Content, Water Content, Density, Volume, Solids and Weight Solids of Surface Coatings*;

(D) As specified by 40 CFR part 60, Appendix A—Test Methods, *Method 24A—Determination of Volatile Matter Content and Density of Printing Inks and Related Coatings*; or

(E) As specified by 40 CFR part 60, Appendix A—Test Methods, *Method 21—Determination of Volatile Organic Compound Leaks*.

(15) The hydrogen chloride emissions from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A—Test Methods, *Method 26—Determination of Hydrogen Chloride Emissions from Stationary Sources*.

(16) Dioxin and furan emissions from air pollution sources shall be determined as specified by 40 CFR part 60, Appendix A— Test Methods, *Method 23—Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans from Stationary Sources*.

(17) The mercury emissions, both particulate and gaseous, from air pollution sources shall be determined as specified by 40 CFR part 61, Appendix B—Test Methods, *Method 101A—Determination of Particulate and Gaseous Mercury Emissions from Stationary Sources*.

(18) The latest effective date of any 40 CFR part 60, Appendix A—Test Methods shall be as designated in 10 CSR 10-6.070 New Source Performance Regulations.

(19) Alternative Sampling Method. An alternative sampling method to any method referenced in this rule may be used provided it is in accordance with good professional practice, provides results of at least the same accuracy and precision as the replaced method and receives the approval of the director for its use.

(20) The capture efficiency of air pollution control devices shall be determined as specified by the United States Environmental Protection Agency's February 7, 1995 memorandum entitled, "Revised Capture Efficiency Guidance for Control of Volatile Organic Compound Emission" and the United States Environment Protection Agency's January 9, 1994 technical document entitled, "Guidelines for Determining Capture Efficiency." For automobile and light-duty truck topcoat operations, the capture efficiency of air pollution control devices shall be determined as specified in USEPA's document entitled, "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations" (USEPA-450/3/88-018), as amended by Enclosure 1, dated March 8, 1996, and entitled, "23—Determining Spraybooth VOC Capture Efficiency."

AUTHORITY: section 643.050, RSMo Supp. 1997 and 643.055, RSMo 1994. Original rule filed Aug. 16, 1977, effective Feb. 11, 1978. Amended: Filed Feb. 27, 1978, effective Dec. 11, 1978. Amended: Filed Sept. 14, 1978, effective April 12, 1979. Amended: Filed July 16, 1979, effective Feb. 11, 1980. Amended: Filed Dec. 10, 1979, effective April 11, 1980. Amended: Filed March 13, 1980, effective Sept. 12, 1980. Amended: Filed Feb. 14, 1984, effective July 12, 1984. Amended: Filed June 2, 1987, effective Nov. 23, 1987. Amended: Filed Sept. 1, 1987, effective Dec. 24, 1987. Amended: Filed Aug. 4, 1988, effective Nov. 24, 1988. Amended: Filed Feb. 4, 1991, effective Sept. 30, 1991. Amended: Filed Sept. 3, 1991, effective April 9, 1992. Amended: Filed April 15, 1996, effective Nov. 30, 1996. Amended: Filed April 14, 1998, effective Nov. 30, 1998.*

**Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995; and 643.055, RSMo 1979, amended 1992, 1994.*

10 CSR 10-6.040 Reference Methods

PURPOSE: This rule provides reference methods for determining data and information necessary for the enforcement of air pollution control regulations throughout Missouri.

Editor's Note: The secretary of state has determined that the publication of the referenced material in this rule in its entirety would be unduly cumbersome or expensive. The entire text of the referenced material has been filed with the secretary of state and is available at the Air Quality Program offices at a cost established by state law.

(1) The percent sulfur in solid fuels shall be determined as specified by American Society of Testing and Materials (ASTM) Method D(3177-75) *Total Sulfur in the Analysis Sample of Coal and Coke*.

(2) The heat content of higher heating value (HHV) of solid fuels shall be determined by use of the Adiabatic Bomb Calorimeter as specified by ASTM Method D(2015-66) *Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter*.

(3) The heat content or HHV of liquid hydrocarbons shall be determined as specified by ASTM Method D(240-64) *Heat of Combustion of Liquid Hydrocarbon by Bomb Calorimeter*.

(4) The methods for determining the concentrations of the following air contaminants in the ambient air shall be as specified in 40 CFR part 50, Appendices A—K or equivalent methods as specified in 40 CFR part 53:

(A) The concentration of sulfur dioxide shall be determined as specified in 40 CFR part 50, Appendix A—*Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method)* or an equivalent method as approved by 40 CFR part 53;

(B) The concentration of total suspended particulate shall be determined as specified in 40 CFR part 50, Appendix B—*Reference Method for the Determination of Suspended Particulates in the Atmosphere (High Volume Method)*;

(C) The concentration of carbon monoxide in the ambient air shall be determined as specified in 40 CFR part 50, Appendix C *Measurement Principle and Calibration Procedure for the Continuous Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Spectrometry)* or equivalent methods as approved by 40 CFR part 53;

(D) The concentration of photochemical oxidants (ozone) in the ambient air shall be determined as specified in 40 CFR part 50, Appendix D—*Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere* or equivalent methods as approved by 40 CFR part 53;

(E) The concentration of hydrocarbons in the ambient air shall be determined as specified by 40 CFR part 50, Appendix E—*Reference Method for the Determination of Hydrocarbons Corrected for Methane* or equivalent method as approved in 40 CFR part 53;

(F) The concentration of nitrogen dioxide in the ambient air shall be determined as specified in 40 CFR part 50, Appendix F—*Measurement Principle and Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas Phase Chemiluminescence)* or equivalent methods as approved by 40 CFR part 53;

(G) The concentration of lead in the ambient air shall be determined as specified in 40 CFR part 50, Appendix G—*Reference Method for the Determination of Lead in Suspended Particulate Matter Collected From Ambient Air* or equivalent methods as approved by 40 CFR part 53;

(H) Compliance with the ozone standard shall be determined as specified in 40 CFR part 50, Appendix H—*Interpretation of the National Ambient Air Quality Standards for Ozone*;

(I) *Reserved*

(J) The concentration of particulate matter 10 micron (PM_{10}) in the ambient air shall be determined as specified in 40 CFR part 50, Appendix J—*Reference Method for the Determination of Particulate Matter as PM_{10} in the Atmosphere*, or an equivalent method as approved in 40 CFR part 53; and

(K) Compliance with PM_{10} standards shall be determined as specified in 40 CFR part 50, Appendix K—*Interpretation of the National Ambient Air Quality Standards for Particulate Matter*.

(5) The concentration of hydrogen sulfide (H_2S) in the ambient air shall be determined by the coulermetric titration of H_2S with bromine as specified by the Phillips Scientific and Analytical Equipment Manufacturer's *Provisional Manual H_2S Conversion Set PW9701/00*.

(6) The concentration of sulfuric acid mist and sulfur trioxide in the ambient air shall be determined by sampling for the concentration of total sulfur in the ambient air and subtracting the concentrations of sulfur dioxide and hydrogen sulfide.

(A) The concentration of total sulfur shall be determined as specified in section (4) of this rule by sampling for sulfur dioxide without removing other sulfur compound interferences.

(B) The concentration of sulfur dioxide shall be determined as specified by section (4) of this rule.

(C) The concentration of hydrogen sulfide shall be determined as specified by section (5) of this rule.

(7) The percent sulfur in liquid hydrocarbons shall be determined as specified by ASTM D(129-64), *Standard Method of Test for Sulfur in Petroleum Products and Lubricants by the Bomb Method*.

(8) The amount of solvent present in earth filters and distillation wastes shall be determined as specified by ASTM Method D(322-67), *Standard Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Distillation*.

(9) The latest effective date of any 40 CFR part 50, Appendices A—K and equivalent methods as specified in 40 CFR part 53 shall be as designated in 10 CSR 10-6.070 New Source Performance Regulations for 40 CFR part 60.

AUTHORITY: section 643.050, RSMo Supp. 1992. Original rule filed Aug. 16, 1977, effective Feb. 11, 1978. Amended: Filed Sept. 14, 1978, effective April 12, 1979. Amended: Filed Dec. 10, 1979, effective April 11, 1980. Amended: Filed March 13, 1980, effective Sept. 12, 1980. Amended: Filed Feb. 14, 1984, effective July 12, 1984. Amended: Filed Jan. 5, 1988, effective April 28, 1988.*

**Original authority: 643.050, RSMo 1965, amended 1972, 1992.*

10 CSR 10-6.050 Start-Up, Shutdown and Malfunction Conditions

PURPOSE: This rule, applicable to all installations in Missouri, provides the owner or operator of an installation the opportunity to submit data regarding conditions which resulted in excess emissions. These submittals will be used by the director to determine whether the excess emissions were due to a start-up, shutdown or malfunction condition. These determinations will be the basis for further enforcement action.

(1) General Provisions.

(A) Upon receipt of a notice of excess emissions issued by the Missouri Department of Natural Resources or an agency holding a certificate of authority under section 643.140, RSMo, the source to which the notice is issued may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. Based upon any information submitted by the source operator and any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo. In determining whether enforcement action is warranted, the director or commission shall consider the following factors:

1. Whether the excess emissions during start-up, shutdown or malfunction occurred as a result of safety, technological or operating constraints of the control equipment, process equipment or process;

2. Whether the air pollution control equipment, process equipment or processes were, at all times, maintained and operated to the maximum extent practical, in a manner consistent with good practice for minimizing emissions;

3. Whether repairs were made as expeditiously as practicable when the operator knew or should have known when excess emissions were occurring;

4. Whether the amount and duration of the excess emissions were limited to the maximum extent practical during periods of this emission; and

5. Whether all practical steps were taken to limit the impact of the excess emissions on the ambient air quality.

(B) The information provided by the source operator under subsection (1)(A) shall include, at a minimum, the following:

1. Name and location of installation;

2. Name and telephone number of person responsible for the installation;

3. The identity of the equipment causing the excess emissions;

4. The time and duration of the period of excess emissions;

5. The cause of the excess emissions;

6. The type of air contaminant involved;

7. A best estimate of the magnitude of the excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude;

8. The measures taken to mitigate the extent and duration of the excess emissions; and

9. The measures taken to remedy the situation which caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.

(C) The information specified in subsection (1)(B) shall be submitted to the director not later than fifteen (15) days after receipt of the notice of excess emissions.

(D) Nothing in this rule shall be construed to limit the authority of the director or the commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.

AUTHORITY: section 643.050, RSMo Supp. 1992. Original rule filed March 15, 1979, effective Nov. 11, 1979. Amended: Filed April 2, 1987, effective Aug. 27, 1987.*

**Original authority: 643.050, RSMo 1965, amended 1972, 1992.*

10 CSR 10-6.060 Construction Permits Required

PURPOSE: This rule defines sources which are required to obtain permits to construct. It establishes requirements to be met prior to construction or modification of any of these sources. This rule also establishes permit fees and public notice requirements for certain sources and incorporates a means for unifying the processing of construction and operating permit issuance.

(1) Applicability.

(A) Definitions. Definitions for key words or phrases used in this rule may be found in 10 CSR 10-6.020(2).

(B) Covered Installations/Changes. This rule shall apply to installations throughout Missouri with the potential to emit any pollutant in an amount equal to or greater than the *de minimis* levels. This rule also shall apply to changes at installations which emit less than the *de minimis* levels where the construction or modification itself would be subject to section (6), (7), (8) or (9) of this rule. This rule shall apply to all incinerators and asphaltic concrete plants.

(C) Construction/Operation Prohibited. No owner or operator shall commence construction or modification of any installation subject to this rule, begin operation after that construction or modification, or begin operation of any installation which has been shut down longer than five (5) years without first obtaining a permit from the permitting authority under this rule. For sources not subject to review under sections (7), (8) or (9), construction may be commenced if authorized by the director. A request for authorization must include: a signed waiver of any state liability; a complete list of the activities to be undertaken; and, the applicant's full acceptance and knowledge of all liability associated with the possibility of denial of the permit application. A request will not be granted unless an application for permit approval under this rule has been filed. The waiver is not available to sources seeking federally enforceable permit restrictions to avoid review under sections (7)—(9).

(D) Exempt Emissions Units.

1. The following combustion equipment is exempt from this rule if the equipment emits only combustion products, and the equipment produces less than one hundred fifty (150) pounds per day of any air contaminant:

A. Any combustion equipment using exclusively natural or liquefied petroleum gas or any combination of these with a capacity of less than ten (10) million British thermal units (BTUs) per hour heat input; or

B. Any combustion equipment with a capacity of less than one (1) million BTUs per hour heat input.

2. The following establishments, systems, equipment and operations also are exempt from this rule:

A. Office and commercial buildings, where emissions result solely from space heating by natural or liquefied petroleum gas of less than twenty (20) million BTUs per hour heat input. Incinerators operated in conjunction with these sources are not exempt;

B. Comfort air conditioning or comfort ventilating systems not designed or used to remove air contaminants generated by, or released from, specific units of equipment;

C. Equipment used for any mode of transportation;

D. Livestock and livestock handling systems from which the only potential air contaminant is odorous gas;

E. Any grain handling, storage and drying facility which—

(I) Is in noncommercial use only, that is, used only to handle, dry or store grain produced by the owner if—

(a) The total storage capacity does not exceed seven hundred fifty thousand (750,000) bushels;

(b) The grain handling capacity does not exceed four thousand (4000) bushels per hour; and

(c) The facility is located at least five hundred feet (500') from any recreational area, residence or business not occupied or used solely by the owner; and

(II) Is in commercial use and the total storage capacity of the new and any existing facility(ies) does not exceed one hundred ninety thousand (190,000) bushels;

F. Restaurants and other retail establishments for the purpose of preparing food for employee and guest consumption;

G. Sand and gravel operations that have a maximum capacity to produce less than seventeen and one-half (17.5) tons of product per hour and use only natural gas as fuel when drying;

H. Fugitive dust controls unless a control efficiency can be assigned to the equipment or control equipment;

I. Equipment or control equipment which eliminates all emissions to the ambient air;

J. Equipment (other than anaerobic lagoons) or control equipment which emits odors unless the equipment or control equipment also emits other regulated air pollutants;

K. Residential wood heaters, cookstoves or fireplaces;

L. Laboratory equipment used exclusively for chemical and physical analysis or experimentation, except equipment used for controlling radioactive air contaminants;

M. Recreational fireplaces; and

N. Stacks or vents to prevent the escape of sewer gases through plumbing traps

for systems handling domestic sewage only. Systems which include any industrial waste do not qualify for this exemption.

3. At installations, previously issued a permit under this rule, construction or modifications are exempt from this rule if they meet the requirements of subparagraphs (1)(D)3.A. or (1)(D)3.B. of this rule for criteria pollutants, except lead, and subparagraph (1)(D)3.C. for hazardous air pollutants. The director may require review of construction or modifications otherwise exempt under subparagraphs (1)(D)3.A., (1)(D)3.B., or (1)(D)3.C. of this rule if the emissions of the proposed construction or modification will appreciably affect air quality or the air quality standards are appreciably exceeded or complaints involving air pollution have been filed in the vicinity of the proposed construction or modification.

A. For proposed construction or modification located less than five hundred (500) feet from the property boundary, at maximum design capacity the proposed construction or modification shall emit each criteria pollutant at a rate of no more than one-half (0.5) pounds per hour. For proposed construction or modification located more than five hundred (500) feet from the property boundary, at a maximum design capacity the proposed construction or modification shall emit each criteria pollutant at a rate of no more than 0.91 pounds per hour.

B. Actual emissions of each criteria pollutant will be no more than eight hundred seventy-six (876) pounds per year.

C. At maximum design capacity the proposed construction or modification will emit a hazardous air pollutant at a rate of no more that one-half (0.5) pounds per hour, or the hazardous air pollutant emission threshold as established in subsection (12)(J) of this rule, whichever is less.

(E) Excluded Activities. This rule does not apply to—

1. Routine maintenance, parts replacement or relocation of emissions units within the same installation which do not involve either any appreciable change either in the quality or nature, or any increase in either the potential to emit or the effect on air quality, of the emissions of any air contaminant. Solely for the purpose of illustrating this category of excluded activities without limiting the generality of the preceding liberal sentence, the following examples are given:

A. Replacing the bags in a baghouse;

B. Replacing wires, plates, rappers, controls or electric circuitry in an electrostatic precipitator which does not measurably decrease the design efficiency of the unit;

C. Replacement of fans, pumps or motors which does not alter the operation of a source or performance of a control device;

D. Boiler tubes;

E. Piping, hoods and ductwork; or

F. Replacement of engines, compressors or turbines as part of a normal maintenance program.

2. Changes in a process or process equipment which do not involve installing, constructing or reconstructing an emissions unit or associated air cleaning devices, and that do not involve either any appreciable change either in the quality or nature, or any increase in either the potential to emit or the effect on air quality of the emissions of any air contaminant. Solely for the purpose of illustrating this category of excluded activities and without limiting the generality of the preceding liberal sentence, the following examples are given:

A. Change in the supplier or formulation of similar raw materials, fuels, paints and other coatings;

B. Change in the sequence of the process;

C. Change in the method of raw material addition;

D. Change in the method of product packaging;

E. Change in the process operating parameters;

F. Replacement of an identical or more efficient cyclone precleaner which is used as a precleaner in a fabric filter control system;

G. Installation of a floating roof on an open top petroleum storage tank;

H. Replacement of a fuel burner in a boiler with a more thermally efficient burner;

I. Lengthening a paint drying oven to provide additional curing time; or

J. Changes in the location, within the storage area, or configuration of a material storage pile or material handling equipment.

3. Replacement of like-kind emission units that do not involve either any appreciable change either in the quality or nature, or any increase either in the potential to emit or the effect on air quality, of the emissions of any air contaminant.

4. The exempt activities in paragraphs (1)(E)1.–3. of this rule reflect a presumption that existing emissions units which are changed or replaced by like-kind units shall be treated as having begun normal operation for purposes of the definition of actual emissions in 10 CSR 10-6.020.

5. Permit-by-rule. *(Reserved)*

(F) Exceptions to Excluded Activities. The exclusion provisions of subsection (1)(E) of this rule notwithstanding, this rule shall apply to any construction, reconstruction, alteration or modification which—

1. Is expressly required by an operating permit; or

2. Is subject to federally-mandated construction permitting requirements set forth in sections (7), (8) or (9), or any combination of these, of this rule.

(2) Unified Review. When the construction or modification and operation of any installation requires a construction permit under this rule, and an operating permit or its amendment, under 10 CSR 10-6.065, the installation shall receive a unified construction and operating permit, or its amendment, and a unified review, hearing and approval process, unless the applicant requests in writing that the application for a construction and operating permit, or its amendment, be reviewed separately. Under this unified review process, the applicant shall submit all the applications, forms and other information required by the permitting authority.

(A) Review of Applications. The permitting authority shall complete any unified review within one hundred eighty-four (184) days, as provided under the procedures of this rule and 10 CSR 10-6.065 Operating Permits Required.

(B) Issuance of Permits. As soon as the unified review process is completed, if the applicant complies with all applicable requirements under this rule and 10 CSR 10-6.065, the construction permit and the operating permit, or its amendment, shall be issued to the applicant and the applicant may commence construction. The operating permit shall be retained by the permitting authority until validated pursuant to this section.

(C) Validation of Operating Permits. Within one hundred and eighty (180) days after commencing operation, the holder of an operating permit, or its amendment, issued by the unified review process shall submit to the permitting authority all information required by the permitting authority to demonstrate compliance with the terms and conditions of the issued operating permit, or its amendment. The permittee shall also provide information identifying any applicable requirements which became applicable subsequent to issuance of the operating permit. Within thirty (30) days after the applicant's request for validation, the permitting authority will take action denying or approving validation of the issued operating permit, or its amendment. If the permittee demonstrates compliance with both the construction and operating permits, or its amendment, the permitting authority shall validate the operating permit, or its amendment, and forward it to

the permittee. No part 70 permit will be validated unless—

1. At the time of validation, the permitting authority certifies that the issued permit contains all applicable requirements; or

2. The procedures for permit renewal in 10 CSR 10-6.065(6)(E)3. have occurred prior to validation to insure the inclusion of any new applicable requirements to which the part 70 permit is subject.

(3) Temporary Installations and Pilot Plants Permits. The permitting authority may exempt temporary installations and pilot plants having a potential to emit under one hundred (100) tons of each pollutant from any of the requirements of this rule, provided that these exemptions are requested in writing prior to the start of construction. These exemptions shall be granted only when the attainment or maintenance of ambient air quality standards is not threatened, when there will be no significant impact on any Class I area, and when the imposition of requirements of this rule would be unreasonable.

(4) Portable Equipment Permits. Portable equipment must meet the following criteria:

(A) The potential to emit is less than one hundred (100) tons per year of any air pollutant;

(B) The equipment was permitted previously under either section (5), (6), (7) or (8) and the previous permit is still valid;

(C) The equipment is operated and maintained in a manner identical to that specified in the currently valid permit; and

(D) The following conditions must be met when permitted portable equipment is to be operated at a different location:

1. When the owner or operator wishes to operate the portable equipment at a new location not previously permitted or at a location where other sources (either permanent or portable) are operating, the owner or operator shall submit to the permitting authority a Portable Source Relocation Request, property boundary plot plan and the equipment layout for the site. A relocation request is subject to the fees and the time frames specified in this rule, except for the permit filing fee. The relocation request will be approved if it is determined that there will be no significant impact on any Class I area or an area where air quality increments have been consumed. The permitting authority shall make the final determination and, if appropriate, approve the relocation request no later than twenty-one (21) calendar days after receipt of the complete Portable Source Relocation Request;

2. When the owner or operator wishes to relocate the portable equipment to a site that is listed on the permit or on the amended permit (provided other sources are not approved to operate at the same location), the owner or operator shall report the move to the permitting authority on a Portable Source Relocation Request for authorization to operate in the new locale as soon as possible, but not later than seven (7) calendar days prior to ground breaking or initial equipment erection. No fees are associated with this authorization. Authorization will be presumed if notification of denial is not received by the specified ground breaking or equipment erection date; and

3. The equipment shall be operated at each new location no more than twenty-four (24) consecutive months without an intervening relocation.

(5) *De Minimis* Permits.

(A) Any construction or modification at an installation subject to this rule which results in a net emissions increase below the *de minimis* levels shall be exempt from further requirements of this rule if the owner or operator of the source applies for, and the permitting authority issues, a *de minimis* permit for that installation.

(B) This *de minimis* permit shall be issued and in effect only if all of the following conditions are met:

1. The permitting authority is notified in writing of the proposed construction prior to the commencement of construction;

2. Information is submitted to the permitting authority which is sufficient for the permitting authority to verify the annual emission rate, to verify that no applicable emission control rules will be violated, and to verify that the net emission increase of the installation is below the *de minimis* levels;

3. Net emissions do not increase above the *de minimis* levels at an installation having a *de minimis* permit under this section. If net emissions at the installation do increase above the *de minimis* levels, the installation shall be in violation of this rule until it obtains a permit under the other applicable requirements of this rule; and

4. All permit fees are paid.

(C) In order to eliminate the necessity for a large number of *de minimis* permit applications from a single installation, a special case *de minimis* permit may be developed for those batch-type production processes which frequently change products and component source operations. Operating in violation of the conditions of a special case *de minimis* permit shall be a violation of this rule.

(D) Air Quality Analysis Requirements.

1. An air quality analysis will not be required for applications having a maximum design capacity emission rate of no more than the hourly *de minimis* level unless paragraph (5)(D)2. applies. For applications having a maximum design capacity emission rate greater than the hourly *de minimis* level, a permit will be issued only if an air quality analysis demonstrates that the proposed construction or modification will not appreciably affect air quality or the air quality standards are not appreciably exceeded.

2. Exceptions. The director may require an air quality analysis for applications if it is likely that emissions of the proposed construction or modification will appreciably affect air quality or the air quality standards are being appreciably exceeded or complaints filed in the vicinity of the proposed construction or modification warrant an air quality analysis.

(6) General Permit Requirements for Construction or Emissions Increase Greater Than *De Minimis* Levels.

(A) A permit shall be issued pursuant to this section only if it is determined that the proposed source operation or installation will not—

1. Violate any of the provisions of this rule;

2. Interfere with the attainment or maintenance of ambient air quality standards;

3. Cause or contribute to ambient air concentrations in excess of any applicable maximum allowable increase listed in subsection (11)(A), Table 1 over the baseline concentration in any attainment or unclassified area;

4. Violate any applicable requirements or the Air Conservation Law; and

5. Cause an adverse impact on visibility in any Class I area (those designated in paragraph (12)(I)3. of this rule).

(B) In order for the permitting authority to make this determination, each applicant shall—

1. Complete and submit application forms supplied by the permitting authority. These forms shall consist of an Application for Authority to Construct and an Emissions Information for Construction Permit Application. Both forms shall be completed so that all information necessary for processing the permit is supplied;

2. Send to the permitting authority as part of the application: site information; plans; descriptions; specifications; and drawings showing the design of the installation, the nature and amount of emissions of each pollutant, and the manner in which it will be operated and controlled;

3. Supply ambient air quality modeling data for the pollutant to determine the air quality impact of the installation on the applications with the potential to emit fifty (50) tons or more of particulate matter or sulfur dioxide. The modeling techniques to be used are as specified in the Environmental Protection Agency's (EPA) Guidelines on Air Quality Models (revised July 1986) (EPA 450/2-78-027R) and supplement A (July 1987) or another model which the permitting authority deems accurate. Temporary installations and portable equipment shall be exempt from this requirement provided that the source shall apply best available control technology (BACT) for each pollutant emitted in a significant amount;

4. Furnish any additional information, plans, specifications, evidence, documentation, modeling or monitoring data that the permitting authority may require to complete review under this rule; and

5. Submit fees for the filing and processing of their permit application. The amount of the fee will be determined from section (10) of this rule.

(C) The review of each permit application will follow the procedures of subsection (12)(A) Appendix A and, when applicable, subsection (12)(B), Appendix B.

(D) Special Considerations for Stack Heights and Dispersion Techniques.

1. The degree of emission limitation required for control of any air pollutant under this rule shall not be affected in any manner by—

A. So much of the stack height of any installation as exceeds good engineering practice (GEP) stack height; or

B. Any other dispersion technique.

2. Paragraph (6)(D)1. of this rule shall not apply to stack heights on which construction commenced on or before December 31, 1970, or to dispersion techniques implemented on or before December 31, 1970.

3. Before the permitting authority issues a permit under this rule based on stack heights that exceed GEP, the permitting authority must notify the public of the availability of the demonstration study and must provide opportunity for a public hearing on it.

4. This paragraph does not require that actual stack height or the use of any dispersion technique be restricted in any manner.

(E) After a permit has been granted—

1. The owner or operator subject to the provisions of this rule shall furnish the permitting authority written notification as follows:

A. A notification of the anticipated date of initial start-up of the source operation or installation not more than sixty (60) days or less than thirty (30) days prior to that date; and

B. A notification of the actual date of initial start-up of a source operation or installation within fifteen (15) days after that date;

2. A permit may be revoked if construction or modification work is not begun within two (2) years from the date of issuance or if work is suspended for one (1) year, and if—

A. The delay was reasonably foreseeable by the owner or operator at the time the permit was issued;

B. The delay was not due to an act of God or other conditions beyond the control of the owner or operator; or

C. Failure to revoke the permit would be unfair to other potential applicants;

3. Any owner or operator who constructs, modifies or operates an installation not in accordance with the application submitted and the permit issued, including any terms and conditions made a part of the permit, or any owner or operator of an installation who commences construction or modification after May 13, 1982, without meeting the requirements of this rule, is in violation of this rule;

4. Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the Air Conservation Law and rules or any other requirements under local, state or federal law; and

5. The permitting authority may require monitoring of visibility in any Class I area (those designated in paragraph (12)(I)3. of this rule) near the new installation or major modification for these purposes and by such means as the permitting authority deems necessary and appropriate.

(7) Nonattainment Area Permits.

(A) Exemptions. Installations and modifications which have the potential to emit one hundred (100) tons or more solely because fugitive emissions are counted when calculating potential to emit are exempt from the requirements of this section, provided that the installations are not named in 10 CSR 10-6.020(3)(B), Table 2.

(B) A permit shall not be issued for the construction or major modification of an installation with the potential to emit the nonattainment pollutant in amounts equal to or greater than the *de minimis* levels; for an installation or modification with the potential to emit one hundred (100) tons or more or other nonattainment pollutants; or for a major modification of an installation with the potential to emit one hundred (100) tons or more of the nonattainment pollutant, unless the following requirements, in addition to section (6) are met:

1. By the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained, such that, the total allowable emission from existing sources in the nonattainment area, from new or modified sources which are not major emitting facilities, and from existing sources prior to the application for that permit to construct or modify represent annual incremental reductions in emissions of the nonattainment pollutant as are required to ensure attainment of the applicable national ambient air quality standard by the applicable date;

2. In the case of a new or modified installation which is located in a zone (within the nonattainment area) identified by the administrator, in consultation with the Secretary of Housing and Urban Development, as a zone to which economic development should be targeted, emissions of that pollutant resulting from the proposed new or modified installation will not cause or contribute to emissions levels which exceed the allowance permitted for that pollutant for that zone from new or modified installations;

3. Offsets have been obtained in accordance with the offset and banking procedures in subsection (12)(C) and (D) of this rule;

4. The administrator has not determined that the state implementation plan is not being adequately implemented for the nonattainment area in which the proposed source is to be constructed or modified; and

5. Temporary installation and portable sources shall be exempt from this subsection provided that the source applies BACT for each pollutant emitted in a significant amount.

(C) A permit for the construction or major modification of an installation with the potential to emit annually one hundred (100) tons or more of a nonattainment pollutant, or a permit for a modification with the potential to emit annually one hundred (100) tons or more of a nonattainment pollutant, shall not be issued unless the following requirements, in addition to section (6) of this rule, are met:

1. The applicant must provide documentation establishing that all installations in Missouri which are owned or operated by the applicant (or by any entity controlling, controlled by or under common control with the applicant) are subject to emission limitations and are in compliance, or are on a schedule for compliance, with all applicable requirements;

2. The applicant shall document that the provisions in its application for the installation and operation of pollution control equipment or processes will meet the lowest

achievable emission rate (LAER) for the nonattainment pollutant. Temporary installations and portable equipment shall be exempt from LAER, provided the installation applies BACT for each pollutant emitted in a significant amount;

3. For phased construction projects, the determination of LAER shall be reviewed and modified as appropriate at the latest reasonable time prior to commencement of construction of each independent phase of construction;

4. The applicant must provide an alternate site analysis; and

5. The applicant shall provide an analysis of impairment to visibility in any Class I area (those designated in subsection (12)(I) of this rule) that would occur as a result of the installation or major modification and as a result of the general, commercial, residential, industrial and other growth associated with the installation or major modification.

(D) Any construction or modification that will impact a federal Class I area shall be subject to the provisions of subsection (12)(H) of this rule.

(E) NO_x Requirements. For the purpose of section (7), any significant increase due to the levels of emission of oxides of nitrogen, shall be considered significant for ozone. Any installation with the potential to emit one hundred (100) tons per year of oxides of nitrogen located within an area which is nonattainment for ozone, must comply with the specific permit requirements of the nonattainment provisions of section (7) and with section (8) for any significant increase due to the levels of emission of oxides of nitrogen.

(8) Attainment and Unclassified Area Permits.

(A) Applicability.

1. Applicants for permits for construction or major modification of installations which are in a category named in 10 CSR 10-6.020(3)(B), Table 2, and have the potential to emit one hundred (100) tons or more of any pollutant shall adhere to the requirements of this section, in addition to the requirements of section (6) of this rule.

2. Applicants for permits for construction or modification with the potential to emit one hundred (100) tons or more of any pollutant at an installation in a category named in 10 CSR 10-6.020(3)(B), Table 2 shall comply with the requirements of this section, in addition to the requirements of section (6) of this rule.

3. Applicants for permits for construction or major modification of installations with the potential to emit two hundred and fifty (250) tons or more of any pollutant shall comply with the requirements of this section, in addition to the requirements of section (6); unless the potential to emit would be less than two hundred and fifty (250) tons if fugitive emissions were not counted in calculating the potential to emit and the installation is not in a category named in 10 CSR 10-6.020(3)(B), Table 2.

4. Applicants for permits for construction or modification with the potential to emit two hundred and fifty (250) tons or more of any pollutant shall comply with the requirements of this section, in addition to the requirements of section (6), unless the potential to emit would be less than two hundred and fifty (250) tons if fugitive emissions were not counted in calculating the potential to emit and the installation is not in a category named in 10 CSR 10-6.020(3)(B), Table 2.

(B) Control Technology.

1. An installation to which this section applies shall apply BACT for each pollutant that it would emit in a significant amount.

2. The requirement for BACT in the case of a major modification shall apply to the physical change(s) in the method of operation contained in the permit application that brings the installation's net emissions increase to the significant level.

3. For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time prior to commencement of construction of each independent phase of construction.

4. An owner or operator of an installation to which this subsection applies may employ a system of innovative control technology, if the procedures specified in subsection (12)(E) of this rule are followed.

(C) Air Quality Impacts.

1. Preapplication modeling and monitoring.

A. Each application shall contain an analysis of ambient air quality or ambient concentrations in the significantly impacted area of the installation for each pollutant specified in 10 CSR 10-6.020(3)(A), Table 1, which the installation would emit in significant amounts. The analysis shall follow the guidelines of subsection (12)(F).

B. The analysis required under this paragraph shall include continuous air quality monitoring data for any pollutant, except VOC, emitted by the installation, for which an ambient air quality standard exists. The owner or operator of a proposed installation or major modification emitting VOC who satisfies all the conditions of 40 CFR part 51, Appendix S, section IV.A. may provide post-construction monitoring data for ozone in lieu of providing preconstruction data for ozone.

C. The continuous air monitoring data required in this paragraph shall relate to, and shall have been gathered over, a period of one (1) year and shall be representative of the year preceding receipt of the complete application, unless the permitting authority determines that a complete and adequate analysis may be accomplished in a shorter period (but not less than four (4) months). Continuous, as used in this subparagraph, refers to frequency of monitoring operation as required by 40 CFR part 58, Appendix B.

D. For pollutants emitted in a significant amount for which no ambient air quality standards exist, the analysis required under this paragraph shall contain whatever air quality monitoring data the permitting authority determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

2. Operation of monitoring stations. The owner or operator shall meet the requirements of 40 CFR part 58, Appendix B during the operation of monitoring stations for the purposes of paragraphs (8)(C)1. or 7. of this rule at the time the station is put into operation.

3. Modeling. The owner or operator of the installation to which this section applies shall provide modeling data, following the requirements of subsection (12)(F), to demonstrate that potential and secondary emission increases from the installation, in conjunction with all other applicable emissions increases or reductions in the baseline area since the baseline date, will not cause or contribute to ambient air concentrations in excess of any ambient air quality standard or any applicable maximum allowable increase over the baseline concentration in any area, in the amounts listed in subsection (11)(A), Table 1 of this rule. The permitting authority will track the consumption of allowable increment in accordance with subsection (12)(G) of this rule.

4. Emission reductions. The applicant must show that it has obtained emission reductions of a comparable air quality impact for the nonattainment pollutant if its planned emissions of the pollutant will affect a nonattainment area in excess of the air quality impact for that pollutant listed in subsection (11)(D), Table 4 of this rule. These reductions shall be obtained through binding agreement prior to the commencement of operations of the installation or major modification and shall be subject to the offset conditions set forth in subsection (12)(C), Appendix C of this rule.

5. Impact on visibility. The owner or operator shall provide an analysis of the

impairment to visibility, soils and vegetation that would occur as a result of the installation or major modification and general commercial, residential, industrial and other growth associated with the installation or major modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

6. Projected air quality impacts. The owner or operator shall provide, following the requirements of subsection (12)(F), Appendix F of this rule, an analysis of the air quality impact projected for the area as a result of general commercial, residential and industrial growth, as well as growth associated with the installation or major modification.

7. Post-construction monitoring. After construction of the installation or major modification, the applicant shall conduct ambient monitoring as the permitting authority determines may be necessary to determine the effect emissions from the installation or major modification may have, or are having, on air quality in any area.

8. Exemptions.

A. The requirements of subsection (8)(C) shall not apply unless otherwise determined to be needed by the permitting authority, if—

(I) The increase in potential emissions of that pollutant from the installation would impact no Class I area and no area where an applicable increment is known to be violated; and

(II) The duration of the emissions of the pollutant will not exceed two (2) years.

B. The requirements of subsection (8)(C) as they relate to any maximum allowable increase for a Class II area shall not apply unless otherwise determined to be needed by the permitting authority, if—

(I) The application is for a major modification of an installation which was in existence on March 1, 1978;

(II) Any such increase would cause or contribute to no exceedance of any ambient air quality standard; and

(III) The new increase in allowable emissions of each air pollutant after the application of BACT would be less than fifty (50) tons per year.

C. The requirements of subsection (8)(C) shall not apply, if the ambient air quality effect is less than the air quality impact of subsection (11)(B), Table 2, or if the pollutant is not listed in subsection (11)(B), Table 2, unless otherwise determined to be needed by the permitting authority. The ambient air quality impact must be determined using either of the following methods:

(I) The screening technique set forth in Guidelines for Air Quality Maintenance and Planning Analysis Vol. III (Revised); Procedures for Evaluating Air Quality Impact of New Stationary Sources (United States EPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711); or

(II) A more sophisticated modeling technique as indicated in subsection(12)(F).

(D) Modifications in Class I Areas. Any construction or modification that will impact a federal Class I area shall be subject to the provisions of subsection (12)(H).

(E) Offsets. Applicants must obtain emission reductions, obtained through binding agreement prior to commencing operations and subject to subsection (12)(C), Appendix C of this rule, equal to and of a comparable air quality impact to the new or increased, emissions in the following circumstances when the:

1. Area has no increment available; or

2. Proposal will consume more increment than is available.

(9) Hazardous Air Pollutant Permits. The requirements of section (9) apply to any owner or operator of a major source identified in subsection (9)(B) unless the major source in question has been specifically regulated or exempted from regulation under a standard issued pursuant to section 112(d), section 112(h) or section 112(j) of the Clean Air Act and incorporated in another subpart of part 63 of the *Code of Federal Regulations* (CFR), or the owner or operator of such a major source has received all necessary air quality permits for construction or reconstruction before the effective date of section (9).

(A) Definitions. As used in section (9)—

1. Construct a major source means—

A. To fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit ten (10) tons per year of any hazardous air pollutant (HAP) or twenty-five (25) tons per year of any combination of HAPs; or

B. To fabricate, erect, or install at any developed site a new process or production unit which in and of itself emits or has the potential to emit ten (10) tons per year of any HAP or twenty-five (25) tons per year of any combination of HAPs;

2. Greenfield site means a contiguous area under common control that is an undeveloped site;

3. Process or production unit means any collection of structures and/or equipment, that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one (1) process or production unit;

4. Reconstruct a major source means the replacement of components at an existing process or production unit that in and of itself emits or has the potential to emit ten (10) tons per year of any HAP or twenty-five (25) tons per year of any combination of HAP, whenever:

A. The fixed capital cost of the new components exceeds fifty percent (50%) of the fixed capital cost that would be required to construct a comparable process or production unit; and

B. It is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under this section;

5. Research and development activities means activities conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a *de minimis* manner;

6. Similar source means a stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major source such that the source could be controlled using the same control technology; and

7. Other definitions contained in 40 CFR parts 63.40 through 63.44, to the extent they are different from the definitions found in 10 CSR 10-6.020, supersede the definitions found in 10 CSR 10-6.020 and are only applicable to this section (9).

(B) Applicability. No person may construct or reconstruct a major source unless they submit an application and receive approval from the permitting authority according to the procedures of paragraph (9)(D)2. and (9)(D)3.; or unless all of the following are satisfied:

1. All HAPs emitted by the process or production unit that would otherwise be controlled under the requirements of this section will be controlled by emission control equipment which was previously installed at the same site as the process or production unit;

2. The permitting authority—

A. Has determined within a period of five (5) years prior to the fabrication, erection, or installation of the process or produc-

tion unit that the existing emission control equipment represented best available control technology (BACT), lowest achievable emission rate (LAER) under 40 CFR part 51 or 52, toxic-best available control technology (T-BACT), or maximum achievable control technology (MACT) based on state air toxic rules for the category of pollutants which includes those HAPs to be emitted by the process or production unit; or

B. Determines that the control of HAP emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (i.e., equivalent to the level of control that would be provided by a current BACT, LAER, T-BACT, or state air toxic rule MACT determination);

3. The permitting authority determines that the percent control efficiency for emissions of HAP from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;

4. The permitting authority has provided notice and an opportunity for public comment concerning its determination that criteria in paragraphs (9)(B)1., 2., and 3. of this rule apply and concerning the continued adequacy of any prior LAER, BACT, T-BACT, or state air toxic rule MACT determination;

5. If any commenter has asserted that a prior LAER, BACT, T-BACT, or state air toxic rule MACT determination is no longer adequate, the permitting authority has determined that the level of control required by that prior determination remains adequate;

6. The requirements of section (6) are met; and

7. Any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by the permitting authority are predicated will be construed by the permitting authority as applicable requirements under section 504(a) of the Clean Air Act and either have been incorporated into any existing Part 70 permit for the affected facility or will be incorporated into such permit upon issuance.

(C) Exemptions. The requirements of this section do not apply to—

1. Electric utility steam generating units; or

2. Research and development activities.

(D) MACT Review and Determinations.

1. General principles.

A. The MACT emission limitation or MACT requirements recommended by the applicant and approved by the permitting authority shall not be less stringent than the emission control which is achieved in practice by the best controlled similar source, as determined by the permitting authority.

B. Based upon available information, the MACT emission limitation and control technology recommended by the applicant and approved by the permitting authority shall achieve the maximum degree of reduction in emissions of HAPs which can be achieved by utilizing those control technologies that can be identified from the available information, taking into consideration the costs of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements associated with the emission reduction.

C. The applicant may recommend a specific design, equipment, work practice, or operational standard, or a combination thereof, and the permitting authority may approve such a standard if the permitting authority specifically determines that it is not feasible to prescribe or enforce an emission limitation under the criteria set forth in section 112(h)(2) of the Clean Air Act.

D. The applicant has met the requirements of section (6).

2. Application requirements for a case-by-case MACT determination.

A. An application for a MACT determination shall specify a control technology selected by the owner or operator that, if properly operated and maintained, will meet the MACT emission limitation or standard as determined according to the principles set forth in paragraph (9)(D)1.

B. Where additional control technology or a change in control technology is required, the application for a MACT determination shall contain the following information:

(I) Emissions Information for Construction Permit Application;

(II) Standard application form and information as described in paragraph (12)(A)4.;

(III) The anticipated date of start-up;

(IV) The estimated emission rate for each such HAP, to the extent this information is needed by the permitting authority to determine MACT;

(V) Any applicable federally enforceable emission limitations;

(VI) The maximum and expected utilization of capacity and the associated uncontrolled emission rates for that source, to the extent this information is needed by the permitting authority to determine MACT;

(VII) The controlled emissions in tons/year at expected and maximum utilization of capacity, to the extent this information is needed by the permitting authority to determine MACT;

(VIII) A recommended emission limitation consistent with the principles set forth in paragraph (9)(D)1.;

(IX) The selected control technology to meet the recommended MACT emission limitation, including technical information on the design, operation, size, estimated control efficiency of the control technology (and the manufacturer's name, address, telephone number, and relevant specifications and drawings, if requested by the permitting authority);

(X) Supporting documentation including identification of alternative control technologies considered by the applicant to meet the emission limitation, and analysis of cost and non-air quality health environmental impacts or energy requirements for the selected control technology; and

(XI) Any other relevant information required to be submitted by the permitting authority deemed necessary to determine MACT.

C. Where the owner or operator contends that source will be in compliance, upon startup, with case-by-case MACT without a change in control technology, the application for a MACT determination shall contain the following information:

(I) The information described in parts (9)(D)2.B.(II) through (9)(D)2.B.(XI) to determine MACT; and

(II) Documentation of the control technology in place.

3. Administrative procedures for review of the MACT application.

A. The permitting authority will notify the owner or operator in writing, within thirty (30) days from the date the application is first received, as to whether the application for a MACT determination is complete or whether additional information is required.

B. The permitting authority will initially approve the recommended MACT emission limitation and other terms set forth in the application, or the permitting authority will notify the owner or operator in writing of its intent to disapprove the application, within thirty (30) calendar days after the owner or operator is notified in writing that the application is complete.

C. Notice of disapproval.

(I) The owner or operator may present, in writing, within sixty (60) calendar days after receipt of notice of the permitting authority's intent to disapprove the application, additional information or arguments pertaining to, or amendments to, the application for consideration by the permitting

authority before it decides whether to finally disapprove the application.

(II) The permitting authority will either initially approve or issue a final disapproval of the application within ninety (90) days after it notifies the owner or operator of an intent to disapprove or within thirty (30) days after the date additional information is received from the owner or operator, whichever is earlier.

(III) A final determination by the permitting authority to disapprove any application will be in writing and will specify the grounds on which the disapproval is based. If any application is finally disapproved, the owner or operator may submit a subsequent application, provided that the subsequent application has been amended in response to the stated grounds for the prior disapproval.

D. Incorporation of the MACT determination into a construction permit.

(I) When an application for a MACT determination is approved pursuant to section (9), the construction permit issued pursuant to this rule shall contain a MACT emission limitation (or a MACT work practice standard if the permitting authority determines it is not feasible to prescribe or enforce an emission standard) to control the emissions of HAP.

(II) Such construction permit will specify any notification, operation and maintenance, performance testing, monitoring, reporting and record keeping requirements. Such construction permit shall include:

(a) In addition to the MACT emission limitation additional emission limits, production limits, operational limits or other terms and conditions necessary to ensure enforceability of the MACT emission limitation;

(b) Compliance certifications, testing, monitoring, reporting and record keeping requirements that are consistent with the requirements of 10 CSR 10-6.065;

(c) In accordance with section 114(a)(3) of the Clean Air Act, monitoring shall be capable of demonstrating continuous compliance during the applicable reporting period. Such monitoring data shall be of sufficient quality to be used as a basis for enforcing all applicable requirements including emission limitations; and

(d) A statement requiring the owner or operator to comply with all applicable requirements.

(III) Approval shall expire if construction or reconstruction has not commenced within eighteen (18) months of issuance, unless the permitting authority has granted an extension. However, in no case will approval extend beyond thirty (30) months from the date of issuance if construction or reconstruction have not commenced.

E. Opportunity for public comment on the construction permit shall follow the procedure found in subsection (12)(B) Appendix B, Public Participation.

F. EPA notification. The permitting authority shall send a copy of the final construction permit or other notice of approval issued to the administrator through the appropriate regional office, and to all other state and local air pollution control agencies having jurisdiction in affected states;

G. Compliance date. On and after the date of start-up, a constructed or reconstructed major source which is subject to these requirements shall be in compliance with all applicable requirements specified in the MACT determination.

(E) Requirements for constructed or reconstructed major sources subject to a subsequently promulgated standard or MACT requirement.

1. If an emission standard is promulgated under section 112(d) or section 112(h) of the Clean Air Act or the state issues a determination under section 112(j) of the Clean Air Act that is applicable to a stationary source or group of sources which would be deemed to be a constructed or reconstructed major source under section (9) before the date that the owner or operator has obtained a final and legally effective MACT determination under any of the review options available in this rule, the owner or operator of the source(s) shall comply with the promulgated standard or determination rather than any MACT determination under section (9) by the state, and the owner or operator shall comply with the promulgated standard by the compliance date in the promulgated standard.

2. If an emission standard is promulgated under section 112(d) or section 112(h) of the Clean Air Act or the state issues a determination under section 112(j) of the Clean Air Act that is applicable to a stationary source or group of sources which would be deemed to be a constructed or reconstructed major source under section (9) and has been subject to a prior case-by-case MACT determination pursuant to section (9), and the owner or operator obtained a final and legally effective case-by-case MACT determination prior to the promulgated date of such emission standard, then the state shall (if the initial part 70 permit has not yet been issued) issue an initial operating permit which incorporates the emission standard or determination, or shall (if the initial part 70 permit has been issued) revise the operating permit according to the reopening procedures in 40 CFR part 70 or part 71, whichever is relevant, to incorporate the emission standard or determination.

A. The EPA may include in the emission standard established under section 112(d) or section 112(h) of the Clean Air Act a specific compliance date for those sources which have obtained a final and legally effective MACT determination under section (9) and which have submitted the information required by section (9) to the EPA before the close of the public comment period for the standard established under section 112(d) of the Clean Air Act. Such date shall assure that the owner or operator shall comply with the promulgated standard as expeditiously as practicable, but no longer than eight (8) years after such standard is promulgated. In that vent, the state shall incorporate the applicable compliance date in the part 70 operating permit.

B. If no compliance date has been established in the promulgated 112(d) or 112(h) standard or section 112(j) determination, for those sources which have obtained a final and legally effective MACT determination under section (9), then the permitting authority shall establish a compliance date in the permit that assures that the owner or operator shall comply with the promulgated standard or determination as expeditiously as practicable, but not longer than eight (8) years after such standard is promulgated or a section 112(j) determination is made.

3. Notwithstanding the requirements of paragraphs (9)(E)1. and 2., if an emission standard is promulgated under section 112(d) or section 112(h) of the Clean Air Act or the state issues a determination under section 112(j) of the Clean Air Act that is applicable to a stationary source or group of sources which was deemed to be a constructed or reconstructed major source under section (9) and which is the subject of a prior case-by-case MACT determination pursuant to section (9), and the level of control required by the emission standard issued under section 112(d) or section 112(h) or the determination issued under section 112(j) is less stringent than the level of control required by any emission limitation or standard in the prior MACT determination, the state is not required to incorporate any less stringent terms of the promulgated standard in the part 70 operating permit applicable to such source(s) and may in its discretion consider any more stringent provisions of the prior MACT determination to be applicable legal requirements when issuing or revising such operating permit.

(10) Permit Amendments and Fees.

(A) Permit Fees.

1. All installations or source operations requiring permits under this rule shall make application to the permitting authority and submit the application with a permit filing fee of one hundred dollars ($100). Failure to submit the permit filing fee constitutes an incomplete permit application according to paragraph (12)(A)2. of this rule.

2. Upon the determination that a complete application for a permit or a permit amendment has been received, a fee for permit processing in the amount of fifty dollars ($50) per hour of actual staff time will begin to accrue. In lieu of the fifty-dollar ($50) per hour review fee, for projects subject to review under paragraph (4)(D)1. of this rule, a fee of two hundred dollars ($200) shall be submitted by the applicant.

3. The applicant shall submit fees for the processing of the permit application within ninety (90) calendar days of the final review determination, whether the permit is approved, denied, withdrawn or not needed. After the ninety (90) calendar days, the unpaid processing fees shall have interest imposed upon the unpaid amount at the rate of ten percent (10%) per annum from the date of billing until payment is made. Failure to submit the processing fees after the ninety (90) calendar days will result in the permit being denied (revoked for portable installation location amendments) and the rejection of any future permit applications by the same applicant until the processing fee plus interest have been paid.

4. In addition to permit filing and processing fees, the applicant shall pay for any publication of notice required and shall pay for the original and one (1) copy of the transcript, to be filed with the permitting authority, of any hearing required under this rule. No permit shall be issued until all publication and transcript costs have been paid.

5. Partially processed permits that are withdrawn after submittal shall be charged at the same processing fee rate in paragraph (10)(A)2. for the time spent processing the application.

6. The commission may reduce the permit processing fee or exempt any person from payment of the fee upon an appeal filed with the commission stating and documenting that the fee will create an unreasonable economic hardship upon the person.

7. Any person who obtains a valid permit from a city or county holding a certificate of authority granted by the commission under section 643.140, RSMo shall be deemed to have met the fee requirements of this section for that permit.

(B) Amending a Final Permit.

1. No changes in the proposed installation or modification may be made which would change any information in a finalized permit, except in accordance with this subsection.

2. If the applicant desires to make the change, the applicant shall submit in writing a request to the permitting authority that the permit be amended.

3. If the requested change will result in increased emissions, air quality impact or increment consumption, and is submitted after the final notice of permit processing fee due, a new permit application is required for the requested change. The new application, to the maximum extent possible, should reference those portions of the original application that are unchanged. This new submittal will be subject to all requirements of this rule. The accrued permit processing fee from the original application must be submitted to the permitting authority before the new permit application can be accepted.

4. If the requested change will not result in increased emissions, air quality impact, or increment consumption, the original permit application shall be amended and the permit shall be modified pursuant to the amended application within thirty (30) calendar days of receipt of the written request. The fee for this type of change will be subject to the requirements of subsection (10)(A), except paragraph (10)(A)1., of this rule.

(11) Tables.

(A) Table—1 Ambient Air Increment Table.

Pollutant	Maximum Allowable Increase
Class I Areas	
Particulate Matter 10 Micron	
Annual arithmetic mean	4
24-hour maximum	8
Sulfur Dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen Dioxide:	
Annual arithmetic mean	2.5
Class II Areas	
Particulate Matter 10 Micron	
Annual arithmetic mean	17
24-hour maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
Nitrogen Dioxide:	
Annual arithmetic mean	25
Class III Areas	
Particulate Matter 10 Micron	
Annual arithmetic mean	34
24-hour maximum	60
Sulfur dioxide:	
Annual arithmetic mean	40
24-hour maximum	182
3-hour maximum	700
Nitrogen Dioxide:	
Annual arithmetic mean	50

Notes:

1. All increases in micrograms per cubic meter. For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one (1) period once per year at any one (1) location.

2. There are two (2) Class I Areas in Missouri–one (1) in Taney County (Hercules Glade) and one (1) in Wayne and Stoddard Counties (Mingo Refuge).

3. There are no Class III Areas in Missouri at this time.

(B) Table 2—*De Minimis* Ambient Air Quality Impacts.

Pollutant	Air Quality Impact
Carbon monoxide	575, 8-hour average
Nitrogen dioxide	14, annual
Particulate matter—	
10 micron (PM_{10})	10, 24-hour
Sulfur dioxide	13, 24-hour
Ozone	*
Lead	.1, 3-month
Mercury	0.25, 24-hour
Beryllium	.001, 24-hour
Fluorides	0.25, 24-hour
Vinyl chloride	15, 24-hour
Total reduced sulfur	10, 1-hour
Hydrogen sulfide	0.2, 1-hour
Reduced sulfur compounds	10, 1-hour

Note: All impacts in micrograms per cubic meter.

No **de minimis air quality level is provided for ozone. However, any potential net increase of 100 tons per year, or more, of volatile organic compounds subject to section (8) would require an ambient impact analysis, including the gathering of ambient air quality data.*

(C) Table 3—Missouri Guidelines for Valid Data Total Suspended Particulate.

Time Period	Minimum Requirement for Validity
Month	2, 24-hour samples
Quarter	10, 24-hour samples and 3 valid months
Year	45, 24-hour samples and 4 valid quarters

Continuously Monitored Data

Time Period	Minimum Requirement for Validity
3-hour running average	3 consecutive hourly observations
8-hour running average	6 hourly observations

24-hour average (daily)	18 hourly observations
Monthly	21 daily averages
Quarterly[1]	3 consecutive monthly averages
Yearly[2]	11 monthly averages

[1]Quarter is defined as calendar quarter.
[2]Year is defined as four (4) consecutive calendar quarters.

(D) Table 4—Levels of Significant Air Quality Impact for Areas Not Meeting 10 CSR 10-6.010.

		Averaging Time (Hours)			
Pollutant	**Annual**	**24**	**8**	**3**	**1**
SO_2	1.0	5		25	
PM_{10}	1.0	5			
NO_2	1.0				
CO			.5		2

Note: All impacts in micrograms per cubic meter, except for CO in milligrams per cubic meter.

(12) Appendices.

(A) Appendix A, Permit Review Procedures.

1. Preapplication meeting. Prior to submittal of a complete permit application, the applicant may request a preapplication meeting with the permitting authority to discuss the nature of and apparent requirements for the forthcoming permit application. This meeting shall not fall under the permit fee requirements.

2. Complete application.

A. The permitting authority shall review each application for completeness and shall inform the applicant within thirty (30) days if the application is not complete. In order to be complete, an application must include a completed application form and, to the extent not called for by the form, the information required in paragraph (12)(A)4.

B. If the permitting authority does not notify the installation that its application is not complete within thirty (30) days of receipt of the application, the application shall be deemed complete. However, nothing in this subsection shall prevent the permitting authority from requesting additional information that is reasonably necessary to process the application.

(I) The permitting authority shall maintain a checklist to be used for the completeness determination. A copy of the checklist identifying the application's deficiencies shall be provided to the applicant along with the notice of incompleteness.

(II) If, while processing an application that has been determined or deemed to be complete, the permitting authority determines that additional information is necessary to evaluate or to take final action on that application, the permitting authority may request this additional information in writing. In requesting this information, the permitting authority shall establish a reasonable deadline for a response. The review period will be extended by the amount of time necessary to collect the required information.

(III) In submitting an application for amendment of a construction permit, the applicant may incorporate by reference those portions of the existing permit (and the permit application and any permit amendment) that describe products, processes, operations and emissions. The applicant must identify specifically and list which portions of the previous permit, applications, or both, are incorporated by reference. In addition, a permit amendment application must contain—

(a) Information specified in paragraph (12)(A)4. for those products, processes, operations and emissions—

I. That are not addressed in the previous permit or application;

II. That are subject to applicable requirements that are not addressed in the previous permit or application; or

III. For which the applicant seeks permit terms and conditions that differ from those in the previous permit or application.

C. Confidential information. An applicant may submit information to the permitting authority under a claim of confidentiality pursuant to 10 CSR 10-6.210.

D. Filing fee. Each application must be accompanied by a one hundred-dollar ($100) filing fee.

3. Duty to supplement or correct application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application, upon becoming aware of the failure or incorrect submittal, shall promptly submit supplementary facts or corrected information. In addition, an applicant shall provide additional information, as necessary, to address any requirements that become applicable to the installation after the date an application is deemed complete, but prior to the issuance of the construction permit.

4. Standard application form and required information. The director will provide a standard application package for applicant's use. An applicant shall submit an application package consisting of the standard application form and Emissions Information for Construction Permit Application. After the effective date of this rule, any revision to the department-suppled forms will be presented to the regulated community for a forty-five (45)-day comment period. The application package must include all information needed to determine applicable requirements. The application must include information needed to determine the applicability of any applicable requirement. The applicant shall submit the information called for by the application form for each emissions unit at the installation to be permitted. The standard application form (and any attachments) shall require that the following information be provided:

A. Identifying information. The applicant's company name and address (or plant name and address if different from the company name), the owner's name and state registered agent, and the telephone number and name of the plant site manager or other contact person;

B. Processes and products. A description of the installation's processes and products (by two (2)-digit Standard Industrial Classification Code);

C. Emissions-related information. The following emissions-related information on the emission inventory forms:

(I) All emissions of regulated air pollutants. The permit application shall describe all emissions of regulated air pollutants emitted from each emissions unit, except as provided for by this section. The installation shall submit additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable;

(II) Identification and description of all emissions units whose emissions are included in part (12)(A)4.C.(I), in sufficient detail to establish the applicability of all requirements;

(III) Emissions rates, or information that enables the permitting authority to determine such rates, in tons per year and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method, if any;

(IV) Information to the extent needed to determine or regulate emissions: fuels, fuel use, raw materials, production rates and operating schedules;

(V) Identification and description of air pollution control equipment;

(VI) Identification and description of compliance monitoring devices or activities;

(VII) Limitations on installation operations affecting emissions or any work practice standards, where applicable, for all regulated air pollutants;

(VIII) Other information required by any applicable requirement (including