

**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**

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**Title 10—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**

**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	Pollutant	Method	Concentration	Remarks
1. Particulate matter 10 micron (PM <sub>10</sub> )	As specified in 10 CSR 10-6.040(4)(J)	50 micrograms per cubic meter annual arithmetic mean		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
		150 micrograms per cubic meter 24-hour average concentration	As determined 10 CSR 10-6.040(4)(K)	6. Hydrogen sulfide			
2. Sulfur dioxide	As specified in 10 CSR 10-6.040(4)(A)	0.03 ppm (80 micrograms per cubic meter)	Annual arithmetic mean			0.03 ppm (42 micrograms per cubic meter)	1/2-hour average not to be exceeded over 2 times in any 5 consecutive days
		0.14 ppm (365 micrograms per cubic meter)	24-hour average not to be exceeded more than once per year	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
		0.5 ppm (1300 micrograms per cubic meter)	3-hour average not to be exceeded more than once per year			30 micrograms per cubic meter	1-hour average not to be exceeded more than once in any 2 consecutive days
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	8. Lead		As specified in 10 CSR 10-6.040(4)(G)	1.5 micrograms per cubic meter
		35 ppm (40,000 micrograms per cubic meter)	1-hour average not to be exceeded more than once per year				
4. Photo-chemical 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))				

*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.*

*PUBLISHER'S NOTE: The publication of the full text of the material that the adopting agency has incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, the full text of that material will be made available to any interested person at both the Office of the Secretary of State and the office of the adopting agency, pursuant to section 536.031.4, RSMo. Such material will be provided at the cost established by state law.*

(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<sub>2</sub>).

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 pre-construction 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 ( $1 \mu\text{g}/\text{m}^3$ ) 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)(A), Table 1. 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 adjuncts 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. Criteria pollutant—Air pollutants for which air quality standards have been established in 10 CSR 10-6.010.

27. 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.

28. 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.

29. 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  $(\text{NH}_4)_2\text{HPO}_4$ .

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 agree-

gate 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 (diluent).

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—This term is defined in 40 CFR 51.166(b)(3) and is incorporated by reference.

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; and

B. Nonattainment areas for lead include the city of Herculaneum in Jefferson County, and the Dent, Liberty and Arcadia townships in Iron 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<sub>x</sub> 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<sub>10</sub>—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 cut-back 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  $\mu\text{g}/\text{m}^3$ ) (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<sub>2</sub>O) in five (5) minutes when pressurized to a gauge pressure of four thousand five hundred (4,500) pascals (eighteen inches (18") of H<sub>2</sub>O) or evacuated to a gauge pressure of one thousand five hundred (1,500) pascals (six inches (6") of H<sub>2</sub>O).

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-fluoroethane (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 <sub>10</sub>	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 x 10 <sup>-6</sup>
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);	92875	Benzidine	123911	1,4-Dioxane (1,4-Diethyleneoxide)
2. Kraft pulp mills;	50328	Benzo(a)pyrene		1,2-Diphenylhydrazine
3. Portland cement plants;	98077	Benzotrithloride	122667	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
4. Primary zinc smelters;	100447	Benzyl chloride	106898	1,2-Epoxybutane
5. Iron and steel mills;	192524	Biphenyl		Ethyl acrylate
6. Primary aluminum ore reduction plants;	117817	Bis((2-ethylhexyl))phthalate (DEHP)	106887	Ethyl benzene
7. Primary copper smelters;	542881	Bis(chloromethyl)ether	140885	Ethyl carbamate (Urethane)
8. Municipal incinerators capable of charging more than 250 tons of refuse per day;	75252	Bromoform	100414	Ethyl chloride (Chloroethane)
9. Hydrofluoric, sulfuric or nitric acid plants;	106990	1,3-Butadiene	51796	Ethylene dibromide (1,2-Bibromoethane)
10. Petroleum refineries;	156627	Calcium cyanamide		Ethylene dichloride (1,2-Dichloroethane)
11. Lime plants;	133062	Captan	75003	Ethylene glycol
12. Phosphate rock processing plants;	63252	Carbaryl		Ethylene imine (Aziridine)
13. Coke oven batteries;	75150	Carbon disulfide	106934	Ethylene oxide
14. Sulfur recovery plants;	56235	Carbon tetrachloride		Ethylene thiourea
15. Carbon black plants (furnace process);	463581	Carbonyl sulfide	107062	Ethylidene dichloride (1,1-Dichloroethane)
16. Primary lead smelters;	120809	Catechol		Formaldehyde
17. Fuel conversion plants;	133904	Chloramben	107211	Heptachlor
18. Sintering plants;	57749	Chlordane	151564	Hexachlorobenzene
19. Secondary metal production plants;	7782505	Chlorine		Hexachlorobutadiene
20. Chemical process plants;	79118	Chloroacetic acid	75218	Hexachlorocyclopentadiene
21. Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;	532274	2-Chloroacetophenone	96457	Hexachloroethane
22. Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand (300,000) barrels;	108394	Chlorobenzene	75343	Hexamethylene-1,6-diisocyanate
23. Taconite ore processing facilities;	95487	Chlorobenzilate		Hexamethylphosphoramide
24. Glass fiber processing plants;	106445	Chloroform	50000	Hexane
25. Charcoal production facilities;	98828	Chloromethyl ethyl ether	76448	Hydrazine
26. Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat;	94757	Chloroprene	118741	Hydrochloric acid
27. Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.	3547044	Cresols/Cresylic acid (isomers and mixture)	87683	Hydrogen fluoride (hydrofluoric acid)
(C) Table 3—Hazardous Air Pollutants.	108394	m-Cresol	77474	Hydroquinone
	95487	o-Cresol	67721	Isophorone
	106445	p-Cresol	822060	Lindane (all isomers)
	98828	Cumene		Maleic anhydride
	94757	2,3-D, salts and esters	680319	Methanol
	3547044	DDE		Methoxychlor
	334883	Diazomethane	110543	Methyl bromide (Bromomethane)
	132649	Dibenzofurans	302012	Methyl chloride (Chloromethane)
	96128	1,2-Dibromo-3-chloropropane	7647010	Methyl chloroform (1,1,1-Trichloromethane)
	84742	Dibutylphthalate	7664393	Methyl ethyl ketone (2-Butanone)
	106467	1,4-Dichlorobenzene(p)	123319	Methyl hydrazine
	91941	3,3-Dichlorobenzidine	78591	Methyl iodide (Iodomethane)
	111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	58899	Methyl isobutyl ketone (Hexone)
	542756	1,3-Dichloropropene	108316	Methyl isocyanate
	62737	Dichlorvos	67561	Methyl methacrylate
	111422	Diethanolamine	72435	Methyl tert butyl ether
	121697	N,N-Diethyl aniline (N,N-Dimethylaniline)	74839	
		Diethyl sulfate	74873	
		3,3-Dimethoxybenzidine		
		Dimethyl aminoazobenzene	71556	
		3,3-Dimethyl benzidine		
		Dimethyl carbamoyl chloride	78933	
		Dimethyl formamide	60344	
		1,1-Dimethyl hydrazine	74884	
		Dimethyl phthalate		
		Dimethyl sulfate	108101	
		4,6-Dinitro-o-cresol and salts	624839	
		2,4-Dinitrophenol	80626	
		2,4-Dinitrotoluene	1634044	



101144	4,4-Methylene bis(2-chloroaniline)	593602	Vinyl bromide (bromoethene)
75092	Methylene chloride (Dichloromethane)	75014	Vinyl chloride
101688	Methylene diphenyl diisocyanate (MDI)	75354	Vinylidene chloride (1,1-Dichloroethylene)
101779	4,4-Methylenedianiline	1330207	Xylenes (isomers and mixture)
91203	Naphthalene	108383	m-Xylenes
12035722	Nickel subsulfide	95476	o-Xylenes
98953	Nitrobenzene	106423	p-Xylenes
92933	4-Nitrobiphenyl	0	Antimony compounds
100027	4-Nitrophenol	0	Arsenic compounds (inorganic)
79469	2-Nitropropane	0	Beryllium compounds
684935	N-Nitroso-N-methylurea	0	Beryllium salts
62759	N-Nitrosodimethylamine	0	Cadmium compounds
59892	N-Nitrosomorpholine	0	Chromium compounds
56382	Parathion	0	Cobalt compounds
82688	Pentachloronitrobenzene (Quintobenzene)	0	Coke oven emissions
87865	Pentachlorophenol	0	Cyanide compounds <sup>1</sup>
108952	Phenol	0	Glycol ethers <sup>2</sup>
106503	p-Phenylenediamine	0	Lead compounds
75445	Phosgene	0	Manganese compounds
7803512	Phosphine	0	Mercury compounds
7723140	Phosphorus	0	Mineral fibers <sup>3</sup>
85449	Phthalic anhydride	0	Nickel compounds
1336363	Polychlorinated biphenyls (Arochlors)	0	Nickel refinery dust
1120714	1,3-Propane sultone	0	Polycyclic organic matter <sup>4</sup>
57578	beta-Propiolactone	0	Radionuclides (including radon) <sup>5</sup>
123386	Propionaldehyde	0	Selenium compounds
114261	Propoxur (Baygon)	0	
78875	Propylene dichloride (1,2-Dichloropropane)	0	
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		

**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.

<sup>1</sup> X'CN where X-H' or any other group where a formal dissociation may occur, for example, KCN or Ca(CN)<sub>2</sub>.

<sup>2</sup> Includes mono- and diethers of ethylene glycol, diethylene glycol and triethylene glycol R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-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<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OH. Polymers are excluded from the glycol category.

<sup>3</sup> 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.

<sup>4</sup> 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).

<sup>5</sup> A type of atom which spontaneously undergoes radioactive decay.

**AUTHORITY:** sections 643.050 and 643.055, RSMo Supp. 1998.\* 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. Amended: Filed Sept. 22, 1999, effective May 30, 2000.

\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995 and 643.055, RSMo 1979, amended 1992, 1994, 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<sub>10</sub> shall be determined as specified by 40 CFR part 51, Appendix M—Test Methods, *Method 20I—Determination of PM<sub>10</sub> 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<sub>10</sub> emissions.

(D) The concentration of particulates of PM<sub>10</sub> shall be determined as specified by 40 CFR part 51, Appendix M—Test Methods, *Method 20IA—Determination of PM<sub>10</sub> 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<sub>10</sub> emissions.

(E) The concentration of condensable particulate matter (CPM) shall be determined as specified by 40 CFR part 51, Appendix M—Test Methods, *Methods 202—Determination of Condensable 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 Dibenzop-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.*

(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<sub>10</sub>) 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<sub>10</sub> in the Atmosphere*, or an equivalent method as approved in 40 CFR part 53; and

(K) Compliance with PM<sub>10</sub> 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<sub>2</sub>S) in the ambient air shall be determined by scrubbing all sulfur dioxide (SO<sub>2</sub>) present in the sample and then converting each molecule of H<sub>2</sub>S to SO<sub>2</sub> with a thermal converter so that the resulting SO<sub>2</sub> is detected by an analyzer as specified in 40 CFR part 50, Appendix A—*Reference Method for the Determination of Sulfur Dioxide in the Atmosphere* or an equivalent method approved by 40 CFR part 53, in which case the calibration gas used must be National Institute of Standards and Technology traceable H<sub>2</sub>S gas.

(6) The concentration of sulfuric acid mist in the ambient air shall be determined as specified in the *Compendium Method IO-4-2, Determination of Reactive Acidic and Basic Gases and Strong Acidity of Fine-Particles (<2.5 μm)*, Center for Environmental Research Information, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, OH 45268, EPA/625/R-96/010a.

(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(2622-98), *Sulfur in Petroleum Products by X-Ray Fluorescence Spectrometry*.

(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. 1999.\* 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. Amended: Filed Oct. 13, 2000, effective July 30, 2001.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

**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 result 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 used in deciding whether or not enforcement action is appropriate.*

(1) Applicability. This regulation applies to all installations in the state of Missouri.

(2) Definitions. Definitions of certain terms in this rule, other than those specified in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

(A) In the event of a malfunction, which results in excess emissions that exceeds one (1) hour, the owner or operator of such facility shall notify the Missouri Department of Natural Resources' Air Pollution Control Program in the form of a written report which shall be submitted within two (2) business days. The written report 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. Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered;
4. Identity of the equipment causing the excess emissions;
5. Time and duration of the period of excess emissions;
6. Cause of the excess emissions;
7. Air pollutants involved;

8. Estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;

9. Measures taken to mitigate the extent and duration of the excess emissions; and

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

(B) The owner or operator shall notify the Missouri Department of Natural Resources' Air Pollution Control Program at least ten (10) days prior to any maintenance, start-up or shutdown, which is expected to cause an excess release of emissions that exceeds one (1) hour. If notice cannot be given ten (10) days prior to any maintenance, start-up or shutdown, which is expected to cause an excess release of emissions, notice shall be given as soon as practicable prior to the maintenance, start-up or shutdown or orally as soon as practical during normal working hours after the release and no later than close of business of the following working day with written notice to follow within ten (10) working days of the release. The owner or operator of such facility shall notify the Missouri Department of Natural Resources' Air Pollution Control Program in the following ways: a written report including:

1. Name and location of installation;
  2. Name and telephone number of person responsible for the installation;
  3. Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered;
  4. Identity of the equipment causing the excess emissions;
  5. Time and duration of the period of excess emissions;
  6. Type of activity and the reason for the maintenance, start-up or shutdown;
  7. Type of air contaminant involved;
  8. 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;
  9. Measures taken to mitigate the extent and duration of the excess emissions; and
  10. 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) 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.

1. In determining whether enforcement action is warranted, the director or commission shall consider the following factors:

A. 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;

B. 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;

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

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

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

F. Whether all emission monitoring systems were kept in operation if at all possible;

G. Whether the owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;

H. Whether the excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance; and

I. Whether the owner or operator properly and promptly notified the appropriate regulatory authority.

2. The information provided by the source operator under paragraph (3)(C)1. shall include, at a minimum, the following:

A. Name and location of installation;

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

C. Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered;

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

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

F. The cause of the excess emissions;

G. The type of air contaminant involved;

H. 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;

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

J. 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.

(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.

(E) Compliance with this rule does not automatically absolve the owner or operator of such facility of liability for the excess emissions reported.

(4) Reporting and Record Keeping.

(A) The information specified in subsection .(C) shall be submitted to the director not later than fifteen (15) days after receipt of the notice of excess emissions. Information regarding the type and amount of emissions and time of the episode shall be recorded and kept on file. This data shall be included in emissions reported on any required Emissions Inventory Questionnaire.

(B) The information submitted according to paragraphs (3)(A)2., (3)(B)2. and (3)(C)2., shall be kept on file at the installation for a period of five (5) years. This data shall be included in emissions reported on any required Emissions Inventory Questionnaire. The information shall be available to the director upon request.

(5) Test Methods (*Not Applicable*)

*AUTHORITY: section 643.050, RSMo 2000.\* Original rule filed March 15, 1979, effective Nov. 11, 1979. Amended: Filed April 2, 1987, effective Aug. 27, 1987. Amended: Filed June 15, 2001, effective Feb. 28, 2002.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

**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.

(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 (4,000) 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;

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; and

O. Noncommercial incineration of dead animals, the on-site incineration of resident animals for which no consideration is received or commercial profit is realized, as authorized in section 269.020.6, RSMo 2000.

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 than 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 lay-

out 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)  $\text{NO}_x$  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 production 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 event, 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 emis-

sion 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	
<u>Particulate Matter 10 Micron</u>	
Annual arithmetic mean	4
24-hour maximum	8
<u>Sulfur Dioxide:</u>	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
<u>Nitrogen Dioxide:</u>	
Annual arithmetic mean	2.5
Class II Areas	
<u>Particulate Matter 10 Micron</u>	
Annual arithmetic mean	17
24-hour maximum	30

<u>Sulfur dioxide:</u>	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
<u>Nitrogen Dioxide:</u>	
Annual arithmetic mean	25
Class III Areas	
<u>Particulate Matter 10 Micron</u>	
Annual arithmetic mean	34
24-hour maximum	60
<u>Sulfur dioxide:</u>	
Annual arithmetic mean	40
24-hour maximum	182
3-hour maximum	700
<u>Nitrogen Dioxide:</u>	
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.

<u>Pollutant</u>	<u>Air Quality Impact</u>
Carbon monoxide	575, 8-hour average
Nitrogen dioxide	14, annual
Particulate matter— 10 micron (PM <sub>10</sub> )	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.

<u>Time Period</u>	<u>Minimum Requirement for Validity</u>
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**

<u>Time Period</u>	<u>Minimum Requirement for Validity</u>
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 <sup>1</sup>	3 consecutive monthly averages
Yearly <sup>2</sup>	11 monthly averages

<sup>1</sup>Quarter is defined as calendar quarter.

<sup>2</sup>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.

<u>Pollutant</u>	<u>Averaging Time (Hours)</u>				
	<u>Annual</u>	<u>24</u>	<u>8</u>	<u>3</u>	<u>1</u>
SO <sub>2</sub>	1.0	5		25	
PM <sub>10</sub>	1.0	5			
NO <sub>2</sub>	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-supplied 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 information related to stack height limitations developed pursuant to section 123 of the Act); and

(IX) Calculations on which the information in items (12)(A)4.C.(I)–(VIII) is based;

D. Other specific information required under the permitting authority's rule to implement and enforce other applicable requirements of the Act or of these rules, or to determine the applicability of these requirements.

5. Certification by responsible official. Any application form or report submitted pursuant to this rule shall contain certification by a responsible official of truth, accuracy and completeness. This certification, and any other certification, shall be signed by a responsible official and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

6. Receipt of the complete application. Upon receipt of a complete permit application, the permitting authority shall proceed with processing of the application.

7. Notification of processing fees. The permitting authority, as timely as possible, will notify the applicant in writing if the permit processing fee approaches one thousand dollars (\$1000) and in one thousand-dollar (\$1000) increments after that.

8. Public participation. For all applications for sources that emit five (5) or more tons of lead per year, or that contain good engineering practice stack height demonstrations, or that are subject to section (7) or (8) of this rule, the permitting authority shall follow the procedures for public participation as specified in section (12), Appendix (B).

9. Final completeness determination. Final determination will be made on the following schedules:

A. The permitting authority will make final determinations for complete permit applications processed under section (7), (8) or (9) of this rule no later than one hundred and eighty-four (184) calendar days after receipt of a complete application, taking into account any additional time necessary for missing information;

B. The permitting authority will make final determination for complete permit applications processed under section (3), (4), (5) or (6) of this rule no later than ninety (90) calendar days after receipt of a complete application, taking into account any additional time necessary for missing information; and

C. If the permitting authority exceeds the time for review described in subparagraphs (12)(A)9.A. or B. of this rule, the applicant shall not be required to pay the processing fee associated with the application.

10. Conditions required by permitting authority. The permitting authority may impose those conditions in a permit as may be necessary to accomplish the purposes of this rule, any applicable requirements, or the Air Conservation Law, Chapter 643, RSMo, and are no less stringent than any applicable requirements. Nothing in this rule shall be deemed to limit the power of the permitting authority in this regard. The following condition examples are solely for the purposes of illustration, and do not limit the generality of the preceding liberal sentence:

A. Sampling ports of a suitable size, number and location;

B. Safe access to each port;

C. Instrumentation to monitor and record emission data;

D. Other sampling and testing facilities;

E. Operating or work practice constraints to limit the maximum level of emissions;

F. Emission control device efficiency specifications to limit the maximum level of emissions;

G. Maximum level of emissions;

H. Emission testing after commencing operations, to be conducted by the owner or operator, as necessary to demonstrate compliance with applicable requirements or other permit conditions;

I. Data reporting; and

J. Post-construction ambient monitoring and reporting.

11. Drafts for public comment. Following review of an application, the permitting authority shall issue a draft permit for public comment, in accordance with subsection (12)(B) of this rule. The draft shall be accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). The permitting authority shall send this statement to the administrator, to affected states and to the applicant, and shall place a copy in the public file.



12. Additional procedures needed for unified reviews of section (6), (7), (8) or (9) unified reviews construction permit applications and part 70 operating permit applications.

A. Permit review by the administrator and affected states.

(I) Administrator review.

(a) Copies of applications, proposals and final actions. The applicant will provide two (2) copies of the information included in an application. The permitting authority will forward to the administrator one (1) copy of each permit application and each final operating permit.

(b) Administrator's objection. No permit shall be issued under this rule if the administrator objects to its issuance in writing within forty-five (45) days after receipt of the proposed permit and all necessary supporting information.

(c) Failure to respond to objection. If the permitting authority does not respond to an objection of the administrator by transmitting a revised proposed permit within ninety (90) days after receipt of that objection, the administrator may issue or deny the permit in accordance with the Act.

(d) Public petitions for objection. If the administrator does not object to a proposed permit action, any person may petition the administrator to make such an objection within sixty (60) days after expiration of the administrator's forty-five (45)-day review period.

I. This petition may only be based on objections raised during the public review process, unless the petitioner demonstrates that it was impracticable to raise objection during the public review period (including when the grounds for objection arose after that period).

II. If the administrator responds to a petition filed under this section by issuing an objection, the permitting authority will not issue the permit until the objection has been resolved. If the permit was issued after the administrator's forty-five (45)-day review period, and prior to any objection by the administrator, the permitting authority shall treat that objection as if the administrator were reopening the permit for cause. In these circumstances, the petition to the administrator does not stay the effectiveness of the issued permit, and the permittee shall not be in violation of the requirement to have submitted a complete and timely permit application.

(II) Affected state review.

(a) Notice of draft actions. The permitting authority will give notice of each draft permit to any affected state on or before

the time that the permitting authority provides notice to the public. Affected states may comment on the draft permit action during the period allowed for public comment, as shall be set forth in a notice to affected states.

(b) Refusal to accept recommendations. If the permitting authority refuses to accept all recommendations for a proposed permit action that any affected state has submitted during the review period, the permitting authority shall notify the administrator and the affected state in writing of its reasons for not accepting those recommendations.

B. Proposals for review. Following the end of the public comment period, the permitting authority shall prepare and submit to the administrator a proposed permit.

(I) The proposed permit shall be issued no later than forty-five (45) days after the deadline for final action under this section and shall contain all applicable requirements that have been promulgated and made applicable to the installation as of the date of issuance of the draft permit.

(II) If new requirements are promulgated or otherwise become newly applicable to the installation following the issuance of the draft permit, but before issuance of a final permit, the permitting authority may elect to either—

(a) Extend or reopen the public comment period to solicit comment on additional draft permit provisions to implement the new requirements; or

(b) If the permitting authority determines that this extension or reopening of the public comment period would delay issuance of the permit unduly, the permitting authority may include in the proposed or final permit, or both, a provision stating that the operating permit will be reopened immediately to incorporate the new requirements and stating that the new requirements are excluded from the protection of the permit shield. If the permitting authority elects to issue the proposed or final permit, or both, without incorporating the new requirements, the permitting authority, within thirty (30) days after the new requirements become applicable to the source, shall institute proceedings pursuant to this section to reopen the permit to incorporate the new requirements. These reopening proceedings may be instituted, but need not be completed, before issuance of the final permit.

C. Action following the administrator's review.

(I) Upon receipt of notice that the administrator will not object to a proposed permit that has been submitted for the administrator's review pursuant to this section, the

permitting authority shall issue the permit as soon as practicable, but in no event later than the fifth day following receipt of the notice from the administrator.

(II) Forty-five (45) days after transmittal of a proposed permit for the administrator's review, and if the administrator has not notified the permitting authority that s/he objects to the proposed permit action, the permitting authority shall promptly issue the permit, but in no event later than the fiftieth day following transmittal to the administrator.

(III) If the administrator objects to the proposed permit, the permitting authority shall consult with the administrator and the applicant, and shall submit a revised proposal to the administrator within ninety (90) days after the date of the administrator's objection. If the permitting authority does not revise the permit, the permitting authority will so inform the administrator within ninety (90) days following the date of the objection and decline to make those revisions. If the administrator disagrees with the permitting authority, the administrator may issue the permit with the revisions incorporated.

13. Notification in writing. After making a final determination whether the permit should be approved, approved with conditions, or denied, the permitting authority shall notify the applicant in writing of the final determination and the total permit processing fees due.

14. Notice of processing fees due. If payment of permit processing fees has not been received from the applicant eighty (80) calendar days after the final determination, the permitting authority shall issue in writing to the applicant a final notice of payment due.

15. Processing fees unpaid. If payment of permit processing fees has not been received from the applicant ninety (90) calendar days after the final determination, the permitting authority shall notify the applicant that the permit has been denied, provided the application previously had been approved in the final determination. The permitting authority also shall advise the applicant that the fee is still due and as specified in paragraph (10)(A)3., the fee shall have interest imposed upon it from the date of billing until payment is made.

16. Payment received. No later than three (3) calendar days after receipt of the whole amount of the fee due, the permitting authority will send the applicant a notice of payment received. The permit will also be issued at this time, provided the final determination was for approval and the permit processing fee was timely received.

(B) Appendix B, Public Participation.



1. This subsection shall apply to applications for unified review, as well as applications under sections (7) and (8), applications for source operations or installations emitting five (5) or more tons of lead per year, and applications containing GEP stack height demonstrations as defined in 10 CSR 10-6.020(1)(G)3.A.–C.

2. For those applications subject to section (7) or (8), completing the final determination within one hundred eighty-four (184) days after receipt of a complete application involves performing the following actions in a timely manner:

A. Preliminary determination. Within ninety (90) days after receipt of a complete application, the permitting authority shall make a preliminary determination whether construction should be approved, approved with conditions or denied;

B. Public notice of hearing. No later than ten (10) days after the close of the preliminary review period, the permitting authority shall cause a notice to be published in a newspaper of general circulation within or nearest to the county in which the project is proposed to be constructed or operated. The public notice shall describe the nature of the application, including, with reasonable specificity, the following: name, address, phone number and representative of the agency issuing the public notice; name and address of the applicant; and the proposed project, including its location and permits applied for; a description of the amount and location of emission reductions that will offset the emissions increase from the new or modified source, and include information on how LAER was determined for the project (where appropriate). The public notice shall also include degree of increment consumption, when appropriate, the permitting authority's preliminary determination of whether or not to approve, approve with conditions or deny, and any reference to conditions relating to visibility as required in paragraph (8)(C)5. The notice shall state, a public hearing shall be held, if requested, concerning the permit application, at which time any interested person may submit any relevant information, materials and views in support of or opposed to the permit applied for. The notice shall state the location and time of the public hearing (if one is requested), with the hearing being held in the county in which all or a major part of the proposed project is to be located and with the hearing being held not less than thirty (30) nor more than forty (40) days after the date of publication of the notice. The notice also shall state that any interested person may submit relevant information materials and views to the permitting

authority, in writing, until the end of the day on which the public hearing is held, or would be held if requested. The notice shall further state that a copy of materials submitted by the applicant and used in making the preliminary determination, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination are available for public inspection at the Department of Natural Resources' regional office in the region in which the proposed installation or major modification would be constructed, as well as at the Jefferson City Central Office of the Air Pollution Control Program. The permitting authority shall submit a copy of this public notice to the administrator;

C. Availability of preliminary determination. After the close of the preliminary review period, but no later than the date public notice is published, the permitting authority shall make available to the public, until the end of the public comment period, at the regional office in the region in which the proposed installation or major modification would be constructed, as well as in the Air Pollution Control Program Office in Jefferson City, a copy of the preliminary determination and a copy of summary of other materials, if any, considered in making the preliminary determination;

D. The permitting authority may designate another person to conduct any hearing under this section;

E. Distribution of public notice. Within ten (10) days after the close of the preliminary review period, the permitting authority shall send a copy of the public notice to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: local air pollution control agencies, the chief executive of the city and county where the installation or modification would be located, any comprehensive regional land use planning agency, any state air program permitting authority and any Federal Land Manager (FLM) whose lands may be affected by emissions from the installation or modification;

F. Public comment and applicant response. The permitting authority shall consider all written comments submitted within the time specified in the public notice and all comments received at the public hearing, if one is held, in making a final decision on the approvability of the application. No later than ten (10) days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The permitting authority shall consider the applicant's response in making a

final decision. The permitting authority shall make all comments available for public inspection in the same locations where the permitting authority made available prehearing information relating to the proposed installation or modification. Further, the permitting authority shall prepare written response to all comments and make them available at the locations referred to previously;

G. Final determination. The permitting authority shall make a final determination whether construction should be approved, approved with conditions or denied pursuant to this rule, then notify the applicant in writing of the final determination and make this notification available for public inspection at the same locations where the permitting authority made available prehearing information and public comments relating to the installation or modification. The permitting authority shall submit a copy of this final determination to the administrator;

H. Public notice exception. If the administrator has provided public notice and opportunity for public comment and hearing equivalent to that provided by this subsection, the permitting authority may make a final determination without providing public notice and opportunity for public comment and hearing required by this subsection; and

I. Class I area visibility review and notice to the FLM.

(I) For proposed installation subject to specific permit requirements in sections (7) and (8) of this rule, but not dependent on any quantity of lead emissions as stated in paragraph (12)(B)1., the permitting authority shall provide advance notification to any FLM where, in the judgment of the permitting authority, visibility may be affected in a Class I area of the FLM's responsibility. The notice shall be provided within thirty (30) days of receipt of an initial application or when first learning of the applicant's intent for a permit.

(II) No later than thirty (30) days after receipt of a complete application, the permitting authority shall make written notification to the FLM whose Class I area (those designated in paragraph (12)(I)3.) may be affected by emissions from the proposed source. The notification must include all information relevant to the permit application and shall include an analysis of anticipated Class I visibility impacts. The permitting authority may also make this notification to any additional FLM whose Class I area's visibility, in the judgment of the permitting authority, may be impacted.

(III) The permitting authority shall consider any analysis performed by an FLM

that is provided to the permitting authority within thirty (30) days of the FLM's receipt of the notification and analysis required in part (12)(B)2.I.(II). Where the FLM's analysis indicates that an adverse impact on visibility (as defined in 10 CSR 10-6.020) would occur in a Class I area as a result of the proposed project, and analysis does not demonstrate an adverse impact to the permitting authority's satisfaction, the permitting authority shall so indicate the dissatisfaction in the public notice of hearing. With this condition, the public notice also shall contain the location where an explanation of the permitting authority's reasoning can be found, and that the explanation be available for public inspection no later than the date public notice is published.

3. This paragraph is for those applications not subject to section (7) or (8), but which propose an emission of five (5) or more tons of lead per year or applications containing GEP stack height demonstrations. For these applications, completing the final determination within ninety (90) calendar days after receipt of the complete application involves performing the same public participation activities as those subject to section (7) or (8), but with shorter time frames. The following specifies the new time frames:

A. Permitting authority's preliminary determination—No later than forty-five (45) calendar days after receipt of a complete application;

B. Public notice of hearing—No later than five (5) calendar days after the preliminary determination;

C. Public hearing—No later than thirty (30) calendar days after the date of the public notice; and

D. Applicant response—No later than five (5) calendar days after the end of the public comment period, the applicant may submit a written response to any comments submitted.

(C) Appendix C, Offsets. Offsets under subsection (7)(B) are subject to the following conditions:

1. The applicant provides documentation satisfactory to the permitting authority showing:

A. That the offsets have occurred or will occur prior to commencement of operation of the new or modified source;

B. That the level of emission of the offset pollutant at the offsetting source prior to and after the offset is applied;

C. That the owner or operator of the source from which offsets are obtained has made a binding agreement to limit emissions of the offset pollutant at that source to the levels identified after the offset is applied; and

D. That the emissions from the offsetting source, prior to being reduced, had or have a comparable air quality impact equal and comparable to that attributed to the proposed increase;

2. It shall be a violation of this rule for any person to operate a source from which offsets were obtained so as to emit the offset pollutant at levels greater than identified in the agreement referred to in subparagraph (12)(C)1.C.;

3. The permitting authority may not approve use of offsets where that use would interfere with the nonattainment control strategy contained in the Missouri State Implementation Plan;

4. Offset credit may not be taken for emission reductions required by federal, state or local emission control rules, ordinances, or enforceable permits, state or federal court order, or order of a federal, state or local air pollution control agency;

5. Except for previously banked emission reduction credits, no offset credit may be taken for emission reductions occurring prior to the base year used to project attainment of the pollutant standard in the state implementation plan;

6. No offset credit may be taken for emission reductions previously used in determining net emission increases or used to create alternate emission limits; and

7. Emission reductions that will be achieved by shutting down an existing installation or by permanently curtailing production or operating hours may be credited, provided that the work force to be affected has been notified of the proposed shutdown or curtailment. Installation shutdowns and curtailments in production or operating hours that have occurred prior to the date the application is filed generally may not be used for emissions offset credit. As used here, shutdown means rendering an installation inoperable by physically removing, dismantling or otherwise disabling the installation, so that it could not be reactivated without obtaining a new permit in accordance with this rule. However, when an applicant can establish that it shut down or curtailed production less than one (1) year prior to the date of permit application, and the proposed installation or major modification is a replacement for the shutdown or curtailment, credit for that shutdown or curtailment may be applied to offset emissions from the new source.

(D) Appendix D, Banking. Banking credit for emission reductions to use as offsets or to implement an alternate emission limit, at some future time, shall be allowed under the following circumstances:

1. The person requesting banking is the owner or operator of—

A. A new or modified installation who obtains a permit by applying offsets which exceed the requirements of subsection (7)(B);

B. An existing installation in a nonattainment area who voluntarily reduces emissions of the nonattainment pollutant after the base year used in the state implementation plan; or

C. An existing installation in an attainment or unclassified area who voluntarily reduces emissions after August 7, 1977, or the transferee of the owner or operator;

2. The person requesting banking submits documentation satisfactory to the permitting authority showing:

A. The location of the installation and source operation from which the reductions are obtained;

B. The magnitude of the emission reductions, and the rates and levels of emission of the pollutant prior to and after the emission reductions;

C. That the reductions are based on actual emissions;

D. That the reductions are not required by any emission control regulations or ordinances, federal or state court order, or order of a federal, state or local air pollution control agency;

E. The owner or operator of the installation from which the reductions were obtained has made an enforceable binding agreement to limit emission of the pollutant at the installation to the identified levels after the emission reductions occur, and if the reductions were obtained from an installation not owned or operated by the person requesting banking, the notarized consent of the installation owner or operator to the reductions and to banking those reductions; and

F. That the reductions are from installations and source operations existing on the state's emission inventory;

3. The person requesting banking must also submit the information necessary for evaluating the air quality impact of the emission reductions, including, when appropriate, stack parameters, temperature and velocity of plume, particle size, the existence of hazardous pollutants, and daily and seasonal emission rates;

4. For source operations in the nonattainment areas for which reasonable available control technology (RACT) would be required, but as yet has not been defined, actual emission levels will be reduced to represent post-RACT levels. The control technology assumed for these calculations will be mutually agreed upon by the applicant and

the permitting authority. Only emission reductions beyond the post-RACT emissions levels will be creditable;

5. Credit cannot be banked by the owner for emission reduction achieved by the shutdown of an installation. Shutdown as used here means rendering an installation inoperable by physically removing, dismantling or otherwise disabling the installation, so that it could not be reactivated without obtaining a new permit in accordance with this rule. Emission reductions credit from an installation shutdown, unless used by the owner or operator of the installation to replace the installation within a year of shutdown, will be placed in special accounts by the permitting authority to attain and maintain the air quality standards and provide growth increment for the area;

6. Credit for emission reductions beyond those that were required by RACT or paragraph (8)(D)4. at a shutdown installation and that are in excess of those needed to offset a replacement installation can be banked by the owner and can be transferred or used for offset or alternate emission limits;

7. Credit can be banked for emission reductions from permanent curtailment of production or operating hours only for the purpose of offsets or implementing alternate emission limits at some future time. Credit cannot be granted for process curtailments in nonattainment areas if the proposed decrease will be negated by countervailing emission increases occurring at other installations in the same area in response to the applicant's process curtailments;

8. It shall be a violation of this rule for any person to operate a source operation from which banked credit for emission reductions was obtained so as to emit the pollutant at levels greater than identified in the agreement referred to in subparagraph (12)(D)2.E., unless the person who banked credit for the reductions, or their transferee, first files a notice with the permitting authority stating that credit for the reductions or a part of the credit is being withdrawn from the bank, and credit has not previously been withdrawn.

9. Banked credits for emission reductions may be withdrawn only by notice from the person who banked the emission reduction credits or his/her transferee. No transfer of banked reduction credits shall be recognized by the permitting authority until a notice of transfer is filed with the permitting authority clearly identifying the transferee, and containing a notarized statement of the transferor that they consent to the transfer and relinquish all claims to the banked credits for emission reductions that are being transferred;

10. An applicant for a permit must withdraw from its bank, as needed, those credits for emission reductions which were created within its own property and apply them to offset its own emission increases in accordance with subsection (12)(C). If growth increment is available, banked credit for emission reductions shall be used at a ratio of one to one (1:1). If no growth increment exists, credit for emission reductions shall be used at a ratio of one-point-one-five to one (1.15:1);

11. A notice of withdrawal of banked credit for emission reductions shall identify the installation and source operation to which the withdrawn credit will be applied;

12. The permitting authority shall establish and maintain a tracking system of banked credit for emission reductions, in order to preserve banked credit for the owner and ensure that offsets are not obtained from banked emission reduction credit in violation of the requirements of this rule; and

13. The amount of banked emission reduction credits shall be discounted without compensation to the holder in the applicable source category when new rules requiring emission reductions are adopted by the commission. The amount of discounting of banked emission reduction credits shall be calculated on the same basis as the reductions required for existing sources which are subject to the new rule. A portion of banked credits, equivalent to the anticipated required reductions may be temporarily frozen by the permitting authority in anticipation of a new rule being adopted by the commission. This paragraph, however, will not apply to emission reductions, discounted at the time of banking in accordance with paragraph (12)(D)4., unless the new rule provides for the replacement RACT with BACT or another more stringent level of control.

(E) Appendix E, Innovative Control Technology.

1. An owner or operator of an installation subject to section (8) of this rule may employ a system of innovative control technology if—

A. The applicant demonstrates to the satisfaction of the permitting authority that the proposed control system will not cause or contribute to an unreasonable risk to public health, welfare or safety in its operation, function or malfunction;

B. The owner or operator demonstrates the ability and agrees to achieve a level of continuous emission reduction equivalent to that which would have been required under paragraph (8)(B)1. of this rule, by a reasonable date specified by the permitting authority, taking into consideration the technical and

economic feasibility. The date shall not be later than four (4) years from the time of startup or seven (7) years from permit issuance;

C. On the date specified by the permitting authority, the proposed construction, employing the system of innovative control, will meet the requirements of paragraphs (8)(C)3. and 4.;

D. The proposed construction would not, before the date specified by the permitting authority—

(I) Cause or contribute to a violation of an applicable national ambient air quality standard;

(II) Impact any Class I area; or

(III) Impact any area where an applicable increment is known to be violated;

E. The governor of any adjacent state that will be significantly impacted by the proposed construction gives his/her consent before the date specified by the permitting authority; and

F. All other applicable requirements, including those for public participation, have been met.

2. Any approval to employ a system of innovative control technology may be revoked by the permitting authority, if—

A. The proposed system fails or will fail by the specified date to achieve the required continuous emission reduction rate; or

B. The proposed system, before the specified date, contributes or will contribute to an unreasonable risk to public health, welfare or safety in its operation, function or malfunction; or

C. The permitting authority determines that the proposed system is unlikely to protect the public health, welfare or safety.

3. If an installation to which this subsection applies fails to meet the required level of continuous emission reduction within the specified time period, or the approval is revoked in accordance with paragraph (12)(E)2., the owner or operator may request the permitting authority to grant an extension of time for a minimum period as may be necessary to meet the requirement for the application of BACT through use of a demonstrated system of control. The period shall not extend beyond the date three (3) years after termination of the same time period specified in paragraph (12)(E)1.

(F) Appendix F, Air Quality Models.

1. All estimates and analyses of ambient concentrations shall be based on the applicable air quality models, data bases and other requirements specified in the *Guideline on Air Quality Models* (Revised, July 1986)

(EPA 450/2-78-027R) and Supplement A (July 1987).

2. Any model(s) designated in paragraph (12)(F)1. may be adjusted upon a determination by the administrator and the permitting authority, after notice and opportunity for public hearing, that the adjustment is necessary to take into account unique terrain or meteorological characteristics of an area potentially affected by emissions from the source. Methods like those outlined in the *Workbook for the Comparison of Air Quality Models* (United States EPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, May 1978) should be used to determine the comparability of air quality models.

3. Where the *Guideline on Air Quality Models* (Revised, July 1986) and Supplement A (July 1987) does not address a situation requiring modeling, the administrator and the permitting authority, after notice and opportunity for public hearing, may approve the use of a model which they deem accurate for modeling that situation.

(G) Appendix G, Increment Tracking.

1. The permitting authority will track ambient air increment consumption at fixed baseline locations within the baseline areas.

2. Available increment will be allocated on a first-come, first-serve basis. The marked received date of a complete application will be used by the permitting authority to determine which applicant is entitled to prior allocation of increments.

3. At the intervals of five (5) years from the baseline date, the permitting authority shall determine the actual air quality increment available or consumed for a location(s) for which complete air monitoring data exists using subsection (11)(C), Table 3.

4. Exclusions from increment consumption. Upon written request of the owner or operator of an installation, made after notice and opportunity for at least one (1) public hearing to be held in accordance with the procedures established in subsection (12)(B), the permitting authority shall exclude the following concentrations in determining consumption of a maximum allowable increase:

A. Concentrations attributable to the increase in emissions from installations which have converted from the use of petroleum products, natural gas, or both, by reason of an order in effect under sections 2(a) and (b) of the Energy Supply Environmental Coordination Act of 1974 over the emissions from those sources before the effective date of the order;

B. Concentrations attributable to the increase in emissions from installations which have converted from using natural gas

by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from those sources before the effective date of the plan;

C. Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities, however;

D. No exclusion of these concentrations shall apply more than five (5) years after the effective date of the order to which subparagraph (12)(G)4.A. refers or the plan to which subparagraph (12)(G)4.B. refers, whichever is applicable. If both the order and the plan are applicable, no exclusion shall apply more than five (5) years after the later of the effective dates.

(H) Appendix H, Impacts on Class I Areas.

1. At any time prior to the close of the public comment period specified in subsection (12)(B), the FLM for any federal Class I area may provide information to the permitting authority demonstrating that the emissions from the proposed installation or major modification would have an adverse impact on the air quality-related values (including visibility) of any federal mandatory Class I area, notwithstanding that the change in air quality, resulting from emissions from the installation or major modification, would not cause or contribute to concentrations which would exceed the maximum allowable increase for a Class I area, as specified in subsection (11)(A), Table 1. If the permitting authority concurs in the demonstration by the FLM, the permit shall be denied.

2. Class I variances. The owner or operator of a proposed installation or major modification may demonstrate to the FLM that the emissions from the source would have no adverse impact on the air quality-related values of any federal mandatory Class I area (including visibility), notwithstanding that the change in air quality resulting from emissions from the source would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the FLM concurs with a demonstration and so certifies to the permitting authority, the permitting authority, providing that all other applicable requirements of this rule are met, may issue the permit with those emission limitations as may be necessary to assure that emissions of sulfur dioxide, particulate matter and nitrogen dioxide would not exceed the following maximum allowable increases over baseline concentration for these pollutants:

<b>Pollutant</b>	<b>Maximum Allowable Increase</b>
<u>Particulate Matter 10 Micron:</u>	
Annual arithmetic mean	17
24-hour maximum	30
<u>Sulfur Dioxide:</u>	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325
<u>Nitrogen Dioxide:</u>	
Annual arithmetic mean	25

*Note: Increases are in micrograms per cubic meter.*

3. Sulfur dioxide variance by governor with FLM's concurrence.

A. If the owner or operator of a proposed installation or major modification who has been denied an FLM's certification pursuant to paragraph (12)(H)1. demonstrates to the governor that the installation or major modification cannot be constructed as a result of any maximum allowable increase for sulfur dioxide for periods of twenty-four (24) hours or less applicable to any Class I area and, in the case of federal mandatory Class I areas, that a variance under this part would not adversely affect the air quality-related values of the area (including visibility), then the governor, after consideration of the FLM's recommendation (if any) and subject to his/her concurrence, may grant, after notice and an opportunity for a public hearing, a variance from these maximum allowable increases.

B. If a variance is granted, the permitting authority may issue a permit to an installation or major modification in accordance with the requirements of paragraph (12)(H)5., provided that all other applicable requirements of this rule are met.

4. Variance by the governor with the president's concurrence.

A. The recommendations of the governor and the FLM shall be transferred to the president in any case where the governor recommends a variance in which the FLM does not concur.

B. If this variance is approved by the president pursuant to 42 U.S.C.A. section 7475(d)(2)(D)(ii), the permitting authority may issue a permit in accordance with the requirements of paragraph (12)(H)5. provided that all other applicable requirements of this rule are met.

5. Emission limitations for presidential or gubernatorial variance.

A. In the case of a permit issued pursuant to paragraph (12)(H)3. or 4., the permitting authority shall impose, as conditions of the permit, emission limitations as may be



necessary to assure that emissions of sulfur dioxide from the installation or major modification (during any day on which the otherwise applicable maximum allowable increases are exceeded) will not cause or contribute to concentrations which will exceed the following maximum allowable increases over the baseline concentration:

**Maximum Allowable Increase  
(micrograms per cubic meter)**

Period of Exposure	Terrain Areas	
	Low	High
24-hour maximum	36	62
3-hour	130	221

B. These emission limitations also shall assure that the emissions will not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than eighteen (18) days, not necessarily consecutive, during any annual period.

6. The permitting authority shall transmit to the administrator a copy of each permit application under this subsection (12)(H) and provide notice to the administrator of every action related to the consideration of a permit.

(I) Appendix I, Attainment and Unclassified Area Designations.

1. Area classification.

A. The following areas shall be Class I areas and may not be redesignated:

(I) Hercules Glade National Wilderness Area; and

(II) Mingo National Wilderness Area.

B. Any other area, unless specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

C. The following areas may be redesignated only as Class I or II:

(I) An area which as of August 7, 1977 exceeded ten thousand (10,000) acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, or a national lakeshore or seashore; and

(II) A national park or national wilderness area established after August 7, 1977, which exceeds ten thousand (10,000) acres in size.

2. Area redesignation.

A. All areas (except as otherwise provided under paragraph (12)(I)1.) are designated Class II as of December 5, 1974. Redesignation (except as precluded by paragraph (12)(I)1.) may be proposed by the com-

mission as provided in this rule, subject to approval by the administrator.

B. The commission may submit to the administrator a proposal to redesignate areas of the state as Class I or Class II provided that—

(I) At least one (1) public hearing has been held in accordance with procedures established in 643.070 and 643.100, RSMo;

(II) Other states and FLMs whose lands may be affected by the proposed redesignation were notified at least thirty (30) days prior to the public hearing;

(III) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least thirty (30) days prior to the hearing and the notice announcing the hearing containing appropriate notification of the availability of that discussion;

(IV) Prior to the issuance of notice respecting the redesignation of an area that includes any federal lands, the commission has provided written notice to the appropriate FLM and afforded adequate opportunity (not in excess of sixty (60) days) to confer with the commission respecting the redesignation and to submit written comments and recommendations. In redesignating any area, with respect to which any FLM had submitted written comments and recommendations, the commission shall have published a list of any inconsistencies between the redesignation and comments and recommendations (together with the reasons for making redesignation against the recommendation of the FLM); and

(V) The commission has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

C. Any area other than an area to which paragraph (12)(I)1. refers may be redesignated Class III if—

(I) The redesignation would meet the requirements of provisions established in accordance with subparagraph (12)(I)2.B.;

(II) The redesignation has been approved by the commission and the governor;

(III) The redesignation has been approved by the governor after consultation with the appropriate committees of the legislature if it is in session, or with the leadership of the legislature if it is not in session;

(IV) General purpose units of local government, representing a majority of the

residents of the area to be redesignated, adopt resolutions concurring in the redesignation;

(V) The redesignation would not cause or contribute to a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(VI) Any permit application for any installation or major modification subject to provisions established in accordance with subparagraph (12)(I)2.A. which could receive a permit only if the area in question were redesignated as Class III and any material submitted as part of that application were available, insofar as was practicable, for public inspection prior to any public hearing on redesignation of any area as Class III.

3. Area class designations.

Area Class	Description
Class I	Hercules Glade National Wilderness Area Mingo National Wilderness Area
Class II	All areas of the state which are not nonattainment
Class III	No areas designated

(J) Appendix J, Air Quality Analysis for Hazardous Air Pollutants.

1. The director shall maintain a table of emission threshold levels, risk assessment levels, and screening model action levels for hazardous air pollutants. Applicants will not be required to submit a hazardous air pollutant air quality analysis for applications having a maximum design capacity no more than the hazardous air pollutant emission threshold levels unless paragraph (12)(J)2. applies.

2. Exceptions. The director may require an air quality analysis for applications if it is likely that the construction or modification will result in the discharge of air contaminants in quantities, of characteristics and of a duration which directly and proximately cause or contribute to injury to human, plant, or animal life or the use of property or complaints filed in the vicinity of the proposed construction or modification warrant an air quality analysis.

*AUTHORITY: section 643.050, RSMo 2000.\* Original rule filed Dec. 10, 1979, effective April 11, 1980. Amended: Filed Nov. 10, 1980, effective April 11, 1981. Amended: Filed Jan. 14, 1981, effective June 11, 1981. Rescinded and readopted: Filed Nov. 10, 1981, effective May 13, 1982. Amended: Filed June 14, 1982, effective Dec. 11, 1982. Amended: Filed Jan. 15, 1985, effective May 11, 1985. Amended: Filed Jan. 6, 1986,*

effective May 11, 1986. Amended: Filed April 2, 1987, effective Aug. 27, 1987. Amended: Filed Jan. 5, 1988, effective April 28, 1988. Amended: Filed June 2, 1988, effective Sept. 29, 1988. Amended: Filed Sept. 6, 1988, effective Jan. 1, 1989. Amended: Filed Jan. 24, 1990, effective May 24, 1990. Rescinded and readopted: Filed Sept. 2, 1993, effective May 9, 1994. Amended: Filed Dec. 15, 1994, effective Aug. 30, 1995. Amended: Filed Aug. 14, 1997, effective April 30, 1998. Amended: Filed April 15, 1999, effective Nov. 30, 1999. Amended: Filed Sept. 4, 2001, effective May 30, 2002.

\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.

### **10 CSR 10-6.065 Operating Permits**

*PURPOSE: This rule defines air contaminant sources which are required to obtain operating permits and establishes procedures for obtaining and complying with operating permits; it does not establish any air quality standards or guidelines.*

*PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.*

#### **(1) Definitions.**

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

(B) Basic state installations are installations which meet any of the following criteria, but are not Part 70 installations:

1. Emit or have the potential to emit any air pollutant in an amount greater than the *de minimis* levels; or

2. Either of the following criteria, provided the U.S. EPA administrator has deferred a decision on whether the installation would be subject to Part 70:

A. Are subject to a standard, limitation or other requirement under section 111 of the Act, including area sources subject to a standard, limitation or other requirement under section 111 of the Act; or

B. Are subject to a standard or other requirement under section 112 of the Act, except that a source is not required to obtain a permit solely because it is subject to rules or requirements under section 112(r) of the Act, including area sources subject to a standard or other requirement under section 112 of the Act, except that an area source is not required to obtain a permit solely because it is subject to regulations or requirements under section 112(r) of the Act.

(C) Intermediate installations are part 70 installations that become basic state installations based on their potential to emit by accepting the imposition of voluntarily agreed to federally-enforceable limitations on the type of materials combusted or processed, operating rates, hours of operation, or emission rates more stringent than those otherwise required by rule or regulation.

(D) Part 70 installations are installations to which the Part 70 operating permit requirements of this rule apply, in accordance with the following criteria:

1. They emit or have the potential to emit, in the aggregate, ten (10) tons per year (tpy) or more of any hazardous air pollutant, other than radionuclides, or twenty-five (25) tpy or more of any combination of these hazardous air pollutants or such lesser quantity as the administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not these units are in a contiguous area or under common control, to determine whether these units or stations are subject installations. For sources of radionuclides, the criteria shall be established by the administrator;

2. They emit or have the potential to emit one hundred (100) tpy or more of any air pollutant, including all fugitive air pollutants. The term "air pollutant" means an air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the staff director has identified such precursor(s) for the particular purpose for which the term "air pollutant" is used. The fugitive emissions of an installation shall not be considered unless the installation belongs to one of the source categories listed in 10 CSR 10-6.020(3)(B), Table 2;

3. They emit or have the potential to emit, in ozone nonattainment areas, one hundred (100) tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as marginal or moderate, fifty (50) tpy or more in areas classified as serious, twenty-five (25) tpy or more in areas classified as severe, and ten (10) tpy or more in areas classified as extreme. The references in this paragraph to one hundred (100), fifty (50), twenty-five (25) and ten (10) tpy of nitrogen oxides shall not apply to any source the administrator has made a finding, under section 182(f)(1) or (2) of the Act, that requirements under section 182(f) of the Act do not apply;

4. They are affected sources under Title IV of the 1990 Act;

5. They are solid waste incinerators subject to section 129(e) of the Act;

6. Any installation in a source category designated by the administrator as a Part 70 source pursuant to 40 CFR 70.3; and

7. Installations that would be Part 70 sources strictly due to the following criteria are not subject to Part 70 source requirements until the administrator subjects this installation to these requirements by rule:

A. They are subject to a standard, limitation or other requirement under section 111 of the Act, including area sources; or

B. They are subject to a standard or other requirement under section 112 of the Act, except that a source, including an area source, is not required to obtain a permit solely because it is subject to rules or requirements under section 112(r) of the Act.

#### **(2) Prohibitions.**

(A) After the effective date of this rule, no person shall operate a part 70 installation, intermediate installation, or basic state installation except in compliance with an operating permit issued by the permitting authority in accordance with this rule.

(B) Except as specified in this rule or in the operating permit, it is not a violation of this rule for a permitted installation to be operated in ways that are not addressed in, constrained by or prohibited by the operating permit.

#### **(3) Applicability.**

(A) Part 70, Intermediate and Basic State Installations. This rule shall apply to existing, modified, reconstructed and new installations, whether part 70, intermediate or basic state, throughout Missouri.

(B) Incinerators. This rule shall apply to all incinerators.

(C) Exempt Installations and Emission Units. The following installations and emission units are exempt from the requirements of this rule unless such units are Part 70 installations or are located at Part 70 installations. Emissions from exempt installations and emission units shall be considered when determining if the installation is a Part 70 installation:

1. Any installation that would be required to obtain a permit solely because it is subject to 10 CSR 10-6.070(7)(AAA) Standards of Performance for New Residential Wood Heaters;

2. Any installation that would be required to obtain a permit solely because it is subject to 10 CSR 10-6.240 or 10 CSR 10-6.250;

3. Single or multiple family dwelling units for not more than three (3) families;

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

5. Equipment used for any mode of transportation;

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

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

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

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

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

11. Residential wood heaters, cookstoves or fireplaces;

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

13. Recreational fireplaces;

14. 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;

15. Combustion equipment that—

A. Emits only combustion products;

B. Produces less than one hundred fifty (150) pounds per day of any air contaminant; and

C. Has a maximum rated capacity of—

(I) Less than ten (10) million British thermal units (Btus) per hour heat input by using exclusively natural or liquefied petroleum gas, or any combination of these; or

(II) Less than one (1) million Btus per hour heat input;

16. Office and commercial buildings, where emissions result solely from space heaters using natural gas or liquefied petroleum gas with a maximum rated capacity of less than twenty (20) million Btus per hour heat input. Incinerators operated in conjunction with these sources are not exempt;

17. Any country grain elevator that never handles more than one million two hundred thirty-eight thousand six hundred fifty-seven (1,238,657) bushels of grain during any twelve (12)-month period and is not located within an incorporated area with a population of fifty thousand (50,000) or more. A country grain elevator is defined as a grain elevator that receives more than fifty percent (50%) of its grain from producers in the immediate vicinity during the harvest season. This exemption does not include grain terminals which are defined as grain elevators that receive grain primarily from other grain elevators. To qualify for this exemption the owner or operator of the facility shall retain monthly records of grain origin and bushels of grain received, processed and stored for a minimum of five (5) years to verify the exemption requirements. Monthly records must be tabulated within seven (7) days of the end of the month. Tabulated monthly records shall be made available immediately to Missouri Department of Natural Resources representatives for an announced inspection or within three (3) hours for an unannounced visit; and

18. 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; and

19. Noncommercial incineration of dead animals, the on-site incineration of resident animals for which no consideration is received or commercial profit is realized, as authorized in section 269.020.6, RSMo 2000.

(4) Basic State Operating Permits.

(A) Applicability. All basic state installations are subject to this section.

(B) Notifications. All notifications will be submitted in duplicate. The permitting authority will return one (1) copy to the notifier stamped Received. This copy will be kept at the installation to which the notification

pertains for inspection purposes. The following schedules apply:

1. Initial notifications. All basic state installations shall file complete operating permit notifications within twenty-four (24) months following the administrator's approval of the part 70 operating permit program;

2. Subsequent notifications. Any installation that becomes subject to this section at any time following twenty-four (24) months after the administrator's approval of the part 70 operating permit program shall file a complete operating permit notification no later than thirty (30) days after commencement of operations;

3. Renewal notifications. Installations subject to this section shall file complete operating permit notifications for operating permit renewal at least six (6) months before the date the current operating permit expires; and

4. Notwithstanding the deadlines established in this subsection, a complete operating permit notification filed at any time shall be received for processing.

(C) Notifications Review.

1. After the permitting authority receives an operating permit notification, they shall perform a completeness and applicable requirements verification review and, if the notification is determined to be complete, shall inform the notifier that the operating permit is accepted.

2. If the permitting authority determines that an operating permit notification is not complete, they shall inform the notifier promptly of the deficiencies in the notification and shall specifically describe required amendments to the operating permit notification.

(D) Confidential Information. Operating permit notifiers may make claims of confidentiality pursuant to 10 CSR 10-6.210, for information submitted pursuant to this section.

(E) Filing Fee. Each operating permit notification must be accompanied by a one hundred dollar (\$100) filing fee.

(F) Certification by Responsible Official. Operating permit notifications and compliance reports required under this section shall be signed and certified by a responsible official that the information contained in them is true, accurate and complete based on information and belief formed after reasonable inquiry.

(G) Notification Contents. The permitting authority shall prepare and make available to all basic state installations subject to this section an operating permit notification form(s). The operating permit notification form(s) shall require a general description of the

installation and the installation's processes and products, emissions-related information, and all applicable emission limitations and control requirements for each emissions unit at the installation to be permitted. The notification also shall require a statement of the installation's compliance status with respect to these requirements and a commitment regarding the installation's plans to either attain compliance with these requirements within the time allowed by law or maintain compliance with these requirements during the operating permit period.

(H) General Permits. Installations may apply to operate under any general permit.

1. Issuance of general permits. General permits covering similar installations may be issued by the permitting authority. Basic installation operating permits are not required to have public participation; however, citizens may appeal any action of the director. The general permit shall indicate a reasonable time after which an installation that has submitted an application for authorization will be deemed to be authorized to operate under the general permit. A general permit shall identify criteria by which installations may be authorized to operate under the general permit. This criteria must include the following:

A. Categories of sources covered by the general permit must be homogeneous in terms of operations, processes and emissions;

B. Sources may not be subject to case-by-case standards or requirements; and

C. Sources must be subject to substantially similar requirements governing operations, emissions, monitoring, reporting and recordkeeping.

2. Applications. The permitting authority shall provide application forms for coverage under a general permit. General permit applications may deviate from individual permit applications but shall include all information necessary to determine qualification for, and to assure compliance with, the general permit. The permitting authority shall authorize coverage by the conditions and terms of a general permit to all installations that apply for and qualify under the specified general permit criteria. Installations applying for coverage under a general permit must comply with all the requirements of this rule, except public participation requirements.

3. Enforcement. The source shall be subject to enforcement actions for operating without an operating permit if it is determined later that the source does not qualify for the conditions and terms of the general permit, regardless of any application shield provisions.

(I) Compliance Reporting. Operating permit notification forms provided by the per-

mitting authority shall include a compliance reporting requirement, which shall require a brief compliance report no more frequent than annually (or less frequently in the discretion of the permitting authority).

(J) Operating Permit Period. Each operating permit under this section shall be effective for a period of five (5) years. The permit term shall commence on the date of receipt or acceptance, whichever is later.

(K) Operating Permit Amendments. Whenever an operating permit notifier or basic state installation determines, at any time after an operating permit notification has been submitted or an operating permit notification has been accepted by the permitting authority, that the notification or operating permit contains false, misleading, incorrect or incomplete information, the owner or operator of the installation shall submit an amendment to the notification or operating permit promptly to the permitting authority. Whenever the permitting authority determines that an operating permit fails to include or inadequately implements any applicable requirement, including any new requirement promulgated after the permitting authority's acceptance of the operating permit, the permitting authority shall inform the installation of this requirement and direct the installation to prepare and submit a notification or operating permit amendment.

(L) Compliance Demonstrations. The permitting authority, at any time when an operating permit notification is pending or after an operating permit has been accepted, may require the installation to demonstrate compliance with applicable requirements. If the installation fails to comply with this request, or fails to demonstrate compliance, the installation will be subject to the same enforcement provisions as established under the part 70 state operating permits of section (6) of this rule.

(M) State Enforcement. All terms of an operating permit shall be enforceable by the permitting authority. The permitting authority is authorized, for enforcement purposes, to enter and inspect basic state installations at reasonable times and upon the presentation of proper credentials. The owner or operator will provide the representative of the permitting authority the stamped "Received" or copy of the operating permit notification upon entry.

(N) Federal Enforceability. Any terms of an accepted operating permit which are based on applicable requirements contained in the federally-approved State Implementation Plan (SIP) or any other federal applicable requirements are federally enforceable.

(O) Operational Flexibility. Nothing in this section shall be construed to inhibit the operation of a basic state installation with respect to any operations, activities or emissions not addressed in, constrained by or prohibited by the operating permit accepted by the permitting authority.

(P) Public Availability. Operating permit notifications, accepted operating permits and compliance reports under this section shall be maintained in a file available to the public for inspection and copying, except to the extent confidential treatment has been granted at the request of the basic state installation.

(Q) Construction Permits or Authorizations Not Affected. The requirements of this section shall not affect the obligation of any basic state installation to obtain a permit or authorization for any construction activity at the basic state installation which is subject to 10 CSR 10-6.060 Construction Permits Required.

(5) Intermediate State Operating Permits.

(A) Applicability. All intermediate installations are subject to the requirements of subsections (4)(C)–(G) and (4)(I)–(Q) of this rule, in addition to the requirements of this section.

(B) Timely Notification. All notifications will be submitted in duplicate. The permitting authority will return one (1) copy of the notifier stamped Received. This copy will be kept at the installation to which the notification pertains for inspection purposes. Intermediate installations shall file initial notifications on the following schedule:

1. Initial notification. All installations shall file complete notifications within the first two (2) months following the administrator's approval of the part 70 operating permit program with one (1) exception allowed as follows: Intermediate installations that have actual emissions (as defined in 10 CSR 10-6.020(2)(A)4.) less than fifty percent (50%) of the part 70 installation threshold levels (refer to the definition section of this rule for part 70 installation threshold levels) shall file complete notifications within the first twelve (12) months following the administrator's approval of the part 70 operating permit program;

2. Subsequent notification. Any installation that becomes subject to this section at any time following the first two (2) months after the administrator's approval of the part 70 operating permit program shall file a complete notification no later than thirty (30) days after the commencement of operations;

3. Renewal notification. Installations subject to this section shall file notifications for renewal of the operating permits at least



six (6) months before the date of permit expiration; and

4. Notwithstanding the deadlines established in this subsection, a complete notification filed at any time shall be accepted for processing.

(C) Federally-Enforceable Conditions. Any voluntary provisions issued under this section (5), designed to limit an installation's potential to emit, shall be designated federally-enforceable by the permitting authority. Any terms and conditions so designated are required to—

1. Be at least as stringent as any other applicable limitations and requirements contained in the implementation plan or enforceable under the implementation plan. The permitting authority may not waive or make less stringent any limitations or requirements contained in the implementation plan, or that are otherwise federally-enforceable (for example, standards established under sections 111 or 112 of the Act) in the operating permit;

2. Be permanent, quantifiable and otherwise enforceable as a practical matter; and

3. Follow the public participation procedures of section (7) of this rule.

(D) General Permits. Installations may apply to operate under any general permit.

1. Issuance of general permits. General permits covering similar installations may be issued by the permitting authority after notice and opportunity for public participation under section (7). The general permit shall indicate a reasonable time after which an installation that has submitted an application for authorization will be deemed to be authorized to operate under the general permit. A general permit shall identify criteria by which installations may be authorized to operate under the general permit. This criteria must include the following:

A. Categories of sources covered by the general permit must be homogeneous in terms of operations, processes and emissions;

B. Sources may not be subject to case-by-case standards or requirements; and

C. Sources must be subject to substantially similar requirements governing operations, emissions, monitoring, reporting and recordkeeping.

2. Applications. The permitting authority shall provide application forms for coverage under a general permit. General permit applications may deviate from individual permit applications but shall include all information necessary to determine qualification for, and to assure compliance with, the general permit. The permitting authority shall authorize coverage by the conditions and terms of a general permit to all installations that apply for and qualify under the specified general

permit criteria. Installations applying for coverage under a general permit must comply with all the requirements of this rule, except public participation requirements.

3. Public participation. Although public participation under section (7) of this rule is necessary for the issuance of a general permit, the permitting authority may authorize an installation to operate under general permit terms and conditions without repeating the public participation procedures.

4. Enforcement. The source shall be subject to enforcement actions for operating without an operating permit if it is determined later that the source does not qualify for the conditions and terms of the general permit, regardless of any application shield provisions.

(6) Part 70 Operating Permits.

(A) Applicability. All part 70 installations are subject to this section.

(B) Permit Applications.

1. Duty to apply.

A. Timely application.

(I) Part 70 installations shall file initial applications on the following schedule:

(a) The permit registry.

I. The permitting authority shall create and maintain a permit issuance registry that part 70 installations may apply in writing to be placed on. The request must identify a specific year of initial issuance. The registry will identify by year when the permitting authority expects to issue the operating permit.

II. The registry will be opened for three (3) months after the effective date of this rule. The registry will be filled on a first-come, first-served basis, judged by the stamped Received date by the permitting authority.

III. The permitting authority will assign installations that do not make a specific request to the registry at the permitting authority's discretion as necessary to meet a one-third (1/3) per year for three (3) years permit issuance schedule following the administrator's approval of the operating permit program.

IV. The permitting authority may exercise discretion in reassigning applicants on the registry by accepting applicants after the close of the registry, and taking into consideration staff resources, complexity of applicant's operations, distribution of multiple installation under common control, and amount and nature of the air contaminants; and

(b) Initial application submittal schedule.

I. Installations scheduled to receive their operating permit within the first year of the registry shall file complete applications within the first two (2) months following the administrator's approval of the operating permit program.

II. All other installations shall file complete applications within the twelve (12) months following the administrator's approval of the program.

(II) Any installation that becomes subject to this section at any time following the effective date of this rule shall file a complete application no later than twelve (12) months following either the administrator's approval of the operating permit program or the commencement of operations, whichever is later.

(III) A complete initial application filed at any time shall be accepted for processing. However, acceptance of an application does not relieve the applicant of his/her liability for submitting an untimely application.

(IV) An installation subject to this section required to meet section 112(g) of the Act, or to have a construction permit under 10 CSR 10-6.060 may submit a complete application for an operating permit or permit modification for concurrent processing as a unified review. An operating permit application submitted for concurrent processing shall be submitted with the applicant's construction permit application, or at a later time as the permitting authority may allow, provided that the total review period does not extend beyond eighteen (18) months. An installation that is required to obtain a construction permit under 10 CSR 10-6.060 and who, in writing has not chosen to undergo unified review, shall file a complete operating permit application, permit amendment or modification application separate from the construction permit application within twelve (12) months after commencing operation.

(V) Installations subject to this section shall file complete applications for renewal of the operating permits at least six (6) months before the date of permit expiration. In no event shall this time be greater than eighteen (18) months.

(VI) Installations subject to this section required to submit applications for initial phase II acid rain permits shall submit complete applications to the permitting authority by January 1, 1996, for sulfur dioxide, and by January 1, 1998 for nitrogen oxides.

B. Complete application.

(I) The permitting authority shall review each application for completeness and shall inform the applicant within sixty (60)

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 (6)(B)3. of this rule.

(II) If the permitting authority does not notify the installation within sixty (60) days after receipt that its application is not complete, 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.

(III) 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.

(IV) 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 take final action on that application, the permitting authority may request this additional information be in writing. In requesting this information, the permitting authority shall establish a reasonable deadline for a response.

(V) In submitting an application for renewal of an operating permit, the applicant may identify terms and conditions in the previous permit that should remain unchanged, and may incorporate by reference those portions of the existing permit (and the permit application and any permit amendment or modification applications) that describe products, processes, operations and emissions to which those terms and conditions apply. The applicant must identify specifically and list which portions of the previous permit or applications, or both, are incorporated by reference. In addition, a permit renewal application must contain:

(a) Information specified in paragraph (6)(B)3. of this rule for those products, processes, operations and emissions—

I. That are not addressed in the existing permit;

II. That are subject to applicable requirements which are not addressed in the existing permit; or

III. For which the applicant seeks permit terms and conditions that differ from those in the existing permit; and

(b) A compliance plan and certification as required in subparagraphs (6)(B)3.I. and J. of this rule.

C. Confidential information. If an applicant submits information to the permit-

ting authority under a claim of confidentiality pursuant to 10 CSR 10-6.210, the applicant shall also submit a copy of this information directly to the administrator, if the permitting authority requests that the applicant do so.

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

2. 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 this 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 issuance or validation of the permit, whichever is later.

3. Standard application form and required information. An applicant shall submit an application package consisting of the standard application form, emission inventory questionnaire, compliance plan and compliance certification. 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, except for insignificant activities. An activity cannot be listed as insignificant if the activity has an applicable requirement. The installation shall provide a list of any insignificant activities that are exempt because of size or production rate. Any insignificant activity required to be listed in the application also must list the approximate number of activities included (for example, twenty (20) leaky valves) and the estimated quantity of emissions associated. The application must include any other information, as requested by the permitting authority, to determine the insignificant activities have no applicable requirements. Information reported in the permit application which does not result in the specification of any permit limitation, term or condition with respect to that information (including, but not limited to, information identifying insignificant activities), shall not in any way constrain the operations, activities or emissions of a permitted installation, except as otherwise provided in this section. 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 (SIC)), including those associated with any reasonably anticipated operating scenarios identified by the applicant;

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

(I) All emissions of pollutants for which the installation is a part 70 source, and all emissions of any other regulated air pollutants. The permit application shall describe all emissions of regulated air pollutants emitted from each emissions unit, except as provided for by section (6) of this rule. The installation shall submit additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the installation;

(II) Identification and description of all emissions units whose emissions are included in part (6)(B)3.C.(I) of this rule, in sufficient detail to establish the applicability of any and all requirements;

(III) Emissions 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) The following information to the extent needed to determine or regulate emissions including: 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 pollutants;

(VIII) Other information required by any applicable requirement (including information related to stack height credit limitations developed pursuant to section 123 of the Act); and

(IX) Calculations on which the information in parts (6)(B)3.C.(I)-(VIII) of this rule is based;

D. Air pollution control information. The following air pollution control information:

(I) Citation and description of all applicable requirements; and

(II) Description of, or reference to, any applicable test method for determining compliance with each applicable requirement;

E. Applicable requirements information. Other specific information required under the permitting authority's regulations to implement and enforce other applicable requirements of the Act or of these rules, or to determine the applicability of these requirements;

F. Alternative emissions limits. If the SIP allows an installation to comply through an alternative emissions limit or means of compliance, the applicant may request that such an alternative limit or means of compliance be specified in the permit. The applicant must demonstrate that any such alternative is quantifiable, accountable, enforceable and based on replicable procedures. The applicant shall propose permit terms and conditions to satisfy these requirements in the application;

G. Proposed exemptions. An explanation of any proposed exemptions from otherwise applicable requirements;

H. Proposed reasonably anticipated operating scenarios. Additional information, as determined necessary by the permitting authority, to define reasonably anticipated operating scenarios identified by the applicant for emissions trading or to define permit terms and conditions implementing operational flexibility;

I. Compliance plan. A compliance plan that contains all of the following:

(I) A description of the compliance status of the installation with respect to all applicable requirements;

(II) A description as follows:

(a) For applicable requirements with which the installation is in compliance, a statement that the installation will continue to comply with these requirements;

(b) For applicable requirements that will become effective during the permit term, a statement that the installation will comply with these requirements on a timely basis; and

(c) For any applicable requirements with which the installation is not in compliance at the time of permit issuance, a narrative description of how the installation will achieve compliance with these requirements;

(III) A compliance schedule as follows:

(a) For applicable requirements with which the installation is in compliance,

a statement that the installation will continue to comply with these requirements;

(b) For applicable requirements that will become effective during the permit term, a statement that the installation will comply with these requirements on a timely basis. A statement that the installation will comply in a timely manner with applicable requirements that become effective during the permit term shall satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement;

(c) A schedule of compliance for all applicable requirements with which the installation is not in compliance at the time of permit issuance, including a schedule of remedial measures and an enforceable sequence of actions, with milestones, leading to compliance. (This compliance schedule shall resemble and be equivalent in stringency to that contained in any judicial consent decree or administrative order to which the installation is subject);

(IV) For installations required to have a schedule of compliance under subpart (6)(B)3.I.(III)(c) of this rule, a schedule for the submission of certified progress reports no less frequently than every six (6) months; and

(V) The compliance plan content requirements specified in this paragraph shall apply to, and be included in, the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under Title IV of the Act with regard to the schedule and method(s) the installation will use to achieve compliance with the acid rain emissions limitations;

J. Compliance certification and information.

(I) A certification of compliance with all applicable requirements signed by a responsible official consistent with paragraph (6)(B)4. and section 114(a)(3) of the Act;

(II) A statement of methods used for determining compliance, including a description of monitoring, recordkeeping and reporting requirements, and test methods;

(III) A schedule for the submission of compliance certifications during the permit term, which shall be submitted annually, or more frequently if required by an underlying applicable requirement; and

(IV) A statement indicating the installation's compliance status with respect to any applicable enhanced monitoring and compliance certification requirements of the Act; and

K. Acid rain information. Nationally-standardized forms for acid rain portions of permit applications and compliance plans

shall be used, as required by rules promulgated under Title IV of the Act.

4. Certification by responsible official. Any application form, report or compliance certification submitted pursuant to this rule shall contain certification by a responsible official of truth, accuracy and completeness. This certification, and any other certification, shall be signed by a responsible official and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

5. Single, multiple or general permits. Pursuant to this section (6), an installation must have a permit (or group of permits) addressing all applicable requirements for all relevant emissions units in the installation. An installation may comply with this subsection (6)(B) through any one (1) of the following methods:

A. The installation may apply for a single permit covering all relevant emissions units located within a contiguous area under common control (whether or not the installation falls under the same two (2)-digit SIC code);

B. The installation may apply for separate permits for separate emissions units or groups of emissions units; or

C. The installation may apply for coverage for one (1) or more emissions units eligible for permitting under a general permit issued by the permitting authority, and obtain a separate permit(s) for emissions units not eligible for general permit coverage.

(C) Permit Content.

1. Standard permit requirements. Every operating permit issued pursuant to this section (6) shall contain all requirements applicable to the installation at the time of issuance.

A. Emissions limitations and standards. The permit shall specify emissions limitations or standards applicable to the installation, and shall include those operational requirements or limitations as necessary to assure compliance with all applicable requirements.

(I) The permit shall specify and reference the origin of and authority for each term or condition and shall identify any difference in form as compared to the applicable requirement upon which the term or condition is based.

(II) The permit shall state that, where an applicable requirement is more stringent than an applicable requirement of rules promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the administrator.

(III) If the implementation plan or other applicable requirement allows an installation to comply through an alternative emissions limit or means of compliance and the applicant requests that this alternative limit or means of compliance be specified in the permit, the permitting authority may include this alternative emissions limit or means of compliance in an installation's permit upon demonstrating that it is quantifiable, accountable, enforceable and based on replicable procedures.

B. Permit duration. The permitting authority shall issue permits for five (5) years. The permit term shall commence on the date of issuance or, when applicable, the date of validation.

C. Monitoring and related recordkeeping and reporting requirements.

(I) The permit shall contain the following requirements with respect to monitoring:

(a) All emissions monitoring and analysis procedures or test methods required under the applicable requirements, including any procedures and methods promulgated by the administrator pursuant to sections 114(a)(3) or 504(b) of the Act;

(b) Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), then periodic monitoring sufficient to yield reliable data for the relevant time period that are representative of the installation's compliance with the permit, as reported pursuant to part (6)(C)1.C.(III) of this rule. These monitoring requirements shall assure the use of terms, test methods, units, averaging periods and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this paragraph; and

(c) As necessary, requirements concerning the use, maintenance, and where appropriate, installation of monitoring equipment or methods.

(II) With respect to recordkeeping, the permit shall incorporate all applicable recordkeeping requirements and require, where applicable, the following:

(a) Records of required monitoring information that include the following:

I. The date, place as defined in the permit, and time of sampling or measurements;

II. The date(s) analyses were performed;

III. The company or entity that performed the analyses;

IV. The analytical techniques or methods used;

V. The results of these analyses; and

VI. The operating conditions as existing at the time of sampling or measurement;

(b) Retention of records.

I. Retention of records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings when used for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

II. Affected sources under Title IV of the Act will have a three (3)-year monitoring data record retention period as required in 40 CFR part 75.

(III) With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:

(a) A permit issued under these rules shall require the permittee to submit a report of any required monitoring every six (6) months. To the extent possible, the schedule for submission of these reports shall be timed to coincide with other periodic reports required by the permit, including the permittee's annual compliance certification;

(b) Each report submitted under subpart (6)(C)1.C.(III)(a) of this rule shall identify any deviations from permit requirement, since the previous report, that have been monitored by the monitoring systems required under the permit, and any deviations from the monitoring, recordkeeping and reporting requirements of the permit;

(c) In addition to semiannual monitoring reports, each permittee shall be required to submit supplemental reports as indicated here. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.

I. Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7. of this rule shall be submitted to the permitting authority either verbally or in writing within two (2) working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that

indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted facility must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.

II. Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

III. Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit;

(d) Every report submitted shall be certified by a responsible official, except that, if a report of a deviation must be submitted within ten (10) days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten (10) days after that, together with any corrected or supplemental information required concerning the deviation; and

(e) A permittee may request confidential treatment of information submitted in any report of deviation.

D. Risk management plans. If the installation is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permit is required to specify only that the permittee will verify that they have complied with the requirement to register such a plan. The contents of the risk management plan itself need not be incorporated as a permit term.

E. Emissions exceeding Title IV allowances. Where applicable, the permit shall prohibit emissions exceeding any allowances that the installation lawfully holds under Title IV of the Act or rules promulgated thereunder.

(I) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program if the increases do not require a permit revision under any other applicable requirement.

(II) No limit shall be placed on the number of allowances that may be held by an installation. The installation may not use these allowances, however, as a defense for noncompliance with any other applicable requirement.

(III) Any of these allowances shall be accounted for according to procedures

established in rules promulgated under Title IV of the Act.

F. Severability clause. The permit shall include a severability clause to ensure the continued validity of uncontested permit conditions in the event of a successful challenge to any contested portion of the permit.

G. General requirements.

(I) The permittee must comply with all the terms and conditions of the permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, for permit termination, permit revocation and reissuance, permit modification or denial of a permit renewal application. Note: The grounds for termination of a permit under part (6)(C)1.G.(I) are the same as the grounds for revocation as stated in part (6)(E)8.A.(I).

(II) It shall not be a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

(III) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(IV) The permit does not convey any property rights of any sort, or grant any exclusive privilege.

(V) The permittee shall furnish to the permitting authority, upon receipt of a written request and within a reasonable time, any information that the permitting authority reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the permitting authority copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this paragraph (6)(C)1.

H. Incentive programs not requiring permit revisions. The permit shall include a provision stating that no permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in the permit.

I. Reasonably anticipated operating scenarios. The permit shall include terms and conditions for reasonably anticipated operating scenarios identified by the applicant and

approved by the permitting authority. The permit shall authorize the permittee to make changes among alternative operating scenarios authorized in the permit without notice, but shall require the permittee, contemporaneous with changing from one (1) operating scenario to another, to record in a log at the permitted installation the scenario under which it is operating. The permit shield shall apply to these terms and conditions.

J. Emissions trading. The permit shall include terms and conditions for the trading of emissions increases and decreases within the permitted installation to the extent that the applicable requirements provide for the trading of increases and decreases without case-by-case approval of each emissions trade. These terms and conditions shall include all those required to determine compliance (to include contemporaneous recording in a log of the details of the trade) and must meet all applicable requirements, and requirements of this rule. The permit shield shall apply to all terms and conditions that allow the trading of these increases and decreases in emissions.

2. Federally-enforceable conditions and state-only requirements.

A. Federally-enforceable conditions. Except as provided in subparagraph (6)(C)2.B. of this rule, all terms and conditions in a permit issued under this section, including any voluntary provisions designed to limit an installation's potential to emit, are enforceable by the permitting authority, by the administrator, and by citizens under section 304 of the Act.

B. State-only requirements. Notwithstanding subparagraph (6)(C)2.A. of this rule, the permitting authority shall expressly designate as not being federally-enforceable or enforceable under section 304 of the Act any terms and conditions included in the permit that are not required under the Act or any of its applicable requirements, and these terms and conditions shall not be enforceable by the administrator or by citizens under section 304 of the Act. Terms and conditions so designated shall not be subject to the requirements of 40 CFR sections 70.7 and 70.8. Terms and conditions expressly designated as state-only requirements under this paragraph may be included in an addendum to the installation's permit.

3. Compliance requirements. Permits issued under this section (6) shall contain the elements listed here with respect to compliance.

A. General requirements, including certification. Consistent with the monitoring and related recordkeeping and reporting requirements of this paragraph, the operating permit must include compliance certification,

testing, monitoring, reporting and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. Any document (including reports) required to be submitted under this rule shall contain a certification signed by a responsible official as to the results of the required monitoring.

B. Inspection and entry. The permit must include requirements providing that, upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the permitting authority to perform the following (subject to the permittee's right to seek confidential treatment of information submitted to, or obtained by, the permitting authority under this subsection):

(I) Enter upon the permittee's premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(II) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(III) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(IV) As authorized by the Missouri Air Conservation Law Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

C. Schedule of compliance. The permit must include a schedule of compliance, to the extent required.

D. Progress reports. To the extent required under an applicable schedule of compliance, the permit must require progress reports to be submitted semiannually, or more frequently if specified in the applicable requirement or by the permitting authority. These progress reports shall contain the following:

(I) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved; and

(II) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

E. Compliance certification. The permit must include requirements for certification of compliance with terms and conditions contained in the permit that are federally

enforceable, including emissions limitations, standards or work practices. The permit shall specify—

(I) The frequency (which shall be annually unless the applicable requirement specifies submission more frequently) of compliance certifications;

(II) The means for monitoring compliance with emissions limitations, standards and work practices contained in applicable requirements;

(III) A requirement that the compliance certification include the following:

(a) The identification of each term or condition of the permit that is the basis of the certification;

(b) The permittee's current compliance status, as shown by monitoring data and other information reasonably available to the permittee;

(c) Whether compliance was continuous or intermittent;

(d) The method(s) used for determining the compliance status of the installation, currently and over the reporting period; and

(e) Such other facts as the permitting authority may require to determine the compliance status of the source;

(IV) A requirement that all compliance certifications be submitted to the administrator as well as to the permitting authority;

(V) Additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act; and

(VI) Any other provisions as the permitting authority may require.

4. General permits. Installations may apply to operate under any general permit.

A. Issuance of general permits. General permits covering similar part 70 installations may be issued by the permitting authority after notice and opportunity for public participation under subsection (6)(F) and section (7). The general permit shall indicate a reasonable time after which an installation that has submitted an application for authorization will be deemed to be authorized to operate under the general permit. A general permit shall identify criteria by which installations may be authorized to operate under the general permit. This criteria must include the following:

(I) Categories of sources covered by the general permit must be homogeneous in terms of operations, processes and emissions;

(II) Sources may not be subject to case-by-case standards or requirements; and

(III) Sources must be subject to substantially similar requirements governing

operations, emissions, monitoring, reporting and recordkeeping.

B. Applications. The permitting authority shall provide application forms for coverage under a general permit. General permit applications may deviate from individual part 70 permit applications but shall include all information necessary to determine qualification for, and to assure compliance with, the general permit. The permitting authority shall authorize coverage by the conditions and terms of a general permit to all installations that apply for and qualify under the specified general permit criteria. Installations applying for coverage under a general permit must comply with all the requirements of this rule, except public participation requirements. General permits shall not be authorized for affected sources under the acid rain program unless otherwise provided in rule promulgated under Title IV of the Act.

C. Public participation. Although public participation under section (7) of this rule is necessary for the issuance of a general permit, the permitting authority may authorize an installation to operate under general permit terms and conditions without repeating the public participation procedures. However, this authorization shall not be a final permit action of purposes for judicial review.

D. Enforcement. Notwithstanding the permit shield provisions of paragraph (6)(C)6. of this rule, an installation authorized to operate under a general permit is subject to enforcement for operating without an individual part 70 operating permit if the installation is determined not to be qualified for the general permit.

5. Portable installations. An installation may apply for a single permit authorizing emissions from similar operations by the same installation owner or operator at multiple temporary locations.

A. Qualification criteria. To qualify for a permit under this paragraph (6)(C)5. the applicant's operation must be temporary and involve at least one (1) change of location during the permit term. Affected sources shall not be authorized as temporary installations under the acid rain program unless otherwise provided in rules promulgated under Title IV of the Act.

B. Compliance at each location. The permittee must comply with all applicable requirements at each authorized location.

C. Notice of location change. The owner or operator of the installation must notify the permitting authority at least ten (10) days in advance of each change of location.

6. Permit shield.

A. Express permit statement required. Part 70 operating permits shall include express provisions stating that compliance with the conditions of the permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that—

(I) The applicable requirements are included and specifically identified in the permit; or

(II) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation and the permit expressly includes that determination or a concise summary of it.

B. Exceptions to permit protection. The permit shield does not affect the following:

(I) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders;

(II) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance;

(III) The applicable requirements of the acid rain program;

(IV) The administrator's authority to obtain information; or

(V) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions of this rule.

7. Emergency provisions.

A. Definition. For the purposes of a part 70 operating permit, an emergency or upset means any condition arising from sudden and not reasonably foreseeable events beyond the control of the permittee, including acts of God, which require immediate corrective action to restore normal operation and that causes the installation to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency or upset. An emergency or upset shall not include non-compliance caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

B. Affirmative defense requirements. The permitting authority shall include in each permit a provision stating that an emergency or upset constitutes an affirmative defense to an enforcement action brought for non-compliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:

(I) An emergency or upset occurred and the permittee can identify the source of the emergency or upset;

(II) The installation was being operated properly;

(III) The permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or the requirements in the permit; and

(IV) The permittee submitted notice of the emergency to the permitting authority within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

8. Operational flexibility (installation changes not requiring permit revisions). An installation that has been issued a part 70 operating permit under this rule is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described in subparagraphs (6)(C)8.A. of this rule if the changes are not Title I modifications and the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The installation shall notify the permitting authority and the administrator at least seven (7) days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally-enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

A. Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally-enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.

(I) Before making a change under this provision, the permittee shall provide advance written notice to the permitting authority and to the administrator, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the permitting authority shall place a copy with the per-

mit in the public file. Written notice shall be provided to the administrator and the permitting authority at least seven (7) days before the change is to be made. If less than seven (7) days' notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the administrator and the permitting authority as soon as possible after learning of the need to make the change.

(II) The permit shield shall not apply to these changes.

B. SIP-based emissions trading changes. Changes associated with trading emissions increases and decreases within a permitted installation may be made without a permit revision if the SIP provides for these trades. The permit shall contain terms and conditions governing the trading of emissions.

(I) For these changes, the advance written notice provided by the permittee shall identify the underlying authority authorizing the trade and shall state when the change will occur, the types and quantities of emissions to be traded, the permit terms or other applicable requirements with which the source will comply through emissions trading and any other information as may be required by the applicable requirement authorizing the emissions trade.

(II) The permit shield shall not apply to these changes. Compliance will be assessed according to the terms of the implementation plan authorizing the trade.

C. Emissions cap-based changes. Changes associated with the trading of emissions increases and decreases within a permitted installation may be made without a permit revision if this trading is solely for the purpose of complying with the federally-enforceable emissions cap that was established in the permit at the applicant's request, independent of otherwise applicable requirements. For these changes, the advance written notice provided by the permittee shall identify the underlying authority authorizing the emissions trade and shall state when the change will occur, the types and quantities of emissions to be traded, the permit terms or other applicable requirements with which the source will comply through emissions trading, and any other information as may be required by the applicable requirement authorizing the emissions trade. The permit shield does apply to these changes.

9. Off-permit changes. Except as provided in subparagraph (6)(C)9.A. in this rule, a part 70 permitted installation may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by

the permit without obtaining a permit revision. Insignificant activities listed in the permit, but not otherwise addressed in or prohibited by the permit, shall not be considered to be constrained by the permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:

A. Compliance with applicable requirements. The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; no permittee may change a permitted installation without a permit revision, even if the change is not addressed in or constrained by, the permit, if this change is subject to any requirements under Title IV of the Act or is a Title I modification;

B. Contemporaneous notice, except insignificant activities. The permittee must provide written notice of the change to the permitting authority and to the administrator no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under paragraph (6)(B)3. of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

C. Record of changes. The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

D. Permit shield not applicable. The permit shield shall not apply to these changes.

(D) Unified Review. When the construction or modification and operation of any installation requires a construction permit under 10 CSR 10-6.060, and an operating permit or its amendment under this rule, the installation shall receive a unified construction and operating permit or its amendments, review, hearing and approval process, unless the applicant requests in writing that the construction and operating permit, or its amendment application be reviewed separately. Under this unified review process, the applicant shall submit all the applications, forms and other information required by the permitting authority.

1. 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 10-6.060 Construction Permits Required.

2. 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 10-6.060, 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 or its amendment shall be retained by the permitting authority until validated pursuant to this subsection (6)(D).

3. 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 processing 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, and all of the requirements for permit issuance in subsection (6)(E) of this rule have been met, the permitting authority shall validate the operating permit and forward it to the permittee. No part 70 permit will be validated unless—

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

B. The procedures for permit renewal in paragraph (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.

(E) Permit Issuance, Renewal, Reopenings and Revisions.

1. Action on application.

A. General requirements. A part 70 operating permit, permit modification or permit renewal may be issued only if all of the following conditions have been met:

(I) Except for a general permit authorization, the permitting authority has received a complete application for a permit, permit modification or permit renewal;

(II) Except for permit modifications qualifying for minor permit modification procedures, the permitting authority has complied with the requirements for public participation;

(III) The permitting authority has complied with the requirements for notifying and responding to affected states;

(IV) The permitting authority finds that the conditions of the permit provide for compliance with all applicable requirements and the requirements of the Act and the requirements of this rule; and

(V) The administrator has received a copy of the draft permit and any notices required, and has not objected to issuance of the permit under 40 CFR 70.8(c) within the time specified therein.

B. Completeness determination. After receipt of an application, the permitting authority promptly shall provide notice to the applicant of whether the application is complete. Unless the permitting authority notifies the applicant that the application is not complete within sixty (60) days after receipt, the application shall be deemed complete.

(I) The permitting authority shall make available to applicants all the necessary application forms, together with a checklist of items required for a complete application package. An application will be deemed complete in the first instance if the applicant submits a completed application form, together with the other items on the checklist.

(II) No completeness determination shall be required for applications for minor permit modifications.

C. Drafts for public comment. Following review of an application, the permitting authority shall issue a draft permit, draft permit modification or draft permit renewal for public comment, in accordance with section (7). The draft shall be accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). The permitting authority shall send this statement to the administrator, to affected states and to the applicant and shall place a copy in the public file.

D. Proposals for review. Following the end of the public comment period, the permitting authority shall prepare and submit to the administrator a draft permit, permit modification or permit renewal.

(I) The draft permit, modification or renewal shall be issued no later than forty-five (45) days preceding the deadline for final action under this section and shall contain all applicable requirements that have been promulgated and made applicable to the installation as of the date of issuance of the draft permit.

(II) If new requirements are promulgated or otherwise become newly applicable to the installation following the issuance of the draft permit but before issuance of a final permit (or in the case of unified review,

before validation of an issued permit), the permitting authority may elect to either—

(a) Extend or reopen the public comment period to solicit comment on additional draft permit provisions to implement the new requirements; or

(b) If the permitting authority determines that this extension or reopening of the public comment period would delay issuance of the permit unduly, the permitting authority may include in the permit a provision stating that the permit is reopened upon issuance or validation to incorporate the new requirements and stating that the new requirements are excluded from the protection of the permit shield. If the permitting authority elects to issue the permit without incorporating the new requirements, the permitting authority shall institute, within thirty (30) days after the new requirements become applicable to the source, proceedings pursuant to this section to reopen the permit to incorporate the new requirements. These reopening proceedings may be instituted, but need not be completed, before issuance of the final permit.

E. Action following the administrator's review.

(I) Upon receipt of notice that the administrator will not object to a permit, permit modification or permit renewal that has been submitted for the administrator's review pursuant to this section, the permitting authority shall issue the permit, permit modification or permit renewal forthwith, but in no event later than the fifth day following receipt of the notice from the administrator.

(II) Forty-five (45) days after receipt by the administrator of a draft permit, permit modification or permit renewal for the administrator's review, and if the administrator has not notified the permitting authority that s/he objects to the permit action, the permitting authority shall promptly issue the permit, permit modification or permit renewal, but in no event later than the fiftieth day following receipt by the administrator.

(III) If the administrator objects to the permit, modification or renewal, the permit shall not be issued and the permitting authority shall consult with the administrator and the applicant, and shall submit a revised proposal to the administrator within ninety (90) days after the date of the administrator's objection. If the permitting authority does not revise the permit, the permitting authority will inform the administrator within ninety (90) days following the date of the objection and decline to make those revisions. If the administrator disagrees with the permitting authority, the administrator may issue the permit with the revisions incorporated.



F. Final actions.

(I) Noninitial applications. Except as provided in this subsection (6)(E), the permitting authority shall take final action on each application for a part 70 operating permit within eighteen (18) months after receiving a complete application. Final action on each application for a significant permit modification or permit renewal shall be taken within six (6) months after receipt of a complete application. For each application, the permitting authority shall submit a draft permit, modification or renewal to the administrator no later than forty-five (45) days before the deadline for final action established in this section. The permitting authority shall take action on any permit, permit modification or permit renewal issued in compliance with rules promulgated under Title IV or V of the Act for the permitting of affected installations under the acid rain program within the time specified in those regulations.

(II) Initial applications. Applications accepted under the registry system shall be acted upon according to that registry.

G. Order for acting on applications. To the extent feasible, applications shall be acted upon in the order received, except that—

(I) Priority shall be given to taking final action on applications for construction or permit modification under Title I, Parts C and D of the Act and to applications for general permits. To the extent feasible, final action on these applications shall be taken within six (6) months following receipt of a complete application;

(II) For processing purposes, the permitting authority may group together applications addressing similar installations; and

(III) The permitting authority may give expedited treatment to simple applications that do not require significant review (for example, permits incorporating few or no substantive regulatory requirements).

2. Application shield.

A. Protection for not having a permit. If an installation subject to the requirement to obtain a permit under this section submits a timely and complete application for permit issuance or renewal, that installation's failure to have an issued permit shall not be a violation of the requirement to have the permit until the permitting authority takes final action on the application. This application protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit, by the deadline specified in writing by the permitting authority, any additional information identified as being reasonably required to process the application.

B. Loss of protection. If an applicant files a timely application that the permitting authority determines is not complete, or if the applicant loses the protection granted under this section as a result of the failure to provide additional information reasonably requested by the permitting authority within the time specified, the applicant is in violation of this section for failure to have an issued permit.

C. Construction permits not affected. The submittal of a complete part 70 operating permit application shall not affect the requirement, where applicable, that an installation have a construction permit.

3. Permit renewal and expiration.

A. Renewal application requirements. Applications for permit renewals shall be subject to the same procedural requirements, including public participation, affected state comment and the administrator review, that apply to initial permit issuance. The permitting authority, in issuing a permit or renewal permit, may identify those portions that are proposed to be revised, supplemented or deleted.

B. Timely application. An installation's right to operate shall terminate upon the expiration of the permit, unless a complete permit renewal application is submitted at least six (6) months before the date of expiration, or unless the permitting authority takes final action approving an application for a permit renewal by the expiration date.

C. Extension of expired permits. If a timely and complete application for a permit renewal is submitted, but the permitting authority fails to take final action to issue or deny the renewal permit before the end of the term of the previous permit, the previous permit shall not expire until the renewal permit is issued or denied. Any permit shield granted under the previous permit shall continue in effect during this period of time. However, the administrator may invoke its authority under section 505(e) of the Act to terminate or revoke and reissue the permit.

4. Administrative permit amendments.

A. Definition. An administrative permit amendment is a permit revision that—

(I) Corrects typographical errors;

(II) Identifies a change in the name, address or phone number of any person identified in the permit, or provides a similar minor administrative change at the installation;

(III) Requires more frequent monitoring or reporting by the permittee;

(IV) Allows for a change in ownership or operational control of an installation where no other change in the permit is necessary, provided that a written agreement

containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee must be submitted to the permitting authority;

(V) Incorporates in the part 70 operating permit the requirements of a unified construction permit issued by the permitting authority.

B. Acid rain provisions. For purposes of any acid rain portion of a part 70 operating permit, administrative permit amendments shall be governed by rules promulgated under Title IV of the Act.

C. Procedures. An administrative permit amendment shall be made by the permitting authority under the following procedures:

(I) The permitting authority shall take final action on a request for an administrative permit amendment within sixty (60) days after receipt of the request, and may incorporate the proposed changes in a permit without providing notice to the public or affected states, if any of the permit revisions are designated as having been made pursuant to this paragraph (6)(E)4.;

(II) The permitting authority shall transmit a copy of the amended permit to the administrator; and

(III) An installation may implement the changes addressed in a request for an administrative permit amendment immediately upon submittal of the request.

D. Permit shield applicable. The permitting authority, upon taking final action granting a request for an administrative permit amendment, shall allow coverage by the permit shield.

5. Permit modifications.

A. Definition. A permit modification is any revision to a part 70 operating permit which is not an administrative amendment.

B. Minor permit modification.

(I) Criteria.

(a) Minor permit modifications involve changes to an installation that do not—

I. Violate any applicable requirement;

II. Involve significant changes to monitoring, reporting or recordkeeping requirements in the permit;

III. Require or change any case-by-case or source-specific determination contained in the permit, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

IV. Establish or change a permit term for which there is no corresponding underlying applicable requirement and which the source has assumed in order to avoid an

applicable requirement to which it would otherwise be subject, such as a federally-enforceable emissions cap voluntarily agreed to in order to avoid classification as a Title I modification or an alternative emissions limit approved pursuant to 112(i)(5) of the Act;

V. Constitute a Title I modification; and

VI. Constitute a significant permit modification.

(b) Notwithstanding subpart (6)(E)5.B.(I)(a) and subparagraph (6)(E)5.C. of this section, minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by EPA.

(II) Procedures.

(a) The applicant should complete a minor permit modification form application which is consistent with the requirements of this section (6), and which includes at least the following information:

I. A description of the proposed change, the resulting emissions and any new applicable requirements;

II. The applicant's draft modified permit;

III. Certification consistent with this section; and

IV. Completed forms to enable the permitting authority to notify the administrator and affected states.

(b) The permitting authority will notify the administrator and affected states within five (5) days after receipt of the application.

(c) Public participation requirements are not applicable to minor permit modifications.

(d) Within thirty (30) days after receiving the minor permit modification application, the permitting authority will notify the applicant whether the application is deemed complete or if further information is needed to deem it so.

(e) Within ninety (90) days after receiving the minor permit modification application, or fifteen (15) days after the end of the administrator's forty-five (45)-day review period, whichever is later, the permitting authority shall—

I. Issue the permit modification as proposed;

II. Deny the permit modification;

III. Determine that the requested change is a significant permit modification that should be reviewed as such; or

IV. Revise the draft modified permit and notify the applicant and the administrator by providing a written copy of the proposed intended changes, a written statement of the factual and legal reasons for the changes, and notice of the rights of the applicant and the administrator to appeal or object to the changes, including any deadlines for this appeal or objection.

(f) An applicant for a minor permit modification may make the change proposed immediately after filing the application. After making the change, and until the permitting authority takes any of the actions specified in this section (6), the applicant must comply with both the applicable requirements governing the change and the proposed modified permit terms and conditions. During this time period, the installation need not comply with the existing permit terms and conditions the applicant is seeking to modify. However, if the applicant fails to comply with the proposed modified permit terms and conditions during this time period, the existing permit terms and conditions which the applicant is seeking to modify may be enforced against the installation.

(III) Permit shield not applicable. The permit shield does not apply to minor permit modifications.

(IV) Public notice. The permitting authority shall provide public notice of a change proposed in a minor permit modification application when it determines that the proposed change is of sufficient consequence that the public may have an interest in being informed. The procedures for the public notice shall be as follows:

(a) Notice shall be given by publication in a newspaper of general circulation in the area where the installation is located or in a state publication designed to give general public notice, and to persons on a mailing list developed by the permitting authority, including those who request in writing to be on the list;

(b) The notice shall identify: the installation; the name and address of the permittee; the name and address of the permitting authority; the activity(ies) involved in the permit action; any emissions change involved in the proposed minor permit modification; the name, address and telephone number of a person from whom interested persons may obtain additional information, including copies of the draft permit, the application, all relevant supporting materials and all other materials available to the permitting authority that are relevant to the permit decision; and

(c) The permitting authority shall provide public notice, as provided in this section, promptly upon receipt of the source's minor permit modification application; however, the timing and content of this notice shall not be grounds for a challenge to the permitting authority's final action.

C. Group processing of minor permit modifications. Pursuant to this paragraph (6)(E)5., the permitting authority may modify the procedures outlined in this section (6) to process groups of an installation's applications for certain modifications eligible for minor permit modification processing.

(I) Criteria. Group processing of proposed minor permit modifications may be used only for those which—

(a) Meet the criteria for minor permit modification procedures under this section; and

(b) Collectively are below the following threshold level: ten percent (10%) of the emissions allowed by the permit for the emissions unit for which the change is proposed; twenty percent (20%) of the applicable definition of a part 70 installation; or five (5) tons per year, whichever is least.

(II) Applications. An application requesting the use of group processing procedures shall meet the requirements of this subparagraph and shall include the following:

(a) A description of the change, the emissions resulting from the change and any new applicable requirements that will apply if the change occurs;

(b) The applicant's draft modified permit;

(c) Certification by a responsible official, consistent with this section, that the proposed modification meets the criteria for use of group processing procedures and a request that these procedures be used;

(d) A list of the installation's other pending applications awaiting group processing and a determination of whether the requested modification, aggregated with these other applications, equals or exceeds the threshold established under this section (6);

(e) Certification, consistent with this section (6), that the applicant has notified the administrator of the proposed modification. This notification need only contain a brief description of the proposed modification; and

(f) Completed forms for the permitting authority to use to notify the administrator and affected states.

(III) Administrator and affected state notification. On a quarterly basis or within five (5) business days after receipt of

an application demonstrating that the aggregate of an installation's pending applications equals or exceeds the threshold level established under this section, whichever is earlier, the permitting authority promptly, in accordance with section (7) of this rule, shall notify the administrator and affected states of the proposed permit modifications. The permitting authority shall send any notice required to the administrator.

(IV) Timetable for issuance. The provisions of this section shall apply to modifications eligible for group processing, except that the permitting authority shall take one (1) of the actions specified in this paragraph within one hundred and eighty (180) days after receipt of the application or fifteen (15) days after the end of the administrator's forty-five (45)-day review period, whichever is later.

(V) Installation's ability to make change. The provisions of this subpart (6)(E)5.B.(II)(f) shall apply to modifications eligible for group processing.

(VI) Permit shield not applicable. The provisions of part (6)(E)5.B.(III) shall apply to modifications eligible for group processing.

(VII) Public notice. The provisions of this part (6)(E)5.B.(IV) shall apply to modifications eligible for group processing.

D. Significant permit modifications.

(I) Definition. Any permit revision which is not a minor modification or administrative permit amendment is a significant permit modification. This revision includes, but is not limited to, significant changes in monitoring, reporting or recordkeeping permit terms and any change in the method of measuring compliance with existing permit requirements. Criteria for determining whether a proposed change is significant shall include the magnitude of the change and the resulting impact on the environment.

(II) Procedures.

(a) An applicant for a significant permit modification shall adhere to all the relevant requirements for an initial permit application under section (6) of this rule, as well as requirements for public participation under section (7), and review by the administrator and affected states under subsection (6)(F) except—

I. The applicant should use the form for a significant permit modification application, rather than the form for an initial permit issuance; and

II. The permitting authority will complete review of significant permit modification applications within nine (9) months after receipt of an application.

6. Reopening permits for cause.

A. Cause to reopen. A part 70 operating permit shall be reopened for cause if—

(I) The permitting authority receives notice from the administrator that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d), provided that the reopening may be stayed pending judicial review of that determination;

(II) The permitting authority or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions limitations standards or other terms of the permit;

(III) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—

(a) The permit has a remaining term of less than three (3) years;

(b) The effective date of the requirement is later than the date on which the permit is due to expire; or

(c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit;

(IV) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable to that source, provided that, upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit; or

(V) The permitting authority or the administrator determines that the permit must be reopened and revised to assure compliance with applicable requirements.

B. Notice to the permittee. If the permitting authority finds reason to believe that a permit should be reopened for cause, it shall provide at least thirty (30) day's prior written notice to the permittee, except the notice period may be less if the permitting authority finds that an emergency exists.

(I) This notice shall include a statement of the terms and conditions that the permitting authority proposes to change, delete or add to the permit. If the permitting authority does not have sufficient information to determine the terms and conditions that must be changed, deleted or added to the permit, the notice shall request the permittee to provide that information within a period of time specified in the notice, which shall be not less than thirty (30) days except in the case of an emergency.

(II) If the proposed reopening is pursuant to subparagraph (6)(E)6.A. of this

rule, the permitting authority shall give the permittee an opportunity to provide evidence that the permit should not be reopened.

C. Procedures for reissuance. In reissuing the permit, the permitting authority shall follow the procedures established under subsection (6)(E). The permittee shall in all cases be afforded an opportunity to comment on the revised permit terms.

D. Judicial review. Upon issuance of the revised permit, both the determination to reopen the permit and the revised permit terms shall be subject to judicial review.

E. Extension of permit shield. While a reopening proceeding is pending, the permittee shall be entitled to the continued protection of any permit shield provided in the permit pending issuance of a revised permit, unless the permitting authority specifically suspends the permit shield on the basis of a finding that this suspension is necessary to implement applicable requirements. If this finding applies only to certain applicable requirements or to certain permit terms, the suspension shall extend only to those requirements or terms.

F. Deadline for completion. Any reopening and reissuance proceeding shall be completed within eighteen (18) months after promulgation of the applicable requirements.

7. Reopening permits for cause by the administrator.

A. Notice of cause. If the permitting authority receives notice from the administrator that the administrator has found cause to revoke, modify or reopen and reissue a part 70 operating permit, the permitting authority, within ten (10) days after receipt of this notification, shall provide notice to the permittee. The notice to the permittee shall include a copy of the notice from the administrator and invite the permittee to comment in writing on the proposed action.

B. Proposed permitting authority response. Within ninety (90) days following receipt of the notification from the administrator, the permitting authority shall issue and forward to the administrator a proposed determination in response to the administrator's notification. The permitting authority may request an additional ninety (90) days for this submission if this time is required to obtain a new or revised permit application or other information from the permittee.

C. Comment by the administrator. The permitting authority shall address any further comment or objection from the administrator on the permitting authority's response to the administrator notification pursuant to this section.

**8. Revocations and terminations.**

A. Cause for revocation. The permitting authority may revoke a part 70 operating permit only upon request of the permittee or for cause. For purposes of this section, cause for revocation exists if—

(I) There is a pattern of unresolved and repeated noncompliance with the terms and conditions of the permit and the permittee has refused to take appropriate action (such as a schedule of compliance) to resolve the noncompliance;

(II) The permittee has failed to disclose material facts relevant to issuance of the permit or has knowingly submitted false or misleading information to the permitting authority;

(III) The permitting authority finds that the permitted installation or activity endangers public health, safety or the environment, and that the danger cannot be removed by a modification of the terms of the permit; or

(IV) The permittee has failed to pay a civil or criminal penalty imposed for violations of the permit.

B. Notice to permittee. Upon finding that cause exists for the revocation of a permit, the permitting authority shall notify the permittee of that finding in writing, stating the reasons for the proposed revocation. Within thirty (30) days following receipt of the notice, the permittee may submit written comments concerning the proposed revocation. If the permitting authority after that makes a final determination to revoke the permit, it shall provide a written notice to the permittee specifying the reasons for the decision and the effective date of the revocation.

C. Conditional revocation. A permit revocation issued under this section may be issued conditionally, with a future effective date, and may specify that the revocation will not take effect if the permittee satisfies the specified conditions before the effective date.

D. Application for termination. A permittee may apply at any time for termination of all or a portion of its part 70 operating permit relating solely to operations, activities and emissions that have been permanently discontinued at the permitted installation. An application for termination shall identify with specificity the permit or permit terms that relate to the discontinued operations, activities and emissions. The permitting authority shall act on an application for termination on this ground within ninety (90) days after receipt, and shall grant the application for termination upon finding that the permit terms for which termination is sought relate solely to operations, activities and emissions that have been permanently discontinued.

In terminating all or portions of a permit pursuant to this subsection, the permitting authority may make appropriate orders for the submission of a final report or other information from the permittee to verify the complete discontinuation of the relevant operations, activities and emissions.

E. Application for termination based on general permit. A permittee may apply for termination of its permit on the ground that its operations, activities and emissions are fully covered by a general permit for which it has applied and received coverage. The permitting authority shall act on an application for termination on this ground within ninety (90) days after receipt, and shall grant the application upon a finding that the permittee's installation's operations, activities and emissions are fully covered by a general permit.

F. Application for new permit. An installation that has received a final revocation or termination of its permit may apply for a new permit.

9. Case-by-case determinations. If applicable requirements require the permitting authority to make a case-by-case determination of an emission limitation, technology requirement, work practice standard or other requirement for an installation, and to include terms and conditions implementing that determination in the installation's part 70 operating permit, the installation shall include in its permit application a proposed determination, together with the data and other information upon which the determination is to be based, and proposed terms and conditions to implement the determination. Upon receipt of a request from the applicant, the permitting authority shall meet with the applicant before the permit application is submitted to discuss the determination and the information required to make it. In the event the permitting authority determines that the applicant's proposed determination and implementing terms and conditions should be revised in the draft permit or the final permit, the permitting authority shall in all cases inform the applicant of the changes to be made, and allow the applicant to comment on those changes before issuing the draft permit or final permit.

10. Public participation. The procedures of section (7) of this rule shall be followed.

11. Judicial review. Any final action in granting or denying an application for a permit, permit amendment or modification or permit renewal shall be subject to Missouri Air Conservation Commission review as provided in 643.078 and 643.130, RSMo upon an appeal filed by the applicant or permittee, or by any affected state or other person who

participated in the public comment process. If no public comment procedure was employed for the action under challenge, an application for review may be filed by the permittee or an affected state. The opportunity for judicial review provided for in this subsection shall be the exclusive means for obtaining judicial review of any permit action.

A. Deadline for filing. No application for judicial review may be filed more than ninety (90) days following the final action on which review is sought, unless the grounds for review arose at a later time, in which case the application for review shall be filed within ninety (90) days of the date on which the grounds for review first arose, and review shall be limited to such later-arising grounds.

B. Scope of review. Any application for judicial review shall be limited to issues that—

(I) Were raised in written comments filed with the permitting authority or during a public hearing on the proposed permit action (if the grounds on which review is sought were known at that time), except that this restriction shall not apply if the person seeking review was not afforded an advance opportunity to comment on the challenged action; and

(II) Are germane and material to the permit action at issue.

C. Deadline for final action. For purposes of this section (6), final action shall include a failure by the permitting authority to take final action to issue or deny an application within the time specified in these regulations.

(F) Permit Review by the Administrator and Affected States.

**1. Administrator review.**

A. Copies of applications, proposals and final actions. The applicant will provide two (2) copies of the information included in an application under this section. The permitting authority will forward to the administrator one (1) copy of each permit application, including application for permit modification, request for validation, application for permit renewal, draft permit and each final operating permit, modified permit and permit renewal.

B. Administrator's objection. No permit shall be issued or validated under this section if the administrator objects to its issuance in writing within forty-five (45) days after receipt of the draft permit, modified permit or permit renewal and all necessary supporting information.

C. Failure to respond to objection. If the permitting authority does not respond to

an objection of the administrator by transmitting a revised draft permit, modified permit or renewal permit within ninety (90) days after receipt of such objection, the administrator may issue or deny the permit, modified permit or permit renewal in accordance with the Act.

D. Public petitions for objection. If the administrator does not object to a proposed permit action, any person may petition the administrator to make an objection within sixty (60) days after expiration of the administrator's forty-five (45)-day review period.

(I) This petition may only be based on objections raised during the public review process, unless the petitioner demonstrates that it was impracticable to raise objection during the public review period (including when the grounds for objection arose after that period).

(II) If the administrator responds to a petition filed under this section by issuing an objection, the permitting authority will not issue the permit until the objection has been resolved. If the permit was issued after the administrator's forty-five (45)-day review period, and prior to any objection by the administrator, the permitting authority shall treat that objection as if the administrator were reopening the permit for cause. In these circumstances, the petition to the administrator does not stay the effectiveness of the issued permit, and the permittee shall not be in violation of the requirement to have submitted a complete and timely permit application.

2. Affected state review.

A. Notice of draft actions. The permitting authority will give notice of each draft permit, modified permit and renewed permit to any affected state on or before the time that the permitting authority provides notice to the public, except in the case of minor permit modifications. Affected states may comment on the draft permit action during the period allowed for public comment, as shall be set forth in a notice to affected states.

B. Refusal to accept recommendations. If the permitting authority refuses to accept all recommendations for a proposed permit action that any affected state has submitted during the review period, the permitting authority shall notify the administrator and the affected state in writing of its reasons for not accepting the recommendations.

(7) Public Participation. Except for proposed modifications qualifying for the minor permit modification procedures, all permit proceedings, including initial permit issuance, signif-

icant permit modifications and permit renewals, shall be conducted in accordance with the procedures for public participation in this section (7).

(A) Drafts for Public Comment and Public Notice. After receipt of an application for a permit, significant permit modification or permit renewal and no later than sixty (60) days before the deadline for issuance of a permit, significant permit modification or permit renewal for the administrator's review, the permitting authority shall issue a draft permit and solicit comment from the applicant, affected states and the public as follows:

1. The permitting authority shall provide notice to the public by—

A. Making available in at least one (1) location in the area in which the installation is located a public file containing copies of all materials that the applicant has submitted other than those granted confidential treatment, copies of the preliminary determination and draft permit, modified permit or permit renewal, and a copy or summary of other materials, if any, considered in making the preliminary permit determination;

B. Publishing, by advertisement in at least one (1) newspaper of general circulation in the area in which the installation is located, a notice of the application, the preliminary permit determination, the location of the public file, the procedures for submitting written comments and for requesting a public hearing, and the date, time and location for a public hearing if one is to be held.

2. Copies of the notice required shall be sent to the applicant and to the representatives of affected states designated by those states to receive the notices.

(B) Public Notice. The public notice shall establish a period of not less than thirty (30) days following publication of the notice for the submission of written comments, and shall identify the affected installation, the name and address of the applicant or permittee, the name and address of a permitting authority representative with responsibility for the permitting action, the activity(ies) involved in the permit action, the emissions change involved in any permit modification and the location of the public file.

(C) Public Hearing Opportunity. The permitting authority shall hold an informal public hearing on the draft permit, modified permit or permit renewal if—

1. A timely request is made for such a hearing during the public comment period; and

2. The person requesting the hearing identifies material issues concerning the preliminary permit determination and the permitting authority determines that a public

hearing will be useful in resolving those issues.

(D) Time of Public Hearing. Any public hearing held under this section shall be held no earlier than the thirty-first day following publication of the public notice and no later than the thirtieth day preceding the deadline for the draft permit, modified permit or permit renewal under this section.

(E) Scope of Public Hearing. The permitting authority may limit participation at the public hearing to issues raised in written comments submitted during the public comment period. The officer conducting the hearing, as appropriate, may impose additional limitations, including time restrictions.

(F) Applicant's Opportunity to Respond to Comments. The applicant shall be afforded an opportunity to submit, within ten (10) days following the close of the public comment period or the public hearing, whichever is later, a response to any comments made.

(G) Consideration of Comments Received. The permitting authority shall consider all comments submitted by the applicant, the public and affected states in reaching its final determination and issuing the proposed permit, modified permit or permit renewal for the administrator's review. The permitting authority shall maintain a list of all commenters and a summary of the issues raised and shall make that information available in the public file and supply it to the administrator upon request.

(H) Written Response to Comments. At the time a draft permit, modified permit or permit renewal is proposed for the administrator's review, the permitting authority shall issue a written response to all comments submitted by affected states and all significant comments submitted by the applicant and the public. Copies of this written response shall be provided to the administrator, affected states and the applicant and a copy shall be placed in the public file.

*AUTHORITY: section 643.050, RSMo 2000.\* Original rule filed Sept. 2, 1993, effective May 9, 1994. Amended: Filed June 5, 1995, effective Jan. 30, 1996. Amended: Filed Oct. 3, 1995, effective June 30, 1996. Amended: Filed Aug. 14, 1997, effective April 30, 1998. Amended: Filed Sept. 22, 1999, effective May 30, 2000. Amended: Filed Sept. 4, 2001, effective May 30, 2002.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

**10 CSR 10-6.070 New Source Performance Regulations**

*PURPOSE: This rule establishes acceptable design and performance criteria for specified new or modified emission sources.*

*PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.*

(1) General.

(A) The provisions of 40 CFR part 60, as of December 31, 1999, shall apply and are adopted by reference as part of this rule.

(B) Exceptions to the adoption are as follows:

1. Sections 60.4, 60.9 and 60.10 of subpart A;
2. Subpart B in its entirety; and
3. Those provisions which are not delegable by United States Environmental Protection Agency (EPA). Examples of these are listed as follows:

A. Innovative Technology Waivers (for example, sections 60.47, 60.286 and 60.398);

B. Commercial Demonstration Permits (for example, section 60.45a);

C. Alternative or Equivalent Methods (for example, sections 60.8(b)(2), 60.8(b)(3), 60.11(e), 60.114(a), 60.195(b), 60.302(d)(3), 60.482-1(c)(2), 60.484, 60.493(b)(2)(i)(A), 60.496(a)(1), 60.592(c) and 60.623); and

D. National Consistency (for example, sections 60.332(a)(3) and 60.335(f)(1)).

(2) Term Substitutions. Certain terms used in 40 CFR part 60 refer to federal officers, agencies and publications. The following terms applicable to Missouri shall be substituted where appropriate for the delegable federal counterparts:

(A) Director shall be substituted for Administrator;

(B) Missouri Department of Natural Resources shall be substituted for EPA, EPA Regional Office or Environmental Protection Agency; and

(C) *Missouri Register* shall be substituted for *Federal Register*.

(3) More Restrictive Limitations to Apply. Where emission limitations, test procedure or other requirements found in both subsection (1)(A) of this rule and in another rule under Title 10 Division 10 of the CSR are applicable to an emission source, the more restrictive of each emission limitation, the more accurate test procedure or the more restrictive requirement shall be applied.

(4) Exceptions. Incinerators which are subject to Hazardous Waste Management Commission rule 40 CFR 264, subpart O as incorporated in 10 CSR 25-7.264 shall not be subjected to the requirements of this rule. The exemptions granted under 40 CFR 264.340(b) as incorporated in 10 CSR 25-7.264 are subject to this rule. All other applicable requirements of this chapter shall remain in effect as to the incinerators.

(5) Relation to 10 CSR 10-6.030 Sampling Methods for Air Pollution Sources. The sampling methods given in 40 CFR part 60, Appendix A and specified in 10 CSR 10-6.030 shall be effective as of the date in section (1) of this rule.

(6) Relation to 10 CSR 10-6.040 Reference Methods. The reference methods given in 40 CFR parts 50 and 53 and specified in 10 CSR 10-6.040(4) shall be effective as of the date in section (1) of this rule.

(7) The following are the New Source Performance Standards (NSPS) 40 CFR part 60 subparts that are adopted by reference in this rule. Individual source operations or installations in these categories are subject to this rule based on date of commencement of construction and other category specific parameters, as specified in the applicable subpart:

- “(D) Fossil-Fuel Fired Steam Generators;
  - (Da) Electric Utility Steam Generating Units;
  - (Db) Industrial-Commercial-Institutional Steam Generating Units;
  - (Dc) Small Industrial-Commercial-Institutional Steam Generating Units;
  - (E) Incinerators;
    - (Ea) Municipal Waste Combustors constructed after December 20, 1989, and on or before September 20, 1994;
    - (Eb) Municipal Waste Combustors constructed after September 20, 1994;
    - (Ec) Hospital/Medical/Infectious Waste Incinerators constructed after June 20, 1996;
    - (F) Portland Cement Plants;
    - (G) Nitric Acid Plants;
    - (H) Sulfuric Acid Plants;

- (I) Asphalt Concrete Plants;
- (J) Petroleum Refineries;
- (K) Storage Vessels for Petroleum Liquids after June 11, 1973;
  - (Ka) Storage Vessels for Petroleum Liquids;
  - (Kb) Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) after July 23, 1984;
  - (L) Secondary Lead Smelters;
  - (M) Secondary Brass and Bronze Production Plants;
  - (N) Primary Emissions from Basic Oxygen Process Furnaces;
  - (Na) Secondary Emissions from Basic Oxygen Process Steelmaking Facilities;
  - (O) Sewage Treatment Plants;
  - (P) Primary Copper Smelters;
  - (Q) Primary Zinc Smelters;
  - (R) Primary Lead Smelters;
  - (S) Primary Aluminum Reduction Plants;
  - (T) Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants;
  - (U) Phosphate Fertilizer Industry: Superphosphoric Acid Plants;
  - (V) Phosphate Fertilizer Industry: Diammonium Phosphate Plants;
  - (W) Phosphate Fertilizer Industry: Triple Superphosphate Plants;
  - (X) Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities;
  - (Y) Coal Preparation Plants;
  - (Z) Ferroalloy Production Facilities;
  - (AA) Steel Plants: Electric Arc Furnaces;
  - (AAa) Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels;
  - (BB) Kraft Pulp Mills;
  - (CC) Glass Manufacturing Plants;
  - (DD) Grain Elevators;
  - (EE) Surface Coating of Metal Furniture;”
  - “(GG) Stationary Gas Turbines;
  - (HH) Lime Manufacturing Plants;”
  - “(KK) Lead-Acid Battery Manufacturing Plants;
  - (LL) Metallic Mineral Processing Plants;
  - (MM) Automobile and Light-Duty Truck Surface Coating Operations;
  - (NN) Phosphate Rock Plants;”
  - “(PP) Ammonium Sulfate Manufacture;
  - (QQ) Graphic Arts Industry: Publication Rotogravure Printing;
  - (RR) Pressure Sensitive Tape and Label Surface Coating Operations;
  - (SS) Industrial Surface Coating: Large Appliances;
  - (TT) Metal Coil Surface Coating;
  - (UU) Asphalt Processing and Asphalt Roofing Manufacture;
  - (VV) Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry;



(WW) Beverage Can Surface Coating Industry;  
(XX) Bulk Gasoline Terminals;”  
“(AAA) New Residential Wood Heaters;  
(BBB) Rubber Tire Manufacturing Industry;”  
“(DDD) Polymer Manufacturing Industry;”  
“(FFF) Flexible Vinyl and Urethane Coating and Printing;  
(GGG) Equipment Leaks of VOC in Petroleum Refineries;  
(HHH) Synthetic Fiber Production Facilities;  
(III) VOC Emissions from SOCM I Air Oxidation Unit Processes;  
(JJJ) Petroleum Dry Cleaners;  
(KKK) Equipment Leaks of VOC From Onshore Natural Gas Processing Plants;  
(LLL) Onshore Natural Gas Processing—SO<sub>2</sub> Emissions;”  
“(NNN) VOC Emissions from SOCM I Distillation Operations;  
(OOO) Nonmetallic Mineral Processing Plants;  
(PPP) Wool Fiberglass Insulation Manufacturing Plants;  
(QQQ) VOC Emissions From Petroleum Refinery Wastewater Systems;  
(RRR) Synthetic Organic Chemical Manufacturing Reactor Processes;  
(SSS) Magnetic Tape Coating Facilities;  
(TTT) Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines;  
(UUU) Standards of Performance for Calciners and Dryers in Mineral Industries;  
(VVV) Polymeric Coating of Supporting Substrates Facilities; and  
(WWW) Municipal Solid Waste Landfills.”

*AUTHORITY: section 643.050, RSMo Supp. 1999.\* Original rule filed Dec. 10, 1979, effective April 11, 1980. Amended: Filed Feb. 9, 1981, effective July 11, 1981. Amended: Filed Dec. 10, 1981, effective June 11, 1982. Amended: Filed Dec. 15, 1982, effective May 12, 1983. Amended: Filed Jan. 12, 1983, effective June 11, 1983. Amended: Filed Feb. 14, 1984, effective July 12, 1984. Amended: Filed March 14, 1985, effective Aug. 26, 1985. Amended: Filed June 5, 1986, effective Sept. 26, 1986. Amended: Filed April 2, 1987, effective Aug. 27, 1987. Amended: Filed March 2, 1988, effective June 27, 1988. Amended: Filed June 6, 1989, effective Oct. 27, 1989. Amended: Filed March 31, 1992, effective Feb. 26, 1993. Amended: Filed March 25, 1993, effective Nov. 8, 1993. Amended: Filed June 30, 1994, effective Feb. 26, 1995. Amended: Filed Sept. 14, 1995,*

*effective May 30, 1996. Amended: Filed July 15, 1997, effective Feb. 28, 1998. Amended: Filed March 15, 1999, effective Oct. 30, 1999. Amended: Filed July 30, 1999, effective March 30, 2000. Amended: Filed May 15, 2000, effective Dec. 30, 2000.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

### 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations

*PURPOSE: This rule establishes emission control technology, performance criteria and work practices to achieve emission standards for sources that emit or have the potential to emit hazardous air pollutants.*

*PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.*

#### (1) General.

(A) The provisions of 40 CFR part 63 as of December 31, 1999, with the exception of those provisions which are not delegable by the United States Environmental Protection Agency (EPA) shall apply and are adopted by reference as part of this rule.

(B) In addition to complying with the provisions of this rule, affected sources may be required to obtain an operating permit pursuant to Title V of the Clean Air Act Amendments or 10 CSR 10-6.065.

(2) Term Substitutions. Certain terms used in 40 CFR part 63 refer to federal officers, agencies and publications. The following terms applicable to Missouri shall be substituted where appropriate for the delegable federal counterparts:

(A) Director shall be substituted for administrator;

(B) Missouri Department of Natural Resources shall be substituted for EPA, EPA regional office or Environmental Protection Agency; and

(C) Missouri Register shall be substituted for Federal Register.

(3) More Restrictive Limitations to Apply. Where emission limitations, test procedures or other requirements found in both subsection (1)(A) of this rule and in another rule under Title 10 Division 10 of the CSR are applicable to an emission source, the more restrictive emission limitation, the more accurate test procedure or the more restrictive requirement shall be applied.

(4) The following are the Maximum Achievable Control Technology (MACT) 40 CFR part 63 subparts that are adopted by reference in this rule. Individual source operations or installations in these categories are subject to this rule based on category specific parameters, as specified in the applicable subpart:

“(F) National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry;

(G) National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater;

(H) National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks;

(I) National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks;”

“(L) National Emission Standards for Coke Oven Batteries;

(M) National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities;

(N) National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks;

(O) Ethylene Oxide Emissions Standards for Sterilization Facilities;”

“(Q) National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers;

(R) National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations);

(S) National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry;

(T) National Emission Standards for Halogenated Solvent Cleaning;

(U) National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins;”

“(W) National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production;

(X) National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting;

(Y) National Emission Standards for Marine Tank Vessel Loading Operations;”

“(AA) National Emission Standards for Hazardous Air Pollutants From Phosphoric Acid Manufacturing Plants;

(BB) National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants;

(CC) National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries;

(DD) National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations;

(EE) National Emission Standards for Magnetic Tape Manufacturing Operations;”

“(GG) National Emission Standards for Aerospace Manufacturing and Rework Facilities;

(HH) National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities;

(II) National Emission Standards for Shipbuilding & Ship Repair (Surface Coating);

(JJ) National Emission Standards for Wood Furniture Manufacturing Operations;

(KK) National Emission Standards for the Printing and Publishing Industry;

(LL) National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants;”

“(OO) National Emission Standards for Tanks—Level 1;

(PP) National Emission Standards for Containers;

(QQ) National Emission Standards for Surface Impoundments;

(RR) National Emission Standards for Individual Drain Systems;

(SS) National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process;

(TT) National Emission Standards for Equipment Leaks—Control Level 1;

(UU) National Emission Standards for Equipment Leaks—Control Level 2 Standards;

(VV) National Emission Standards for Oil-Water Separators and Organic-Water Separators;

(WW) National Emission Standards for Storage Vessels (Tanks)—Control Level 2;”

“(YY) National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Available Control Technology Standards;”

“(CCC) National Emission Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants;

(DDD) National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production;

(EEE) National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors;”

“(GGG) National Emission Standards for Pharmaceuticals Production;

(HHH) National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities;

(III) National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production;

(JJJ) National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins;”

“(LLL) National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry;

(MMM) National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production;

(NNN) National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing;”

“(PPP) National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production;”

“(TTT) National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting;”

“(VVV) National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works;” and

“(XXX) National Emission Standards for Hazardous Air Pollutants for Ferrous Alloys Production: Ferromanganese and Silicomanganese.”

*AUTHORITY: section 643.050, RSMo Supp. 1999.\* Original rule filed May 1, 1996, effective Dec. 30, 1996. Amended: Filed April 14, 1998, effective Nov. 30, 1998. Amended: Filed March 15, 1999, effective Oct. 30, 1999. Amended: Filed July 30, 1999, effective March 30, 2000. Amended: Filed May 15, 2000, effective Dec. 30, 2000.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

**10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants**

*PURPOSE: This rule establishes emission standards and performance criteria for new or modified sources emitting hazardous air pollutants.*

*PUBLISHER’S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency’s headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.*

(1) General. The provisions of 40 CFR part 61, as of December 31, 1999, with the exception of sections 61.4, 61.16, 61.17, and subparts B, H, I, K, W, Q, R, T and those provisions which are not delegable by United States Environmental Protection Agency (EPA) shall apply and are adopted by reference as part of this rule. Authorities which may not be delegated include 40 CFR 61.04(b), 61.12(d)(1), 61.13(h)(1)(ii), 61.112(c), 61.164(a)(2), 61.164(a)(3), 61.172(b)(2)(ii)(B), 61.172(b)(2)(ii)(C), 61.174(a)(2), 61.174(a)(3), 61.242-1(c)(2), 61.244, and all authorities listed as not delegable in each subpart under Delegation of Authority.

(2) Term Substitutions. Certain terms used in 40 CFR part 61 refer to federal officers, agencies and publications. The following terms applicable to Missouri shall be substituted where appropriate for the delegable federal counterparts:

(A) Director shall be substituted for Administrator;

(B) Missouri Department of Natural Resources shall be substituted for EPA, EPA Regional Office or Environmental Protection Agency; and

(C) Missouri Register shall be substituted for Federal Register.

(3) The following are the National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR part 61 subparts that are adopted by reference in this rule. Individual sources, operations or installations in these categories are subject to this rule based on





date of commencement of construction and other category specific parameters, as specified in the applicable subpart:

“(C) National Emission Standard for Beryllium;

(D) National Emission Standard for Beryllium Rocket Motor Firing;

(E) National Emission Standard for Mercury;

(F) National Emission Standard for Vinyl Chloride;”

“(J) National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene;”

“(L) National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants;

(M) National Emission Standard for Asbestos;

(N) National Emission Standard for Inorganic Arsenic Emissions From Glass Manufacturing Plants;

(O) National Emission Standard for Inorganic Arsenic Emissions From Primary Copper Smelters;

(P) National Emission Standard for Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities;”

“(V) National Emission Standard for Equipment Leaks (Fugitive Emission Sources);”

“(Y) National Emission Standards for Benzene Emissions From Benzene Storage Vessels;”

“(BB) National Emission Standards for Benzene Emissions From Benzene Transfer Operations; and”

“(FF) National Emission Standard for Benzene Waste Operations.”

*AUTHORITY: section 643.050, RSMo Supp. 1999.\* Original rule filed Dec. 10, 1979, effective April 11, 1980. Amended: Filed Feb. 9, 1981, effective July 11, 1981. Amended: Filed Dec. 10, 1981, effective June 11, 1982. Amended: Filed Jan. 12, 1983, effective June 11, 1983. Amended: Filed Feb. 14, 1984, effective July 12, 1984. Amended: Filed June 4, 1985, effective Oct. 26, 1985. Amended: Filed June 5, 1986, effective Sept. 26, 1986. Amended: Filed Feb. 4, 1987, effective May 28, 1987. Amended: Filed April 2, 1987, effective Aug. 27, 1987. Amended: Filed March 2, 1988, effective June 27, 1988. Amended: Filed June 6, 1989, effective Oct. 27, 1989. Amended: Filed May 1, 1992, effective Feb. 26, 1993. Amended: Filed March 25, 1993, effective Nov. 8, 1993. Amended: Filed June 30, 1994, effective Feb. 26, 1995. Amended: Filed Sept. 14, 1995, effective May 30, 1996. Amended: Filed July*

*15, 1997, effective Feb. 28, 1998. Amended: Filed March 15, 1999, effective Oct. 30, 1999. Amended: Filed July 30, 1999, effective March 30, 2000. Amended: Filed May 15, 2000, effective Dec. 30, 2000.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

**10 CSR 10-6.090 Restriction of Emission of Fluorides From Primary Aluminum Reduction Installations**

*PURPOSE: This rule establishes the maximum allowable rate of primary (stack) emissions of total fluorides from primary aluminum reduction installations, except where New Source Performance Standards apply (as provided in 10 CSR 10-6.070). Fugitive emissions (those escaping the primary collection system) for installations of the type found in Missouri have been determined to be small, due to the efficiencies of the primary collection systems and are not otherwise regulated.*

(1) Application. This rule shall apply to primary (stack) emissions of total fluoride from potroom groups and anode bake plants within a primary aluminum reduction installation constructed before August 13, 1981.

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

(3) Maximum allowable emission of total fluorides. Primary (stack) emissions of total fluorides from any primary aluminum reduction installation shall not exceed 1.25 kilograms/metric ton (2.5 pounds/ton) of aluminum produced.

(4) Time Schedule for Compliance. All sources subject to this rule shall comply by the schedule set forth as follows:

Installation of air pollution control equipment completed	September 1, 1981;
Start-up period completed	December 1, 1981;
Compliance testing completed	December 31, 1981.

(5) Monitoring of Operations.

(A) The owner or operator of any primary aluminum reduction installation subject to the requirements of this rule shall maintain and operate weighing devices which can be used to monthly determine the weight of aluminum produced. The weighing devices shall have an accuracy of plus or minus five percent (±5%) over their operating range.

(B) The owner or operator of any affected primary aluminum reduction installation shall maintain a record of the daily production rates of aluminum. These records shall be retained by the owner or operator for a minimum of two (2) years.

(6) Performance Testing. Compliance with the requirements of this rule shall be determined as set forth in 10 CSR 10-6.030(13), Method 13A or 13B.

*AUTHORITY: section 643.050, RSMo Supp. 1992.\* Original rule filed March 11, 1981, effective Aug. 13, 1981.*

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

**10 CSR 10-6.100 Alternate Emission Limits**

*PURPOSE: This rule allows installations in ozone nonattainment areas to propose alternate means of achieving reductions of volatile organic compounds emissions to those prescribed in rules establishing volatile organic compounds limits. This rule allows greater flexibility and efficiency in attaining the ambient air quality standards.*

*PUBLISHER’S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency’s headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.*

(1) General Provisions.

(A) This rule applies to installations that emit volatile organic compounds (VOC) in the ozone nonattainment areas of the state.

(B) The owner or operator of an installation may propose alternate ways of meeting VOC emission limits required in 10 CSR 10-2-10 CSR 10-5. Proposals may treat several source operations within one (1) or more installations as being placed under a hypothetical dome with one (1) emission point. Emission levels within the dome may be increased and decreased so long as the total emissions from the hypothetical emission point do not increase and other requirements

of this rule are met. If an installation is controlling VOC emissions from a source operation for other reasons than to contribute to attainment of the ozone standard, for example, to prevent a nuisance or odor violation, it cannot increase those emissions through application of this rule.

(2) Application and Permit Procedures.

(A) Proposals for alternate emission limits shall be submitted on Alternate Emission Limits Permit application forms provided by the director.

(B) An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with this rule before alternate emission limits may become effective. The permit will contain all conditions necessary to assure that the involved source operations will operate in accordance with the alternate emission limits.

(3) Existing Compliance Schedules.

(A) Submission of an Alternate Emission Limits Permit application will not affect any existing obligation of an installation to comply with applicable state or local laws, rules and orders unless the director issues an order specifically extending a state compliance schedule.

(B) No alternate emission limits will be established for an installation which is presently subject to federal enforcement action unless the administrator approves the alternate emission limits and the schedule for meeting it.

(4) Computing Alternate Emission Limits. The total emission level that will be used to evaluate the effect of proposed decreases or increases of emissions at installations desiring alternate emission limits will be the sum of the lower emission level for each involved source operation calculated from the following:

(A) The actual production and emission information for the source operation reported by the installation which was used in the base year emission inventory to project attainment of the ozone standard in the state implementation plan; 1980 has been used as the base year in the St. Louis nonattainment area; 1977 has been used in the Kansas City area. If the source operation was not included in the base year inventory actual production and emission information will be used; or

(B) The allowable emission rate for each source operation involved in an application. The owners of source operations for which emission limits have not been established, but which emit either forty (40) tons per year or one hundred kilograms per day (100 kg/day)

of VOCs must agree to emission levels approved by the director to serve as the source operations' allowable emissions for the purpose of this analysis. The agreed-upon emission level will represent eighty-five percent (85%) control unless the applicant demonstrates that level of control to be beyond the effectiveness of reasonably available control technology (RACT).

(5) Criteria for Approval.

(A) An Alternate Emission Limits Permit application must demonstrate that the proposed control will not cause total emissions from the source operations to exceed the level of emissions determined in section (4).

(B) Applicants desiring to make use of emission reductions occurring at another installation must demonstrate that the emissions have occurred or will occur prior to the commencement of the alternate emission limit; and that the owner or operator of the installation from which emission reductions are obtained has entered a legally binding and enforceable agreement approved by the director or changed the installation's permit conditions to limit emissions of VOCs at the specified source operations to the levels and rates identified in the application.

(C) No alternate emission limit may be approved which allows a new or modified source operation to exceed New Source Performance Standards (NSPS) in 10 CSR 10-6.070 or 40 CFR part 60 or the requirement for lowest achievable emission rate (LAER) in 10 CSR 10-6.060(4)(A)2.

(D) No alternate emission limit may be approved which allows emissions of a hazardous pollutant from any source operation to exceed National Emission Standards for Hazardous Air Pollutants (NESHAPS) in 10 CSR 10-6.080 or 40 CFR part 61 or which allows emissions of a hazardous pollutant to increase for which a standard has not yet been promulgated.

(E) An application proposing an emission decrease from process curtailments or source operation shutdowns will not be approved if the proposed decrease will be negated by countervailing emission increases occurring at other installations in the same area in response to the applicant's process curtailment or shutdown.

(F) An application proposing to use emission reductions from the shutdown of an installation will not be approved. These reductions are available only to the owner of the shutdown installation for replacement purposes or to new or modified installations in the area as growth margin.

(G) An application proposing to make use of emission reductions which occurred prior

to applying for an alternate emission limit permit is subject to the following time constraints:

1. No application may be approved involving emission reductions which occurred prior to January 1, 1980 in the St. Louis metropolitan area or January 1, 1977 in the Kansas City metropolitan area unless the emission reductions were accounted for in the respective base year inventory as banked emission reduction credits;

2. For emission reductions which occurred between January 1, 1980 in St. Louis or January 1, 1977 in Kansas City and December 11, 1982, applications must be submitted within nine (9) months (September 11, 1983) after December 11, 1982 unless credit for the emission reductions is banked in accordance with 10 CSR 10-6.060(8)(D); and

3. For emission reductions which occur after the effective date (December 11, 1982), applications must be submitted within one (1) year of the emission decrease unless credit for the emission reductions is banked in accordance with 10 CSR 10-6.060(8)(D).

(H) No application may be approved which proposes to use emission reductions which previously have been used to offset emission increases as described in 10 CSR 10-6.060(8)(C) or to net against emission increases as discussed in the definitions of major modification and net emission increase in 10 CSR 10-6.020. Emission reductions used to create an alternate emission limit are likewise for the duration of the alternate emission limit not eligible to be banked, used for offset purposes or used to net against emission increases.

(I) An application must include an expeditious schedule of implementation that adheres as closely as possible to any compliance dates the source operation would otherwise be subject to.

(J) An application will be approved only if it is determined that the alternate emission limit will not interfere with attainment and maintenance of the ambient air quality standard or create any public nuisance.

(6) Quantification of Emission Reductions.

(A) In cases where the director determines that the emission reduction estimates made by the applicant are uncertain, the director may calculate alternative emission limitations based on other estimates.

(B) If necessary to quantify emission reductions to be used in an alternate emission limit, the director may require source tests, continuous monitors or any other acceptable means of measurement before and after reductions occur.

(C) To quantify emission reductions which have already occurred, the director will rely on the installation's emissions reported in the base year inventory used to project attainment of the ozone standard in the State Implementation Plan and the emission inventory taken the twelve (12) months following the reduction or if credits for the emission reductions were banked in accordance with 10 CSR 10-6.060(8)(D), the director will rely on the documentation provided at the time the credits were banked.

(7) Permanence of Emission Reductions. It shall be a violation of this rule for any person to operate an installation from which emission reductions were obtained so as to emit volatile organic compounds at levels greater than those identified in the agreement or permit conditions referred to in subsection (5)(B).

(8) New Control Requirements. If a new and more restrictive emission limitation applicable to any source operation included in an Alternate Emission Limits Permit is promulgated for the purpose of attaining and maintaining the ozone standard, the owner or operator of the installation who applied for the permit shall submit a new Alternate Emission Limits Permit application demonstrating that reductions in total emissions equal to or greater than the reduction required by the new emission limitations will occur on or before the final compliance date of the new rule. It will be a violation of this rule if the owner of an affected installation does not achieve the necessary reductions.

(9) Public Participation.

(A) After making a preliminary determination to approve an application, the director will cause a notice to be published in a newspaper of general circulation within the county in which the alternate emission units are proposed. The public notice shall describe the nature of the application including, with reasonable specificity, the following: name, address, phone number and representative of the agency issuing the public notice; name and address of the applicant; and the alternate emission limits. The public notice also shall include the director's preliminary determination to approve or approve with conditions. The notice shall state that any interested person may submit relevant information, materials and views to the director, in writing, for thirty (30) days after the date of publication of the notice. The notice shall further state that a copy of materials submitted by the applicant and used in making the preliminary determination, a copy of the preliminary

determination and a copy or summary of other materials, if any, considered in making the preliminary determination are available for public inspection at the Department of Natural Resources' regional office in the region in which the alternate emission limit would become effective, as well as at the Jefferson City central office of the air pollution control program;

(B) No later than the date public notice is published, the director shall make available to the public, until the end of the public comment period, at the regional office in the region in which the proposed emission limit would become effective as well as the air pollution control program office in Jefferson City, a copy of the preliminary determination and a copy or summary of other materials, if any, considered in making the preliminary determination;

(C) Within ten (10) days of a preliminary determination, the director shall send a copy of the public notice to the applicant and to officials and agencies having cognizance over the location where the alternate emission limit would occur as follows: local air pollution control agencies, the chief executives of the city and county where the alternate emission limit would become effective, any comprehensive regional land use planning agency and any state air program director whose lands may be affected by emissions from the installation;

(D) The director shall consider all written comments submitted within the time specified in the public notice in making a final decision on the approvability of the application. No later than ten (10) days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The director shall consider the applicant's response in making a final decision. The director shall make all comments available for public inspection in the same locations where the director made available information at the time of public notice relating to the proposed emission limit. Further, the director shall prepare a written response to all comments and make it available at the locations referred to previously; and

(E) The director shall make a final determination whether the alternate emission limit application should be approved, approved with conditions or denied pursuant to this rule and notify the applicant in writing of the final determination and make notification available for public inspection at the same locations where the director made available information pertaining to the preliminary determination.

(10) Fee Schedule.

(A) Filing Fee. Each application will be accompanied by a one hundred dollar (\$100) filing fee.

(B) Permit Fee. One hundred ten dollars (\$110) per source operation due prior to the publication of public notice.

*AUTHORITY: section 643.050, RSMo Supp. 1992.\* Original rule filed June 14, 1982, effective Dec. 11, 1982.*

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

### 10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

*PURPOSE: This rule deals with submittal of emission information, emission fees and public availability of emission data. It provides procedures for collection, recording and submittal of emission data and process information on state-supplied Emission Inventory Questionnaire and Emission Statement forms, or in a format satisfactory to the director, so that the state can calculate emissions for the purpose of state air resource planning.*

*PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.*

(1) Applicability.

(A) This rule applies to any installation that: is required to obtain a permit under 10 CSR 10-6.060 or 10 CSR 10-6.065, is required to file an Emission Inventory Questionnaire (EIQ) as outlined in the Reporting Frequency table in subsection (2)(E), or is required by the staff director to prove its potential emissions are below *de minimis* levels.

(B) An emission statement is required of facilities if the actual emission of either nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs) or carbon monoxide (CO) are equal to or greater than ten (10) tons annual-

ly. Emission statement (Form 2.0Z) requirements in this rule are applicable only to sources located in nonattainment areas.

(2) Record Keeping and Reporting Requirements.

(A) The owner or operator of an installation that is a source of any air contaminant shall collect, record and maintain, during each calendar year of operation—the time period and duration of emissions; the amounts of processed materials, fuels and solvents consumed; and the amounts of process materials, fuels and solvents stored in tanks and storage piles which emit any regulated air pollutant.

(B) The owner or operator of an installation subject to subsection (2)(A) of this rule shall file with the director, on the frequency specified in subsection (2)(E), reports containing the information specified in subsection (2)(A). The reports shall specify the type and location of all sources of regulated air pollutants and the amount of each type of regulated air pollutant at each location; the size and height of all emission outlets, stacks and vents; the processes employed, including all fuel combustion and incineration; the type of air pollution control equipment used at the installation; the capture efficiency and control efficiency of the air pollution control equipment, where applicable; and ozone season information (Form 2.0Z) from sources located in nonattainment areas. Capture efficiency shall be applicable to emission points which are controlled by air pollution control devices and are not fully enclosed. Capture efficiency is not applicable to fugitive dust. The department encourages facilities to perform tests to determine capture efficiency. Industrial ventilation principles and engineering calculations may be used if testing is physically impossible or cost prohibitive. If testing or engineering calculation is not possible, then a default value of fifty percent (50%) capture efficiency may be used. Documentation verifying the capture efficiency shall be included with the EIQ. The owner or operator may submit a report containing information of a different nature provided the information submitted is adequate for the purposes of air quality planning and fee assessment and is approved by the director. Information submitted shall be reduced by the director to emission data as defined in 10 CSR 10-6.210(3)(B)2.

(C) The reports required by subsections (2)(B) and (2)(D) of this rule shall be completed on state supplied EIQ forms or in a form satisfactory to the director and shall be submitted to the director within ninety (90) days after the end of each reporting period.

After the effective date of this rule, any revision to the EIQ forms will be presented to the regulated community for a forty-five (45)-day comment period. The reporting periods for an installation, as determined by the reporting frequency specified in subsection (2)(E), shall end on December 31 of each calendar year. Sources allowed to file reports once every five (5) years shall submit the EIQ on the same schedule as the operating permit renewal application. Each report shall contain the information required by subsection (2)(B) for each air contaminant source at the installation for the twelve (12)-month period immediately preceding the end of the reporting period, in addition to the information required under subsection (2)(A) to be collected, recorded and maintained during each year of operation of the installation.

(D) For sources located in nonattainment areas, an emission statement is required if the actual emission of either nitrogen oxides ( $\text{NO}_x$ ), volatile organic compounds (VOCs) or carbon monoxide (CO) are equal to or greater than ten (10) tons annually. Emissions of each pollutant shall be reported if a facility meets the ten (10) ton threshold for any of the three (3). Emissions statement reporting requirements shall be completed on state supplied EIQ forms and include the information required at subsection (2)(B) of this rule and ozone season information for VOC,  $\text{NO}_x$  and CO emissions and any other criteria pollutant requested by the director. After the effective date of this rule, any revision to the EIQ forms will be presented to the regulated community for a forty-five (45)-day comment period. Emission statements shall be submitted in accordance with the schedule in subsection (2)(E) of this rule.

(E) The reports required by subsections (2)(B) and (D) of this rule shall be filed on the following frequency:



Reporting Frequency

Installation Classification	Emission Inventory Questionnaire	
	Nonattainment Area	All Other
1. Any installation required to obtain a Part 70, Intermediate or Basic State Operating Permit under 10 CSR 10-6.065.	Annually	Annually
2. Any installation required to obtain a construction permit under 10 CSR 10-6.060, but not an operating permit.	Once every five years	Once every five years
3. Any installation required to submit an EIQ by the director.	Within 45 days of request	Within 45 days of request
4. Any installation whose actual emissions of VOC, NO <sub>x</sub> or CO are equal to or greater than ten (10) tons/year.	Annually, an emission statement is required	Exempt, no emission statement required

  

(F) All data collected and recorded in accordance with the provisions of this rule shall be retained by the owner or operator for not less than five (5) years after the end of the calendar year in which the data was collected and all these records shall be made available to the director upon his/her request.

(3) Specific Report Required. The director may require the owner or operator of an installation to submit compound specific emission rates when the information submitted pursuant to subsection (2)(C) of this rule does not provide sufficient information to determine whether specific compounds from the installation may cause a threat to public health or welfare.

(4) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.

(5) Emission Fees.  
 (A) Any air contaminant source required to obtain a permit under sections 643.010–643.190, RSMo, except sources that produce charcoal from wood, shall pay an annual emission fee, regardless of their EIQ reporting frequency, of twenty-five dollars and seventy cents (\$25.70) per ton of regulated air pollutant emitted during calendar year 2001 in accordance with the conditions specified in subsection (5)(B) of this rule. Sources which are required to file reports once every five (5) years may use the information in their most recent EIQ to determine their annual emission fee.  
 (B) General Requirements.

1. The fee shall apply to the first four thousand (4,000) tons of each regulated air pollutant emitted. However, no air contaminant source shall be required to pay fees on total emissions of regulated air pollutants in excess of twelve thousand (12,000) tons in any calendar year. A permitted air contaminant source which emitted less than one (1) ton of all regulated pollutants shall pay a fee equal to the amount of one (1) ton.

2. The fee shall be based on the information provided in the facility's EIQ.

3. An air contaminant source which pays emissions fees to a holder of a certificate of authority issued pursuant to section 643.140, RSMo, may deduct those fees from the emission fee due under this section.

4. The fee imposed under subsection (5)(A) of this rule shall not apply to carbon oxide emissions.

5. The fees shall be due April 1 each year for emissions produced during the previous calendar year.

6. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire form or equivalent approved by the director.

7. For the purpose of determining the amount of air contaminant emissions on which the fees are assessed, a facility shall be considered one (1) source under the definition of section 643.078.2, RSMo, except that a facility with multiple operating permits shall pay emission fees separately for air contaminants emitted under each individual permit.

(C) Fee Collection. The annual changes to this rule to establish emission fees for a specific year do not relieve any source from the payment of emission fees for any previous year.

(6) Emission Calculation and Verification.  
 (A) Emission Calculation. All sources shall use the following hierarchy as a guide in determining the most desirable emission data to report to the department. If data is not available for an emission estimation method or an emission estimation method is impractical for a source, then the subsequent emission estimation method should be used in its place:

1. Continuous Emission Monitoring System (CEMS) as specified in paragraph (6)(B)1. of this rule;
2. Stack tests as specified in paragraph (6)(B)2. of this rule;
3. Material/mass balance;
4. AP-42 (Environmental Protection Agency (EPA) *Compilation of Air Pollution Emission Factors*) or FIRE (Factor Information and Retrieval System) (as updated);
5. Other EPA documents as specified in paragraph (6)(B)3. of this rule;
6. Sound engineering calculations; or
7. Facilities shall obtain department pre-approval of emission estimation methods other than those listed in paragraphs (6)(A)1.–6. of this rule before using any such method to estimate emissions in the submission of an EIQ. The department will approve or deny requests by December 31 if submitted in writing by September 1.

(B) Emission Verification. The director reserves the authority to review and approve all emission estimation methods used to calculate emissions for the purpose of filing an EIQ for accuracy, reliability and appropriateness. Inappropriate usage of an emission factor or method shall include, but is not limited to: using emission factors not representative of a process, using equipment in a manner other than that for which it was designed for in calculating emissions, or using a less accurate emission estimation method for a

process when a facility has more accurate emission data available. Additional requirements for the use of a specific emission estimation method include:

1. Continuous Emission Monitoring System (CEMS).

A. CEMS must be shown to have met applicable performance specifications during the period for which data is being presented.

B. CEMS data must be presented in the units which the system was designed to measure. Additional data sets used to extrapolate CEMS data must have equal or better reliability for such extrapolation to be acceptable.

C. When using CEMS data to estimate emissions, the data must include all parameters (i.e. emission rate, gas flow rate, etc.) necessary to accurately determine the emissions. CEMS data which does not include all the necessary parameters must be reviewed and approved by the director or local air pollution control authority before it may be used to estimate emissions;

2. Stack tests.

A. Stack tests must be conducted on the specific equipment for which the stack test results are used to estimate emissions.

B. Stack tests must be conducted according to the methods cited in 10 CSR 10-6.030, unless an alternative method has been approved in advance by the director or local air pollution control authority.

C. Stack tests will not be accepted unless the choice of test sites and a detailed test plan have been approved in advance by the director or local air pollution control authority.

D. Stack tests will not be accepted unless the director or local air pollution control authority has been notified of test dates at least thirty (30) days in advance and thus provided the opportunity to observe the testing. This thirty (30)-day notification may be reduced or waived on a case-by-case basis by the director or local air pollution control authority.

E. Stack test results which do not meet all the criteria of subparagraphs (6)(B)2.A.–D. of this rule may be acceptable for estimating emissions, but must be submitted for review and approval by the director or local air pollution control authority on a case-by-case basis; and

3. EPA documents. Other EPA documents may be used to estimate emissions if the emission factors are more appropriate or source specific than AP-42 or FIRE. Newly developed EPA emission factors must be published by December 31 of the year for which the facility is submitting an EIQ.

(7) Emission Fee Auditing/Adjustment.

(A) The department may conduct on-site detailed reviews (audits) of EIQs and supporting documentation as the director deems necessary.

(B) The department may make emission fee adjustments when—

1. Clerical or arithmetic errors have been made;

2. Submitted documentation is not supported by inspections or audits;

3. Emissions estimates are modified as a result of emission verification or audits;

4. Credit has been incorrectly applied for an emissions fee paid to a local air pollution control agency; or

5. The department shall not be limited by paragraphs (7)(B)1.–4. in making emission fee adjustments.

(8) Request for Additional Fees and Emission Fee Refunds.

(A) A maximum two (2)-year review period, beginning on the date received, shall exist for all EIQ submissions. If an EIQ review indicates that additional emission fees are required, the department will notify the source in writing and request that additional fees be paid within forty-five (45) days. The notification shall state the reason for the additional fees and the amount due. If after forty-five (45) days the additional fees have not been paid, then enforcement action may be taken against the source to recover the additional fees.

(B) Emission Fee Refunds. Overpayment of emission fees shall be refunded to the source. The refund shall be accompanied by a letter stating the reason for the refund and the amount refunded. There shall be a two (2)-year time limit, beginning on the date the EIQ is received, for emission fee refunds. Refunds on EIQs exceeding the two (2)-year time limit shall only be considered upon written request by the source and if approved by the director.

*AUTHORITY: section 643.050, RSMo 2000.\* Original rule filed June 13, 1984, effective Nov. 12, 1984. Amended: Filed April 2, 1987, effective Aug. 27, 1987. Amended: Filed May 14, 1993, effective Jan. 31, 1994. Amended: Filed Sept. 2, 1993, effective May 9, 1994. Amended: Filed May 15, 1995, effective Dec. 30, 1995. Amended: Filed May 15, 1997, effective Dec. 30, 1997. Amended: Filed May 12, 1998, effective Dec. 30, 1998. Amended: Filed May 14, 1999, effective Dec. 30, 1999. Amended: Filed April 6, 2000, effective Nov. 30, 2000. Amended: Filed June 1, 2001, effective Dec. 30, 2001.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

**10 CSR 10-6.120 Restriction of Emissions of Lead From Specific Lead Smelter-Refinery Installations**

*PURPOSE: This rule establishes maximum allowable rates of emissions of lead from stacks in specific lead-smelter installations, except where New Source Performance Standards apply (as provided in 10 CSR 10-6.070). It also provides for the operation and maintenance of equipment and procedures specific to controlling lead emissions to the ambient air, both from stacks and from the fugitive emissions that escape stack collection systems at these installations.*

(1) General Provisions.

(A) Application. This rule shall apply to existing installations in Missouri engaged in specific smelting and refining for the production of lead.

(B) Operation and Maintenance of Lead Emissions Control Equipment and Procedures. The owner or operator of any specific lead smelter shall operate and maintain all lead emissions control equipment and perform all procedures as required by this rule.

(C) Methods of Measurement of Lead Emissions.

1. The method of determining the concentration of visible emissions from stack sources shall be as specified in 10 CSR 10-6.030(9).

2. The method of measuring lead in stack gases shall be the sampling method as specified in 10 CSR 10-6.030(12).

3. The method of quantifying the determination of compliance with the emission limitations from stacks in this rule shall be as follows:

A. Three (3)-stack samplings shall be planned to be conducted for any one (1) stack within a twenty-four (24)-hour period in accordance with paragraph (1)(C)2. If this cannot be done due to weather, operating or other preventative conditions that develop during the twenty-four (24)-hour period, then the remaining samplings may be conducted in a reasonable time determined by the director following the twenty-four (24)-hour period;

B. Each stack sample shall have a sampling time of at least one (1) hour;

C. The process(es) producing the emissions to that stack being tested shall be operating at a minimum of ninety percent (90%) of capacity of the process(es) for the full duration of the samplings; and

D. The emission rate to be used for compliance determination shall be quantified by using the following formula:

$$E_c = T \text{ avg lbs per hour} \times 24 \text{ hours} = \text{lbs per 24 hours}$$



Where:

Ec = 24-hour emission rate extrapolated from stack sampling results used for compliance determination; and

T avg = Summation of hourly emission rates of three (3) stack sampling results, divided by three (3) for the average hourly rate.

4. The method of measuring lead in the ambient atmosphere shall be the reference method as specified in 10 CSR 10-6.040(4)(G).

(D) Operational Malfunction.

1. The owner or operator shall maintain a file which identifies the date and time of any significant malfunction of plant process operations or of emission control equipment which results in increased lead emissions. The file also shall contain a description of any corrective action taken, including the date and time. 10 CSR 10-6.050 Start-Up, Shutdown and Malfunction Conditions shall apply.

2. All of these files relating to operational malfunction shall be retained for a minimum of two (2) years and, upon request, shall be made available to the director.

(2) Provisions Pertaining to Limitations of Lead Emissions from Specific Installations.

(A) Doe Run Primary Lead Smelter-Refinery at Glover, Missouri.

1. This installation shall limit lead emissions into the atmosphere to the allowable amount as shown in Table IA.

Table IA

Stack Names	Emissions Limitation (lbs per 24 hours)
Main Ventilation	184.2
Baghouse	125.4
Blast Furnace	82.3

2. Fugitive lead emissions from lead production processes.

A. This installation shall limit production of lead from processes that emit lead to the ambient air to the allowable amount as shown in Table IB and Table IC.

Table IB

Process Name	Throughput (tons per calendar quarter)
Sinter Plant—Material across Sinter Machine	202,000
Blast Furnace—Lead Bearing Material	75,000

Table IC

Process Name	Throughput (tons per day)
Sinter Plant—Material across Sinter Machine	3120

B. Record Keeping. The operator shall keep records of daily process throughput corresponding with the processes in Table IB in subparagraph (2)(A)2.A. These records shall be maintained on-site for at least three (3) years and made available upon request of the director.

(B) Doe Run Primary Lead Smelter-Refinery in Herculaneum, Missouri. This installation shall limit lead emissions into the atmosphere to the allowable amount as shown in Table II.

Table II

Stack Name	Emissions Limitation (lbs per 24 hours)
Main Stack Number 7 & 9	794.0
Baghouse Stack Number 8 Baghouse Stack	56.6 8.2

(C) Doe Run Lead Smelter-Refinery near Buick, Missouri. The following applies to Doe Run's 1998 and ongoing lead producing operations at this installation.

1. Lead emissions from stacks. This installation shall limit lead emissions into the atmosphere to the allowable amount as shown in Table III.

Table III

Stack Name	Emissions Limitation (lbs per 24 hours)
Main Stack	540.0

2. Fugitive lead emissions from lead production processes. This installation shall limit production from processes that emit lead to the ambient air to the allowable amount as shown in Table IV.

Table IV

Process Name	Throughput (tons per day)
Blast Furnace	1000 Charge
Reverb Furnace	360 Charge
Rotary Melt Refinery	240 Charge 648 Lead Cast

3. Record keeping. The operator shall keep records of daily process throughput corresponding with the processes in Table IV in subparagraph (2)(C)2. of this rule. These records shall be maintained on-site for at least three (3) years and made available upon the request of the director.

(3) Provisions Pertaining to Limitations of Lead Emissions From Other Than Stacks at All Installations.

(A) The owner or operator shall control fugitive emissions of lead from all process and area sources at an installation by measures described in a work practice manual identified in subsection (3)(B). It shall be a

violation of this rule to fail to adhere to the requirements of these work practices.

(B) Work Practice Manual.

1. The owner or operator shall prepare, submit for approval and then implement a process and area-specific work practice manual that will apply to locations of fugitive lead emissions at the installation.

2. The manual shall be the method of determining compliance with the provisions of this section. Failure to adhere to the work practices in the manual shall be a violation of this rule.

3. Any change to the manual proposed by the owner or operator following the initial approval shall be requested in writing to the director. Any proposed change shall demonstrate that the change in the work practice will not lessen the effectiveness of the fugitive emission reductions for the work practice involved. Written approval by the director is required before any change becomes effective in the manual.

4. If the director determines a change in the work practice manual is necessary, the director will notify the owner or operator of that installation. The owner or operator shall revise the manual to reflect these changes and submit the revised manual within thirty (30) days of receipt of notification. These changes shall become effective following written approval of the revised manual by the director.

(C) Record Keeping.

1. The operator shall keep records and files generated by the work practice manual's implementation.

2. The work practice manual shall contain the requirement that records of inspections made by the operator of fugitive emissions control equipment such as hoods, air ducts and exhaust fans be maintained by the operator.

3. Records shall be kept for a minimum of two (2) years at the installation and shall be made available upon request of the director for purposes of determining compliance.

*AUTHORITY: sections 643.050 and 643.055, RSMo Supp. 1999.\* Original rule filed Aug. 4, 1988, effective Dec. 29, 1988. Amended: Filed Sept. 5, 1990, effective March 14, 1991. Amended: Filed March 4, 1993, effective Oct. 10, 1993. Amended: Filed Aug. 3, 1993, effective April 9, 1994. Amended: Filed Feb. 16, 1994, effective Aug. 28, 1994. Amended: Filed Nov. 14, 1995, effective June 30, 1996. Amended: Filed March 16, 1998, effective Oct. 30, 1998. Amended: Filed Aug. 11, 2000, effective March 30, 2001.*

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

**10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

*PURPOSE: This rule specifies the conditions that establish an air pollution alert, watch or emergency and the associated procedures and emissions reduction objectives for dealing with each.*

*PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.*

(1) General Provisions.

(A) This rule shall apply to all emissions from any source or from any premises.

(B) The boundaries of the affected area shall be determined at the discretion of the director in accordance with the nature and magnitude of the pollutant concentrations and meteorological conditions that cause the alert.

(2) Air Pollution Alerts.

(A) Alert levels are stated in terms of the Pollution Standards Index (PSI) as defined in the Code of Federal Regulations (CFR) part 58, Appendix G, for sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>) and Particulate Matter—10 Micron (PM<sub>10</sub>). Table A shows the relation of the PSI value to equivalent concentrations of air contaminants. All concentrations are measured in micrograms per cubic meter (µg/m<sup>3</sup>) and are averaged over the time period indicated.

**Table A—Concentration of Air Contaminants**

Alert Type	PSI Value	PM <sub>10</sub> 24 hr.	SO <sub>2</sub> 24 hr.	CO 8 hr.	O <sub>3</sub> 1 hr.	NO <sub>2</sub> 1 hr.
Yellow	200	350	800	17,000	400	1130
Red	300	420	1600	34,000	800	2260
Emergency	400	500	2100	46,000	1000	3000

(B) Alert Types and Levels of Initiation.

1. Yellow alert PSI value. Any one (1) of the contaminants listed in subsection (2)(A) reaching a concentration which results in a

PSI value of two hundred (200) shall initiate the yellow alert.

2. Red alert PSI value. Any one (1) of the contaminants listed in subsection (2)(A) reaching a concentration which results in a PSI value of three hundred (300) shall initiate the red alert.

3. Emergency alert PSI value. Any one (1) of the contaminants listed in subsection (2)(A) reaching a concentration which results in a PSI value of four hundred (400) shall initiate the emergency alert.

(C) The testing references for Missouri ambient air quality data are as specified in 10 CSR 10-6.040 Reference Methods.

(D) A yellow alert, red alert or emergency alert may be declared on the basis of deteriorating air quality alone; an air stagnation advisory need not be in effect. The appropriate episode status should be declared by the director as ambient monitoring would indicate.

(3) Yellow Alert.

(A) Yellow alert procedures shall be initiated by the director if the following conditions are met:

1. An air stagnation advisory is in effect;

2. The yellow alert PSI value is equalled or exceeded at any one (1) sampling station within the affected area, unless there is a current forecast of meteorological improvement within the next twenty-four (24) hours; and

3. Meteorological conditions are so that the pollutant concentrations can be expected to remain or reoccur at the previously mentioned levels during the next twenty-four (24) or more hours or increase unless control actions are taken.

(B) The following are yellow alert procedures:

1. All affected governmental control agencies shall be notified that yellow alert conditions exist and that coordination of action is required;

2. All hospitals within the affected area shall be notified that yellow alert conditions exist;

3. The frequency of air monitoring shall be increased at all sampling stations which are not continuous at intervals not exceeding one (1) hour, with continual hourly review at a central control location, if this equipment is available and it is deemed necessary by the director;

4. The general public shall be informed through the news media that a yellow alert exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiated the alert, individual abatement actions which will help alleviate the problem, and encourage those with respi-

ratory ailments or heart conditions to take the most appropriate and expedient precautions;

5. The director shall request very emphatically through the news media that all unnecessary use of automobiles be restricted and that all entertainment functions and facilities be closed;

6. Facilities which are sources of air contaminant emissions and are required to file approved alert plans with the director for yellow alert conditions shall initiate the plans upon notification by the director (see section (7)); and

7. No open burning will be allowed anywhere within the affected area.

(4) Red Alert.

(A) Red alert procedures shall be initiated by the director if the following conditions are met:

1. An air stagnation advisory is in effect; and

2. The red alert PSI value is equalled or exceeded at any one (1) monitoring station within the affected area.

(B) The red alert also can be initiated if—

1. The red alert PSI value is equalled or exceeded as the arithmetic mean for twelve (12) consecutive hours and an air stagnation advisory is in effect; or

2. The yellow alert PSI value is equalled or exceeded as the arithmetic mean for twenty-four (24) consecutive hours and a forecast of stagnation for the following twelve (12) hours is received.

(C) The following are red alert procedures:

1. All affected governmental control agencies shall be notified that red alert conditions exist and that coordination of action is required;

2. All hospitals within the affected area shall be notified that red alert conditions exist;

3. The frequency of air monitoring shall be increased, if necessary, at all sampling stations which are not continuous at intervals not exceeding one (1) hour with continual hourly review at a central control location;

4. The general public shall be informed through the news media that a red alert exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiate the alert, individual abatement actions which will help alleviate the problem and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions;

5. Airlines operating within the red alert area shall be notified that those conditions exist and that a reduction of flights out of the airport may be required;

6. Nonlocal vehicular traffic may be diverted around the red alert area depending upon which pollutant(s) caused the alert;



7. Local vehicular traffic, through the news media, shall be told to avoid certain areas and emphatically told to restrict nonessential trips;

8. All incineration and open burning shall cease throughout the area; and

9. Facilities which are sources of air contaminant emissions and are required to file approved alert plans with the director for red alert conditions shall initiate these plans upon notification by the director (see section (8)).

(5) Air Pollution Emergency Alert.

(A) Emergency alert procedures shall be initiated by the director, if the following conditions are met:

1. An air stagnation advisory is in effect; and

2. The air pollution emergency PSI value is equalled or exceeded at any one (1) monitoring station within the advisory area.

(B) The air pollution emergency procedures can also be initiated if—

1. The air pollution emergency PSI value is equalled or exceeded as the arithmetic mean of twelve (12) consecutive hours and a forecast of stagnation for the following twelve (12) hours is received;

2. The red alert PSI value is equalled or exceeded as the arithmetic mean for twenty-four (24) hours and a forecast of stagnation for the following twelve (12) hours is received; or

3. The yellow alert PSI value is equalled or exceeded as the arithmetic mean for thirty-six (36) hours and a forecast of stagnation for the following twelve (12) hours is received.

(C) The following are emergency alert procedures:

1. All affected governmental control agencies shall be notified that an emergency exists and that coordination of action is required;

2. All hospitals within the affected area shall be notified that an emergency exists and to be so prepared;

3. The frequency of air monitoring shall be increased, if necessary, at all sampling stations which are not continuous at intervals not exceeding one-half (1/2) hour with continual half-hour review at a central control location;

4. Open burning and incineration shall cease throughout the area;

5. Facilities which are sources of air contaminant emissions and are required to have filed approved plans with the director shall initiate these plans upon notification by the director or his/her representative that air pollution emergency conditions exist (see section (9));

6. The use of motor vehicles is prohibited except in emergencies with the approval of local or state police;

7. All manufacturing facilities except those listed in paragraph (5)(C)5. shall institute action that will result in maximum reduction of air contaminants from their operations by ceasing, curtailing or postponing operations to the extent possible without causing injury to persons or damage to equipment;

8. All airplane flights originating within the area of the air pollution emergency shall be cancelled;

9. All places of employment described as follows immediately shall cease operation during the air pollution emergency:

- A. Mining and quarrying;
- B. Contract construction work;
- C. Wholesale trade establishments;
- D. Schools and libraries;
- E. Governmental agencies except

those needed to administer air pollution alert program and other essential agencies determined by the director to be vital for public safety and welfare and needed to administer the provisions of this rule;

F. Retail trade stores except those dealing primarily in sale of food or pharmacies;

G. Banks, real estate agencies, insurance offices and similar business;

H. Laundries, cleaners and dryers, beauty and barber shops and photographic studios;

I. Amusement and recreational service establishments, such as motion picture theaters;

J. Automobile repair and automobile service garages; and

K. Advertising offices, consumer credit reporting, adjustment and collection agencies, printing and duplicating services, rental agencies and commercial testing laboratories; and

10. The general public shall be informed through the news media that an emergency alert exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiated the alert, individual abatement actions which will help alleviate the problem and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions.

(6) Termination of Alerts. When, in the judgment of the director, meteorological conditions and pollutant concentrations warrant discontinuance of any alert condition, the director shall notify the technical staff, the chairman and members of the Missouri Air Conservation Commission that the alert has been discontinued and issue a public notice to that effect.

(7) Yellow Alert Plan Objectives.

(A) Air Contaminant Source. Electric power generating facilities—requirements for plan.

1. Reduction of emission by utilization of fuels having low ash and sulfur content. Soot blowing and boiler lancing to be allowed only during periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.).

2. Reduction of emissions by diverting electric power generation to facilities outside of area for which the alert is called.

(B) Air Contaminant Source. Process steam generating facilities—requirements for plan.

1. Reduction of emissions by utilization of fuels having low ash and sulfur content. Soot blowing and boiler lancing to be allowed only during periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.).

2. Reduction of steam load demands consistent with continuing the operation of the plant.

(C) Air Contaminant Source. Manufacturing industries of the following Standard Industrial Classification Manual (SIC) group designations: paper and allied products industries, group 26; chemicals and allied products industries, group 28; petroleum refining and related industries, group 29; stone, glass, clay and concrete product industries, group 32; primary metal industries, group 33; and grain industries, group 20—requirements for plan.

1. Curtailing, postponing or deferring production and allied operations. Stopping all trade waste disposal practices which emit particles, gases, vapors or malodorous substances including incineration.

2. Reducing heat load demands for processing to a minimum.

(D) Air Contaminant Source. Other manufacturing facilities required to submit alert plans by the director—requirements for plan.

1. Reduction of air contaminant emissions by curtailing or deferring production and allied operations. Stopping of all trade waste disposal practices which emit particles, gases, vapors or malodorous substances including incineration.

2. Reduction of heat load demands for processing to a minimum.

(E) Air Contaminant Source. Private, public and commercial refuse disposal operations—requirement for plan. Stoppage of all open burning including disposal of trees and burning at fire-fighting schools, except as required for disposal of hazardous materials or other emergency needs. Operation of incinerators shall be limited to the hours between 10:00 a.m. and 2:00 p.m.

(F) Air Contaminant Source. Transportation—requirement for plan. The unnecessary operation of any motor vehicle should be restricted.

(8) Red Alert Plan Objectives. All yellow alert plans shall be continued. In addition, the following measurers shall be taken:

(A) Air Contaminant Source. Process steam generating facilities—requirements for plan.

1. Maximum reduction of air contaminant emissions by utilization of fuels having the lowest ash and sulfur content.

2. Maximum utilization of periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.) for soot blowing and boiler lancing. Prepare to implement the emergency plan submitted to the director;

(B) Air Contaminant Source. Manufacturing industries of the following SIC group designations: paper and allied products industries, group 26; chemical and allied products industries, group 28; petroleum refining and related industries, group 29; stone, glass, clay and concrete product industries, group 32; primary metals industries, group 33; and grain industries, group 20—requirements for plan.

1. Maximum reduction of air contaminant emissions by, if necessary, postponing production and allied operations.

2. Maximum reduction of heat load demands for processing. Prepare to implement the emergency plan submitted to the director;

(C) Air Contaminant Source. Other manufacturing facilities required to submit alert plans by the director—requirement for plan. Maximum reduction of air contaminant emissions, if necessary, by postponing production and allied operations;

(D) Air Contaminant Source. Private, public and commercial refuse disposal operations—requirement for plan. Stop operation of all incinerators; and

(E) Air Contaminant Source. Transportation—requirement for plan. Car pools and public transportation must be used in place of unnecessary motor vehicle operation.

(9) Air Pollution Emergency Plan Objectives. All yellow and red alert plans shall be continued. In addition, the following measures shall be taken:

(A) Air Contaminant Source. Process steam generating facilities—requirements for plan.

1. Maximum reduction of air contaminant emissions by reducing heat and steam load demands to values consistent with preventing equipment damage.

2. Maximum utilization of periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.) for soot blowing and boiler lancing;

(B) Air Contaminant Source. Manufacturing industries of the following SIC group designations: paper and allied products industries, group 26; chemicals and allied

products industries, group 28; petroleum refining and related industries, group 29; stone, glass, clay and concrete product industries, group 32; primary metals industries, group 33; and grain industries, group 20—requirement for plan. Elimination of air contaminant from the manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment;

(C) Air Contaminant Source. Other manufacturing facilities required to submit alert plans by the director—requirements for plan.

1. Elimination of air contaminant emissions from the manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.

2. Maximum reduction of heat load demands for processing;

(D) Air Contaminant Source. Private, public and commercial operations—requirement for plan. The following places of employment, if notified by the director, immediately shall cease operations: mining and quarrying operations; construction projects except as required to avoid emergent physical harm; manufacturing establishments except those required to have in force an air pollution alert plan; wholesale trade establishments; governmental units, except as required to implement the provisions of this rule and other operations essential to immediate protection of the public welfare and safety; retail trade and service establishments except pharmacies, food stores and other similar operations providing for emergency needs; other commercial service operations, such as those engaged in banking, insurance, real estate, advertising, and the like; educational institutions; and amusement and recreational facilities; and

(E) Air Contaminant Source. Transportation—requirement for plan. Motor vehicles shall only be used for private and public emergency needs.

*AUTHORITY: section 643.050, RSMo Supp. 1992.\* Original rule filed May 11, 1984, effective Oct. 11, 1984. Amended: Filed Jan. 5, 1988, effective April 28, 1988.*

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

**10 CSR 10-6.140 Restriction of Emissions Credit for Reduced Pollutant Concentrations From the Use of Dispersion Techniques**

*PURPOSE: This rule implements provisions of federal regulations which restrict credit in the calculation of emission limitations for*

*reduced pollutant concentrations due to the use of dispersion techniques.*

(1) Applicability. This rule shall apply to the procedures to account for emission dispersion techniques used in the calculation of any emission limitation or any revision of any limitation to be established by the director or to be considered for establishment by the Missouri Air Conservation Commission (MACC). This rule also requires that all emission limitations established by the director or by the MACC after December 31, 1970, be reviewed for compliance with this rule.

(2) General.

(A) The degree of emission limitation required of any installation for control of any air pollutant must not be affected by that portion of any installation's stack height that exceeds good engineering practice (GEP) or by any other dispersion technique, except as provided in section (3).

(B) Before the director or the MACC establishes an emission limitation that is based on a GEP stack height that exceeds the formula GEP height allowed by 10 CSR 10-6.020(2)(G)2.B., the director must notify the public of the availability of the demonstration study and must provide opportunity for public hearing on it.

(C) This rule does not restrict the actual stack height of any installation or the use of any dispersion technique by any installation.

(3) Exemptions. The provisions of section (2) shall not apply to emission limitation credits from—

(A) Stack heights on which construction commenced on or before December 31, 1970, except where pollutants are being emitted from the stacks by source operations which were constructed, or reconstructed or on which major modifications were carried out after December 31, 1970; or

(B) Dispersion techniques implemented before December 31, 1970, except where these dispersion techniques are being applied to source operations which were constructed, or reconstructed or on which major modifications were carried out after December 31, 1970.

*AUTHORITY: section 643.050, RSMo Supp. 1992.\* Original rule filed Jan. 6, 1986, effective May 11, 1986.*

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

### 10 CSR 10-6.150 Circumvention

*PURPOSE: This rule prohibits the installation or use of any device or means which conceals or dilutes an emission violating a rule.*

(1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceal or dilute an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

*AUTHORITY: section 643.050, RSMo Supp. 1992.\* This rule was previously filed as 10 CSR 10-2.090, 10 CSR 10-4.130 and 10 CSR 10-5.230. Original rule filed April 18, 1990, effective Nov. 30, 1990.*

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

### 10 CSR 10-6.160 Medical Waste and Solid Waste Incinerators

*Editor's Note: On March 29, 1993, the Circuit Court of Cole County found that 10 CSR 10-6.160 was void since it exceeds the statutory cost analysis requirements of sections 536.200 and 536.205, RSMo.*

### 10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

*PURPOSE: This rule restricts the emission of particulate matter to the ambient air beyond the premises of origin.*

(1) Restrictions to Limit Fugitive Particulate Matter Emissions. It shall be a violation of this regulation if, in the opinion of the staff director—

(A) Any person causes or allows to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director; or

(B) Any person causes or allows to occur any fugitive particulate matter emissions to

remain visible in the ambient air beyond the property line of origin.

(2) Should the director determine that non-compliance with section (1) has occurred at a location, the director may require reasonable control measures, as may be necessary. These measures may include, but are not limited to, the following:

A. Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;

B. Paving or frequent cleaning of roads, driveways and parking lots;

C. Application of dust-free surfaces;

D. Application of water; and

E. Planting and maintenance of vegetative ground cover.

(3) Exceptions. Section (1) shall not apply to the following:

(A) Those portions of unpaved public roads that are not designated as nonattainment areas for particulate matter;

(B) Agricultural operations including tilling, planting, cultivating or harvesting within a field, the moving of livestock on foot or the hauling of produce within the confines of a farm; and

(C) Driveways limited to residential use.

(4) The staff director may allow an exemption for unusual and adverse weather conditions for any activity which would otherwise be a violation of section (1). These conditions may include, but are not limited to, high winds, extended dry weather periods and extreme cold weather periods.

*AUTHORITY: section 643.050, RSMo Supp. 1997.\* Original rule filed March 5, 1990, effective Nov. 30, 1990. Amended: Filed March 18, 1996, effective Oct. 30, 1996. Amended: Filed Jan. 2, 1998, effective Aug. 30, 1998.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1995.*

### 10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

*PURPOSE: This rule provides that upon request any source shall complete, or have completed, tests of emissions or, at the option of the agency, make the source available for tests of emissions.*

(1) Responsible Persons to Have Tests Made. The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emis-

sion of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be conducted by reputable, qualified personnel. The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

(2) Director May Make Tests. The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

*AUTHORITY: section 643.050, RSMo Supp. 1992.\* Original rule filed Aug. 2, 1990, effective Dec. 31, 1990.*

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

### 10 CSR 10-6.190 Sewage Sludge and Industrial Waste Incinerators

*Editor's Note: On March 29, 1993 the Circuit Court of Cole County found that 10 CSR 10-6.190 was void since it exceeds the statutory cost analysis requirements of sections 536.200 and 536.205, RSMo.*

### 10 CSR 10-6.200 Hospital, Medical, Infectious Waste Incinerators

*PURPOSE: This rule establishes emission limits for existing hospital, medical, and infectious waste incinerators. The pollutants regulated include metals, particulate matter, acid gases, organic compounds, carbon monoxide, and opacity. This rule includes requirements for operator training and qualification, waste management, compliance and performance testing, monitoring, and reporting/record keeping.*

*PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The*

entire text of the rule is printed here. This note refers only to the incorporated by reference material.

(1) Applicability.

(A) Except as provided in subsection (1)(B) through (H) of this rule, this rule applies to each individual hospital or medical/infectious waste incinerator (HMIWI) for which construction was commenced on or before June 20, 1996.

(B) A combustor is not subject to this rule during periods when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned, provided the owner or operator of the combustor—

1. Notifies the director of an exemption claim; and
2. Keeps records on a calendar-quarter basis of the periods of time when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned.

(C) Any co-fired combustor is not subject to this rule if the owner or operator of the co-fired combustor—

1. Notifies the director of an exemption claim;
2. Provides an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels and/or wastes to be combusted; and
3. Keeps records on a calendar-quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor.

(D) Any combustor required to have a permit under section 3005 of the Solid Waste Disposal Act is not subject to this rule.

(E) Any combustor which meets the applicability requirements under subpart Cb, Ea, or Eb of 40 CFR part 60 is not subject to this rule.

(F) Any pyrolysis unit is not subject to this rule.

(G) Cement kilns firing hospital waste and/or medical/infectious waste are not subject to this rule.

(H) Physical or operational changes made to an existing HMIWI unit solely for the purpose of complying with this rule are not considered a modification and do not result in an existing HMIWI unit becoming subject to the provisions of 40 CFR part 60 subpart Ec.

(I) Beginning September 15, 2000, designated facilities subject to this rule shall operate pursuant to a permit issued under the permitting authorities operating permit program.

(2) Definitions.

(A) Batch HMIWI means an HMIWI that is designed such that neither waste charging

nor ash removal can occur during combustion.

(B) Biologicals means preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

(C) Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

(D) Chemotherapeutic waste means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

(E) Co-fired combustor means a unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, ten percent (10%) or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar-quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other wastes" when calculating the percentage of hospital waste and medical/infectious waste combusted.

(F) Continuous HMIWI means an HMIWI that is designed to allow waste charging and ash removal during combustion.

(G) Department means the Department of Natural Resources.

(H) Dioxins/furans means the combined emission of tetra- through octa-chlorinated dibenzo-para-dioxins and dibenzofurans.

(I) Director means the director of the Department of Natural Resources.

(J) Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gases in the HMIWI exhaust stream forming a dry powder material.

(K) Hospital means any facility which has an organized medical staff, maintains at least six (6) inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of twenty-four (24) hours per admissions. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision.

(L) Hospital/medical/infectious waste incinerator or HMIWI or HMIWI unit means

any device that combusts any amount of hospital waste and/or medical/infectious waste.

(M) Hospital waste means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

(N) Intermittent HMIWI means an HMIWI that is designed to allow waste charging, but not ash removal, during combustion.

(O) Large HMIWI means an HMIWI whose maximum design waste burning capacity is more than five hundred (500) pounds per hour, or a continuous or intermittent HMIWI whose maximum charge rate is more than five hundred (500) pounds per hour, or a batch HMIWI whose maximum charge rate is more than four thousand (4,000) pounds per day.

(P) Low-level radioactive waste means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or state standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

(Q) Maximum charge rate means for continuous and intermittent HMIWI, one hundred ten percent (110%) of the lowest three (3)-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits or for batch HMIWI, one hundred ten percent (110%) of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

(R) Maximum fabric filter inlet temperature means one hundred ten percent (110%) of the lowest three (3)-hour average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

(S) Maximum flue gas temperature means one hundred ten percent (110%) of the lowest three (3)-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the mercury (Hg) emission limit.

(T) Medical/infectious waste means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed in paragraphs (2)(T)1. through (2)(T)7. be-



low. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR part 261; household waste, as defined in 40 CFR part 261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in 40 CFR part 261.4(a)(1).

1. Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

2. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.

3. Human blood and blood products including:

- A. Liquid waste human blood;
- B. Products of blood;
- C. Items saturated and/or dripping with human blood; and
- D. Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category.

4. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

5. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals.

6. Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly communicable

diseases, or isolated animals known to be infected with highly communicable diseases.

7. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

(U) Medium HMIWI means an HMIWI whose maximum design waste burning capacity is more than two hundred (200) pounds per hour but less than or equal to five hundred (500) pounds per hour, or a continuous or intermittent HMIWI whose maximum charge rate is more than two hundred (200) pounds per hour but less than or equal to five hundred (500) pounds per hour, or a batch HMIWI whose maximum charge rate is more than one thousand six hundred (1,600) pounds per day but less than or equal to four thousand (4,000) pounds per day.

(V) Minimum dioxin/furan sorbent flow rate means ninety percent (90%) of the highest three (3)-hour average dioxin/furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

(W) Minimum Hg sorbent flow rate means ninety percent (90%) of the highest three (3)-hour average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the Hg emission limit.

(X) Minimum hydrogen chloride (HCl) sorbent flow rate means ninety percent (90%) of the highest three (3)-hour average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

(Y) Minimum horsepower or amperage means ninety percent (90%) of the highest three (3)-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limit.

(Z) Minimum pressure drop across the wet scrubber means ninety percent (90%) of the highest three (3)-hour average pressure drop across the wet scrubber particulate matter (PM) control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM emission limit.

(AA) Minimum scrubber liquor flow rate means ninety percent (90%) of the highest three (3)-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits.

(BB) Minimum scrubber liquor pH means ninety percent (90%) of the highest three (3)-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all HCl emission limits.

(CC) Minimum secondary chamber temperature means ninety percent (90%) of the highest three (3)-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, carbon monoxide (CO), or dioxin/furan emission limits.

(DD) Pathological waste means waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable).

(EE) Pyrolysis means the endothermic gasification of hospital waste and/or medical/infectious waste using external energy.

(FF) Small HMIWI means an HMIWI whose maximum design waste burning capacity is less than or equal to two hundred (200) pounds per hour, or a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to two hundred (200) pounds per hour, or a batch HMIWI whose maximum charge rate is less than or equal to one thousand six hundred (1,600) pounds per day.

(GG) Standard Metropolitan Statistical Area or SMSA means any areas listed in Office of Management and Budget Bulletin No. 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" date June 30, 1993 (incorporated by reference).

(HH) Wet scrubber means an add-on air pollution control device that utilizes an alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

### (3) General Provisions.

#### (A) Emission Limits.

1. On or after the date on which the initial performance test is completed or September 1, 2000, whichever date comes first, no owner or operator of an existing HMIWI shall cause to be discharged into the atmosphere from that HMIWI any gases that contain stack emissions in excess of the limits presented in Table 1 of this subsection, except as provided for in paragraph (3)(A)2. of this rule.

**TABLE 1. EMISSION LIMITS FOR SMALL, MEDIUM, AND LARGE HMIWI**

Pollutant	Units (7 percent oxygen, dry basis)	Emission limits		
		HMIWI size		
		Small	Medium	Large
Particulate matter	milligrams per dry standard cubic meter (grains per dry standard cubic foot)	115 (0.05)	69 (0.03)	34 (0.015)
Carbon monoxide	parts per million by volume	40	40	40
Dioxins/furans	nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	125 (55) 2.3 (1.0)	125 (55) 2.3 (1.0)	125 (55) 2.3 (1.0)
Hydrogen chloride	parts per million by volume or percent reduction	100 or 93 %	100 or 93 %	100 or 93 %
Sulfur dioxide	parts per million by volume	55	55	55
Nitrogen oxides	parts per million by volume	250	250	250
Lead	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	1.2 (0.52) or 70 %	1.2 (0.52) or 70 %	1.2 (0.52) or 70 %
Cadmium	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.16 (0.07) or 65 %	0.16 (0.07) or 65 %	0.16 (0.07) or 65 %
Mercury	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.55 (0.24) or 85 %	0.55 (0.24) or 85 %	0.55 (0.24) or 85 %

2. Small rural HMIWI located more than fifty (50) miles from the boundary of the nearest Standard Metropolitan Statistical Area and which burns less than two thousand (2,000) pounds per week of hospital waste and medical/infectious waste shall comply with the emission limits described in subparagraphs (3)(A)2.A. and B. of this rule. The two thousand (2,000) pounds per week limitation does not apply during performance tests.

A. On or after the date on which the initial equipment inspection is completed or September 1, 2000, whichever date comes

first, no owner or operator of an existing small rural HMIWI shall cause to be discharged into the atmosphere from that HMIWI any gases that contain stack emissions in excess of the limits presented in Table 2 of this subparagraph.



TABLE 2. EMISSION LIMITS FOR SMALL RURAL HMIWI

Pollutant	Units (7 percent oxygen, dry basis)	HMIWI Emission limits
Particulate matter	milligrams per dry standard cubic meter (grains per dry standard cubic foot)	197 (0.086)
Carbon monoxide	parts per million by volume	40
Dioxins/furans	nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	800 (350) or 15 (6.6)
Hydrogen chloride	parts per million by volume	3100
Sulfur dioxide	parts per million by volume	55
Nitrogen oxides	parts per million by volume	250
Lead	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	10 (4.4)
Cadmium	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	4 (1.7)
Mercury	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	7.5 (3.3)

B. On or after the date on which the initial inspection is completed or September 1, 2000, whichever date comes first, no owner or operator of an existing small rural HMIWI shall cause to be discharged into the atmosphere from the stack of that HMIWI any gases that exhibit greater than ten percent (10%) opacity (six (6)-minute block average).

3. On or after the date on which the initial performance test is completed or September 1, 2000, whichever date comes first, no owner or operator of an existing HMIWI shall cause to be discharged into the atmosphere from the stack of that HMIWI any gases that exhibit greater than ten percent (10%) opacity (six (6)-minute block average).

(B) Operator Training and Qualification Requirements.

1. No owner or operator of an existing HMIWI shall allow the HMIWI to operate at any time unless a fully trained and qualified

HMIWI operator is accessible, either at the facility or available within one (1) hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one (1) or more HMIWI operators.

2. Operator training and qualification shall be obtained by completing the requirements included in paragraphs (3)(B)3. through 7. of this rule.

3. Training shall be obtained by completing an HMIWI operator training course that includes, at a minimum, the following provisions:

A. Twenty-four (24) hours of training on the following subjects:

(I) Environmental concerns, including pathogen destruction and types of emissions;

(II) Basic combustion principles, including products of combustion;

(III) Operation of the type of incinerator to be used by the operator, including

proper startup, waste charging, and shutdown procedures;

(IV) Combustion controls and monitoring;

(V) Operation of air pollution control equipment and factors affecting performance (if applicable);

(VI) Methods to monitor pollutants and equipment calibration procedures (where applicable);

(VII) Inspection and maintenance of the HMIWI, air pollution control devices, and continuous emission monitoring systems;

(VIII) Actions to correct malfunctions or conditions that may lead to malfunction;

(IX) Bottom and fly ash characteristics and handling procedures;

(X) Applicable federal, state, and local regulations;

(XI) Work safety procedures;

(XII) Pre-startup inspections; and

(XIII) Record keeping requirements;

B. An examination designed and administered by the instructor; and

C. Reference material distributed to the attendees covering the course topics.

4. Qualifications shall be obtained by—

A. Completion of a training course that satisfies the criteria under paragraph (3)(B)3. of this rule; and

B. Either six (6) months experience as an HMIWI operator, six (6) months experience as a direct supervisor of an HMIWI operator, or completion of at least two (2) burn cycles under the observation of two (2) qualified HMIWI operators.

5. Qualification is valid from the date on which the examination is passed or the completion of the required experience, whichever is later.

6. To maintain qualification, the trained and qualified HMIWI operator shall complete and pass an annual review or refresher course of at least four (4) hours covering, at a minimum, the following:

A. Update of regulations;

B. Incinerator operation, including startup and shutdown procedures;

C. Inspection and maintenance;

D. Responses to malfunctions or conditions that may lead to malfunction; and

E. Discussion of operating problems encountered by attendees.

7. A lapsed qualification shall be renewed by one (1) of the following methods:

A. For a lapse of less than three (3) years, the HMIWI operator shall complete and pass a standard annual refresher course described in paragraph (3)(B)6. of this rule; or

B. For a lapse of three (3) years or more, the HMIWI operator shall complete and pass a training course with the minimum criteria described in paragraph (3)(B)3. of this rule.

8. The owner or operator of an HMIWI shall maintain documentation at the facility that address the following:

A. Summary of the applicable standards under this subpart;

B. Description of basic combustion theory applicable to an HMIWI;

C. Procedures for receiving, handling, and charging waste;

D. HMIWI startup, shutdown, and malfunction procedures;

E. Procedures for maintaining proper combustion air supply levels;

F. Procedures for operating the HMIWI and associated air pollution control systems within the standards established under this subpart;

G. Procedures for responding to periodic malfunction or conditions that may lead to malfunction;

H. Procedures for monitoring HMIWI emissions;

I. Reporting and record keeping procedures; and

J. Procedures for handling ash.

9. The owner or operator of an HMIWI shall establish a program for reviewing the information listed in paragraph (3)(B)8. of this rule annually with each HMIWI operator.

A. The initial review of the information listed in paragraph (3)(B)8. of this rule shall be conducted within six (6) months after the effective date of this rule or prior to assumption of responsibilities affecting HMIWI operation, whichever date is later.

B. Subsequent reviews of the information listed in paragraph (3)(B)8. of this rule shall be conducted annually.

10. The information listed in paragraph (3)(B)8. of this rule shall be kept in a readily accessible location for all HMIWI operators. This information, along with records of training shall be available for inspection by the department or its delegated enforcement agent upon request.

(C) Waste Management Plan. The owner or operator of an HMIWI shall prepare a waste management plan. The waste management plan shall identify both the feasibility and the approach to separate certain components of solid waste from the health care waste stream in order to reduce the amount of toxic emissions from incinerated waste. A waste management plan may include, but is not limited to, elements such as paper, cardboard, plastics, glass, battery, or metal recycling; or purchasing recycled or recyclable products. A waste management plan may include different goals or approaches for different areas or departments of the facility and need not include new waste management goals for every waste stream. It should identify, where possible, reasonably available additional waste management measures, taking into account the effectiveness of waste management measures already in place, the costs of additional measures, the emission reductions expected to be achieved, and any other environmental or energy impacts they might have. The American Hospital Association publication entitled *An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities* (incorporated by reference) shall be considered in the development of the waste management plan.

(D) Inspection Guidelines.

1. Each small rural HMIWI subject to the emission limits under paragraph (3)(A)2.

of this rule shall undergo an initial equipment inspection by September 1, 2000.

A. At a minimum, an inspection shall include the following:

(I) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation;

(II) Ensure proper adjustment of primary and secondary chamber combustion air;

(III) Inspect hinges and door latches;

(IV) Inspect dampers, fans and blowers for proper operation;

(V) Inspect HMIWI door and door gaskets for proper sealing;

(VI) Inspect motors for proper operation;

(VII) Inspect primary chamber refractory lining;

(VIII) Inspect incinerator shell for corrosion and/or hot spots;

(IX) Inspect secondary/tertiary chamber and stack;

(X) Inspect mechanical loader, including limit switches, for proper operation, if applicable;

(XI) Visually inspect waste bed (grates);

(XII) For the burn cycle that follows the inspection, document that the incinerator is operating properly;

(XIII) Inspect air pollution control devices for proper operation, if applicable;

(XIV) Inspect waste heat boiler systems to ensure proper operation, if applicable;

(XV) Inspect bypass stack components;

(XVI) Ensure proper calibration of thermocouples, sorbent feed systems and any other monitoring equipment; and

(XVII) Generally observe that the equipment is maintained in good operating condition.

B. Within ten (10) operating days following an equipment inspection all necessary repairs shall be completed unless the owner or operator obtains written approval from the department or local air pollution control authority establishing a date whereby all necessary repairs of the designated facility shall be completed.

2. Each small rural HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule shall undergo an equipment inspection annually (no more than twelve (12) months following the previous annual equipment inspection), as outlined in subparagraphs (3)(D)1.A. and B. of this rule.

(E) Compliance and Performance Testing.



1. The emission limits under this rule apply at all times except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical/infectious waste is charged to the HMIWI during startup, shutdown, or malfunction.

2. Except as provided in paragraph (3)(E)11. of this rule, the owner or operator of an HMIWI shall conduct an initial performance test to determine compliance with the emission limits using the procedures and test methods listed in subparagraphs (3)(E)2.A. through K. of this rule. The use of the bypass stack during a performance test shall invalidate the performance test.

A. All performance tests shall consist of a minimum of three (3) test runs conducted under representative operating conditions.

B. The minimum sample time shall be one (1) hour per test run unless otherwise indicated.

C. EPA Reference Method 1 of 40 CFR part 60, appendix A (incorporated by reference) shall be used to select the sampling location and number of traverse points.

D. EPA Reference Method 3 or 3A of 40 CFR part 60, appendix A (incorporated by reference) shall be used for gas composition analysis, including measurement of oxygen concentration. EPA Reference Method 3 or 3A shall be used simultaneously with each reference method.

E. The pollutant concentrations shall be adjusted to seven percent (7%) oxygen using the following equation:

$$C_{adj} = C_{meas} (20.9 - 7) / (20.9 - \% O_2)$$

where:

$C_{adj}$  = pollutant concentration adjusted to 7 percent oxygen

$C_{meas}$  = pollutant concentration measured on a dry basis

$(20.9 - 7)$  = 20.9 percent oxygen - 7 percent oxygen  
(defined oxygen correction basis)

20.9 = oxygen concentration in air, percent

$\% O_2$  = oxygen concentration measured on a dry basis, percent

F. EPA Reference Method 5 or 29 of 40 CFR part 60, appendix A (incorporated by reference) shall be used to measure the PM emissions.

G. EPA Reference Method 9 of 40 CFR part 60, appendix A (incorporated by reference) shall be used to measure stack opacity.

H. EPA Reference Method 10 or 10B of 40 CFR part 60, appendix A (incorporat-

ed by reference) shall be used to measure the CO emissions.

I. EPA Reference Method 23 of 40 CFR part 60, appendix A (incorporated by reference) shall be used to measure total dioxin/furan emissions. The minimum sample time shall be four (4) hours per test run. If the affected facility has selected the toxic equivalency standards for dioxin/furans the following procedures shall be used to determine compliance:

(I) Measure the concentration of each dioxin/furan tetra- through octa-congener emitted using EPA Reference Method 23;

(II) For each dioxin/furan congener measured in accordance with part (3)(E)2.I.(I) of this rule, multiply the congener concentration by its corresponding toxic equivalency factor specified in Table 3 of this part; and

TABLE 3. TOXIC EQUIVALENCY FACTORS

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.001

(III) Sum the products calculated in accordance with part (3)(E)2.I.(II) of this rule to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

J. EPA Reference Method 26 of 40 CFR part 60, appendix A (incorporated by reference) shall be used to measure HCl emissions. If the affected facility has selected the percentage reduction standards for HCl under section (3) of this rule, the percentage reduction in HCl emissions (%R<sub>HCl</sub>) is computed using the following formula:

$$(\%R_{HCl}) = \frac{(E_i - E_o)}{E_i} \times 100$$

where:

%R<sub>HCl</sub> = percentage reduction of HCl emission achieved

E<sub>i</sub> = HCl emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis)

E<sub>o</sub> = HCl emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis)

K. EPA Reference Method 29 shall be used to measure Lead (Pb), Cadmium (Cd), and Hg emissions. If the affected facility has selected the percentage reduction standards for metals under section (3) of this rule, the percentage reduction in emissions (%R<sub>metal</sub>) is computed using the following formula:

$$(\%R_{metal}) = \frac{(E_i - E_o)}{E_i} \times 100$$

where:

%R<sub>metal</sub> = percentage reduction of metal emission (Pb, Cd, or Hg) achieved

E<sub>i</sub> = metal emission concentration (Pb, Cd, or Hg) measured at the control device inlet, corrected to 7 percent oxygen (dry basis)

E<sub>o</sub> = metal emission concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent oxygen (dry basis)

3. Following the date on which the initial performance test is completed or September 1, 2000, whichever date comes first, the owner or operator of an affected facility shall—

A. Determine compliance with the opacity limit by conducting an annual performance test (no more than twelve (12) months following the previous performance test) using the applicable procedures and test

methods listed in paragraph (3)(E)2. of this rule;

B. Determine compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than twelve (12) months following the previous performance test) using the applicable procedures and test methods listed in paragraph (3)(E)2. of this rule. If all three (3) performance tests over a three (3)-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for the subsequent two (2) years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than thirty-six (36) months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for an additional two (2) years. If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a three (3)-year period indicate compliance with the emission limit. The use of the bypass stack during a performance test shall invalidate the performance test; and

C. Facilities using a Continuous Emission Monitoring System (CEMS) to demonstrate compliance with any of the emission limits under section (3) of this rule shall—

(I) Determine compliance with the appropriate emission limit(s) using a twelve (12)-hour rolling average, calculated each hour as the average of the previous twelve (12) operating hours (not including startup, shutdown, or malfunction); and

(II) Operate all CEMS in accordance with the applicable procedures under appendices B and F of 40 CFR part 60 (incorporated by reference).

4. The owner or operator of an affected facility equipped with a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and wet scrubber shall—

A. Establish the appropriate maximum and minimum operating parameters, indicated in Table 4 of this subparagraph for each control system, as site-specific operating parameters during the initial performance test to determine compliance with the emission limits; and

**TABLE 4. OPERATING PARAMETERS TO BE MONITORED AND MINIMUM MEASUREMENT AND RECORDING FREQUENCIES**

Operating parameters to be monitored	Minimum frequency		Control system		
	Data measurement	Data recording	Dry scrubber followed by fabric filter	Wet scrubber	Dry scrubber followed by fabric filter and wet scrubber
<b>MAXIMUM OPERATING PARAMETERS</b>					
Maximum charge rate	Continuous	1 per hour	✓	✓	✓
Maximum fabric filter inlet temperature	Continuous	1 per minute	✓		✓
Maximum flue gas temperature	Continuous	1 per minute		✓	✓
<b>MIMIMUM OPERATING PARAMETERS</b>					
Minimum secondary chamber temperature	continuous	1 per minute	✓	✓	✓
Minimum dioxin/furan sorbent flow rate	hourly	1 per hour	✓		✓
Minimum HCl sorbent flow rate	hourly	1 per hour	✓		✓
Minimum mercury (Hg) sorbent flow rate	hourly	1 per hour	✓		✓
Minimum pressure drop across the wet scrubber or minimum horsepower or amperage to wet scrubber	continuous	1 per minute		✓	✓
Minimum scrubber liquor flow rate	continuous	1 per minute		✓	✓
Minimum scrubber liquor pH	continuous	1 per minute		✓	✓

B. Following the date on which the initial performance test is completed or September 1, 2000, whichever date comes first, ensure that the affected facility does not operate above any of the applicable maximum operating parameters or below any of the applicable minimum operating parameters listed in Table 4 and measured as three (3)-hour rolling averages (calculated each hour as the average of the previous three (3) operating hours) at all times except during periods of startup, shutdown and malfunction. Operating parameter limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating parameter(s) shall constitute a violation of established operating parameter(s).

5. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a dry scrubber followed by a fabric filter—

A. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;

B. Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit;

C. Operation of the affected facility above the maximum charge rate and below the minimum HCl sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;

D. Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or

E. Use of the bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emission limits.

6. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a wet scrubber—

A. Operation of the affected facility above the maximum charge rate and below the minimum pressure drop across the wet scrubber or below the minimum horsepower or amperage to the system (each measured on a three (3)-hour rolling average) simultane-

ously shall constitute a violation of the PM emission limit;

B. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;

C. Operation of the affected facility above the maximum charge rate, below the minimum secondary temperature, and below the minimum scrubber liquor flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit;

D. Operation of the affected facility above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;

E. Operation of the affected facility above the maximum flue gas temperature and above the maximum charge rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or

F. Use of the bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emission limits.

7. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a dry scrubber followed by a fabric filter and a wet scrubber—

A. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;

B. Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit;

C. Operation of the affected facility above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;

D. Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or

E. Use of the bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emission limits.

8. The owner or operator of an affected facility may conduct a repeat performance test within thirty (30) days of violation of applicable operating parameter(s) to demonstrate that the affected facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph shall be conducted using the identical operating parameters that indicated a violation under paragraphs (3)(E)5., 6., or 7. of this rule.

9. The owner or operator of an affected facility using an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under section (3) of this rule shall petition the administrator for other site-specific operating parameters to be established during the initial performance test and continuously monitored thereafter. The owner or operator shall not conduct the initial performance test until after the petition has been approved by the administrator.

10. The owner or operator of an affected facility may conduct a repeat performance test at any time to establish new values for the operating parameters. The department may request a repeat performance test at any time.

11. Small rural HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule shall meet the following compliance and performance testing requirements:

A. Conduct the performance testing requirements in paragraph (3)(E)1., subparagraphs (3)(E)2.A. through I., (3)(E)2.K. (Hg only), and (3)(E)3.A. of this rule. The two thousand (2,000) pound per week limitation does not apply during performance tests;

B. Establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits;

C. Following the date on which the initial performance test is completed or September 1, 2000, whichever date comes first, ensure that the designated facility does not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three (3)-hour rolling averages (calculated as the average of the previous three (3) operating hours) at all times except during periods of startup, shutdown and malfunction. Operating parameter limits do not apply during performance tests.

Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s);

D. Except as provided in subparagraph (3)(E)11.E. of this rule, operation of the designated facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the PM, CO, and dioxin/furan emission limits; and

E. The owner or operator of a designated facility may conduct a repeat performance test within thirty (30) days of the violation of applicable operating parameter(s) to demonstrate that the designated facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph must be conducted using the identical operating parameters that indicated a violation under subparagraph (3)(E)11.D. of this rule.

(F) Monitoring Requirements.

1. Except as provided for under paragraph (3)(F)5. of this rule, the owner or operator of an HMIWI shall install, calibrate (to manufacturers' specification), maintain, and operate devices (or establish methods) for monitoring the applicable maximum and minimum operating parameters listed in Table 4 of subparagraph (3)(E)4.A. of this rule such that these devices (or methods) measure and record values for these operating parameters at the frequency indicated in Table 4 of subparagraph (3)(E)4.A. at all times except during periods of startup and shutdown.

2. The owner or operator of an HMIWI shall install, calibrate (to manufacturers' specifications), maintain and operate a device or method for measuring the use of the bypass stack including date, time, and duration.

3. The owner or operator of an HMIWI using something other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under section (3) of this rule shall install, calibrate (to manufacturers' specifications), maintain, and operate the equipment necessary to monitor the site-specific operating parameters developed pursuant to paragraph (3)(E)9. of this rule.

4. The owner or operator of an HMIWI shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for seventy-five percent (75%) of the operating hours per day

for ninety percent (90%) of the operating days per calendar quarter that the HMIWI is combusting hospital waste and/or medical/infectious waste.

5. Small rural HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule shall meet the following monitoring requirements:

A. Install, calibrate (to manufacturers' specification), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation;

B. Install, calibrate (to manufacturers' specification), maintain, and operate a device that automatically measures and records the date, time, and weight of each charge fed into the HMIWI; and

C. The owner or operator of a designated facility shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for seventy-five percent (75%) of the operating hours per day for ninety percent (90%) of the operating days per calendar quarter that the designated facility is combusting hospital waste and/or medical/infectious waste.

(4) Reporting and Record Keeping.

(A) Except as provided for under subsection (4)(F) of this rule, the owner or operator of an HMIWI shall maintain the following information (as applicable) for a period of at least five (5) years:

1. Calendar date of each record;

2. Records of the following data:

A. Concentrations of any pollutant listed in section (3) of this rule or measurements of opacity as determined by the continuous emission monitoring system (if applicable);

B. HMIWI charge dates, times, and weights and hourly charge rates;

C. Fabric filter inlet temperatures during each minute of operation, as applicable;

D. Amount and type of dioxin/furan sorbent used during each hour of operation, as applicable;

E. Amount and type of Hg sorbent used during each hour of operation, as applicable;

F. Amount and type of HCl sorbent used during each hour of operation, as applicable;

G. Secondary chamber temperatures recorded during each minute of operation;

H. Liquor flow rate to the wet scrubber inlet during each minute of operation, as applicable;

I. Horsepower or amperage to the wet scrubber during each minute of operation, as applicable;

J. Pressure drop across the wet scrubber system during each minute of operation, as applicable;

K. Temperature at the outlet from the wet scrubber during each minute of operation, as applicable;

L. pH of the scrubber liquor at the inlet to the wet scrubber during each minute of operation, as applicable;

M. Records indicating use of the bypass stack, including dates, times, and durations; and

N. For HMIWI complying with paragraph (3)(E)9. and paragraph (3)(F)3. of this rule, the owner or operator shall maintain all operating parameter data collected;

3. Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (4)(A)2. of this rule have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken;

4. Identification of calendar days, times and durations of malfunctions, a description of the malfunction and the corrective action taken;

5. Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (4)(A)2. of this rule exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken;

6. The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating parameters, as applicable;

7. Records showing the names of HMIWI operators who have completed review of the information in paragraph (3)(B)8. of this rule as required by paragraph (3)(B)9. of this rule, including the date of the initial review and all subsequent annual reviews;

8. Records showing the names of the HMIWI operators who have completed the operator training requirements, including documentation of training and the dates of the training;

9. Records showing the names of the HMIWI operators who have met the criteria for qualification under subsection (3)(B) of

this rule and the dates of their qualification; and

10. Records of calibration of any monitoring devices as required under paragraphs (3)(F)1., 2., and 3. of this rule.

(B) The owner or operator of an HMIWI shall submit to the department the information specified in paragraphs (4)(B)1. through 3. of this rule no later than sixty (60) days following the initial performance test. All reports shall be signed by the facilities manager.

1. The initial performance test data as recorded under subparagraphs (3)(E)2.A. through K. of this rule, as applicable.

2. The values for the site-specific operating parameters established pursuant to paragraph (3)(E)4. or 9. of this rule, as applicable.

3. The waste management plan as specified in subsection (3)(C) of this rule.

(C) An annual report shall be submitted to the department one (1) year following the submission of the information in subsection (4)(B) of this rule and subsequent reports shall be submitted no more than twelve (12) months following the previous report (once the unit is subject to permitting requirements under Title V of the Clean Air Act, the owner or operator of an affected facility must submit these reports semiannually). The annual report shall include the information specified in paragraphs (4)(C)1. through 8. of this rule. All reports shall be signed by the facilities manager.

1. The values for the site-specific operating parameters established pursuant to paragraph (3)(E)4. or 9. of this rule, as applicable.

2. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the calendar year being reported, pursuant to paragraph (3)(E)4. or 9. of this rule, as applicable.

3. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each operating parameter recorded pursuant to paragraph (3)(E)4. or 9. of this rule for the calendar year preceding the year being reported, in order to provide the department with a summary of the performance of the affected facility over a two (2)-year period.

4. Any information recorded under paragraphs (4)(A)3. through 5. of this rule for the calendar year being reported.

5. Any information recorded under paragraphs (4)(A)3. through 5. of this rule for the calendar year preceding the year being reported, in order to provide the department

with a summary of the performance of the affected facility over a two (2)-year period.

6. If a performance test was conducted during the reporting period, the results of that test.

7. If no exceedances or malfunctions were reported under paragraphs (4)(A)3. through 5. of this rule for the calendar year being reported, a statement that no exceedances occurred during the reporting period.

8. Any use of the bypass stack, the duration, reason for malfunction, and corrective action taken.

(D) The owner or operator of an HMIWI shall submit to the department semiannual reports containing any information recorded under paragraphs (4)(A)3. through 5. of this rule no later than sixty (60) days following the reporting period. The first semiannual reporting period ends six (6) months following the submission of information in subsection (4)(B) of this rule. Subsequent reports shall be submitted to the department no later than six (6) calendar months following the previous report. All reports shall be signed by the facilities manager.

(E) All records specified under subsection (4)(A) of this rule shall be maintained on-site in either paper copy or computer-readable format, unless an alternative format is approved by the department.

(F) The owner or operator of a small rural HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule shall—

1. Maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within ten (10) days of an inspection or the time frame established by the inspector; and

2. Submit an annual report to the department containing information recorded under paragraph (4)(F)1. of this rule no later than sixty (60) days following the year in which data were collected. Subsequent reports shall be sent no later than twelve (12) calendar months following the previous report (once the unit is subject to permitting requirements under Title V of the Clean Air Act, the owner or operator must submit these reports semiannually). The report shall be signed by the facilities manager.

(5) Test Methods. Test methods can be found in subparagraphs (3)(E)2.A. through (3)(E)2.K. of this rule.

*AUTHORITY: section 643.050, RSMo Supp. 1999.\* Original rule filed Dec. 1, 1998, effective July 30, 1999. Amended: Filed Oct. 13, 2000, effective July 30, 2001.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

#### 10 CSR 10-6.210 Confidential Information

*PURPOSE: This rule provides procedures and conditions for handling confidential information.*

(1) Application. This rule shall apply to all business information requested to be designated confidential by the Missouri Air Conservation Commission. This rule shall not apply to emission data included in the information that shall not be entitled to confidential treatment, as provided by section 643.050.4, RSMo.

(2) General. Any information submitted pursuant to this rule or other rules of the Missouri Air Conservation Commission that contains, or from which could be derived, confidential business information, shall be kept confidential by the commission and employees and agents of the Department of Natural Resources if a timely request for confidentiality is made by the person submitting the information.

(3) Definitions.

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

(B) Additional definitions specific to this rule are as follows:

1. Confidential business information—Secret processes, secret methods of manufacture or production, trade secrets and other information possessed by a business that, under existing legal concepts, the business has a right to preserve as confidential, and to limit its use by not disclosing it to others in order that the business may obtain or retain business advantages it derives from its rights in the information; and

2. Emission data—

A. The identity, amount, frequency, concentration or other characteristics (related to air quality) of any air contaminant which—

(I) Has been emitted from an emission unit;

(II) Results from any emission by the emissions unit;

(III) Under an applicable standard or limitation, the emissions unit was authorized to emit; or

(IV) Is a combination of any of the parts (3)(B)2.A.(I), (II) or (III) of this rule;

B. The name, address (or description of the location) and the nature of the emissions unit necessary to identify the emission units including, a description of the device, equipment, or operation constituting the emissions unit; and

C. The results of any emission testing or monitoring required to be reported under this rule or other rules of the commission.

(4) Procedures.

(A) An owner or operator who wishes to claim confidentiality for any information submitted pursuant to this rule or other rules of the commission shall submit a claim of confidentiality within ten (10) working days following the time the information is submitted. Failure to submit a claim of confidentiality within the required time shall result in a waiver of any claim to confidentiality.

(B) The claim of confidentiality shall be accompanied by a justification that the information is entitled to confidential treatment.

(C) Upon receipt of a timely claim of confidentiality, the director shall evaluate the claim and inform the owner or operator that the claim has been granted, or that a preliminary decision has been made to deny the claim in whole or in part. Until that time in which the claim is reviewed it shall be held in confidence.

(D) The owner or operator shall have fifteen (15) working days from the receipt of the preliminary decision to deny the claim in which to submit further justification or comments to the director. The director shall inform the owner or operator of his/her final decision on whether the claim will be denied in whole or in part within ten (10) working days.

(E) The owner or operator may appeal to the commission from the director's final decision to deny a claim of confidentiality in whole or part by filing a notice of appeal with the staff director within twenty (20) working days after receipt of the director's final decision. Upon the timely filing of a notice of appeal, the confidentiality of the information shall be preserved until the entry of a final order by the commission.

(F) If the commission's final decision is to deny the claim of confidentiality in whole or in part, the director shall treat the information as subject to public disclosure unless the owner or operator files a timely action for judicial review pursuant to section 536.110, RSMo. If a timely action for judicial review is filed, the confidentiality of the information shall be preserved until adjudication of the matter upon judicial review.

(G) A claim of confidentiality under this rule shall be granted if—

1. The owner or operator has asserted a business confidentiality claim that has not expired by its terms, been waived or withdrawn;

2. The owner or operator has satisfactorily shown that it has taken reasonable mea-

asures to protect the confidentiality of the information and that it intends to continue to take those measures;

3. The information is not, and has not been, reasonably obtained without the owner's or operator's consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on a showing of special needs in a judicial or quasi-judicial proceeding);

4. No statute specifically requires public disclosure of the information;

5. The information is not emission data; and

6. The owner or operator has satisfactorily shown that public disclosure of the information—

A. Is likely to cause substantial harm to the business' competitive position; or

B. Was voluntarily submitted and its disclosure would be likely to impair the director's ability to obtain necessary information in the future. Information is voluntarily submitted if the director has no statutory, regulatory or contractual authority to obtain some benefit or avoid some disadvantage under the Missouri Air Conservation Law and implementing rules (for example, information required to obtain a permit or other approval is submitted to obtain a benefit from the Missouri Air Conservation Commission).

(5) Conditions for Any Disclosure.

(A) Public Request. Upon receipt of a request from a member of the public for release of any information submitted under a claim of confidentiality, and for which the claim has not been finally denied, the director shall inform both the person making the request and the owner or operator that the request for the information is denied or that a tentative decision has been made to release the information. A preliminary decision to release the information shall be treated in the same manner as a preliminary decision to deny a claim of confidentiality under subsections (4)(C)–(G) of this rule.

(B) Confidential and Public Information. If the information submitted under a claim of confidentiality contains both information which is entitled to confidential treatment and emission data or other information not entitled to confidential treatment, the director may take reasonable steps to segregate that information entitled to confidential treatment from that subject to public disclosure. These steps may include, without limitation, photocopying for the public file only portions of the submitted information or applying techniques that would result in confidential information being blacked out in the photocopying process. If information entitled to confidentiality cannot reasonably be separated from

emission data, all the information must be treated as subject to public disclosure.

(C) Public Release. The director and his/her designees shall not release to the public, or place in the public file, any information for which a timely claim of confidentiality has been made until the procedures under subsections (4)(C)–(G) and (5)(A) of this rule have been observed.

(D) Disclosure to Local Agencies. Information submitted under a claim of confidentiality, and where the claim has not been finally denied, may be disclosed to local air pollution control agencies if—

1. The owner or operator is given prior notice fifteen (15) working days in which to obtain an order from a court of competent jurisdiction restraining or enjoining the disclosure to the local agency, and if no such order is obtained, or obtained and later dissolved; or

2. The local agency has ordinances or regulations respecting the treatment of confidential business information that is equivalent to this rule, the director provides notice to the owner or operator that the information is being disclosed to the local agency, and the director informs the local agency that the information is subject to a claim of confidentiality.

(E) Disclosure to Administrator. Information submitted under a claim of confidentiality, and the claim has not been finally denied, may be disclosed to the administrator provided the administrator agrees, pursuant to 40 CFR 2.215, that the information will be kept confidential.

(F) Subpoenas for Confidential Information. The director shall respond to subpoenas and discovery requests for information submitted under a claim of confidentiality, if the claim has not been finally denied, in a manner that is designed to preserve the claim of confidentiality until a confidentiality determination is made by a court or other tribunal of competent jurisdiction.

*AUTHORITY: section 643.050, RSMo Supp. 1992.\* Original rule filed Sept. 2, 1993, effective May 9, 1994.*

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

**10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants**

*PURPOSE: This rule specifies the maximum allowable opacity of visible air contaminant emissions, unless specifically exempt or regulated by 10 CSR 10-6.070 and requires the use of continuous opacity monitor systems (COMS) on certain air contaminant sources.*



(1) Applicability. This rule applies to all sources of visible emissions throughout the state of Missouri with the exception of the following:

(A) Internal combustion engines except as provided in rules 10 CSR 10-2.080 and 10 CSR 10-5.180;

(B) Wood burning stoves or fireplaces used for heating;

(C) Fires used for recreational or ceremonial purposes or fires used for the noncommercial preparation of food by barbecuing;

(D) Fires used solely for the purpose of fire-fighter training;

(E) Smoke generating devices when a required permit (under 10 CSR 10-6.060 or 10 CSR 10-6.065) has been issued or a written determination that a permit is not required has been obtained;

(F) The pyrolysis of wood for the production of charcoal in batch-type charcoal kilns (Emissions from batch-type charcoal kilns shall comply with the requirements of 10 CSR 10-6.330 Restriction of Emissions From Batch-Type Charcoal Emissions);

(G) Truck dumping of nonmetallic minerals into any screening operation, feed hopper or crusher;

(H) Emission sources regulated by 40 CFR part 60 and 10 CSR 10-6.070;

(I) Any open burning that is exempt from applicable open burning rules 10 CSR 10-2.100, 10 CSR 10-3.030, 10 CSR 10-4.090 and 10 CSR 10-5.070; and

(J) Incinerators used to burn refuse in the outstate area of Missouri.

(2) Definitions.

(A) Capacity factor—Ratio (expressed as a percentage) of a power generating unit's actual annual electric output (expressed in Mwe hr) divided by the unit's nameplate capacity multiplied by 8,760 hours.

(B) Continuous Opacity Monitoring System (COMS)—All equipment required to continuously measure and record the opacity of emissions within a stack or duct. Continuous Opacity Monitoring Systems consist of sample interface, analyzer and data recorder components and usually include, at a minimum: transmissometers, transmissometer control equipment, and data transmission, acquisition, and recording equipment.

(C) Opacity—The extent to which airborne material obstructs the transmission of incident light and obscures the visual background. Opacity is stated as a percentage of light obstructed and can be measured by a continuous opacity monitoring system or a trained observer. An opacity of one hundred percent (100%) represents a condition in

which no light is transmitted, and the background is completely obscured.

(D) Outstate area—Any area throughout the state except the City of St. Louis and St. Charles, St. Louis, Jefferson, Franklin, Clay, Cass, Buchanan, Ray, Jackson, Platte and Greene Counties.

(E) Six-minute period—A three hundred sixty (360) consecutive second time interval. Six-minute block averages per 40 CFR part 60, Performance Specification 1 shall be utilized for COMS data.

(F) Smoke generating device—A specialized piece of equipment which is not an integral part of a commercial, industrial or manufacturing process and whose sole purpose is the creation and dispersion of fine solid or liquid particles in a gaseous medium.

(G) Source—Any part or activity of an installation that emits or has the potential to emit any regulated air pollutant.

(H) Definitions of certain terms specified in this rule, other than those specified in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

(A) Maximum Visible Emissions Limitations. Unless specified otherwise in this rule, no owner or other person shall cause or permit to be discharged into the atmosphere from any source, not exempted under this rule, any visible emissions greater than the limitations in the following table:

Area of State	Visible Emission Limitations	
	Existing Sources	New Sources
Kansas City Metropolitan Area	20%	20%
St. Louis Metropolitan Area	20%*	20%
Springfield-Greene County Area	40%	20%
Outstate Area	40%	20%

\*Exception: Existing sources in the St. Louis metropolitan area that are not incinerators and emit less than twenty-five (25) lbs/hr of particulate matter shall be limited to forty percent (40%) opacity

(B) Visible Emissions Limitations, Exceptions Allowed In One Six-Minute Period. The visible emissions limitations in the following table shall be allowed for a period not aggregating more than one six-minute period in any sixty (60) minutes:

Area of State	Visible Emission Limitations, Exceptions	
	Existing Sources	New Sources
Kansas City Metropolitan Area	60%**	60%**
St. Louis Metropolitan Area	40%	40%
Springfield-Greene County Area	60%**	60%**
Outstate Area	60%	60%

\*\*This exception does not apply to existing and new incinerators in the Kansas City metropolitan area and Springfield-Greene County.

metropolitan area and Springfield-Greene County.

(C) Visible emissions over the limitations shown in subsection (3)(B) of this rule are in violation of this rule unless the director determines that the excess emissions do not warrant enforcement action based on data submitted under 10 CSR 10-6.050 Start-Up, Shutdown and Malfunction Conditions.

(D) Failure to meet the requirements of subsection (3)(A) solely because of the presence of uncombined water shall not be a violation of this rule.

(E) The following emission sources shall have COMS installed, calibrated, maintained and operated in accordance with 40 CFR part 60, Performance Specification 1:

1. Coal-fired steam generating units with maximum heat input rate greater than two hundred fifty (250) million British thermal units (Btus)/hour. Exemption: Coal-fired steam generating units that have an annual boiler capacity factor of thirty percent (30%) or less are exempt from this requirement;

2. Portland cement calcining kiln operations; and

3. Sources that require COMS under 10 CSR 10-6.070 New Source Performance Regulations.

(F) All sources that do not fall under the requirements of subsection (3)(E) of this rule shall have the opacity of visible emissions determined by one of the methods in section (5) of this rule.

(G) Compliance Determination. Compliance for any source to which this rule applies shall be determined from opacity measurements taken in accordance with subsection (3)(E) or (3)(F) of this rule. If a COMS is malfunctioning, a non-department qualified observer measurement may be used as a temporary substitute. If opacity measurements taken by a non-department qualified observer differ from visual measurements taken by a qualified department observer, the qualified department observer's opacity measurements shall be used to determine compliance.

(H) Continuous Opacity Monitoring Systems (COMS) General Requirements.

1. Source operating time includes any time fuel is being combusted and/or a fan is being operated.

2. Cycling time. Cycling times include the total time a monitoring system requires to sample, analyze and record an emission measurement. Continuous monitoring systems for measuring opacity shall complete a minimum of one (1) cycle of operation (sampling, analyzing and data recording) for each successive ten-second period.

3. Certification. All COMS shall be certified by the director after review and acceptance of a demonstration of conformance with 40 CFR Part 60, Appendix B, Performance Specification 1.

4. Audit authority. All COMS shall be subject to audits conducted by the department, and all COMS records shall be made available upon request to department personnel.

5. Alternative monitoring methods. All alternative monitoring systems requirements, system locations and procedures for operation and maintenance which do not meet the requirements of this rule must be approved by the staff director. Submittals for approval determination must—

A. Demonstrate that a requirement of subsection (3)(H), (4)(A) and/or (4)(B) of this rule cannot be practically met; and

B. Demonstrate that the alternative produces results that adequately verify compliance.

(I) Time Schedule for Compliance.

1. All new sources shall comply when operations begin; and

2. All existing sources shall comply as of the effective date of this rule.

(4) Reporting and Record Keeping.

(A) COMS Reporting. Owners or operators of sources required to install COMS shall submit a quarterly written report to the director. All quarterly reports shall be post-marked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data:

1. A summary including total time for each cause of excess emissions and/or monitor downtime;

2. Nature and cause of excess emissions, if known;

3. The six-minute average opacity values greater than the opacity emission requirements (The average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions);

4. The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and

5. If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired or adjusted, this information shall be stated in the report.

(B) COMS Records to be Maintained. Owners or operators of affected sources shall maintain a file (hard copy or electronic ver-

sion) of the following information for a minimum of two (2) years from the date the data was collected:

1. All information reported in the quarterly summaries; and

2. All six-minute opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records.

(5) Test Methods.

(A) Emissions from Stationary Sources—Use one of the following four (4) methods:

1. Qualified observer in accordance with 10 CSR 10-6.030 (9), Reference Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources;

2. Qualified observer in accordance with proposed Test Method 203A—Visual Determination of Opacity of Emissions from Stationary Sources for Time-Averaged Regulations (as proposed in the November 22, 1993 *Federal Register*, Volume 58, pp. 61640–61649);

3. Qualified observer in accordance with proposed Test Method 203B—Visual Determination of Opacity of Emissions from Stationary Sources for Time-Exception Regulations (as proposed in the November 22, 1993 *Federal Register*, Volume 58, pp. 61640–61649); or

4. Continuous Opacity Monitoring System that complies with and is installed, calibrated, maintained and operated in accordance with proposed Test Method 203—Visual Determination of the Opacity of Emissions from Stationary Sources by Continuous Opacity Monitoring Systems (as proposed in the October 7, 1992 *Federal Register*, Volume 57, pp. 46114–46119).

(B) Emissions from Mobile Internal Combustion Engines—Use a qualified observer in accordance with 40 CFR part 60, Appendix A—Reference Methods, Method 22—Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares.

(C) Fugitive Emissions from Material Sources, Smoke Emissions from Flares and As Required by Permit Condition—Use a qualified observer in accordance with 40 CFR part 60, Appendix A—Reference Methods, Method 22—Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares.

*AUTHORITY: section 643.050, RSMo Supp. 1998.\* Original rule filed March 31, 1999, effective Nov. 30, 1999.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995.*

### 10 CSR 10-6.230 Administrative Penalties

*PURPOSE: This rule establishes the procedures for assessment of administrative penalties.*

(1) Applicability. This rule applies to installations and individuals throughout Missouri that are subject to sections 643.010–643.250, RSMo or any rule of the Missouri Air Conservation Commission or any site that is permitted by the Missouri Air Pollution Control Program.

(2) Definitions.

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

(B) Additional definitions specific to this rule are as follows:

1. Conference, conciliation and persuasion—A process of verbal or written communications, including but not limited to meetings, reports, correspondence or telephone conferences between authorized representatives of the department and the alleged violator. The process shall, at minimum, consist of one offer to meet with the alleged violator tendered by the department. During any such meeting, the department and the alleged violator shall negotiate in good faith to eliminate the alleged violation and shall attempt to agree upon a plan to achieve compliance;

2. Economic benefit—Any monetary gain which accrues to a violator as a result of noncompliance;

3. Gravity-based assessment—The degree of seriousness of a violation taking into consideration the risk to human health and the environment posed by the violation and considering the extent of deviation from sections 643.010–643.250, RSMo;

4. Minor violation—A violation which possesses a small potential to harm the environment or human health or cause pollution, was not knowingly committed, and is not defined by the United States Environmental Protection Agency as other than minor;

5. Multi-day violation—A violation which has occurred on or continued for two (2) or more consecutive or nonconsecutive days; and

6. Multiple violation penalty—The sum of individual administrative penalties assessed when two (2) or more violations are included in the same complaint or enforcement action.

(3) General Provisions.

(A) Pursuant to section 643.085, RSMo, and in addition to any other remedy provided by law, upon determination by the department that a provision of sections 643.010–



643.250, RSMo, or a standard, limitation, order or rule promulgated, or a term or condition of any permit has been violated, the director may issue an order assessing an administrative penalty upon the violator. The amount of the administrative penalty will be determined according to section (6) of this rule. In no event may the total penalty assessed per day of violation exceed the statutory maximum specified in section 643.151, RSMo.

(B) An administrative penalty shall not be imposed until the department has sought to resolve the violations through conference, conciliation and persuasion and shall not be imposed for minor violations. If the violation is resolved through conference, conciliation and persuasion, no administrative penalty shall be assessed unless the violation has caused, or had the potential to cause, a risk to human health or to the environment, or has caused or has potential to cause pollution, or was knowingly committed, or is not a minor violation.

(C) An order assessing an administrative penalty shall be served upon the operator, owner or appropriate representative through United States Postal Service certified mail, return receipt requested, a private courier or messenger service which provides verification of delivery or by hand delivery to the operator's or owner's residence or place of business. An order assessing an administrative penalty shall be considered served if verified receipt is made by the operator, owner or appropriate representative. A refusal to accept, or a rejection of certified mail, private courier or messenger service delivery or by hand delivery of an order assessing an administrative penalty constitutes service of the order.

(D) The director may at any time withdraw without prejudice any administrative penalty order.

(E) An order assessing an administrative penalty shall describe the nature of the violation(s), the amount of the administrative penalty being assessed and the basis of the penalty calculation.

(4) Reporting and Record Keeping. *(Not Applicable)*

(5) Test Methods. *(Not Applicable)*

(6) Determination of Penalties. The amount of an administrative penalty will involve the application of a gravity-based assessment under subsection (6)(A) and may involve additional factors for multiple violations, (6)(B), multi-day violations, (6)(C) and economic benefit resulting from noncompliance, (6)(D). The resulting administrative penalty

may be further adjusted as specified under (6)(E).

(A) Gravity-Based Assessment. The gravity-based assessment is determined by evaluating the potential for harm posed by the violation and the extent to which the violation deviates from the requirements of the Missouri Air Conservation Law.

1. Potential for harm. The potential for harm posed by a violation is based on the risk to human health, safety or the environment or to the purposes of implementing the Missouri Air Conservation Law and associated rules or permits.

A. The risk of exposure is dependent on both the likelihood that humans or the environment may be exposed to contaminants and the degree of potential exposure. Penalties will reflect the probability the violation either did result in or could have resulted in a release of contaminants in the environment, and the harm which either did occur or would have occurred if the release had in fact occurred.

B. Violations which may or may not pose a potential threat to human health or the environment, but which have an adverse effect upon the purposes of or procedures for implementing the Missouri Air Conservation Law and associated rules or permits may be assessed a penalty.

C. The potential for harm shall be evaluated according to the following degrees of severity:

(I) Major. The violation poses or may pose a substantial risk to human health and safety or to the environment, or has or may have a substantial adverse effect on the purposes of or procedures for implementing the Missouri Air Conservation Law and associated rules and/or permits;

(II) Moderate. The violation poses or may pose a significant risk to human health and safety or to the environment, or has or may have a significant adverse effect on the purposes of or procedures for implementing the Missouri Air Conservation Law and associated rules and/or permits; and

(III) Minor. The violation does not pose significant or substantial risk to human health and safety or to the environment, was not knowingly committed, and is not defined by the United States Environmental Protection Agency as other than minor.

2. Extent of deviation. The extent of deviation may range from slight to total disregard of the requirements of the Missouri Air Conservation Law and associated rules and/or permits. The assessment will reflect this range and will be evaluated according to the following degrees of severity:

A. Major. The violator has deviated substantially from the requirements of the Missouri Air Conservation Law, associated

rules, or permits resulting in substantial non-compliance;

B. Moderate. The violator has deviated significantly from the requirements of the Missouri Air Conservation Law, associated rules, or permits resulting in significant noncompliance; and

C. Minor. The violator has deviated slightly from the requirements of the Missouri Air Conservation Law, associated rules, or permits that does not result in substantial or significant noncompliance; most provisions were implemented as intended; the violation was not knowingly committed; and is not defined by the United States Environmental Protection Agency as other than minor.

3. Gravity-based penalty assessment matrix. The matrix that follows will be used to determine the gravity-based assessment portion of the administrative penalty. Potential for harm and extent of deviation form the axes of the matrix. The penalty range selected may be adapted to the circumstances of a particular violation.

**Gravity-Based Penalty Assessment Matrix**

Potential for Harm	Extent of Deviation		
	Major	Moderate	Minor
Major	\$10,000 to \$8,750	\$8,750 to \$7,500	\$7,500 to \$6,250
Moderate	\$6,250 to \$5,000	\$5,000 to \$3,750	\$3,750 to \$2,500
Minor	\$2,500 to \$1,250	\$1,250 to \$500	\$0

(B) Multiple Violation Penalty. Penalties for multiple violations may be determined when a violation is independent of or substantially different from any other violation. The director may order a separate administrative penalty for that violation as set forth in this rule.

(C) Multi-Day Penalty. Penalties for multi-day violations may be determined when the director has concluded that a violation(s) has continued or occurred for more than one (1) day. Multi-day penalty assessments will be determined by using the Gravity-Based Assessment Matrix in paragraph (6)(A)3. The director may seek penalties for each day of noncompliance not to exceed the amount of the civil penalty specified in section 643.151, RSMo.

(D) Economic Benefit. Any economic benefits, including delayed and avoided costs that have accrued to the violator as a result of

noncompliance, will be added to the penalty amount. The department using an economic benefit formula that provides a reasonable estimate of the economic benefit of noncompliance will make determination. Economic benefit may be excluded from the administrative penalty if—

1. The economic benefit is an insignificant amount;
2. There are compelling public concerns that would not be served by taking a case to trial; or
3. It is unlikely that the department would be able to recover the economic benefit in litigation based on the particular case.

(E) Adjustments. The department may add to or subtract from the total amount of the penalty after consideration of the following adjustments:

1. Recalculation of penalty amount. After the issuance of an order by the director, if new information about a violation becomes available which indicates that the original penalty calculation may have been incorrect, the department may recalculate the penalty;

2. Good faith efforts to comply. The department may adjust a penalty amount downward if good faith efforts have been adequately documented by the violator. Good faith efforts include, but are not limited to, documentation that the violator has reported noncompliance or instituted measures to remedy the violation prior to detection by the department. However, good faith efforts to achieve compliance after agency detection are assumed and are not grounds for decreasing the penalty amount;

3. Culpability. In cases of heightened culpability which do not meet the standard of criminal activity, the penalty may be increased at the department's discretion, within the ranges of the matrix. Likewise, in cases where there is a demonstrable absence of culpability, the department may decrease the penalty. Lack of knowledge of the Missouri Air Conservation Law and any associated rule and/or permit shall not be a basis of decreased culpability. The following criteria will be used to determine culpability:

- A. How much control the violator had over the events constituting the violation;
- B. The foreseeability of the events constituting the violation;
- C. Whether the violator took reasonable precautions against the events constituting the violation;
- D. Whether the violator knew or should have known of the hazards associated with the conduct; and
- E. Whether the violator knew or should have known of the legal requirement which was violated. This criteria shall be

used only to increase a penalty, not to decrease it;

4. History of noncompliance. Where there has been a history of noncompliance with the Missouri Air Conservation Law or any associated rule or permit, to a degree deemed significant due to frequency, similarity or seriousness of past violations, and considering the violator's response to previous enforcement actions, the department may increase the administrative penalty. No downward adjustment is allowed because of this factor;

5. Ability to pay. When a violator has adequately documented that payment of all or a portion of the penalty will preclude the violator from achieving compliance or from carrying out important remedial measures, the department may—

- A. Waive any of the administrative penalty; or
- B. Negotiate a delayed payment schedule, installment plan or penalty reductions with stipulated penalties; and

6. Other adjustment factors. This rule allows for other penalty adjustments based on fairness and equity not mentioned in this rule which may arise on a case-by-case basis.

(7) Proceeds from Administrative Penalties. The proceeds from any administrative penalty assessed in accordance with this rule shall be paid to the county treasurer of the county in which the violation(s) occurred for the use and benefit of the county schools within that county.

(8) Natural Resource Damages. Nothing in this rule shall be construed as satisfying any claim by the state for natural resource damages.

*AUTHORITY: sections 643.050 RSMo Supp. 1998 and 643.085, RSMo 1994.\* Original rule Sept. 11, 1992, effective July 8, 1993. Rescinded and readopted: Filed April 15, 1999, effective Nov. 30, 1999.*

*\*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995 and 643.085, RSMo 1991, amended 1992, 1993.*

**10 CSR 10-6.240 Asbestos Abatement Projects—Registration, Notification and Performance Requirements**

*PURPOSE: This rule requires asbestos abatement contractors to register with the department, to notify the department of each asbestos abatement project, to follow certain work practices, to allow the department to inspect asbestos abatement projects and to*

*pay inspection fees. Each person who intends to perform asbestos abatement projects in Missouri must register annually with the Missouri Department of Natural Resources, Air Pollution Control Program. Each asbestos abatement contractor must submit a notification to the appropriate agency of the department for each asbestos abatement project. Each notification for projects exceeding a certain size must be accompanied by a fee. Projects must be conducted in accordance with the work practices established in this rule. Asbestos abatement contractors must allow representatives of the department to conduct inspections of projects and must pay inspection fees.*

- (1) Application. This rule shall apply to—
- (A) All persons that authorize, design, conduct and work in asbestos abatement projects; and
  - (B) All persons that monitor air-borne asbestos and dispose of asbestos waste as a result of asbestos abatement projects.

(2) General Provisions for Asbestos Abatement Projects.

(A) Registration. Any person that conducts an asbestos abatement project must register with the department according to section (3). This registration is renewable annually.

(B) Certification. Any individual that participates in an asbestos abatement project operating in Missouri must be certified by the state. This certification is renewable annually.

(C) Notifications. Any person undertaking an asbestos abatement project shall provide, at least twenty (20) days in advance, written notification of the project to the director according to section (4). The person also shall provide notification of the project completion according to section (7). Emergency asbestos abatement projects shall comply with the provisions of section (6).

(D) Abatement Procedures and Practices.

1. Persons shall conduct asbestos abatement projects according to section (8).
2. At each asbestos abatement project site the person shall provide the following information for inspection by the department:
  - A. Proof of current departmental registration;
  - B. Proof of current departmental occupational certification for those individuals on the project;
  - C. Most recent available air sampling results;
  - D. Current photo identification for all applicable individuals engaged in the project; and

E. Proof of passage of the training course for the air sampling technicians and photo identifications for air sampling technicians.

(E) Exemptions of Business Entities. The department may exempt a person from registration, certification and certain notification requirements provided the person conducts asbestos abatement projects solely at the person's own place of business as part of normal operations in the facility and also is subject to the requirements and applicable standards of the United States Environmental Protection Agency (EPA) and United States Occupational Safety and Health Administration (OSHA) 29 CFR 1926.58. This exemption shall not apply to asbestos abatement contractors, to those subject to the requirements of the Asbestos Hazard Emergency Response Act (AHERA) and to those persons who provide a service to the public in their place(s) of business as the economic foundation of the facility. These shall include, but not be limited to, child daycare centers, restaurants, nursing homes, retail outlets, medical care facilities, hotels and theaters. Business entities that have received state approved exemption status shall comply with all federal air sampling requirements for their planned renovation operations. Exempt business entities are subject to the air sampling requirements of this rule when not using state-approved in-house staff and when the director requires third party air monitoring for enforcement purposes on in-house projects.

(F) Revocation of Registration. The director may deny, suspend or revoke any person's registration obtained under section (3) if the director finds the person in violation of sections 643.225–643.250, RSMo or Missouri rules 10 CSR 10-6.240 or 10 CSR 10-6.250 or any applicable federal, state or local standard for asbestos abatement projects.

(G) To determine eligibility for registration and registration renewal, the department may consider the compliance history of the applicant as well as that of all management employees and officers. The department may also consider the compliance record of any other entity of which those individuals were officers and management employees.

(H) Any person that authorizes an asbestos abatement project, asbestos inspection or any AHERA-related work shall ensure that Missouri registered contractors and certified workers are employed, and that all notification and post-notification procedures on the project are in compliance with this rule and 10 CSR 10-6.250 and Chapter 643, RSMo. Business entities that have exemption status from the state are exempt from using registered contractors and from post-notification

requirements, when performing in-house asbestos abatement projects.

(I) All information required under this rule must be submitted on the appropriate form found in section (9) and contain accurate, legible information. Failure to provide the required information, failure to submit legible information, submission of false information or failure to provide complete information as required, shall be a violation of this rule and may result in the director's denial or revocation of the notification.

(J) Failure to comply with this rule is a violation of this rule and Chapter 643, RSMo. Compliance with this rule does not relieve the participants from compliance with any other applicable federal and state rules, laws, standards or building codes.

### (3) Registration.

(A) Any person that conducts an asbestos abatement project shall register with the department. Business entities that qualify for exemption status from the state must reapply for exemption from registration.

(B) The registration form that appears in section (9) of this rule shall be used in applying for registration.

(C) The person shall apply for registration renewal on an annual basis, and two (2) months before the expiration date shall send the application to the department for processing.

(D) Annually shall remit the person with the registration application a nonrefundable fee of one thousand dollars (\$1000) to the department.

### (4) Asbestos Project Notification.

(A) Any person undertaking an asbestos abatement project shall submit a notification to the department for review at least twenty (20) days prior to the start of the project. Business entities with state-approved exemption status are exempt from notification except for those projects for which the EPA's National Emission Standards for Hazardous Air Pollutants (NESHAPS) requires notification. The department may waive the twenty (20)-day review period upon request for good cause. To apply for this waiver, the person shall complete Part B, number 2 of the notification form found in section (9). The person who applies for the twenty (20)-day waiver must obtain approval from the department before the project can begin.

1. The person shall submit the notification on the form found in section (9).

2. If an amendment to the notification is necessary, the person shall notify the department immediately by telephone or FAX. The

department must receive the written amendment within five (5) working days following verbal agreement.

3. Asbestos abatement project notifications shall state actual dates and times of the project, the on-site supervisor and a description of work practices. If the person must revise the dates and times of the project, the person shall notify the department and the regional office or the appropriate local delegated enforcement agency at least twenty-four (24) hours in advance of the change by telephone or FAX and then immediately follow-up with a written amendment stating the change. The department must receive the written amendment within five (5) working days of the phone or FAX message.

4. A nonrefundable notification fee of one hundred dollars (\$100) will be charged for each project constituting one hundred sixty (160) square feet or two hundred sixty (260) linear feet or greater. If an asbestos abatement project is in an area regulated by an authorized local air pollution control agency, and the person is required to pay notification fees to that agency, the person is exempt from paying the state fees. Persons conducting planned renovation projects determined by the department to fall under EPA's 40 CFR part 61 subpart M must pay this fee and the inspection fees required in section (5).

5. In projects constituting one hundred sixty (160) square feet or two hundred sixty (260) linear feet or more, the person shall submit the laboratory results of an asbestos sample analysis made to determine asbestos content. The director, on a case-by-case basis, may accept OSHA's Material Safety Data Sheets (MSDS), OMB No. 1218-0072, as fulfillment of this requirement provided that the MSDS meet the following conditions:

A. The MSDS includes the percentage of the asbestos content; and

B. The director can be reasonably assured that the information provided on the MSDS applies to the area of asbestos removed, enclosed, encapsulated or demolished.

(5) Inspections. There shall be a charge of one hundred dollars (\$100) per inspection for the first three (3) inspections of any asbestos abatement project. The department or the local delegated enforcement agency shall bill the person for that inspection(s) and the person shall submit the fee(s) according to the requirements of the department or of the local delegated enforcement agency.

(6) Emergency Project. Any person undertaking an emergency asbestos abatement project

shall notify the department by telephone and must receive departmental approval of emergency status. The person must notify the department within twenty-four (24) hours of the onset of the emergency. Business entities with state-approved exemption status are exempt from emergency notification for state-approved projects that are part of a NESHAPS planned renovation annual notification. If the emergency occurs after normal working hours or weekends, the person shall contact the Environmental Services Program. The notice shall provide—

(A) A description of the nature and scope of the emergency;

(B) A description of the measures immediately used to mitigate the emergency; and

(C) A Schedule for Removal. Following the emergency notice, the person shall provide to the director a notification on the form found in section (9) and the person shall submit it to the director within seven (7) days of the onset of the emergency. The amendment requirements for notification found in section (4) are applicable to emergency projects.

(7) Asbestos Project Post-Notification.

(A) Any person undertaking an asbestos abatement project that requires notification according to section (4) on the department form shall notify the department within sixty (60) days of the completion of the project. This notice shall include a signed and dated receipt for the asbestos waste generated by the project issued by the landfill named on the notification. This notice also shall include final clearance air monitoring results. The laboratory which analyzes final clearance air monitoring results shall attest that it complies with the requirements in subsection (8)(H). The technician performing the analysis shall sign and date all reports of analyses.

(B) Business entities are exempt from post-notification requirements, but shall keep records of waste disposal for department inspection.

(8) Abatement Work Practices.

(A) Work Practices for Asbestos Removal Projects (Gross Removal).

1. A person who conducts an asbestos removal project that involves removing friable asbestos-containing materials (ACM) or nonfriable ACM which will be rendered friable during removal from structural items or equipment shall conduct the project according to the following requirements:

A. The person shall isolate the proposed work area from other areas of the building and from outside areas. The person shall erect temporary partitions around the work area or install airtight seals over door-

ways, windows and ventilation system openings. The person shall use control curtains to close off doorways between the work area and decontamination facilities. The person may provide for makeup air, but the person must maintain reduced air pressure inside the work area until the work area has passed clearance air sampling. Where practical, the person shall install at least one (1) clear window in a temporary partition. The window shall be no less than eighteen (18) inches square. The person shall install the window to allow direct visual observation of the work area from outside. Plastic sheeting used for the construction of airtight seals shall be at least four (4) mil thick. Whenever possible, the person shall shut down and lock out heating and ventilation systems. If the person is unable to shut down these systems, the person shall make special provisions to ensure that airborne contamination cannot enter the ventilation system and infiltrate other areas of the building. The person shall post appropriate warning signs at all entryways into the work area. No individuals other than those involved with the project shall enter the work area before the area meets the requirements of subparagraphs (8)(A)1.J.–L. and all other requirements applicable to the project;

B. If the person intends to remove any items from the proposed work area before abatement begins, the person shall preclean the items using a high efficiency particulate air (HEPA)-filtered vacuum or wet cleaning methods. The person shall restore the items to the work area only after the area passes the final clearance air sample and meets all requirements applicable to the project;

C. The person shall preclean all wall and floor surfaces that contain visible asbestos debris, other than those from which the person will remove asbestos, with an HEPA-filtered vacuum or wet cleaning methods. The person shall preclean any other surfaces in the work area that contain visible asbestos debris with an HEPA-filtered vacuum or wet cleaning methods. The person shall cover all surfaces except floors with plastic sheeting that is at least four (4) mil thick. The person shall cover floors with a minimum of two (2) layers plastic sheeting. Each sheet must be at least six (6) mil thick. The person shall affix plastic sheeting on the walls in a manner that ensures that it will remain in position throughout the length of the project. The wall sheeting and the floor sheeting shall overlap enough to ensure a seal that will endure the entire length of the project. The person may use sprayed-on plastic instead of plastic sheeting if the person proposes this method in the notification prior to the start of the project. The person shall

immediately repair any tears in the plastic sheeting required by this rule;

D. The person shall install HEPA-filtered air filtration equipment in a manner that will continually filter air from within the work area. The capacity of the air filtration equipment shall be sufficient to filter the entire volume of air within the containment every fifteen (15) minutes or less. The air filtration equipment shall establish and maintain a flow of air into the work area from all adjacent areas as demonstrated by using smoke producing tubes or other appropriate means. The person shall perform this test daily and record the results for inspection by the department. The air filtration system shall exhaust air to the outside of the building through a duct installed in the plastic sheeting. The person shall establish an airtight seal between the plastic sheeting and the duct;

E. The person shall provide a decontamination facility between the work area and adjacent areas. The decontamination facility shall contain at least three (3) areas. Each area shall have a doorway covered by a control curtain. The areas of a decontamination facility shall meet these requirements—

(I) Individuals entering the work area must first enter a clean room. The clean room shall be free of asbestos contamination;

(II) Individuals entering the work area must pass from the clean room into the shower room. Individuals exiting the work area must shower before entering the clean room. Individuals shall not take contaminated clothing or equipment into the clean room. The shower room shall contain at least one (1) shower head that is supplied with hot and cold water. The shower room shall contain adequate supplies of soap and shampoo to accommodate all persons who emerge from the work area. Shower enclosures shall be leakproof, opaque and constructed of disposable or easily washable material;

(III) Individuals leaving the work area must first pass through the equipment room. The equipment room shall temporarily store contaminated tools, equipment and protective clothing used in the work area. Items entering the equipment room shall be free of gross contamination before removal from the work area. Six (6) mil thick plastic sheeting shall line the floor and walls of the equipment room; and

(IV) The person shall fully enclose all decontamination facility areas. The person shall build all of the areas contiguous to each other unless enclosed passageways connect them. Decontamination facilities shall remain functional until the project meets the requirements for removal of airtight seals and partitions according to this rule;

F. The person may construct a waste load-out area between the work area and the exit. Asbestos-containing waste and asbestos-contaminated equipment may pass from the work area to appropriate receptacles outside the work area through the waste load-out area. The person shall totally enclose the waste load-out area. The entryway between the work area and the load-out area shall consist of both a control curtain and a rigid door or two (2) control curtains separated by a minimum distance of three feet (3'). The person shall secure the entryway except when using the entryway to transfer materials from the work area. The floor of the load-out area shall be at least six (6) mil thick plastic sheeting. The floor shall be free of visible asbestos debris. The person shall remove the floor covering upon completion of the project and dispose of it according to subsection (8)(G). Asbestos-containing waste that passes through this area must comply with applicable state and federal container and bagging requirements. Individuals who remove asbestos waste through the load-out area must enter the work area through the decontamination facility;

G. The person shall wet the friable ACM with a water solution containing an effective wetting agent. The person shall maintain the ACM in an adequately wet condition during removal. The person shall test the effectiveness of the wetting solution by applying it to a representative sample of the material before the gross removal operation begins. The person shall not use the wetting process as the method for dislodging the friable ACM. The person shall maintain the removed friable ACM and asbestos-contaminated debris in an adequately wet condition and place it in sealed containers for disposal. The person shall clean up and bag all debris as soon as practicable;

H. After removal of the ACM from the structural and equipment items, the person shall clean all plastic sheeting until free of visible debris with an HEPA-filtered vacuum or by wet cleaning methods. If the containment area contains more than one (1) layer of plastic sheeting, the person may remove and dispose of the additional layer instead of cleaning it. The person shall enclose removed sheeting in a double layer of six (6) mil or greater clear plastic and dispose of it in compliance with all applicable federal and state requirements. The person shall remove any liquid or solid material that leaks through the plastic sheeting by wet cleaning methods;

I. After the removal is complete and while the final layer of plastic floor sheeting is in place, the person shall clean all surfaces

in the work area free of all visible asbestos residues and then cover all surfaces from which ACM has been removed with a distinguishable sealing material;

J. The person shall remove the final layer of plastic sheeting after the sealant is dry. If the project requires third party air monitoring, the air sampling professional(s) or their representatives shall visually inspect the area for visible asbestos-containing debris before conducting final clearance air sampling. Air samplers shall conduct final clearance air sampling according to the requirements of subsection (8)(H). State-certified air sampling professionals or their technicians shall conduct all air sampling required by this rule;

K. If the project passes final clearance air sampling, the person shall remove all critical barriers and temporary partitions. The person shall enclose the plastic sheeting in two (2) six (6) mil or greater clear plastic leak-tight layers and dispose of it according to subsection (8)(G); and

L. After the removal of critical barriers and temporary partitions, the person shall ensure that all surfaces in the work area are free of all visible asbestos debris.

(B) Work Practices For Asbestos Encapsulation Projects.

1. In some cases encapsulation may control fiber release from friable ACMs on structural items or equipment. The person who performs encapsulation shall meet these requirements:

A. The person shall use encapsulation only on ACM that is firmly bound to the underlying surface;

B. The person shall not encapsulate friable ACM located in areas subject to abrasive or other physical damage. The person may remove this ACM according to the requirements of subsection (8)(A). The person must dispose of the ACM according to the requirements of subsection (8)(G);

C. Encapsulant materials shall have acceptable adhesive and penetrating characteristics. The person shall test the encapsulant materials by applying the encapsulant to representative samples of the friable surface material and then removing a core sample for physical and visual inspection. The person shall repair the core immediately following visual inspection;

D. Encapsulant materials shall have acceptable flame retardant characteristics. Encapsulant materials, when dry, shall not be noxious or toxic to applicators or to individuals who occupy the structure after the project is completed;

E. The person who repairs damaged portions of the surface before encapsulation shall use asbestos-free patching materials;

F. The person shall apply encapsulating materials with a sprayer that does not cause the release of fibers from the ACM at the application rates specified by the manufacturer or by the project specifications;

G. After application of the encapsulant, the person shall clean all plastic sheeting covering walls, ceilings, equipment and work surfaces in the area free of visible asbestos residue by wet cleaning methods; and

H. The person shall remove from the work area all asbestos-containing debris including accumulations that existed before the project started.

2. The person who encapsulates friable ACMs located in any enclosed area that will be reoccupied shall conduct the project according to subsection (8)(A) and shall dispose of waste according to subsection (8)(G).

(C) Work Practices for Outdoor Areas. The department may waive the requirements of paragraph (8)(A)1. for a person who removes ACM from structural items and equipment installed in and accessible from outdoor areas. The person must meet these requirements—

1. The person shall secure doors, windows or other openings located within one hundred feet (100') of the work area with plastic sheeting. The person shall use at least four (4) mil thick plastic for this purpose;

2. The person shall secure the work area by fences or other department-approved means. No individuals other than those engaged in the project shall pass within fifty feet (50') of the work area. The person shall post appropriate warning signs at all entryways into the area. Warning signs shall remain until the project meets the requirements of paragraphs (8)(C)4. and 5. and all applicable requirements;

3. The person shall wet the friable ACM with a water solution containing an effective wetting agent. The person shall maintain the friable ACM in an adequately wet condition during removal. The person shall maintain all debris in an adequately wet condition. The person shall place the wet debris in a double layer of clear six (6) mil plastic for disposal;

4. The person shall remove from the work area all friable asbestos-containing debris including accumulations that existed before the project started. Warning signs required by paragraph (8)(C)2. and access restrictions shall remain in place until the person removes all debris from the work area;

5. The person shall clean visible asbestos residue from all surfaces. The person shall cover all surfaces with an effective distinguishable sealant. Warning signs required by paragraph (8)(C)2. and access restrictions shall remain in place until the project meets these requirements; and

6. Any individual leaving the work area shall remove outerwear prior to leaving the restricted area required by paragraph (8)(C)2.

(D) Work Practices For Asbestos Dismantling Projects.

1. The person who removes structural or equipment items covered with friable ACM without first stripping the ACM shall conduct the project in the following manner:

A. If the person strips a portion of the surface for the purpose of cutting or mechanically disassembling the equipment, the person shall conduct the project according to subsection (8)(A) or (I); and

B. Before removing structures or equipment from the work area, the person shall wrap the items in a double layer of six (6) mil plastic sheeting or the person shall place them in leak-tight fiber or metal containers. The surface of the wrappings or containers shall be free of all visible asbestos residues. The person shall prevent damage to the containers. If damage to a wrapping or container occurs, the person shall immediately repair or replace the container or wrapping using wet cleaning methods or an HEPA-filtered vacuum.

2. A person who removes structural or equipment items as described in paragraph (8)(D)1. shall comply with disposal requirements of subsection (8)(G) and applicable federal requirements or the person shall meet the following requirements:

A. If the person will sell or reuse items treated according to paragraph (8)(D)1. of this rule, the person shall clean all surfaces free of visible asbestos residue and cover the surfaces with a distinguishable sealing material;

B. If the person removes friable ACM outdoors, the person shall comply with subsection (8)(C) and applicable federal requirements; and

C. If the person removes friable ACM indoors, the person shall carry out the project in an area specifically designated for the purpose and shall comply with subsection (8)(A).

(E) Work Practices for Asbestos Removal Prior to and During Demolition.

1. The person who demolishes a structurally sound and safe structure that contains friable or nonfriable ACM shall meet these requirements:

A. The person shall remove ACM according to subsection (8)(D) and all applicable federal requirements; or

B. The person shall remove all friable ACM and nonfriable category II ACM from the building prior to demolition. The person shall remove friable ACM according to the requirements of subsection (8)(A) and all applicable federal requirements. The person shall remove nonfriable category I ACM that is likely to release significant quantities of asbestos fibers.

2. The person who conducts the demolition of unsafe buildings or parts of buildings containing asbestos may use the following procedures on those portions of the buildings that pose imminent danger to public health or safety, or both. All other parts of the buildings which contain asbestos are subject to all applicable laws and rules.

A. A person who demolishes an asbestos-containing building must obtain a copy of the demolition order from the appropriate authority and submit it with an asbestos abatement notification to the appropriate regulatory agencies.

B. The person shall ensure that the debris is wet at all times and stays wet until disposal. The person shall ensure that the project activities generate no visible emissions.

C. The person shall ensure that on-site at all times during the demolition is an individual who is trained in asbestos removal techniques and who is certified as a competent person.

D. The person shall post signs notifying the public that an emergency exists.

E. The person shall treat all debris generated by the demolition as regulated friable ACM. A registered asbestos abatement contractor shall remove the debris and shall dispose of it in accordance with subsection (8)(G). If it is possible to segregate and decontaminate some debris, then the person may dispose of those materials that do not contain more than one percent (1%) asbestos in a demolition landfill. Certified asbestos abatement workers must perform the segregation and decontamination.

(F) Work Practices for Asbestos Related Enclosure Projects. The person who encloses ACM shall follow these procedures:

1. Before installing hangers, brackets or other enclosure supports, the person shall spray the surface of the ACM with amended water or an encapsulant. The person shall use a sprayer that does not cause release of fibers from the ACM at the application rates specified by the manufacturer or by the project specifications;

2. If the person uses a power drill or any tool which may disturb the ACM, the tool shall be equipped with HEPA vacuum filters;

3. Before beginning to build the enclosure, the person shall adequately wet and remove any loose and hanging ACM. The person shall dispose of this material according to subsection (8)(G);

4. After installing hangers, brackets or other supports, and before building the enclosure, the person shall repair the ACM using materials that do not contain asbestos;

5. The person responsible for maintaining ACM enclosures shall identify the areas by signs, labels, color coding or some other mechanism to warn those who may disturb the enclosure that asbestos is present; and

6. If the enclosure project disturbs ten (10) square feet or sixteen (16) linear feet or more of ACM, the person must meet the requirements of subsection (8)(A).

(G) Asbestos Waste Disposal Work Practices.

1. All solid waste materials containing friable asbestos that result from an asbestos abatement project shall be handled in the following manner:

A. All friable asbestos-containing waste shall be placed in leak-tight containers in an adequately wet condition before it is removed from the work area. Waste containers shall consist of not less than two (2) six (6) mil thick liquid-tight clear plastic bags unless the waste contains rigid or heavy objects that are likely to tear the bags. If bag damage is likely to occur, the waste shall be placed in fiber or metal containers that are equipped with a plastic bag liner and a leak-tight lid which can be firmly fastened in position. Large sections of structural items, such as pipe or duct work that has been removed with friable ACMs left in place, shall be tightly wrapped in not less than a double layer of six (6) mil thick clear plastic sheeting for disposal purposes if they cannot be placed in containers. All ACM exposed during cutting or disjoining operations shall be adequately wet when wrapped.

B. The exterior surface of each container or individually wrapped object shall be free of all visible asbestos debris. An asbestos caution label and a source identification label shall be securely attached to each container or wrapping before it leaves the site;

C. Each waste container shall be carefully handled and transported in order to prevent breaking or opening. Whenever a container breaks or otherwise becomes unable to completely contain the waste, the container shall be immediately repaired or replaced.



Any friable asbestos-containing waste materials that come out of the original container shall be immediately cleaned up after being wetted with water and placed in the replacement container;

D. Friable and category II nonfriable asbestos containing solid waste that is disposed of in Missouri shall be disposed of in a sanitary landfill having a state permit to operate. Category I nonfriable asbestos shall be disposed of in a demolition landfill or a sanitary landfill having a state permit to operate. The landfill shall handle all asbestos waste so that it does not become friable. Demolition landfills shall cover category I nonfriable asbestos-containing waste with at least six (6) inches of soil or nonasbestos waste at the end of each operating day; and

E. Waste shall be transported in enclosed roll-offs or dumpsters, vehicles that have completely enclosed cargo areas, or a four (4)-sided cargo area which shall be completely covered with six (6) mil thick plastic sheeting or other equivalent covering while the waste is being transported. All visible debris remaining in the vehicle cargo area after the waste has been deposited at the disposal area shall be immediately removed by wet cleaning methods and disposed of in accordance with the requirements of subsection (8)(G). If asbestos waste is handled in a rented vehicle, the owner of the vehicle shall be notified that the vehicle will be used to transport asbestos waste.

(H) Air Sampling.

1. The department shall require final clearance air monitoring for all enclosed asbestos abatement work areas. The department shall require third-party final clearance air monitoring for all asbestos abatement projects of a magnitude of one hundred sixty (160) square feet or two hundred sixty (260) linear feet or greater conducted in an indoor work area. In-house projects conducted by state-exempted business entities using their own trained employees are exempt from this provision.

2. The department shall require the following air samples:

A. When the department requires third-party air sampling, the samplers will collect samples outside the work area to determine the effectiveness of work practices and control measures used to contain asbestos fibers inside the project area. The air sampling professional will determine the number, frequency and location of the samples. The department may require third-party air monitoring on a case-by-case basis for any asbestos abatement project; and

B. After removal and clean-up activities are complete the owner and asbestos

abatement contractor shall ensure that air samplers conduct aggressive air sampling on all projects described in paragraph (8)(H)1. Glove bag projects are exempt from aggressive air sampling. Glove bag projects shall employ nonaggressive area sampling during operations.

3. Clearance criteria.

A. An indoor work area of one thousand (1000) cubic feet or greater shall be available for reoccupancy when the results of five (5) phase contrast microscopy (PCM) or transmission electron microscopy (TEM) samples are all less than one-hundredth (.01) fibers per cubic centimeter (f/cc). The microscopists shall perform PCM according to the National Institute for Occupational Safety and Health (NIOSH) 7400 method or TEM according to the NIOSH 7402 method or an equivalent method approved by the department. If any one (1) of the five (5) samples reveals an airborne fiber count greater than one-hundredth (.01) f/cc the asbestos abatement contractor shall clean the area again. Air sampling professionals or their technicians shall conduct aggressive final clearance air sampling again. This process shall continue until the air sampling results are at or below one-hundredth (.01) f/cc.

B. Indoor asbestos abatement work areas of less than one thousand (1000) cubic feet shall require two (2) PCM or TEM samples taken from each work area. Both samples must be less than one-hundredth (.01) f/cc before the air sampling professional can clear the area for reoccupancy.

C. If all sample results done on PCM are higher than one-hundredth (.01) f/cc, then the air sampling professional may choose to direct the laboratory to perform TEM using the NIOSH 7402 method on the highest sample. If the TEM analysis indicates the asbestos fiber level is less than one-hundredth (.01) f/cc, the air sampling professional may clear the area for reoccupancy.

D. The air sampling professional may request a waiver of the one-hundredth (.01) f/cc clearance level required by subparagraphs (8)(H)3.A.–C. for an asbestos abatement project where the sampler can demonstrate that the background levels exceed the one-hundredth (.01) f/cc enforcement level. The department may require the air sampling professional to document that the background interference is from sources not associated with the asbestos abatement project. The background air samples shall be of sufficient number and strategic placement to be acceptable by the department.

4. The asbestos air sampling professional shall have the following responsibilities. Failure to meet those responsibilities may

result in decertification. The air sampling professional shall—

A. Utilize trained air sampling technicians;

B. Assure that the microscopist employs the NIOSH 7400 method when performing PCM on air samples from an asbestos project;

C. Assure that the microscopist employs the NIOSH 7402 or an equivalent method when performing TEM on non-AHERA air samples; and

D. Assure that laboratories utilized have the proper accreditation. The accreditation organizations are the American Industrial Hygiene Association (AIHA) and the National Voluntary Laboratory Accreditation Program (NVLAP). The air sampling professional may utilize persons on the Asbestos Analysts Registry.

5. The contractor and the owner shall keep the air monitoring results for three (3) years. The person shall make the results available to representatives of the department upon request. The contractor shall provide final clearance air monitoring results to the department within sixty (60) days of the close of the project. All AHERA projects shall comply with EPA air monitoring requirements in 40 CFR part 763.

(I) Work Practices for Glove Bag Projects. The department limits use of glove bags to projects of less than two hundred sixty (260) linear feet. The department requires pre-cleaning of any loose asbestos debris in the immediate area of the glove bag project. The director may require portions of paragraph (8)(A)1. if the asbestos project warrants this action to protect health and the environment.

1. The person shall use six (6) mil thick or thicker leak-tight glove bags according to the manufacturer's instructions or an equivalent procedure. The person shall supply a copy of the instructions to the department representative for inspection at the work site. The person shall not use glove bags on surfaces having a temperature of one hundred fifty degrees Fahrenheit (150°) or greater.

2. The person shall post appropriate warning signs at all entryways to the work area. The person shall restrict access to the work area to individuals who have responsibilities directly related to the project. The restrictions and the signs shall remain in place until the project meets all applicable requirements.

3. The person shall tightly enclose in six (6) mil plastic any surface which has loose or damaged ACM attached to it until the person can place a glove bag over the pipe and remove the ACM.

4. The person shall ensure an airtight seal between the glove bag and the surface until the person removes the glove bag. The person shall not use the same glove bag for more than one (1) section of pipe. The person shall not move the glove bag from one (1) section of pipe to another.

5. The person shall maintain the ACM in an adequately wet condition while removing it. The person shall maintain the removed ACM in an adequately wet condition while it remains in the glove bag. The person shall use an HEPA-filtered vacuum to evacuate air from the glove bag.

6. Before the person seals and removes the glove bag for disposal, the person shall clean all surfaces stripped of ACM until free of visible asbestos residues.

7. Before removing warning signs and access restrictions to the work area, the person shall apply a distinguishable sealing material to all surfaces stripped of ACM and to any friable ACM exposed as a result of the removal process.

8. Before removing warning signs and access restrictions to the work area, the person shall ensure that the work area is free of all visible asbestos-containing debris, including accumulations that existed prior to the start of the project.

9. If there is any asbestos contamination of the work area due to damage or improper use of glove bags, the person shall immediately stop the project activities. If damage occurs to any friable ACM within the work area, the person shall immediately stop the project activities. The person shall thoroughly clean with an HEPA-filtered vacuum or by wet cleaning methods all asbestos-contaminated surfaces. Each individual who is contaminated with asbestos fibers from project activities including clean-up operations shall remove or clean clothing with an HEPA-filtered vacuum or by wet cleaning methods before leaving the work area. The person shall notify the department of the date, nature and clean-up measures used for these occurrences before individuals other than those involved in the project occupy the area. The department may require additional cleaning before allowing reoccupation of the area. The person may use mini-containment procedures during glove bag operations if they are necessary to provide increased protection for health and environment.

(J) Additional Provisions.

1. The person who uses any technology not identified in this rule shall list that technology on the asbestos abatement notification. The person shall receive written approval for the use of the technology prior to the start of the project. Failure to comply

with this section shall be a violation of this rule.

2. An asbestos abatement supervisor shall be available at the work site during the hours that a project is being conducted.

3. Waiver. The department may waive any individual requirements of section (8) of this rule. To request a waiver, the person must complete Part B, number 2 of the notification form which appears in section (9) of this rule. Except in cases where the department waives the twenty (20) day-waiting period, the person must receive departmental approval of the waiver before the project begins.

4. Business entities that have exemption status from the state are exempt from the work practices of section (8) for in-house asbestos abatement projects which have been specified as part of normal maintenance activities.

(9) Appendices.

(A) Appendix A. Official Forms.

1. Registration.
2. Notification.
3. Post-Notification.

*AUTHORITY: section 643.050, RSMo Supp. 1992.\* Original rule filed Dec. 14, 1992, effective Sept. 9, 1993.*

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

*Corvera Abatement Technologies, Inc. v. Air Conservation Commission and Missouri Department of Natural Resources, Case No. CV 197-985 CC. An action for declaratory judgment and injunctive relief to challenge the final rulemaking decision of the commission was taken to the Cole County Circuit Court. After a hearing conducted January 30, 1998, the circuit court issued an order on February 3, 1998, finding that 10 CSR 10-6.240 is void from its inception. The Missouri Department of Natural Resources was permanently en-joined from enforcing 10 CSR 10-6.240. A notice of appeal for this case was filed February 10, 1998.*