COMMITTEE SUBSTITUTE FOR ORDINANCE NO. 220226

Amending Chapter 8, Code of Ordinances, entitled "Air Quality," by repealing it and enacting in lieu thereof a new Chapter 8 of like title, consisting of Sections 8-1 through 8-23, to update the Kansas City Air Quality Code.

BE IT ORDAINED BY THE COUNCIL OF KANSAS CITY:

Section 1. That Chapter 8, Code of Ordinances, entitled "Air Quality," is hereby amended by repealing it and enacting in lieu thereof a new Chapter 8 of like title, consisting of Sections 8-1 through 8-23, said Chapter to read as follows:

Sec. 8-1 Title of Chapter.

This chapter shall be known and may be cited as the Air Quality Control Code.

Sec. 8-2. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Abatement project designer – an individual who designs or plans asbestos abatement.

Accumulator – the reservoir of a condensing unit receiving the condensate from the condenser.

Act – means the Clean Air Act as amended, 42 USC 7401 et seq. References to the word "Title" pertain to the titles of the Clean Air Act Amendments of 1990, P.L. 101-549.

Actual emissions – the actual rate of emissions of a pollutant from a source operation which is determined as follows:

(1) The 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-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.

Active Supervision – focused attention and intentional observation of the worksite and workers, accurate knowledge of present and potential safety hazards, and availability to assist workers as necessary.

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

Administrator – The regional administrator for Region VII, Environmental Protection Agency.

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

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. 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.

Aerospace manufacture and/or rework facility – Any installation that produces, reworks, or repairs in any amount any commercial, civil, or military aerospace vehicle or component.

Aerospace vehicle or component – Any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft.

Affected source – A source that includes one or more emission units subject to emission reduction requirements or limitations under Title IV of the Act.

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

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

Aggressive air sampling – the sweeping of floors, ceilings, walls and other surfaces with the exhaust of a minimum of one horsepower leaf blower or equivalent immediately prior to air monitoring.

AHERA – the Asbestos Hazard Emergency Response Act of 1986 (p.L. 99-519).

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

Air contaminant – Any particulate matter, gas or vapor or any combination of them.

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

Air-dried coating – a coating which is dried by the use of air or forced warm air at temperatures up to ninety degrees Celsius (90°C) (One Hundred- and ninety-four-degrees Fahrenheit (194°F)).

Air pollutant – An agent, or combination of 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 administrator of the U.S. Environmental Protection Agency, or the administrator's duly authorized representative has identified such precursor(s) for the particular purpose for which the term air pollutant is used.

Air pollution – The presence in the ambient air of one 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.

Air-tight cleaning system – A degreasing machine that is automatically operated and seals at a differential pressure no greater than one-half (0.5) pounds per square inch gauge (psig) during all cleaning and drying cycles.

Airless cleaning system – A degreasing machine that is automatically operated and seals at a differential pressure of twenty five (25) torr (25.0 millimeters of Mercury (mmHg)) (0.475 pounds per square inch (psi)) or less, prior to the introduction of solvent vapor into the cleaning chamber and maintains differential pressure under vacuum during all cleaning and drying cycles.

Alcohol – isopropanol, isopropyl alcohol, normal propyl alcohol, or ethanol.

Alcohol substitutes – Nonalcohol additives that contain volatile organic compounds and are used in fountain solution.

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.

(2) The emission rate specified as a permit condition.

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

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.

Alternative method – any method sampling and analyzing for on air pollutant that is not a reference or equivalent method, but that has been demonstrated to the director's satisfaction to, in specific cases, produce results adequate for a determination of compliance.

Ambient air – That portion of the atmosphere, external to buildings, to which the general public has access.

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

Ambient air quality standards – The National Primary and Secondary Ambient Air Quality Standards to be found in 40 CFR part 50.

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

Applicable implementation plan or applicable state implementation plan (SIP) – The portion (or portions) of the SIP or most recent revision thereof, which has been approved under section 110(k) of the Act, a federal implementation plan promulgated under section 110(c) of the Act, or a plan Promulgated or approved pursuant to section 301(d) of the Act (tribal implementation plan) and which implements the relevant requirements of the Act.

Applicable requirement – all of the following listed in the Act:

(1) Any standard or requirement provided for in the implementation plan approved or promulgated by the U.S. Environmental Protection Agency (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.

(2) Any term or condition of any preconstruction permit issued pursuant to regulations approved or promulgated through rulemaking under Title I including, Parts C or D of the Act.

(3) Any standard or requirement under Section 111 of the Act, including Section 111(d).

(4) Any standard or requirement under Section 112 of the Act, including any requirement concerning accident prevention under Section 112(r)(7).

(5) Any standard or requirement of the Acid Rain Program under Title IV of the Act or the regulations promulgated thereunder.

(6) Any requirements established pursuant to Section 504(b) or Section 114(a)(3) of the Act.

(7) Any standard or requirement governing solid waste incineration, under Section 129 of the Act.

(8) Any standard or requirement for consumer and commercial products, under Section 183(e) of the Act.

(9) Any standard or requirement for tank vessels under Section 183(f) of the Act.

(10) Any standard or requirement of the program to control air pollution from outer continental shelf sources, under Section 328 of the Act.

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

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

(13) Any standard or requirement established in Sections 643.010 - 643.190 of the Missouri Air Conservation Law and rules adopted under them.

Applicant – A person, firm, corporation, government, or other entity that has applied for a permit.

Application – An approved document submitted to the Regulatory Authority as an official request for a permit.

Aqueous solvent – A solvent in which water is the primary ingredient (greater than eighty percent (80%) by weight or greater than sixty percent (60%) by volume of solvent solution as applied must be water). Detergents, surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions must have a flash point greater than ninety-three degrees Celsius (93 °C) (two hundred degrees Fahrenheit (200 °F) and the solution must be miscible with water.

Appropriate warning sign – Any asbestos hazard warning sign that complies with the regulations of the United States Occupation Safety and Health Administration (OSHA) or the United States Environmental Protection Agency (EPA) rules.

Approved – Acceptable to the Regulatory Authority based on a determination of conformity with principles, practices, and generally recognized standards that protect public health.

Approved source – A source of fuel which has been found by the department director, after the tests as he/she may require, to be in compliance with these sections of the Code.

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

Asbestos – The asbestiform varieties of chrysolite, crocidolite, amosite, anthophyllite, tremolite and actinolite.

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.

Asbestos abatement contractor – Any person who by agreement, contractual or otherwise, conducts asbestos abatement projects at a location other than their own place of business.

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.

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

Asbestos abatement worker – An individual who engages in asbestos abatement projects.

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.

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

Asbestos caution label – A label that complies with applicable Environmental Protection Agency (EPA), Department Of Transportation (DOT) and OSHA rule requirements and is securely affixed to a waste container that contains friable asbestos materials.

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

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

Asbestos dismantling project – An asbestos abatement project that includes the dissembling, 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.

Asbestos encapsulation project – An asbestos 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:

(1) The repainting of a previously painted asbestos-containing surface primarily for the purpose of improving appearance.

(2) The application of a sealing material to a surface subsequent to the removal of asbestos from it.

(3) The application of an encapsulant to asbestos-containing material while the material is being removed.

(4) 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.

(5) The application of a sealing substance to asbestos-containing material that has previously been enclosed or encapsulated.

(6) The painting of nonfriable asbestos-containing material.

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

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 structure or equipment item in order to repair, replace or maintain the item and anything attached to it.

Asbestos Projects

Asbestos removal project – An asbestos abatement project consisting of activities that involve, and are required, to take out friable asbestos-containing material 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.

ASME – the American Society of Mechanical Engineers.

Asphalt prime coat – An application of low-viscosity liquid asphalt to an absorbent surface such as a previously untreated surface.

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.

ASTM – means the American Society of Testing and Materials.

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

Automobile and light duty truck surface coating operations – The application, flashoff and curing of primer, primer-surfacer, topcoat and final repair coatings during the assembly of passenger cars and light duty trucks, excluding such operations when performed by customizers, body shops and other repainters, and excluding the following operations:

(1) Wheel coatings.

(2) Miscellaneous antirust coatings.

(3) Truck interior coatings.

(4) Interior coatings.

(5) Flexible coatings.

(6) Sealers and adhesives.

(7) Plastic parts coatings.

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

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.

Basecoat – A coat of a colored material, usually opaque, that is applied before graining inks, glazing coats, or other opaque finishing materials and is usually top coated for protection.

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 ug/m^3) annual average (established by modeling) for each pollutant for which an installation receives a permit under section 8-10(H) (Attainment and Unclasssified Area Permit) and for which increments have been established in section 8-10(K) table 1 (Ambient Air Increment Table). 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).

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 section 8-10(H) (Attainment and Unclassified Area Permit) or subject to 40 CFR 52.21 (Prevention of significant deterioration of air quality) 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:

(1) The actual emissions of other installations in existence on the applicable baseline date.

(2) 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.

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 section 8-10(H) (Attainment and Unclassified Area Permit) or subject to 40 CFR 52.21 (Prevention of significant deterioration of air quality).

Batch— A discontinuous process involving the bulk movement of material through sequential manufacturing steps, typically not characterized as steady state.

Best available control technology (BACT) – An emission limitation, including a visible emissions 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 such 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 such pollutant. In no event shall application of best available control technology (BACT) result in emission of any pollutant which would exceed the emissions allowed by any applicable emission control regulation, including New Source Performance Standards (NSPS) established in 10 CSR 10-6.070 and 40 CFR 60 and National Emissions Standards for Hazardous Air Pollutants established in 10 CSR 10-60.080 and

40 CFR 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 Best Available Control Technology (BACT). This standard, to the degree possible, shall set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

Board – The air quality control board.

Boiler – an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

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.

Btu – British thermal unit(s).

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

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 eight thousand seven hundred sixty (8,760) hours.

Capture device – A hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.

Capture efficiency – The fraction of all organic vapors or other pollutants generated by a process that is directed to a control device.

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 adsorbed.

Carbon bed breakthrough – A concentration of VOC in the carbon adsorption device exhaust that exceeds ten percent by weight of the inlet VOC concentration.

Carryout – Materials such as gravel, sand, and dirt from vehicles or trailers which falls onto a paved public road or shoulder.

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

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

Category II nonfriable ACS – Any material, excluding category I nonfriable ACM, containing more than one percent asbestos as determined using the methods 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.

(CFR) Code of Federal Regulations – Any incorporation by reference of a CFR regulation contained in this chapter shall incorporate that regulation, as amended, as of the date of passage of the ordinance containing the reference.

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

City – The City of Kansas City, Missouri.

Class A source – Either a class A1, A2 or A3 source as defined in this section.

Class A1 source – Any air contaminant source with the potential to emit equal to or greater than 100 tons per year of an air contaminant.

Class A2 source – Any air contaminant source, which is not a class A1 source, and with the potential, air cleaning devices not considered, to emit equal to or greater than 100 tons per year of an air contaminant.

Class A3 source – Any air contaminant source which emits or has the potential to emit, ten tons per year or more of any hazardous air pollutant or 25 tons of any combination of hazardous air pollutants, or as defined pursuant to Section 112 of the Act.

Class B source – Any air contaminant source with the potential, air cleaning devices not considered, to emit equal to or greater than the de minimis amounts of an air contaminant established by the commission, but not a class A source.

Clean room – an uncontaminated area or room which is part of the worker decontamination enclosure system.

Clean wood – Wood that has not been treated (including, but not limited to, treatment with copper chromium arsenate, creosote, or pentachlorophenol) and has no paint, stain, or any other type of coating.

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 preventive coatings used for the interior of drums or pails.

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

Coating – A protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings. Inks not included in the coating definition are for the purpose of 10 CSR 10- 2.230 (Control of Emissions from Industrial Surface Coating Operations), ink used in printing operations regulated under 10 CSR 10-2.290 (Control of Emissions from Rotogravure and Flexographic Printing Facilities). and 10 CSR 10- 2.340 (Control of Emissions from Lithographic Printing Installations).

Coating applicator – An apparatus used to apply a surface coating.

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

Coating solids (or solids) – The part of the coating that remains after the coating is dried or cured; solids content is determined using data from EPA Method 24 or an alternative or equivalent method.

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

Cold cleaning – The batch process of cleaning removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the solvent below its boiling point.

Cold cleaner – Any device or piece of equipment that contains and/or uses liquid solvent, into which parts are placed to remove soils from the surfaces of the parts or to dry the parts. Cleaning machines that contain and use heated nonboiling solvent to clean the parts are classified as cold cleaning machines.

Combustion chamber – The discrete equipment, chamber or space of an incinerator in which the products of pyrolysis are combusted in the presence of excess air so that carbon is burned to carbon dioxide. Combustion chamber does not include breaching or stacks of the incinerator.

Commence – For the purposes of major stationary source construction or major modification, the owner or operator has all necessary preconstruction approvals or permits and

(1) Began, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time.

(2) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

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

Commercial vehicle – Any motor vehicle, other than a passenger vehicle, and any trailer, semitrailer, or pole trailer drawn by such motor vehicle, that is designed, used, and maintained for the transportation of persons or property for hire, compensation, profit, or in the furtherance of a commercial enterprise.

Commission – The Missouri Air Conservation Commission established pursuant to 643.040, RSMo.

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

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.

Conservation vent – Any valve designed and used to reduce evaporation losses of volatile organic compounds (VOC) by limiting the amount of air admitted to, or vapors released from, the vapor space of a closed storage vessel.

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.

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

Continuous emissions monitoring system (CEMS) – Defined as follows:

(1) For the purpose of 10 CSR 10- 6.350 (Emission Limitations and Emissions Trading of Oxides of Nitrogen) and 10 CSR 10-6.360 (Control of NOx Emissions From Electric Generating Units and Non-Electric Generating Boilers), the equipment

required to sample, analyze, measure, and provide, by readings taken at least once every fifteen (15) minutes of the measured parameters, a permanent record of nitrogen oxides emissions, expressed in tons per hour for nitrogen oxides. The following systems are component parts included, consistent with 40 CFR 75 (Continuous Emission Monitoring), in a continuous emissions monitoring system

a. Flow monitor;

b. Nitrogen oxides pollutant concentration monitors;

c. Diluent gas monitor (oxygen or carbon dioxide) when such monitoring is required;

d. A continuous moisture monitor when such monitoring is required; and

e. An automated data acquisition and handling system; and

(2) For all other purposes, a monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility.

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 (COMS) consists of sample interface, analyzer and data recorder components and usually includes, at a minimum, transmissometers, transmissometer control equipment, and data transmission, acquisition, and recording equipment.

Control curtain – Any of the three following types of closure devices that are to be constructed of not less than four mil thick plastic sheeting material and installed in an entry way of an area that is considered to be contaminated with free asbestos fibers.

(1) A ventilation curtain that allows unrestricted air flow 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 12 inches and the base of the entryway by not less than three inches.

(2) A confinement curtain that restricts the movement of air into, and from, an unventilated and contaminated area. This curtain consists of three 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 of the curtains to fully cover the entryway opening while a person passes through the third curtain. An airlock arrangement consisting of two confinement curtain entryways that are located at last three feet apart may be substituted for the triple baffle arrangement; or

(3) A closure device for which written department approval is required.

Control device – Any equipment that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Includes, but is not limited to, incinerators, carbon adsorbers, and condensers.

Control device efficiency – The ratio of the pollution released by a control device and the pollution introduced to the control device, expressed as a fraction.

Control system – The combination of capture and control devices used to reduce emissions to the atmosphere.

Conveyorized degreaser – a type of degreaser in which the parts are loaded continuously.

Conveyorized degreasing – the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvent.

Criteria pollutant or standard – Any pollutants for which there is established a National Ambient Air Quality Standard at 40 CFR 50 (National Primary and Secondary Ambient Air Quality Standards).

Critical item/violation – A provision of this Code, that, if in noncompliance, is more likely that other violations to contribute to air contamination, personal injury, illness, or environmental hazard.

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

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.

Cutback asphalt – Any asphaltic cement that has been liquefied by blending with volatile organic compound (VOC) liquid diluents.

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.

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

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

De minimis levels – Any emissions level less than or equal to the rates listed as follows:

Air Contaminant	Emission Rate (Tons per year)
Carbon monoxide	100.0
Nitrogen oxides	40.0
Particulate Matter	
PM	25.0
PM_{10}	15.0
$PM_{2.5}$	10.0
SO_2 ($PM_{2.5}$ precursor)	40.0
NO_x ($PM_{2.5}$ precursor) (emissions of nitrogen oxides are considered precursors to $PM_{2.5}$ unless the state or EPA successfully demonstrates that emissions in a specific area are not a significant contributor to that area's ambient $PM_{2.5}$ concentrations)	40.0
Sulfur Dioxide	40.0
Ozone	
VOC (Ozone precursor)	40.0
NOx (Ozone precursor)	40.0
Lead	0.6
Fluorides (excluding hydrogen fluoride)	3.0
Sulfuric acid mist	7.0
Hydrogen sulfide	10.0
Total reduced sulfur (including hydrogen sulfide)	10.0
Reduced sulfur compounds (including hydrogen sulfide)	10.0
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5×10^{-6}
Municipal waste combustor metals (measured as particulate matter)	15.0
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	40.0
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50.0
Hazardous Air Pollutant (each)	10.0
Sum of hazardous air pollutants	25.0

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

Department – The Missouri Department of Natural Resources, which includes the director thereof, or the person or division or program within the department delegated the authority to

render the decision, order, determination, finding, or other action that is subject to review by the commission.

Department-approved in-house 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.

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 40 CFR 72, subpart B 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 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.

Diesel engine – A compression ignited two (2) or four (4) stroke engine in which liquid fuel is injected into the combustion chamber and ignited when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

Director – The director of the city department assigned responsibility for the air quality control program, or his duly authorized representative.

Dispersion technique -

(1) Any technique designed to affect the concentration of a pollutant in the ambient air by:

a. Using that portion of a stack which exceeds good engineering practice stack height;

b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

c. 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

(2) This definition does not include:

a. 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;

b. The merging of exhaust gas streams where:

1. The installation owner or operator demonstrates that the installation was originally designed and constructed with the merged gas streams;

2. 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

3. 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;

c. Smoke management in agricultural or silvicultural prescribed burning programs;

d. Episodic restrictions on residential woodburning and open burning; or

e. Techniques under part (1)c. 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 (5,000) tons per year.

Distillation operation – An operation separating one (1) or more feed stream(s) into two (2) or more exit streams, each exit stream having component concentration different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid- and vaporphase as they approach equilibrium within the distillation unit.

Distillation unit – A device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, stream jet, etc.), plus any associated recovery system.

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

Drum – Any cylindrical container of Thirteen to one hundred ten (13-110) gallon capacity.

Dry cleaning installation – an installation engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of excess solvent by spinning, and drying by tumbling or 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.

DSCF – means dry standard cubic foot of exhaust gas.

DSCM – means dry standard cubic meter of exhaust gas.

Electric generating unit (EGU) – Any fossil-fuel-fired boiler or turbine that serves an electrical generator with the potential to use more than fifty percent (50%) of the usable energy from the boiler or turbine to generate electricity.

Emergency asbestos abatement project – an asbestos abatement project that must be undertaken immediately to prevent imminent severe human exposure or to restore essential operation.

Emergency standby generator – A generator operated only during times of loss of primary power at the facility that is beyond the control of the owner or operator of the facility or during routine maintenance.

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

Emission inventory – A listing of information on the location, type of source, type and quantity of pollutant emitted, as well as other parameters of the emissions.

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.

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.

Emulsified asphalt – an emulsion of asphalt cement and water that contains a small amount of an emulsifying agent, as specified in ASTM D 977-12b or ASTM D 2397-12.

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

End exterior coating – A coating applied to the exterior end of a can to provide protection to the metal.

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

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

Equivalent method – Any method of sampling and analyzing for an air pollutant that has been demonstrated to the director's satisfaction to have a consistent and quantitatively known relationship to the reference method under specific conditions.

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

Excessive concentration –

(1) For installations seeking credit for reduced ambient pollutant concentrations from stack height exceeding that defined in part (2) of the definition of Good Engineering Practice Stack Height, 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 Section 8-10(H), an excessive concentration alternatively 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 (New Source Performance Regulations) 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.

(2) For installations seeking credit after October 11, 1983 for increases in stack heights up to the heights established under part (1) of the definition of Good Engineering Practice Stack Height, an excessive concentration is either:

a. A maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects as provided under part (1) of the definition for Excessive Concentration, except that the emission rate used shall be the

applicable emission limitation (or, in the absence of this a limit, the actual emission rate); or

b. The actual presence of a local nuisance caused by the stack, as determined by the director; and

(3) For installations seeking credit after January 12, 1979 for a stack height determined under part (2) of the definition of Good Engineering Practice Stack Height, where the director requires the use of a field study or 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 adequately represented by the equations under part (2) of the definition for Good Engineering Practice Stack Height, 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.

Existing –

(1) For the purpose of Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating, any source that is existing, installed, or under construction on February 15, 1979, in the Kansas City metropolitan area, except that if any source in this area subsequently is altered, repaired, or rebuilt at a cost of thirty percent (30%) or more of its replacement cost, exclusive of routine maintenance, it shall no longer be existing but shall be considered as new; and

(2) For all other purposes, 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, except that if any equipment, machine, device, article, contrivance or installation subsequently is altered, repaired or rebuilt at a cost of 50 percent 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 Code. 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.

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

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 the liquid being contained and is equipped with a closure seal(s) to close the space between the roof edge and tank wall.

Extreme environmental conditions – The exposure to any of the weather all of the time, temperatures consistently above 95 degrees Celsius, detergents, abrasive and scouring agents, solvents, corrosive atmospheres, or similar environmental conditions.

Extreme performance coating – A coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to the following:

(1) Chronic exposure to corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;

(2) Repeated exposure to temperatures in excess of two hundred fifty degrees Fahrenheit (250 °F); or

(3) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents.

Fabric coating – A coating applied to a textile substrate by dipping or by means of knife or roll.

Fabric filter or baghouse – An add-on air pollution control system that removes particulate matter and nonvaporous metals emissions by passing flue gas through filter bags.

Facility – Defined as follows:

(1) For the purposes of asbestos projects, any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four (4) or fewer dwelling units); any ship; and any active or inactive waste disposal site. Any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. This definition does include any structure, installation, or building that was previously subject to 40 CFR 61, subpart M (National Emission Standard for Asbestos), regardless of its current use or function; and

(2) For all other purposes, see the definition of installation.

Federal agency – A federal department, agency, or instrumentality of the federal government

Federally enforceable – means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR 60 and 61, requirements within any applicable state implementation plan, any permit requirements established pursuant to 40 CFR part 52.21, or under regulations 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 the program.

Final permit – The version of a part 70 permit issued by the permitting authority that has completed all review procedures as required by part 70.7 (Permit issuance, renewal, reopenings, and revisions) and 70.8 (Permit review by EPA and affected States).

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

Finishing operation – Those activities in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

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.

Flare – An open combustor without enclosure or shroud.

Flash-off area – the space between the application area and the oven.

Flexible coating – A coating that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original equipment manufacturer.

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.

Flush cleaning – the removal of contaminants such as dirt, grease and coatings from a vehicle, component, or coating equipment by passing solvent over, into, or through the item being cleaned. The solvent may be simply be poured into the item cleaned and then drained, or be assisted by air or hydraulic pressure, or by pumping. The solvent drained from the item may be assisted by air, compressed gas, hydraulic pressure or by pumping. Hand-wipe cleaning operation where wiping, scrubbing, mopping, or other hand actions are used are not included in this definition. Flush cleaning does not include spray gun cleaning.

Fossil fuel – Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

Fossil-fuel-fired – With the regard to a unit, the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel is projected to comprise more than fifty percent (50%) of the annual heat input

Fountain solution – The solution which is applied to the image plane to maintain the hydrophilic properties of the nonimage areas. It is primary water containing an etchant, a gum arabic and a dampening aid (commonly containing alcohol and alcohol substitures).

Freeboard area – The air space in a batch-load cold cleaner that extends from the liquid surface to the top of the tank.

Freeboard height –

(1) The distance from the top of the solvent to the top of the tank for batch-loaded cold cleaners;

(2) The distance from the air-vapor interface to the top of the tank for open-top vapor degreasers; or

(3) The distance from either the airsolvent or air-vapor interface to the top of the tank for conveyorized degreasers.

Freeboard ratio – The freeboard height divided by the smaller of either the inside length or inside width of the degreaser.

Friable asbestos-containing material – Any material that contains more than one percent (1%), as determined by either the method specified in appendix E, section 1 Polarized Light Microscopy in 40 CFR 61, subpart M or EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, asbestos that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure.

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

Furnishings – Removable furniture, drapes, rugs and decorative items.

Gaseous fuel – A combustible gas that includes, but is not limited to, natural gas, landfill gas, coal-derived gas, refinery gas, and biogas. Blast furnace gas is not considered a gaseous fuel under this definition.

Gasoline – A petroleum liquid having a Reid vapor pressure of four pounds per square inch (4 PSI) or greater.

Gasoline dispensing facility – Any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle.

Gasoline distribution facility – Any stationary facility which transfers, loads, and/or unloads gasoline, including but not limited to gasoline bulk terminals, bulk plants, and pipeline facilities, that also does not meet the definition of a gasoline dispensing facility.

Glove bag – A manufactured or fabricated device, typically constructed of six mil transparent polyethylene or polyvinyl chloride plastic. This device consists of two inward projecting tong 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.

Good engineering practice (GEP) stack height – means the greater of:

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

(2) 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

(3) 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 a result of atmospheric downwash, wakes or eddy effects created by the source itself, nearby structures or nearby terrain features.

Ground-level ozone – A colorless, odorless gas formed by the mixing of volatile organic compounds and oxides of nitrogen from stationary and mobile pollution sources in the presence of heat and sunlight. Ground-level ozone is a strong oxidizer that negatively affects human health by causing diminished lung function in both healthy individuals and those with pre-existing respiratory problems.

Gravure, intaglio printing process – The images are made up of tiny depressions or cells into the surface of the design cylinder. Liquid ink is flowed into the cells while excess ink is scraped from the surface of the cylinder. The cylinder is pressed against the substrate where the ink is transferred from the cells.

Hand cleaning/wiping operation – The removal of contaminants, such as dirt, grease, oil and coatings, from a surface by physically rubbing it with a material such as a rag, paper or cotton swab that has been moistened with a cleaning solvent.

Hazardous air pollutant – Any air pollutant listed in the Environmental Protection Agency list of Hazardous Air Pollutants with Modifications.

Hearing – Any presentation to, or consideration by, the hearing officer of evidence or argument on a petition seeking the commission's review of an action by the department.

Heat input – The product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) and the fuel feed rate into a combustion device (in mass of fuel/time), as measured, recorded, and reported to the administrator by the NOx authorized account representative and as determined by the administrator in accordance with the approved process, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

Heatset – A class of web-offset lithographic and letterpress printing in which the setting of the printing inks requires a heated dryer to evaporate the ink oils. The setting or curing of inks using only radiation (e.g., infrared, ultraviolet light, or electron beam) is not heatset and is classified as nonheatset.

High efficiency particulate air filter (HEPA) – A HEPA filter found in respirators and vacuum systems capable of filtering three-tenths micron particles with at least 99.97% efficiency.

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

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

Hospital/medical/infectious waste incinerator (HMIWI) or HMIWI unit – Any device that combusts any amount of hospital waste and/or medical/infectious waste.

Household waste – Any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Idling – The operation of an engine where the engine is not engaged in gear.

Imminent Health Hazard – A significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that requires immediate correction or cessation of operation to prevent illness or injury based on the following:

Number of potential illnesses or injuries;

- Nature, severity, and duration of the anticipated illness or injury;
- Effect on the environment or the surrounding geographical area.

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 herein.

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.

Ink formulation as applied – The base graphic arts coating and any additives such as thinning solvents to make up the ink material that is applied to a substrate.

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.

Insignificant activity – An activity or emission unit in which the only applicable requirement would be to list the requirement in an operating permit application under 10 CSR 10-6.065 (Operating Permits) and is either of the following:

(1) Emission units whose aggregate emission levels for the installation do not exceed that of the de minimis levels; and

(2) Emission units or activities listed in Section 8-10 as exempt or excluded from construction permit review.

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.

Installation –

(1) For asbestos projects, any building or structure, or any group of buildings or structures, at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control); and

(2) For all other purposes, 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).

Institutional cleaning – Cleaning activities conducted at organizations, societies or corporations including but not limited to schools, hospitals, sanitariums and prisons.

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.

Internal combustion engine – Any engine in which power, produced by heat and/or pressure developed in the engine cylinder(s) by burning a mixture of fuel and air, is subsequently converted to mechanical work by means of one (1) or more pistons.

Internal floating roof – A product cover in a fixed roof tank which rests upon or is floated upon the volatile organic compound (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.

Inventory – A quantification of emissions by installation and by source operation.

Janitorial cleaning – The cleaning of building or facility components such as the floors, ceilings, walls, windows, doors, stairs, bathrooms, kitchens, etc. in nonmanufacturing areas.

Kansas City Metropolitan Area – The geographical area comprised of Jackson, Cass, Clay, Platte, Ray and Buchanan Counties.

Lacquers – A surface coating that is basically solutions of nitrocellulose in volatile organic compounds (VOC), with plasticizers and other resins added to improve the quality of the film.

Landfill – An area of land of an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under 40 CFR 257.2.

Letterpress printing – A printing process in which the image area is raised relative to the nonimage area, and the ink is transferred to the substrate directly for the image surface.

Light-duty truck (LDT) – Any motor vehicle rated at eight thousand five hundred pounds (8,500 lbs) gross weight or less, and which has a basic vehicle frontal area of forty-five (45) square feet or less, which is

(1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle;

(2) Designed primarily for transportation of persons and has a capacity of more than twelve (12) persons; or

(3) Available with special features enabling off-street or off-highway operation and use.

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

Liquid fuel – A combustible liquid that includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

Liquid-mounted seal – A primary foam or liquid-filled seal mounted in continuous contact with the liquid between the wall of the storage vessel and the floating roof around the circumference of the tank.

Lithographic printing – A planographic printing process where the image and nonimage areas are chemically differentiated; the image area is oil receptive and the nonimage area is water receptive. This method differs from other printing methods, where the image is typically printed from a raised or recessed surface. Offset lithographic printing is the only common type of lithographic printing used for commercial printing.

Lithography – uses the planographic method where the image and nonimage areas are on the same surface plane. The image carrier is chemically treated so that the image will accept ink and the nonimage areas will accept water (dampening solution). Based on the principle, "grease and water do not mix." The inked image carrier, or plate, is pressed against a rubber blanket where the ink is transferred. Then the rubber blanket is pressed against the substrate to transfer the inked image. Both sheetfed and web fed offset lithographic presses are used. There are two basic types of lithographic paste inks: non-heatset inks which include sheetfed inks (cure by oxidation and polymerization) and non-heatset web offset ink (absorption) and heatset web offset inks (dry by evaporation).

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.

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 such 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.

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.

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:

(1) Routine maintenance, repair, and replacement of parts;

(2) Use of an alternative fuel or raw material by reason 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;

(3) 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;

(4) 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

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

Malfunction – means 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.

Material safety data sheet (MSDS) – The chemical, physical, technical, and safety information document supplied by the manufacturer of the coating, solvent, or other chemical product.

Maximum achievable control technology (MACT) – The maximum degree of reduction in emissions of the hazardous air pollutants as listed in this section of the Code (including a prohibition on these emissions where achievable) that the administrator, taking into consideration the cost of achieving such 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:

(1) Reduce the volume of or eliminate emissions of pollutants through process changes, substitution of materials, or other modifications;

(2) Enclose systems or processes to eliminate emissions;

(3) Collect, capture or treat such pollutants when released from a process, stack, storage, or fugitive emissions point;

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

(5) Are a combination of the above points.

Maximum design heat input – The ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

Maximum rated hourly heat input – A unit-specific maximum hourly heat input (mmBtu) which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.

Metal furniture coating – means 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.

Modification –

(1) For the purposes of restriction of emissions from municipal solid waste landfills, modification is an increase in the permitted volume design capacity of the landfill by either horizontal or vertical expansion based on its most recent permitted design capacity; modification does not occur until the owner or operator commences construction on the horizontal or vertical expansion;

(2) For the purpose of restriction of emission of odors, modification is any change to a source of odor emissions or source operations, including odor controls, that causes or could cause an increase in potential odor emissions;

(3) For all other purposes, modification means any physical change to, 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.

Modification, Title I. See Title I modification.

Monitoring system – Any monitoring system that meets the requirements as described in a specific rule, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

Monthly throughput – The total volume of gasoline that is loaded into all gasoline storage tanks during a month, as calculated on a rolling thirty (30)-day average.

Motorcycle – A motor vehicle operated on two wheels

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.

Motor vehicle – Any self-propelled vehicle.

Motor vehicle deadener – A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to selected motor vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

Nameplate capacity – The maximum electrical generating output (expressed as megawatt) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the National Allowance Data Base (NADB) under the data field "NAMECAP" if the generator is listed in the NADB or as measured in accordance with the United States Department of Energy standards. For generators not listed in the NADB, the nameplate capacity shall be used.

National Ambient Air Quality Standards (NAAQS) – Those standards established pursuant to section 109 of the Act and defined by 40 CFR 50. It includes standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2) or oxides of nitrogen (NOx), ozone, particulate matter (PM10 and PM2.5), and sulfur dioxide (SO2) or sulfur oxides (SOx).

Named installations means the following which are named installations.

(1) Coal cleaning plants (with thermal dryers).

(2) Kaft pulp mills.

(3) Portland cement plants.

(4) Primary zinc smelters.

(5) Iron and steel mills.

(6) Primary aluminum ore reduction plants.

(7) Primary copper smelters.

(8) Municipal incinerators capable of charging more than 250 tons of refuse per day.

(9) Hydrofluoric, sulturic, or nitric acid plants.

(10) Petroleum refineries.

(11) Lime plants.

(12) Phosphate rock processing plants.

(13) Coke oven batteries.

(14) Sulfur recovery plants.

(15) Carbon black plants (furnace process).

(16) Primary lead smelters.

(17) Fuel conversion plants.

(18) Sintering plants.

(19) Secondary metal production plants.

(20) Chemical process plants.

(21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input.

(22) Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels.

(23) Taconite ore processing facilities.

(24) Glass fiber processing plants.

(25) Charcoal production facilities.

(26) Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat.

(27) All other stationary source categories regulated by a standard promulgated under Section 111 or 112 of the Act, but only with respect to those air pollutants that have been regulated for that category.

Nearby – Nearby, as used in the definition good engineering practice (GEP) stack height point (2) in this section, is defined for a specific structure or terrain feature—

(1) For purposes of applying the formula provided in definition of good engineering practice (GEP) stack height point (2) in this section, 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;

(2) For conducting fluid modeling or field study demonstrations under subparagraph the definition good engineering practice (GEP) stack height point (3) in this section. 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 the definition good engineering practice (GEP) stack height point (2) in this section, or twenty-six meters (26 m), 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.

Net emissions increase – This term is defined in 40 CFR 52.21(b)(3), promulgated as of July 1, 2003, and hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

New – Defined as follows:

(1) For the purpose of Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating, any source which is not permanently shutdown or an existing source as defined in point (1) of "Existing" definition in this section; and

(2) For all other purposes, any source which is not permanently shutdown or an existing source as defined in point (2) of Existing definition in this section.

NIOSH – The National Institute of Occupational Safety and Health.

Nonaqueous solvent – Any solvent not classifiable as an aqueous solvent as defined by a solvent in which water is the primary ingredient (greater than eighty percent (80%) by weight or greater than sixty percent (60%) by volume of solvent solution as applied must be water). Aqueous solutions must have a flash point greater than ninety-three degrees Celsius (93 °C) (two hundred degrees Fahrenheit (200 °F)) (as reported by the manufacturer) and the solution must be miscible with water.

Nonattainment area (NAA) – Any geographic area of the United States which has been designated as nonattainment under section 107 of the Clean Air Act and described in 40 CFR 81.

Nonpermanent final finish – A material such as a wax, polish, nonoxidizing oil, or similar substance that must be periodically reapplied to a surface over its lifetime to maintain or restore the reapplied material's intended effect.

Offset – A decrease in actual emissions from source operation or installation which 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 exceptions to this are ozone nonattainment areas where volatile organic compound (VOC) and oxides of nitrogen (NOx) 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.

Offset lithographic printing – The process that transfer from a plate to a rubber blanket cylinder before transfer to the substrate surface to be printed.

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.

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 the purposes of this definition, a chamber shall be regarded as enclosed, when during the time combustion takes place, only such apertures, ducts, stacks, flues, or chimneys, as are necessary to provide combustion air and to permit the escape of exhaust gases are open.

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.

Operator – An entity that is legally responsible for the operation of a facility in any way or is legally responsible for the renovation, demolition, or abatement of a facility.

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

Paint – A pigmented surface coating using volatile organic compounds (VOCs) as the major solvent and thinner which converts to a relatively opaque solid film after application as a thin layer.

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

Particulate matter – Any material, except uncombined water, that exists in a finely divided form as a liquid or solid and as specifically defined as follows:

(1) For purposes of ambient air concentrations—

(a) PM—Any airborne, finely-divided solid or liquid material with an aerodynamic diameter smaller than one hundred (100) micrometers as measured in the ambient air as specified in 10 CSR 10-6.040(4)(B);

(b) PM_{10}—Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured in the ambient air as specified in 10 CSR 10-6040(4)(J);

(c) $PM_{2.5}$—Particulate matter with an aerodynamic diameter less than or equal to a nominal two and one-half (2.5) micrometers including the filterable component as measured in the ambient air as specified in in 10 CSR 10-6040(4)(L);

(2) For the purpose of Hospital, Medical, Infectious Waste Incinerators, total particulate matter emitted from a hospital medical infectious waste incinerator as measured by EPA Method 5 of 40 CFR 60, Appendix A–3 or EPA Method 29 of 40 CFR 60, Appendix A–8; and

(3) For all other purposes—

(a) Condensable particulate matter (PM)—Material that is vapor phase at stack conditions, but condenses and/or reacts upon cooling and dilution in the ambient air to form solid or liquid PM immediately after discharge from the stack. Note that all condensable PM is assumed to be in the $PM_{2.5}$ size fraction;

(b) Filterable PM—Particles that are emitted directly by a source as a solid or liquid at stack or release conditions and captured on the filter of a stack test train;

(c) Primary PM (Also known as direct PM)—Particles that enter the atmosphere as a direct emission from a stack or an open source. Primary PM has two (2) components: filterable PM and condensable PM. These two (2) PM components have no upper particle size limit;

(4) Primary $PM_{2.5}$ (Also known as direct $PM_{2.5}$, total $PM_{2.5}$, $PM_{2.5}$, or combined filterable $PM_{2.5}$ and condensable PM)—PM with an aerodynamic diameter less than or equal to two and five-tenths (2.5) micrometers. These solid particles are emitted directly from an air emissions source or activity, or are the gaseous or vaporous emissions from an air emission source or activity that condense to form PM at ambient temperatures. Direct $PM_{2.5}$ emissions include elemental carbon, directly emitted organic carbon, directly emitted sulfate, directly emitted nitrate, and other inorganic particles (including but not limited to crustal material, metals, and sea salt); and

(5) Primary PM_{10} (Also known as direct PM_{10}, total PM_{10}, PM_{10}, or the combination of filterable PM_{10} and condensable PM)—PM with an aerodynamic diameter equal to or less than ten (10) micrometers.

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.

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.

Person – Any individual, partnership, association, corporation, association, firm, company, public or private corporation including the parent company of a wholly-owned subsidiary, joint stock company, municipality, political subdivision, agency, board, department or bureau of the state or federal government, trust, estate or other legal entity either public or private which is recognized by law as the subject of rights and duties. This shall include any legal successor, employee or agent of the previous entities.

Person in charge – The individual present at a facility or work site who is responsible for the operation at the time of inspection.

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 396-13, gas turbine fuel oils Number 2-GT-4-GT, as specified in ASTM D 2880-13, and diesel fuel oils Number 2-D and 4-D as specified in ASTM D 975-13.

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.

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.

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

Place of public accommodation – means any place or business offering or holding out to the general public goods, services, privileges, facilities, advantages or accommodations for the peace, comfort, health, welfare, and safety of the general public.

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.

Pollutant – An air contaminant listed in this section under the definition of "de minimis levels" without regard to levels of emission or air quality impact.

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

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

Porous material – A substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, paper and corrugated paperboard.

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 batch plants.

Portland cement – A hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one (1) or more of the forms of calcium sulfate as an interground addition.

Portland cement kiln – A system, including any solid, gaseous, or liquid fuel combustion equipment, used to calcine and fuse raw materials, including limestone and clay, to produce Portland cement clinker.

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, and the application of air pollution control equipment shall be used in determining the annual potential. Secondary emissions do not count in determining annual potential

PPMV – means, for medical waste and solid waste incinerators, parts per million by dry volume. For sewage sludge and industrial waste incinerators, PPMV means parts per million by volume corrected to seven percent oxygen.

Precursors of a criteria pollutant are –

(1) For ozone, nitrogen oxides (NOx), unless an area is exempted from NOx requirements under section 182(f) of the Clean Air Act, and volatile organic compounds (VOCs);

(2) For PM10, those pollutants described in the PM10 nonattainment area applicable state implementation plan as significant contributors to the PM10 levels; and

(3) For PM2.5—

(a) Sulfur dioxide (SO2) in all PM2.5 nonattainment and maintenance areas;

(b) NOx in all PM2.5 nonattainment and maintenance areas unless both the state and U.S. Environmental Protection Agency (EPA) determine that it is not a significant precursor; and

(c) VOC and ammonia (NH3) only in PM2.5 nonattainment or maintenance areas where either the state or EPA determines that they are significant precursors.

Premises – A lot, plot or parcel of land, the improvements thereon and the ambient air above such land or improvements.

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

Primer – The first layer and any subsequent layers of identically formulated coating applied to the article to provide corrosion resistance, surface etching, surface leveling, adhesion promotion, or other property depending on the end use or exposure of the final product. Primers that are defined as specialty coatings are not included under this definition.

Primer-surfacer – An intermediate protective coating applied over the electrodeposition primer and under the topcoat at an automobile or light-duty truck assembly coating facility. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish. Primer-surfacer may also be called guide coat or surfacer.

Process or production unit – For the purpose of section 8-10(I) Hazardous Air Pollutants Permits, 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.

Process weight – The total weight of all materials introduced into an emission unit, including solid fuels which may cause any emission of particulate matter, but excluding liquids and gases used solely as fuels and air introduced for purposes of combustion.

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.

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.

Quantifiable – The quantity of emission reductions can be measured or estimated by accurate and replicable techniques. These techniques shall be at least as accurate and replicable as the techniques accepted by the U.S. EPA, where accepted techniques exist.

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

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 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 add Environmental Coordination Act of 1974, by reason of 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.

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.

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

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

Regulated asbestos-containing material (RACM) – Are one of the following:

(1) Friable asbestos material;

(2) Category I nonfriable ACM that has become friable;

(3) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading; or

(4) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized or reduced to powder by forces expected to act on the material in the course of regulated demolition or renovation operations.

Regulatory authority – The Director of Health or the Director's authorized representative, or local, state, or federal enforcement body or authorized representative having jurisdiction.

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.

Renewal – The process by which a permit is reissued at the end of its term.

Renovation – Altering a facility or one or more facility components in any way, including the stripping or removal of regulated asbestos-containing material from a facility component.

Repair – For the purpose of asbestos projects, 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 reencapsulating or painting previously encapsulated materials.

Residual fuel oil – The fuel oil variously known as Bunker C, PS 400 and Number generally used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. It has a minimum flash point of one hundred forty degrees Fahrenheit (140 °F).

Responsible official means one of the following:

(1) The president, secretary, treasurer, or vice-president of a corporation in charge of a principal business function or 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:

(a) The facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding Twenty-five (25) million dollars (in second quarter 1980 dollars); or

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

(2) A general partner in a partnership or the proprietor in a sole proprietorship;

(3) Either a principal executive officer or ranking elected official in a municipality or 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

(4) The designated representative of an affected source in so far 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.

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

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

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.

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

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.

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.

Sealing material – For the purpose of asbestos projects, 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.

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:

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

(1) 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.

Sewage sludge incinerator – Any incinerator used to reduce the quantity of sewage sludge.

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.

Sheet-fed – A printing press where individual sheets of substrate are fed into the press sequentially.

Shower room – For the purpose of asbestos projects, A room between the clean room and the equipment room in the work decontamination enclosure. This room shall be equipped with running hot and cold water that is suitably arranged for complete showering during decontamination.

Shutdown – The cessation of operation of any air pollution control equipment or process equipment, except the routine phasing out of process equipment.

Side-seam coating – A coating applied on the interior and/or exterior of a welded, cemented, or soldered seam to protect the exposed metal.

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 table 4 (significant levels for air quality impact in Class II areas) in section 8-10.(K), or any emissions rate or any net emissions increase associated with an installation subject to section 8-10 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 micro-gram per cubic meter (1 $\mu g/m^3$) (twenty four (24)-hour average). For purposes of new source review under sections 8-10.(g) and 8-10 (h) net emission increases of hazardous air pollutants exceeding the de minimis levels are considered significant only if they are also criteria pollutants.

Six (6)-minute period – A three-hundred-sixty (360)-consecutive-second time interval. Six (6)-minute block averages shall be utilized for continuous opacity monitoring system data per the provisions of Appendix B to 40 CFR 60, Performance Specification 1, promulgated as of July 1, 2007, and hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

Sludge – Any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

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

Smoke generating device – 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.

Soils – Includes, but is not limited to, unwanted grease, wax, grit, ash, dirt, and oil.

Solid fuel – A solid material used as a fuel that includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials.

Solvent – Organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers or cleaning agents.

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

Solvent volatility – The Reid vapor pressure of the solvent.

Source – Any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the Clean Air Act (CAA). For purposes of section 502(c) of the CAA, a source, including a source with multiple units, shall be considered a single facility.

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

Source operation. See "Emission unit."

Specialty coating – A coating that, even though it meets the definition of a primer, topcoat, or self-priming topcoat, has additional performance criteria beyond those of primers, topcoats, and

self-priming topcoats for specific applications. These performance criteria may include, but are not limited to, temperature or fire resistance, substrate compatibility, anti-reflection, temporary protection, or marking, sealing, adhesively joining substrates, or enhanced corrosion protection.

Spray gun cleaner – Equipment used to clean spray guns used to apply, but not limited to, primers, paints, specialty coatings, adhesives, sealers, resins or deadeners incorporated into a product distributed in commerce.

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.

Stage I vapor recovery system – A system used to capture the gasoline vapors that would otherwise be emitted when gasoline is transferred from a loading installation to a cargo tank or from a cargo tank to a storage tank.

Stage II vapor recovery system – A system used to capture the gasoline vapors that would otherwise be emitted when gasoline is dispensed from a storage tank to the fuel tank of a motor vehicle. Stage II vapor recovery includes both Stage I and Stage II Vapor Recovery equipment and requirements, unless otherwise stated.

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

Startup – The setting into operation of any air pollution control equipment or process equipment, except the routine phasing in of process equipment.

State – Any non-federal permitting authority, including any local agency, interstate association, or statewide program. When clear from its context, state shall have its conventional territorial definition.

State implementation plan (SIP) – A series of plans adopted by the Missouri Air Conservation Commission, submitted by the director of the state department of natural resources, and approved by the administrator, detailing methods and procedures to be used in attaining and maintaining the ambient air quality standards in Missouri.

Stationary source – Any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act. Building, structure, facility, or installation includes all pollutant emitting activities that are located on one (1) or more contiguous or adjacent properties and are under common control of the same person(s).

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.

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

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.

Substrate – The surface onto which coatings are applied (or into which coatings are impregnated).

Synthesized pharmaceutical manufacturing – Manufacture of pharmaceutical products by chemical synthesis.

Temporary installation - An installation which operates or emits pollutants less than two years.

Third party monitoring – For the purpose of asbestos projects, air monitoring conducted by a person who is not under the direct control of the person carrying out the asbestos project and who has been selected by the owner or operator of the property on which the project is conducted.

Title I modification – means any modification that requires a permit 8-10.(g) and 8-10.(h), or that is subject to any requirement under 10 CSR 10-6.070 or 10 CSR 10-6.080.

Ton or tonnage – Any short ton (i.e., two thousand pounds (2,000 lbs)).

Topcoat –

(1) For the purposes of 10 CSR 10-2.205, a coating that is applied over a primer on an aerospace vehicle or component for appearance, identification, camouflage, or protection. Topcoats that are defined as specialty coatings are not included under this definition; and

(2) For all other purposes, the last film building finishing material applied for the purpose of establishing the color or protective surface, or both, including groundcoat and paint sealer materials, base coat, and clear coat. Nonpermanent final finishes are not topcoats.

Total fluoride – means the elemental fluorine and all fluoride compounds as measured by reference methods specified in 40 CFR part 60, Appendix A—Test Methods, Method 12—Determination of Inorganic Lead Emissions from Stationary Sources or equivalent or alternative methods.

Trackout – Materials (sand, gravel, stones, etc.) that adheres to a vehicle tires and is deposited onto paved public roads or shoulders.

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

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.

Treated wood – Wood that has been subjected to a chemical process or application.

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.

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

Unit – A fossil fuel-fired combustion device such as a stationary boiler, combustion turbine, or combined cycle system.

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.

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.

Untreated wood – Lumber and other wooden materials that have not been chemically treated for resistance to moisture, fire, fungi, insects, and other pests, or has not otherwise been treated or manufactured with chemicals, or that does not contain adhesives or resins. Untreated wood does not include plywood, particleboard, chipboard, and wood with other-than-insignificant quantities of paint, coating, or finish

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.

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

Vapor recovery system modification – Any repair, replacement, alteration, or upgrading of Stage I to Stage II vapor recovery control equipment or gasoline dispensing equipment with Stage II vapor recovery beyond normal maintenance of the system as permitted by the staff director.

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

Varnish – An unpigmented surface coating containing volatile organic compounds (VOCs) and composed of resins, thinners, and driers used to give a glossy surface to wood, metal, etc.

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.

Vinyl coating – A functional, decorative or protective topcoat, or printing applied to vinyl-coated fabric or vinyl sheet.

Visible emission – Any discharge of an air contaminant, including condensable, which reduces the transmission of light or obscures the view of an object in the background.

(1) Visible emissions shall be determined in accordance with 40 CFR 60, Appendix A-Reference Methods, "Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources".

(2) Visible fugitive emissions shall be determined in accordance with 40 CFR 60, Appendix A- Reference Methods, "Method 22, Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares".

Volatile organic compounds (VOC) – 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.

(1) The following compounds are not considered VOCs because of their known lack of participation in the atmospheric reactions to produce ozone:

CAS #	Compound
138495428	1,1,1,2,3,4,4,5,5,5-decafluoro-pentane (HFC 43-10mee)
431890	1,1,1,2,3,3,3-heptafluoro-propane (HFC 227ea)
375031	1,1,1,2,2,3,3-heptafluoropro-pane (n-C3F7OCH3 or HFE-7000)
690391	1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
679867	1,1,2,2,3-pentafluoropropane (HFC-245ca)
24270664	1,1,2,3,3-pentafluoropropane (HFC-245ea)
431312	1,1,1,2,3-pentafluoropropane (HFC-245eb)
460731	1,1,1,3,3-pentafluoropropane (HFC-245fa)
431630	1,1,1,2,3,3-hexafluoropropane (HFC-236ea)
406586	1,1,1,3,3-pentafluorobutane (HFC-365mfc)

422560	3,3-dichloro-1,1,1,2,2-penta-fluoropropane (HCFC-225ca)
507551	1,3-dichloro-1,1,2,2,3-penta-fluoropropane (HCFC-225cb)
354234	1,2-dichloro-1,1,2-trifluoro-ethane (HCFC-123a)
1615754	1-chloro-1-fluorethane (HCFC-151a)
163702076	1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C4F9OCH3 or HFE-7100)
163702087	2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoro-propane ((CF3)2CFCF2OCH3)
163702054	1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5 or HFE-7200)
163702065	2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoro-propane ((CF3)2CFCF2OC2H5)
297730939	3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoro-methyl) hexane (HFE-7500)
71556	1,1,1-trichloroethane (methyl chloroform)
67641	acetone
75683	1-chloro 1,1-difluoroethane (HCFC-142b)
75456	chlorodifluoromethane (HCFC-22)
593704	chlorofluoromethane (HCFC-31)
76153	chloropentafluoroethane (CFC-115)
2837890	2-chloro-1,1,1,2-tetrafluo-roethane (HCFC-124)
75718	dichlorodifluoromethane (CFC-12)
1717006	1,1-dichloro 1-fluoroethane (HCFC-141b)
76142	1,2-dichloro 1,1,2,2-tetrafluo-roethane (CFC-114)
75376	1,1-difluoroethane (HFC-152a)
75105	difluoromethane (HFC-32)
74840	ethane
353366	ethylfluoride (HFC-161)
74828	methane
79209	methyl acetate
75092	methylene chloride (dichloromethane)
98566	parachlorobenzotrifluoride (PCBTF)
354336	pentafluoroethane (HFC-125)
127184	perchloroethylene (tetrachloroethylene)
359353	1,1,2,2-tetrafluoroethane (HFC-134)
811972	1,1,1,2-tetrafluoroethane (HFC-134a)
75694	trichlorofluoromethane (CFC-11)
26523648	1,1,2-trichloro-1,2,2-trifluo-roethane (CFC-113)
306832	1,1,1-trifluoro 2,2-dichlo-roethane (HCFC-123)
420462	1,1,1-trifluoroethane (HFC-143a)
75467	trifluoromethane (HFC-23)
107313	methyl formate ($HCOOCH_3$),

132182924	1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300)
108327	propylene carbonate
616386	dimethyl carbonate
29118249	*trans*-1,3,3,3-tetrafluoropropene (HFO-1234ze)
1691174	1,1,3,3-tetrafluorodimethyl ether (HCF2OCF2H or HFE-134)
78522471	bis (difluoromethoxy)(difluoro) methane (HCF2 OCF2 H or HFE-236cal2)
188690780	1,2-bis (difluoromethoxy)-1,1,2,2-tetrafluoroethane (HCF2 OCF2 CF2 OCF2 H or HFE-338pcc13)
188690779	1-(difluoromethoxy)-2-[(difluoromethoxy)(difluoro)methoxy]-1,1,1,2,2-tetrafluo-roethane(HCF2 OCF2 CF2 OCF2H or H-Galden 1040x or H-Galden ZT 130 (or 150 or 180))
Perfluorocarbon compounds in the following classes:	
0	CYCLIC, BRANCHED OR LINEAR, COM-PLETELY FLUORINATED ALKANES
0	CYCLIC, BRANCHED OR LINEAR, COM-PLETELY FLUORINATED ETHERS WITH NO UNSATURATIONS
0	CYCLIC, BRANCHED OR LINEAR, COM-PLETELY METHYLATED SILOXANES
0	CYCLIC, BRANCHED OR LINEAR, COM-PLETELY FLUORINATED TERTIARY AMINES WITH NO UNSATURATIONS
0	SULFUR-CONTAINING PERFLUOROCAR-BONS WITH NO UNSATURATIONS AND WITH SULFUR BONDS ONLY TO CAR-BON AND FLUORINE

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

(2) The following compound(s) are considered VOC for purposes of all record keeping, emissions reporting, photochemical dispersion modeling, and inventory requirements which apply to VOC and shall be uniquely identified in emission reports but are not VOC for purposes of VOC emissions limitations or VOC content requirements.

CAS #	COMPOUND
540885	T-BUTYL ACETATE

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

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.

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.

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.

Work area – A specified 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.

Work Site – Land, building, facility, or other operation where regulated and / or non-regulated work is performed.

Sec. 8-3. Administration and enforcement.

(a) *Notice of violation and hearing procedures.*

(1) Notice of violation. Whenever the director determines that a violation of this chapter may exist, he shall notify the person alleged to be in violation of such fact. This notice shall be in writing, shall specify the alleged violations of this chapter, including any regulation under this chapter, and shall offer the opportunity of a hearing to be held before the director. The hearing may not be held less than 15 days after the date the notice is served.

(2) Order to correct violation. Upon finding that a violation exists, the director shall issue an order to correct or eliminate each violation in such manner as the director deems appropriate.

(3) Settlement offer. In lieu of enforcement actions and penalties available to the regulatory authority, included those prescribed in Section 8-19, the regulatory authority may provide a monetary settlement offer.

(4) *Appeals.* The director's order shall become final unless the person against whom such order is issued shall file with the director a written appeal within 15 days after the date of receipt of such order. The director shall refer the appeal to the board as provided in this chapter. The appeal shall stay enforcement of the order unless an emergency condition has been declared.

(b) *Inspection*

(a) The Director or his agents may enter at all times, with reasonable notice, in or upon any private or public property, except the administrative offices of any person, firm or corporation, for the purpose of inspecting and investigating any condition or equipment which the director shall have cause to believe to be an air contaminant source. No person shall refuse entry or access, requested for purposes of inspection under this section to the director or to an authorized agent of the director who presents appropriate credentials, nor obstruct or hamper the director or any such agent in carrying out the inspection. Should such right of entry be denied in any instance, such official may invoke the aid of the police department to enforce such right.

(b) The director or his agents may inspect at any reasonable time and in a reasonable manner any equipment, control apparatus, fuel, matter or thing which affects or may affect the emission of air contaminants, including but not limited to the premises where the equipment, control apparatus, or fuel is used, or where the fuel is purchased, sold or offered for sale for use in Kansas City, Missouri.

(c) The director or his agents may inspect at any reasonable time and in a reasonable manner any record relating to a use of equipment or control apparatus which affects or may affect the emission of air contaminants, or relating to the use of fuel, or the distribution, storage, or transportation of fuel for use in Kansas City, Missouri.

(d) Upon request, the owner or operator of the facilities shall receive a report setting forth all facts found which relate to compliance status as a result of such tests and sampling.

(e) The director may make or cause to be made any investigation or study which in his opinion is desirable for the purpose of enforcing this code or controlling or reducing the amount or kind of air contaminant.

(c) *Sampling and testing.*

(a) *Generally.* The director is hereby authorized to conduct or cause to be conducted any test or sampling of the operation of any equipment which, in his opinion, may result in emissions in violation of any regulations in effect under this chapter. These tests may include stack sampling of any plant or facility. Any tests or sampling will be conducted in accordance with the methods listed within appendix A to 40 CFR parts 60 and 61, or will be conducted using any method mutually agreed to in writing by the director and the operator of the air contaminant source involved. All tests shall be conducted by reputable, qualified personnel. Both the director and the operator of the equipment tested may be present at the test and each shall be entitled to a copy of the written test results signed by the person responsible for the tests.

(b) Testing by operator. The director may order the operator of any air contaminant source to perform tests or sampling after a hearing conducted as specified in this section, if the director considers such tests or sampling necessary to determine

compliance with the provisions of this chapter. The costs and expenses of such tests or sampling are to be borne by the operator of the air contaminant source involved. Such person shall notify the director of the time and date such person proposes to conduct such tests or sampling. In any such test conducted by such person, the director may require that his duly authorized representative be present during the conduct of such tests and the taking of such samples.

(c) Testing by director. Tests or samplings made by the operator shall not prohibit the director from making independent tests or samplings, the costs and expenses thereof to be paid by the city. Upon request of the director, the person responsible for the source to be tested shall provide necessary test ports in stacks or ducts and such other safe and proper facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants. Also, that responsible person shall cooperate with the director so as to permit such tests to be made, provided that such inspections, sampling and tests shall not unreasonably interfere with the normal operation of the plant.

(d) *Emission inventory.* The director may require persons owning or responsible for the operation of any air contaminant source to file reports and information relating to the rate, period of emission, and composition of effluent from any air contaminant source. The information in these reports shall include, but not be limited to, the location of such source, size and height of air contaminant outlets, processes employed, fuels used, the nature and time periods and duration of emission, and such other relevant information as is available to such person or reasonably capable of being assembled from the normal operating records of such person, by April 1st after having received a request by the director. Such information shall be supplied to the director upon paper forms or other means approved by the director. Such information shall be used to maintain an emission inventory.

(e) *Enforcement; order of abatement.*

(a) Issuance of orders. Whenever the director determines that the terms or conditions of this chapter have been violated, he may order that the violation be abated within a reasonable time. Such order must be served by either personal service or certified or registered mail.

(b) Prosecution in municipal court. If a violation of this chapter occurs, the director may request the city counselor to file a prosecution in the municipal court.

(c) Proceedings in circuit court. The city counselor is hereby empowered to institute proceedings in the circuit court in the name of the city in order to enforce the terms and conditions of this chapter. This power is in addition to the power to prosecute m municipal court.

(d) Issuance of stop work orders. Upon notice that work on the installation of a machine, contrivance, equipment, device, process or operation that may cause the emission of air contaminants is being pursued without a permit or a registration

where such is required, or without being in accordance with plans, specifications or data submitted with the application for such permit or registration, or contrary to any final order of the board, the director shall order such work immediately stopped. The stop work order shall be in writing and shall be serve upon the person responsible for the premises on which the work is occurring or upon the person doing the work, and shall state the conditions under which the work may be resumed.

(e) Stop work order signage. Only the director or their designee may remove a posted stop work order sign from a facility.

(f) Violation of stop work order. Any person who shall continue any work in or about such machine, contrivance, equipment, device, process or operation after having been served with a stop-work order, except such work as he is directed to perform to remove a violation or unsafe condition, shall be subject to the penalties imposed by section 8-19.

(f) *Temporary variances.* Any person owning or responsible for the operation of any stationary sources bearing a valid operating permit may submit to the director, in a form and manner satisfactory to the director, a request for a temporary variance from this chapter. The following will be the minimum conditions of any variance by the director.

(a) The operator must demonstrate to the satisfaction of the director that such variance would in no way interfere with the attainment or maintenance of the ambient air quality standards.

(b) The person requesting the variance must demonstrate that the variance is necessary to allow for correction of excess emissions from a process or control device when the condition causing such excess emissions could not have been reasonably anticipated and corrected by the applicant without such variance.

(c) Any variance which will exceed a period of one year must be approved by the board. In the event the director determines that:

I. The person is taking all reasonable actions available to him to comply with the time limitations, but such compliance is not possible; or

II. The delay is caused by conditions beyond the jurisdiction and control of such person;

then the director may grant one additional extension of time not to exceed 90 days. Any extension of time to exceed 90 days must be approved by the board.

Sec. 8-4. Open burning.

The purpose of this Section is to control the emission of air pollutants caused by the open burning of combustible material except as allowed by subsection (3).

(1) Open Burning Restrictions

(a) No person may conduct, cause, permit, or allow the disposal of tires, petroleum-based products, trade waste, construction or demolition waste, salvage operation waste, or asbestos containing materials by open burning.

(b) No person shall dispose of refuse and yard waste by open burning or cause, allow or permit open burning of refuse and yard waste.

(c) No person shall dispose of household waste or household waste originated from another's property by open burning.

Nothing in this section may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.

(2) Open Burning Permits. Burning permits may be required by the director.

(a) *Issuance of permit.* Any person intending to engage in the open burning of trade wastes or vegetation shall file an application for a permit on a form furnished by the director. The open burning of trade wastes and/or vegetation with an air curtain device may be permitted when it can be shown that it is necessary and in the public interest and that the applicant is willing to comply with the terms and conditions outlined by the director in writing. Trade waste and/or vegetation burning permits may be renewed upon submission of a new application. The fee set forth in section 8-20 shall be submitted prior to the issuance of an operating permit. The terms and conditions imposed by any such permit must be approved by the chief fire prevention inspector. The site and air curtain configuration must be approved by the air quality section. The operator of the burn site must comply with all written instructions on his permit, and all applicable fire ordinances. The burning shall take place only during daylight hours.

(b) *Revocation of permit.* Any violation of the provisions relating to open burning of trade waste shall be grounds for revocation of the trade waste burning permit by the director or the chief inspector of fire prevention.

(3) *Exceptions to open burning restrictions.* General exceptions to open burning restrictions are as follows:

(a) Fires used for agricultural operations which are related to the growing of crops, but not including non-crop vegetation such as trees, brush or fence rows. For the purpose of this paragraph, botanical nursery operations shall not be considered as agricultural operations.

(b) Fires used for recreational purposes (i.e. personal comfort fires), or fires used for the noncommercial preparation of food such as barbecuing.

(c) Fires used for training when approved by the director.

(d) Warmth fires in connection with an activity, such as construction or demolition, may be allowed by the director. The fire must be contained in a 55-gallon drum. Only clean wood may be used; and at no time may the fuel extend beyond the rim of the containing drum. Warmth fires shall be allowed only when the ambient temperature is less than 50 degrees Fahrenheit.

Sec. 8-5. Restriction of Emission of Visible Air Contaminants and Particulate Matter.

(a) The purpose of the section is to specify the maximum allowable opacity of visible air contaminant emissions, unless specifically exempt in this section, or regulated under 40 CFR 60, and requires the use of continuous opacity monitor systems (COMS) on certain air contaminant sources. And to restrict the emission of particulate matter to the ambient air beyond the premises of origin.

(1) Visible Emissions of Air Contaminants

a. Exceptions. This section applies to all sources of visible emissions with the exception of the following:

(1) Fire used solely for fire-fighter training with approval by the director;

(2) Wood-burning stoves or fireplaces used for heating;

(3) Fires used for recreational purposes or fires used for the noncommercial preparation of food by barbecuing;

(4) Smoke generators used for training air pollution control inspectors.

(b) *General Rules*

i. Unless specified otherwise in this section, no owner or other person shall cause or permit to be discharged into the atmosphere from any source, not exempted under this section, any visible emission equal or greater than twenty percent (20%) for any continuous Six (6)-minute period.

ii. Exceptions allowed in one (1) continuous six (6)-Minute period. The visible emissions limitation of no greater than Sixty percent (60%) shall be allowed for one (1) continuous six (6)-minute period in any sixty (60) minutes. This exception does not apply to existing and new incinerators.

iii. No owner or other person shall cause or permit to be discharged into the atmosphere from existing or new incinerators any visible emission equal or greater than ten percent (10%).

iv. Visible emissions over the limitation listed in (1) (b) (II) 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.

v. Failure to meet the requirements of (1) (b) solely because of the presence of uncombined water shall not be a violation.

vi. The following emissions sources shall have Continuous Opacity Monitoring System (COMS) installed, calibrated, maintained and operated in accordance with 40 CFR 60, Performance Specification 1:

a. 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;

b. Portland cement calcining kiln operations; and

c. Sources that require COMS under 10 CSR 10-6.070 New Source Performance Regulations

vii. All Sources shall have the opacity of visible emissions determined by one (1) of the method listed in Section (c) of this subsection.

(c) *Test Methods*

(1) Emissions from Stationary Sources — Use one (1) of the following four (4) methods:

a. Qualified observer in accordance with 40 CFR 60, Appendix A – Test Methods, Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources;

b. Qualified observer in accordance with the provisions of 40 CFR part 51, Appendix M—Recommended Test Methods, Method 203A—Visual Determination of Opacity of Emissions from Stationary Sources for Time-Averaged Regulations, promulgated as of July 1, 2007, and hereby incorporated by reference in this section, as published by the U.S.

Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401:

c. Qualified observer in accordance with the provisions of 40 CFR part 51, Appendix M—Recommended Test Methods, Method 203B—Visual Determination of Opacity of Emissions from Stationary Sources for Time-Exception Regulations, promulgated as of July 1, 2007, and hereby incorporated by reference in this section, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401; or

d. 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 Stationery Sources by Continuous Opacity Monitoring Systems (as proposed in the October 7, 1992, *Federal Register*, Volume 57, pp. 46114–46119).

(2) Emissions from Mobile Internal Combustion Engines - Use a qualified observer in accordance with the provisions of 40 CFR part 60, Appendix A—Test Methods, Method 22—Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares, promulgated as of July 1, 2007, and hereby incorporated by reference in this section, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

(3) Fugitive Emissions from Material Sources -Smoke Emissions from Flares and As Required by Permit Condition—Use a qualified observer in accordance with the provisions of 40 CFR part 60, Appendix A— Test Methods, Method 22—Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares, promulgated as of July 1, 2007, and hereby incorporated by reference in this section, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

(4) Restriction of Emission of Particulate Matter from Industrial Processes

a. This subsection applies to any operation, process, or activity that emits particulate matter with the exception of:

1. Fugitive emissions;

2. Emission sources that are exempt from construction permit under Section 8-10;

3. Coating operations equipped with a control system designed to control at least ninety-five percent (95%) of the particulate overspray provided the system is operated and maintained in

accordance with manufacturers' specifications or comparable maintenance procedures that meet or exceed manufacturers' specifications;

4. Any particulate matter emission unit that is subject to a federally enforceable requirement to install, operate, and maintain a particulate matter control device system that controls at least ninety percent (90%) of particulate matter emissions;

5. Emission units that at maximum hourly design rate (MHDR) have an uncontrolled potential to emit less than the allowable emissions as calculated in paragraphs (c)(3)a.1. and (c)(3)a.2. of this rule

6. The grinding, crushing, and classifying operations at a rock quarry;

7. The receiving and shipping of whole grain from or into a railroad or truck transportation source at a grain elevator;

8. The burning of fuel for indirect heating;

9. The grinding, crushing, and conveying operations at a power plant.

10. The burning of refuse;

11. The processing of salvageable material by burning;

12. Smoke generating devices, as defined under Section 8-2 of this rule, when a required permit or a written determination that a permit is not required has been issued or written;

13. In the event that other rules apply in Title 10 of Code of Regulations or Kansas City, Missouri, Code of Ordinance, Chapter 8 are also applicable to particulate matter emissions units, the more stringent requirement shall apply.

(d) General Rules

(1) Emission Limitations. All applicable sources, except grey iron jobbing cupolas and corn wet milling drying processes, shall meet the following requirements:

a. Except as provided for in paragraph (b) 1. B. and point (a) of this subsection, no person shall cause, suffer, allow or permit the emission of particulate matter in any one (1) hour from any source in excess of the amount calculated using one of the following equations selected based on the applicable process weight rate:

For process weight rates of 60,000 pounds per hour (lb/hr) or less:

$E = 4.10P^{0.67}$

and for process weight rates greater than 60,000 lb/hr:
$E = 55.0P^{0.11} - 40$;

where:
E = rate of emission in lb/hr; and
P = process weight rate in tons per hour (tons/hr); or

b. The limitations established by paragraph (b)(1).A. of this subsection shall not require the reduction of particulate matter concentration, based on the source gas volume, below the concentration specified in paragraph (b)(1)B., Table 1 of this subsection for that volume; provided that, for the purposes of this subsection, the person responsible for the emission may elect to substitute a volume determined according to the provisions of paragraph (b)(1)C. of this subsection; and provided further that the burden of showing the source gas volume or other volume substituted, including all the factors which determine volume and the methods of determining and computing the volume shall be on the person seeking to comply with the provisions of this section.

Table 1

Source Gas Volume (at Standard Cubic Foot per minute)	Concentration Grain per Cubic Foot
7,000 or less	0.100
8,000	0.096
9,000	0.092
10,000	0.089
20,000	0.071
30,000	0.062
40,000	0.057
50,000	0.053
60,000	0.050
80,000	0.045
100,000	0.042
120,000	0.040
140,000	0.038
160,000	0.036
180,000	0.035

200,000	0.034
300,000	0.030
400,000	0.027
500,000	0.025
600,000	0.024
800,000	0.021
1,000,000 or more	0.020; or

c. Any volume of gases passing through and leaving an air pollution abatement operation may be substituted for the source gas volume of the emission unit served by the air pollution abatement operation, for the purposes of paragraph (b)(1)B. of this subsection, provided that air pollution abatement operation emits no more than forty percent (40%) of the weight of particulate matter entering; and provided further that the substituted volume shall be corrected to standard conditions and to a moisture content no greater than that of any gas stream entering the air pollution abatement operation and further provided that there is an enforceable requirement to operate the air pollution abatement equipment; and

d. Notwithstanding the provisions of paragraphs (b)(1)A. and (b)(1)B. of this subsection, no person shall cause, allow, or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

(2) Grey iron jobbing cupolas shall meet the following requirements:

A. Cupolas shall be equipped with gas cleaning devices operated to remove not less than eighty-five percent (85%) by weight of all the particulate matter in the cupola discharge gases or release not more than 0.4 grain of particulate matter per standard cubic foot of discharge gas, whichever is more stringent; and

B. All gases, vapors, and gas entrained effluents shall be incinerated at a temperature not less than one thousand two hundred degrees Fahrenheit (1,200 °F) for a period of not less than 0.3 seconds.

C. All existing corn wet milling drying processes shall be equipped with gas cleaning devices operated to remove not less than ninety-nine and one-half percent (99.5%) by weight of all particulate matter in the dryer discharge gases or release not more than one one-hundredth grain of particulate matter per dry standard cubic foot (0.01 gr/dscf) of discharge gas.

- Reporting and Record Keeping

All records of any tests performed to determine the amount of particulate matter emitted from a unit shall be kept on-site and available for inspection for five (5) years following the test date.

- Test Methods

The following hierarchy of emission measurement approaches shall be used to determine compliance with point (b) of this subsection. If compliance data is not available from a measurement approach, or an approach is impractical for a source, then the next approach listed in the hierarchy shall be used in its place. The choice of an emissions measurement approach is subject to the approval of the director

(1) Continuous Emission Monitoring System (CEMS);

(2) Stack tests as specified in 40 CFR 60, Appendix A- Test Methods, Method 5 - Determination of Particulate Emissons from Stationary Sources, or Appendix A - Test Methods - Method 17 - Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method) or as determined by the director;

(3) Compliance Assurance Monitoring (CAM) plan found in the facility's operating permit; or

(4) Other methods, as described in permits issued or as approved by the director. These may include approved engineering calculations or other U.S. Environmental Protection Agency documentation.

(5) Restriction of Particulate Matter Emissions from Fuel Burning Equipment Used For Indirect Heating

(e) Applicability

(1) This subsection applies to installations 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 and, in the course of doing so, the products of combustion do not come into direct contact with process materials. Fuels may include but are not limited to coal, tire derived fuel, coke, lignite, coke breeze, gas, fuel oil, biomass, and wood, but do not include refuse. When any products or byproducts of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission rate limitations shall apply.

(2) An emission unit that is subject to 10 CSR 10-6.070 and/or Section 8-10 and in compliance with applicable provisions; or an emission unit fueled by landfill gas, propane, natural gas, fuel oils #2 through #6 (with less than one and two-tenths percent (1.2%) sulfur), and/or other gases (with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or

equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent) would be deemed in compliance with this subsection.

(3) The heat input from emission units in subsection (a)(2) of this subsection must be included in the calculation of Q, the installation's total heat input as defined in subsections (b)(4). and (b)(5) of this subsection.

(4) An installation is exempt from this subsection if all of the installation's applicable units are fueled only by landfill gas, propane, natural gas, fuel oils #2 through #6 (with less than one and two-tenths percent (1.2%) sulfur), or other gases (with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent) or any combination of these fuels.

(f) General Provisions.

(1) The heat content of solid fuels shall be determined using ASTM D5865- 12 Standard Test Method for Gross Calorific Value of Coal and Coke, as approved and published December 1, 2012. The heat content of liquid hydrocarbon fuels shall be determined using by ASTM D240-09 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, as approved and published July 1, 2009.

(2) For purposes of this subsection, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack(s). The hourly heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater, except in the case of boilers of ten (10) million British thermal units (mmBtu) or less the heat input can also be determined by the higher heating value (HHV) of the fuel used at maximum operating conditions. The total heat input of all fuel burning units used for indirect heating at a plant or on a premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

(3) Indirect heating sources requiring permits under 10 CSR 10-6.060 and/or Section 8-10 that in turn may require particular air pollution control measures to meet more stringent emission rate limitations than in this subsection shall meet the requirements of the permits issued under 10 CSR 10-6.060 and/or Section 8-10 Construction Permits Required.

(4) Emission Rate Limitations for Existing Indirect Heating Sources. No person may cause, allow, or permit the emission of particulate matter from existing indirect heating sources in excess of that specified in the following table:

Heat Input (mmBtu/hour)	Rate Limits for Existing Sources (pounds/mmBtu)
<10	0.60
≥10 and ≤5,000	$E=1.09Q^{-0.259}$
>5,000	0.12

Where:
E = the maximum allowable particulate emission rate limit for existing sources in pounds per mmBtu of heat input, rounded off to two (2) decimal places; and
Q = the summation of heat input in mmBtu/hour from all affected fuel burning equipment at a source (including existing equipment, new equipment, NSPS units, and other clean units identified in subsection (a)(2) of this subsection.

(5) Emission Rate Limitations for New Indirect Heating Sources. No person may cause, allow, or permit the emission of particulate matter in excess of that specified in the following table:

Heat Input (mmBtu/hour)	Rate Limits for New Sources (pounds/mmBtu)
<10	0.40
≥10 and ≤1,000	$E=0.80Q^{-0.301}$
>1,000	0.10

Where:
E = the maximum allowable particulate emission rate limit for new sources in pounds per mmBtu of heat input, rounded off to two (2) decimal places; and
Q = the summation of heat input in mmBtu/hour from all affected fuel burning equipment at a source (including existing equipment, new equipment, NSPS units, and other clean units identified in subsection (a)(2) of this subsection.

(6) Alternate Method of Compliance.

a. Compliance with this rule also may be demonstrated if the weighted average emission rate (WAER) of two (2) or more indirect heating sources is less than or equal to the maximum allowable particulate E determined in subsection (b)(4) or (b)(5) of this subsection. The WAER for the indirect heating sources to be averaged shall be calculated by the following formula:

$$WAER = \frac{\sum_{i=1}^{n}(Eai\ X\ Qi)}{\sum_{i=1}^{n} Qi}$$

Where:
WATER = the weighted average emission rate in pounds per mmBtu;
Ea_i = the actual emission rate of the ith indirect heating source in pounds per mmBtu;

Q_i = the rated heat input of the ith indirect heating source in mmBtu per hour; and

n = the number of indirect heating sources in the average.

b. Installations demonstrating compliance with this subsection in accordance with the requirements of subsection (b)(6) of this subsection shall do so by making written application to the director. The application shall include the calculations performed in paragraph (b)(6)a. of this subsection and all necessary information relative to making this demonstration.

c. Point (b)(6) of this subsection only shall apply if the WAER determined by paragraph (b)(6)b. of this subsection for indirect heating sources does not exceed the maximum allowable particulate E determined for that source from subsection (b)(4) or (b)(5) of this subsection when using the rated heat input, Q_i, for the individual indirect heating source as if that individual indirect heating source was the only such source at the installation.

(g) *Reporting and Record Keeping.* All records must be kept on-site for a period of five (5) years and made available to the department upon request. The owner or operator shall maintain records of the following information for each year the unit is operated:

(1) The identification of each affected unit and the name and address of the plant where the unit is located for each unit subject to this subsection;

(2) The calendar date of the record;

(3) The emission rate in pounds per mmBtu for each unit on an annual basis for those units complying with the limit in point (b)(4) and (b)(5) of this subsection; and

(4) The emission rate in pounds per mmBtu for each facility on an annual basis for those units complying with subsection (b)(6) of this subsection.

(h) *Test Methods.* The following hierarchy of methods shall be used to determine compliance with subsections (3) d. and (3) e. of this rule:

(1) Continuous Emission Monitoring System (CEMS);

(2) Stack tests, as specified in 40 CFR 60, Appendix A – Test Methods - Method 5 – Determination of Particulate Emissions from Stationary Sources and Method 17- Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method).

(3) Other EPA documents;

(4) Compliance Assurance Monitoring (CAM) Plans as found in a facility operating permit may be used to provide a reasonable assurance of compliance with subsections (b)(4) and (b)(5) of this subsection;

(5) Sound engineering calculations;

(6) Any other method, such as AP-42 (Environmental Protection Agency (EPA) Compilation of Air Pollution Emission Factors) or Factor Information and Retrieval System (FIRE), approved for the source by incorporation into a construction or operating permit, settlement agreement, or other federally enforceable document; or

(7) Other alternate emission estimation methods not listed in this section when pre-approval is obtained from the department and EPA before using such methods to estimate emissions.

(8) Preventing fugitive particulate matter from becoming airborne:

(a) No person may cause or permit the handling, transporting or storing of any material in a manner which may allow fugitive particulate matter to become airborne in such quantities and concentrations that it remains visible in the ambient air beyond where it originates or that its presence may be found beyond the premises where it originates.

(b) Any person that creates carryout and trackout from their facility shall use approved methods to eliminate the carryout and trackout, and shall clean the public roads caused by these acts in a way that prevents the fugitive particulate matter of becoming a public hazard or nuisance.

(c) No person may cause or permit a building or its appurtenances, a road, a driveway, or an open area to be constructed, used, repaired or demolished without applying all such reasonable measures as may be required to prevent fugitive particulate matter from becoming airborne so that it remains visible beyond the premises where it originates or that its presence may be found beyond the premises where it originates. The director may require such reasonable measures as may be necessary to prevent fugitive particulate matter from becoming airborne, including but not limited to paving or frequent cleaning of roads, driveways and parking lots; application of dust free surfaces; application of water and the planting and maintenance of vegetative ground cover.

(d) This paragraph shall not apply to farming operations.

(9) Restriction of particulate matter from Crematories and Animal Incinerators

a. Any crematory or animal incinerator that burns for disposal ninety percent (90%) or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of human remains, human pathological wastes, or animal carcasses and operates in compliance with rule (10 CSR 10-6.062(3)2.) must has an opacity of less than ten percent (10%) at all times.

Sec. 8-6. Indoor Air Quality

This chapter shall apply to matters relating to indoor air quality in buildings occupied by people in places of public accommodation during regular work hours.

(1) Controls of specific contaminant sources

a. The employer or facility manager shall control microbial contamination in the building by promptly repairing water intrusion that can promote growth of biologic agents.

b. The employer or facility manager shall remediate damp or wet materials by drying, replacing, removing or cleaning same within 48 hours of discovery and shall continue such remediation until the water intrusion is eliminated

c. The employer or facility manager shall take measures to remove visible microbial contamination in areas such as ductwork, humidifiers, dehumidifiers, condensate drip pans, heat exchange components, other HVAC and building system components, or on building surfaces, such as carpeting and ceiling tiles, when found during regular or emergency maintenance activities or during visual inspection.

(2) Air quality during renovations and remodeling

(a) Renovation work and/or new construction that results in the diffusion of dust, stone and other small particles, toxic gases or other harmful substances in quantities hazardous to health shall be safeguarded by means of local ventilation or other protective devices to ensure the safety of employees. Renovation and/or new construction work in occupied buildings shall be isolated and air contaminants, dust and debris shall be confined to the renovation or construction area by use of measures such as, but not limited to, physical barriers, pressure differentials, and/or performing the work during periods of minimal occupancy.

(b) Before re-occupancy, work areas shall be cleaned and aired out as necessary.

(c) Before use of paints, adhesives, sealants, solvents, or installation of insulation, particle board, plywood, floor coverings, carpet, textiles, or other

materials in the course of renovation or construction, the employer or facility manager shall check product labels and Material Safety Data Sheets or seek and obtain information from the manufacturers of those products on whether or not they contain volatile organic compounds such as solvents, formaldehyde or isocyanates that could be emitted during regular use.

(d) The employer or facility manager shall notify employees at least 24 hours in advance, or promptly in emergency situations, of work to be performed on the building that may introduce air contaminants into their work area.

(3) Indoor air quality compliance documents. In response to an employee complaint to the Department, the employer or facility manager shall provide any of the following documents, if available, and requested by the Department:

(1) As-built construction documents;

(2) HVAC system commissioning reports;

(3) HVAC systems testing, adjusting, and balancing reports;

(4) Operations and maintenance manuals;

(5) Water treatment logs; and

(6) Operator training manuals

Sec. 8-7. Restriction of emission of odors.

(a) Emission limitations

(1) No person may cause, permit or allow the emission of noxious odor in such concentrations and frequencies or for such durations that such odor can be perceived beyond the property line of the odor source when one (1) volume of odorous air is diluted with seven (7) volumes of odor free air.

(2) No person may cause, permit or allow the emission of noxious odor in such concentrations and frequencies or for such durations that such odor can be perceived at the point of complaint in a residential area when one (1) volume of odorous air is diluted with two (2) volumes of odor free air.

(3) No person may cause, permit or allow the emission of noxious odor in such concentrations and frequencies or for such durations that such odor can be perceived at the point of complaint within any building open to the public when one (1) volume of odorous air is diluted with two (2) volumes of odor free air.

(b) *Method of measurement.* These measurements may be made with a scento-meter as manufactured by the Barnebey-Cheney Company or by a similar device, as recognized by the director that will give equivalent results.

c. *Exemptions.* The provisions of this rule shall not apply to the emission of odorous matter from the raising and harvesting of crops nor from the feeding, breeding, and management of livestock or domestic animals or fowl.

Sec. 8-8. Restriction of Emission of volatile organic compounds.

The purpose of this section is to reduce volatile organic compound (VOC) emissions in the ambient air.

(1) *Restriction of emission of VOC from solvent metal cleaning:*

a. This section applies to all installation which emits volatile organic compounds (VOC) from solvent metal cleaning or degreasing operations.

b. This subsection applies to any of the following processes that use nonaqueous solvents to clean and remove soils for metal parts:

1. Cold cleaners with a solvent reservoir or tanks;

2. Open-top vapor or conveyorized degreasers;

3. Air-tight or airless cleaning systems; or

4. Spray gun cleaners.

(2) General provisions:

a. No person shall cause or allow a solvent metal cleaning or degreasing operation:

1. Without operating procedures as contained in this subsection and recommendations by the equipment manufacturer;

2. Without the minimum operator and supervisor training.

3. Unless the equipment conforms to the specifications listed in this subsection.

b. The owner or operator of a solvent metal cleaning or degreasing operation shall keep monthly inventory records of solvent types and amounts purchased and solvent consumed for a period of two years. These records shall include all types and amounts of solvent containing waste material

transferred to either a contract reclamation service or to a disposal facility and all amounts distilled on the premises. The records also shall include maintenance and repair logs for both the degreaser and any associated control equipment. The director may require further recordkeeping if necessary to adequately demonstrate compliance with this subsection. All these records shall be made available to the director upon their request.

(3) Exemptions

a. The following shall be exempt from this subsection:

1. Cold cleaners with liquid surface areas of one (1) square foot or less or maximum capacities of one (1) gallon or less;

2. Solvent cleaning operations regulated under 40 CFR 63 Subpart T, National Emission Standards for Halogenated Solvent Cleaning. The provisions of 40 CFR part 63 Subpart T promulgated as of December 19, 2005 shall apply and are hereby incorporated by reference in this subsection, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

3. The cleaning of electronic components, medical devices or optical devices;

4. Hand cleaning/wiping operations

5. Flush cleaning operations;

b. The following shall be exempt from the solvent vapor pressure requirements of subparagraphs (E)1.(a) and (E)1.(b) of this subsection:

(a) Sales of cold cleaning solvents in quantities of five (5) gallons or less;

(b) Cold cleaners using solvents regulated under any federal National Emission Standards for Hazardous Air Pollutants; and

(c) Janitorial and institutional cleaning.

(4) Equipment *specifications:*

a. Cold cleaners.

1. No one shall use, sell or offer for sale for use a cold cleaning solvent with a vapor pressure greater than 1.0 mmHg (0.019 psi) at twenty

degrees Celsius (20° C) (sixty-eight degrees Fahrenheit (68 ° F)) unless used for carburetor cleaning.

2. No one shall use, sell or offer for sale for use a cold cleaning solvent for the purpose of carburetor cleaning with a vapor pressure greater than 5.0 mmHg (0.097 psi) at twenty degrees Celsius (20 °C) (sixty-eight degrees Fahrenheit (68 °F)).

3. An owner or operator of a cold cleaner may use an alternate method for reducing cold cleaning emissions if the owner or operator shows the level of emission control is equivalent to or greater than the requirements of subparagraphs paragraphs (E)1.(a) and (E)1.(b) of this subsection . This alternate method must be approved by the director and the U.S. Environmental Protection Agency (EPA).

4. Each cold cleaner shall have a cover which will prevent the escape of solvent vapors from the solvent bath while in the closed position or an enclosed reservoir which will limit the escape of solvent vapors from the solvent bath whenever parts are not being processed in the cleaner.

5. When one (1) or more of the following conditions exist, the cover shall be designed to operate easily such that minimal disturbing of the solvent vapors in the tank occurs. For covers larger than ten (10) square feet, this shall be accomplished by either mechanical assistance such as spring loading or counter weighing or by power systems:

   i. The solvent vapor pressure is greater 0.3 psi measured at thirty-seven point eight degrees Celsius (37.8 °C) (one hundred degrees Fahrenheit 100 ° F)

   ii. The solvent is agitated; or

   iii. The solvent is heated.

6. Each cold cleaner shall have an internal drainage facility that parts are enclosed under the cover while draining.

7. If an internal drainage facility cannot fit into the cleaning system and the solvent vapor pressure is less than six-tenth pounds per square inch (0.6 psi) measured at thirty-seven point eight degrees Celsius (37.8°C) (One hundred degrees Fahrenheit (100 °F)), then the cold cleaner shall have an external drainage facility which provides for the solvent to drain back into the solvent bath.

8. Solvent sprays, if used, shall be a solid fluid stream (not a fine, atomized or shower-type spray) and at a pressure which does not cause splashing above or beyond the freeboard.

9. A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment or in a location readily visible during operation of the equipment.

10. Any cold cleaner which uses a solvent that has a solvent vapor pressure greater than six-tenth pounds per square inch (0.6) psi measured at thirty-seven point eight degrees Celsius (37.8 °C) (one hundred degrees Fahrenheit 100 °F) or heated above forty-eight point nine degrees Celsius (48.9 °C) (one hundred twenty degrees Fahrenheit 120 °F) must use one (1) of the following control devices:

    i. A freeboard ratio greater than or equal to 0.75;

    ii. Water cover (solvent must be insoluble and heavier than water); or

    iii. Other control systems with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%). These control systems must receive approval from the director and EPA prior to their use.

b. Open-top vapor degreasers

    (a) Each open-top vapor degreaser shall have a cover which will prevent the escape of solvent vapors from the degreaser while in the closed position and shall be designed to open and close easily such that minimal disturbing of the solvent vapors in the tank occurs. For covers larger than ten (10) square feet, easy cover use shall be accomplished by either mechanical assistance such as spring loading or counter weighing or by power systems.

    (b) Each open-top vapor degreaser shall be equipped with a vapor level control device that shuts off the heating source when the vapor level rises above the cooling or condensing coil, or an equivalent safety device approved by the director and EPA.

    (c) Each open-top vapor degreaser with an air/vapor interface over ten and three-fourths (10 ¾) square feet shall be equipped with at least one (1) of the following control devices:

        i. A freeboard ratio of at least 0.75;

        ii. A refrigerated chiller;

iii. An enclosed design (the cover or door opens only when the dry part is actually entering or exiting the degreaser);

iv. A carbon adsorption system with ventilation of at least fifty (50) cubic feet per minute per square foot of air vapor area when the cover is open, and exhausting less than twenty five parts per million (25 ppm) of solvent by volume averaged over one (1) complete adsorption cycle as measured using 40 CFR part 60, Appendix A—Test Methods, Method 25—Determination of Total Gaseous Nonmethane Organic Emissions as Carbon ; or

v. A control system with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%) and prior approval by the director and EPA.

(d) A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment or in a location readily visible during operation of the equipment.

c. Conveyorized degreasers

(a) Each conveyorized degreaser shall have a drying tunnel or rotating (tumbling) basket or other means demonstrated to have equal to or better control which shall be used to prevent cleaned parts from carrying out solvent liquid or vapor.

(b) Each conveyorized degreaser shall have the following safety devices which operate if the machine malfunctions:

i. A vapor level control device that shuts off the heating source when the vapor level rises just above the cooling or condensing coil; and

ii. A spray safety switch, which shuts off the spray pump if the vapor level in the spray chamber drops four inches (4"), for conveyorized degreasers utilizing a spray chamber.

iii. Equivalent safety devices approved by the director and EPA.

(c) Entrances and exits shall silhouette workloads so that the average clearance between parts and the edge of the degreaser opening is less than four (4") inches or less than ten percent (10%) of the width of the opening.

(d) Covers shall be provided for closing off the entrance and exit during hours when the degreaser is being used.

(e) A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment or in a location readily visible during operation of the equipment.

(f) If the air-vapor interface is larger than twenty-one and one-half (21.5) square feet, one (1) major control device shall be required. This device shall be one (1) of the following:

i. A refrigerated chiller;

ii. Carbon adsorption system with ventilation of at least fifty (50) cubic feet per minute per square foot of the total entrance and exit areas (when downtime covers are open), and exhausting less than twenty five parts per million (25 ppm) of solvent by volume averaged over one complete adsorption cycle as measured using the reference method as specified in 40 CFR 60 Appendix A – Test Methods -Method 25 – Determination of Total Gaseous Nonmethane Organic Emissions as Carbon; or

iii. A control system with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%) and prior approval by the director.

d. Air-tight or airless cleaning systems

(a) Have a permanent conspicuous label summarizing the operating procedures affixed to the equipment or in a location readily visible during operation of equipment;

(b) Be equipped with a differential pressure gauge to indicate the sealed chamber pressure under vacuum;

(c) Be equipped with a safety alarm to alert the operator of equipment malfunction.

(5) Operating *Procedure Requirement*

a. Cold cleaners

1. Cold cleaner covers shall be closed whenever parts are not being handled in the cleaners or the solvent must drain into an enclosed

reservoir except when performing maintenance or collecting solvent samples.

2. Cleaned parts shall be drained in the freeboard area for at least fifteen (15) seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back into the cold cleaner.

3. Whenever a cold cleaner fails to perform within the rule operating requirements, the unit shall be shut down immediately and shall remain shut down until operation is restored to meet rule operating requirements.

4. Solvent leaks shall be repaired immediately or the cold cleaner shall be shut down until the leaks are repaired.

5. Any waste material removed from a cold cleaner shall be disposed of by one (1) of the following methods or an equivalent method approved by the director and EPA:

   i. Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste; or

   ii. Stored in closed containers for transfer to:

      a. A contract reclamation service; or

      b. A disposal facility approved by the director and EPA.

6. Waste solvent shall be stored in closed containers only.

b. Open-top vapor degreasers

(a) The cover shall be kept closed at all times except when processing workloads through the open-top vapor degreaser, performing maintenance or collecting solvent samples.

(b) Solvent carry-out shall be minimized in the following ways:

   i. Parts shall be racked, if practical, to allow full drainage;

   ii. Parts shall be moved in and out of the open-top vapor degreaser at less than eleven feet (11') per minute;

iii. Workload shall remain in the vapor zone at least thirty (30) seconds or until condensation ceases, whichever is longer;

iv. Pools of solvent shall be removed from cleaned parts before removing parts from the open-top vapor degreaser freeboard area; and

v. Cleaned parts shall be allowed to dry within the open-top vapor degreaser freeboard area for at least fifteen (15) seconds or until visually dry, whichever is longer.

(c) Porous or absorbent materials such as cloth, leather, wood or rope shall not be degreased.

(d) If workloads occupy more than half of the open-top vapor degreaser's open-top area, rate of entry and removal shall not exceed five feet (5') per minute.

(e) Spray shall never extend above vapor level.

(f) Whenever an open-top vapor degreaser fails to perform within the rule operating requirements, the unit shall be shut down until operation is restored to meet the rule operating requirements.

(g) Solvent leaks shall be repaired immediately or the open-top vapor degreaser shall be shut down until the leaks are repaired.

(h) Ventilation exhaust from the open top vapor degreaser shall not exceed sixty-five (65) cubic feet per minute per square foot of open-top vapor degreaser open area unless proof is submitted that it is necessary to meet Occupational Safety and Health Administration (OSHA) requirements. Fans shall not be used near the open-top vapor degreaser opening.

(i) Water shall not be visually detectable in solvent exiting the water separator, except for automatic water separators that by configuration do not allow visual inspection.

(j) Any waste material removed from an open-top vapor degreaser shall be disposed of by one (1) of the following methods or an equivalent method approved by the director and EPA:

i. Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste; or

ii. Stored in closed containers for transfer to:

a. A contract reclamation service; or

b. A disposal facility approved by the director and EPA.

(k) Waste solvent shall be stored in closed containers only.

c. Conveyorized degreasers.

(a) Ventilation exhaust from the conveyorized degreaser shall not exceed sixty-five (65) cubic feet per minute per square foot of conveyorized degreaser opening unless proof is submitted that it is necessary to meet OSHA requirements. Fans shall not be used near the conveyorized degreaser opening.

(b) Solvent carry-out shall be minimized in the following ways:

i. Parts shall be racked, if practical, to allow full drainage; and

ii. Vertical conveyor speed shall be maintained at less than eleven feet (11') per minute.

(c) Whenever a conveyorized degreaser fails to perform within the rule operating requirements, the unit shall be shut down immediately and shall remain shut down until operation is restored to meet the rule operating requirements.

(d) Solvent leaks shall be repaired immediately or the conveyorized degreaser shall be shut down until the leaks are repaired.

(e) Water shall not be visually detectable in solvent exiting the water separator.

(f) Covers shall be placed over entrances and exits immediately after conveyor and exhaust are shut down and removed just before they are started up.

(g) Waste solvent shall be stored in closed containers only.

(h) Any waste material removed from a conveyorized degreaser shall be disposed of by one (1) of the following methods or an equivalent method approved by the director and EPA:

i. Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste; or

ii. Stored in closed containers for transfer to

a. A contract reclamation service; or

b. A disposal facility approved by the director and EPA.

d. Spray gun cleaners.

1. Cleaning of spray guns shall be accomplished by use of one (1) or more of the following methods:

i. Enclosed spray gun cleaning. Enclosed system spray gun cleaning shall consist of forcing solvent through the spray gun and/or spray gun parts. Spray guns and/or spray gun parts shall only be cleaned in remote closed top spray gun cleaning machines under the following conditions:

a. The spray gun cleaning machine is operated within the manufacturer's specifications and with the lid kept tightly closed at all times except when being accessed or maintained; and

b. Removable containers (which shall not exceed thirty (30) gallons in size) for clean, used and waste solvent, are kept tightly closed except when being accessed or maintained;

ii. Nonatomized spray gun cleaning. Nonatomized spray gun cleaning shall consist of placing solvent in the pressure pot and forcing it through the spray gun with the atomizing cap in place. Spray guns shall only be cleaned through nonatomized spray gun cleaning under the following conditions:

a. No atomizing air shall be used; and

b. The cleaning solvent from the spray gun shall be directed into a pail, bucket, drum or other waste container that is closed when not in use;

iii. Disassembled spray gun cleaning. Disassembled spray gun cleaning shall be accomplished by disassembling the spray

gun to be cleaned and cleaning the components by one (1) of the following methods:

a. By hand in a spray gun cleaner, which shall remain closed except when in use; or

b. By soaking in a spray gun cleaner, which shall remain closed during the soaking period and when not inserting or removing components;

iv. Atomized spray gun cleaning. Atomized spray gun cleaning shall consist of forcing the cleaning solvent through the gun and directing the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions; or

v. Cleaning of the nozzle tips of an automated spray equipment system is exempt from the requirements of point (F)4. of this subsection, unless the system is a robotic system that is programmed to spray into a closed container.

2. Any waste material removed from a spray gun cleaning system shall be disposed of by one (1) of the following methods or an equivalent method approved by the director and EPA:

i. Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste; or

ii. Stored in closed containers for transfer to:

a. A contract reclamation service; or

b. A disposal facility approved by the director and EPA.

3. Waste solvent shall be stored in closed containers only.

e. Air-tight and airless cleaning systems.

(a) Operate the air-tight and airless cleaning systems with a door or other pressure sealing apparatus in place during all cleaning and drying cycles.

(b) All associated pressure relief devices shall not allow liquid solvent to drain out of the equipment.

(c) Solvent leaks shall be repaired immediately or the air-tight or airless cleaning system shall be shut down until the leaks are repaired.

(d) The air-tight and airless cleaning systems shall be operated within the manufacturer's specifications.

(e) Parts shall be positioned, if practical, to allow full drainage and pools of solvent shall be removed from cleaned parts before removing parts from the air-tight or airless cleaning system.

(f) Wipe up solvent leaks and spills immediately and store the used rags in closed containers.

(g) Any waste material removed from an air-tight and airless cleaning system shall be disposed of by one (1) of the following methods or an equivalent method approved by

(I) Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste; or

(II) Stored in closed containers for transfer to:

a. A contract reclamation service; or

b. A disposal facility approved by the director and EPA.

(h) Waste solvent shall be stored in closed containers only.

(6) Operator and supervisor training.

1. Only persons trained in at least the operational and equipment requirements specified in this subsection for their particular solvent metal cleaning process shall be permitted to operate the equipment.

2. The supervisor of any person who operates a solvent metal cleaning process shall receive equal or greater operational training than the operator.

3. A procedural review shall be given to all solvent metal cleaning equipment operators at least once each 12 months.

4. A record shall be kept of solvent metal cleaning training for each employee.

5. Training records shall be maintained per subsections (H)4. and (H)5. of this subsection.

(7) Reporting and Record Keeping.

1. The owner or operator of a solvent metal cleaning or degreasing operation shall keep records of all types and amounts of solvent containing waste material from cleaning or degreasing operations transferred to either a contract reclamation service or to a disposal facility and all amounts distilled on the premises. The records also shall include maintenance and repair logs for both the degreaser and any associated control equipment. These records shall be kept current and made available for review on a monthly basis. The director may require additional record keeping if necessary to adequately demonstrate compliance with this rule.

2. All persons that use any solvent subject to the requirements of subparagraphs (E)1.(a) or (E) 1.(b) of this subsection shall maintain records which include for each purchase of cold cleaning solvent:

   (a) The name and address of the solvent supplier;

   (b) The date of purchase;

   (c) The type of solvent; and

   (d) The vapor pressure of the solvent in mmHg at twenty degrees Celsius (20 °C) (sixty-eight degrees Fahrenheit (68 °F)).

3. All persons that sell or offer for sale any solvent subject to the requirements of subparagraph (E)1.(a) or (E) 1.(b) of this subsection shall maintain records which include for each sale of cold cleaning solvent:

   (a) The name and address of the solvent purchaser;

   (b) The date of sale;

   (c) The type of solvent;

   (d) The unit volume of solvent;

   (e) The total volume of solvent; and

   (f) The vapor pressure of the solvent measured in mmHg at twenty degrees Celsius (20 °C) (sixty-eight degrees Fahrenheit (68 °F)).

4. A record shall be kept of solvent metal cleaning training required by point (G) of this subsection.

5. All records required under points (H)1., (H)2. , and (H)3. of this section shall be retained for five (5) years and shall be made available to the director upon request.

(2) *Restriction of emission of VOC from liquefied cutback asphalt paving.* The purpose of this section is to restrict volatile organic compounds emissions from cutback asphalt paving operations.

(A) This subsection limits the use or application of liquefied cutback asphalt in paving and maintenance operations of highways, roads, parking lots and driveways.

(B) After December 31, 1982 no person may cause or permit the use or application of liquefied cutback asphalts on highways, roads, parking lots and driveways during the months of April, May, June, July, August, September and October except as permitted in paragraph (C). This subsection 8-8(2) refers to liquefied cutback asphalt which is directly applied or used in a plant-mix or road-mix

(C) *Exceptions.* The use or application of liquefied cutback asphalts is permitted if the liquefied cutback asphalt is:

1. Used in a plant-mix or road-mix which is used solely for filling potholes or for emergency repairs;

2. Used to produce a plant-mix manufactured for resale or for use outside Clay, Jackson and Platte Counties; or

3. To be used solely as asphalt prime coat or asphalt seal coat on absorbent surfaces.

(D) Record keeping.

1. Records shall be kept on all application uses and all production quantities sufficient to determine daily volatile organic compound emissions for the months of April, May, June, July, August, September, and October.

2. Liquefied cutback asphalt plants shall keep records of the quantities of liquefied cutback asphalt sold and who the purchasers are. The owner, operator or user shall record all information derived for a period of not less than two (2) years and all those records shall be made available to the director upon their request.

(3) *Restriction of emission of VOC from industrial surface coating operations.*

a. This rule restricts volatile organic compound emissions from industrial surface coating operations.

1. This subsection shall apply to any installation with an uncontrolled potential to emit greater than 6.8 kilograms per day (kg/day) or 2.7 tons per year of volatile organic compounds (VOC) from industrial surface coating operations covered under this subsection. This includes any installation which does not have an allowable VOC emission limit established under construction permit requirement or legally enforceable state implementation plan revision and has uncontrolled potential emissions greater than or equal to 6.8 kg/day or 2.7 tons per year. The uncontrolled potential to emit is the potential emissions (as defined) plus the VOC removed by emission control devices.

2. This section is not applicable of the surface coating of the following metal parts and products:

(a) Exterior refinishing of airplanes;

(b) Automobile refinishing;

(c) Customizing top coating of automobiles and trucks, if production is less than 35 vehicles per day; and

(d) Exterior of marine vessels.

b. General provisions. No person shall emit into the atmosphere any VOC from any surface coating operation in excess of the amount allowed in point (C). This subsection will apply to application areas, flash-off areas and ovens used in an affected coating operation.

c. Tables of emission limitations and dates of compliance.

1. Table A: VOC Emission Limits Based on Solids Applied.

Operations	**Emission Limit #VOC/gal Solids Applied**	**Dates of Compliance (See Note 1)**
Auto/light duty truck		
*Ford Motor Company		

Primer surfacer	15.1	12/24/1987
Topcoat (passenger)	15.1	12/31/1988
Topcoat (truck) See Note 2	15.1	12/31/1988
General Motors Car		
Primer surfacer	15.1	12/31/1987
Topcoat	15.1	12/31/1987

2. Table B: VOC Emissions Limits Based on Weight of VOC per Gallon of Coating (minus Water and non-VOC organic compounds.

Surface Coating Operations	Emission Limit VOC/gal Coating (minus water) and non-VOC Organic Compounds	Dates of Solids Compliance (See Note 1)
Large appliance		
*Topcoat	2.8	12/31/1981
Final repair	6.5	12/31/1981
Magnet wire	1.7	12/31/1981
Metal furniture	3	12/31/1981
Auto/light duty truck		
Ford Motor Company		
Electrocoat prime	1.2	12/31/1982
Topcoat (truck)	3.6	12/31/1985
Topcoat (passenger)	3.6	12/31/1986
Final repair	4.8	12/31/1985
Miscellaneous metal parts-extreme performance and air-dried coatings	3.5	12/31/1982
All other coatings	3	12/31/1982
General Motors Car		

Cathodic electrocoat	1.2	12/31/1982
Primer surfacer	3	12/31/1980
Topcoat	5.8	12/31/1979
	5	12/31/1981
Final repair	6.5	7/1/1979
	4.8	12/31/1987
Plastic fascia topcoat	4.5	11/23/1987
Miscellaneous metal parts-extreme performance and air-dried coatings	3.5	12/31/1982
All other coatings	3	12/31/1982
Paper	2.9	12/31/1981
Vinyl	3.8	12/31/1981
Fabric	2.9	12/31/1981
Coil	2.6	12/31/1981
Can		
2 piece exterior	4	12/31/1982
sheet basecoat	2.8	12/31/1985
2 and 3 piece interior body spray	4.2	12/31/1982
2 piece end exterior	4.2	12/31/1982
3 piece side seam	5.5	12/31/1982
End seal compound	4.2	12/31/1982
	3.7	12/31/1985
Railroad cars, farm		
Implements, machinery and heavy duty tracks	3.5	12/31/1982
Other metal parts		
Clear coat	4.3	12/31/1982
Extreme performance coat and air-dried coating	3.5	12/31/1982
Other coatings	3	12/31/1982

Note 1: The emission limit associated with the latest compliance date for each surface coating process supersedes interim emission limits associated with earlier compliance dates.

Note 2: A formal commitment submitted to and received by the director prior to 12/13/88 to construct or modify the truck topcoat surface coating operation no later than 12/13/90 to meet the provisions of 10 CSR 10-6.070 or 40 CFR 60 Subpart MM, whichever is more stringent, may be substituted for this emission limitation. The emission limit specified by the rules referenced in this note is 12.3 lbs. VOC per gallon of solids applied.

d. Determination *of compliance.* Compliance with subsection (c) shall be determined by the methods in subsections (5) 1. through 3. as applicable and appropriate.

1. For subsection (C)1., the calculation of daily volume-weighted emission performance for automobile and light-duty truck primer-surfacer and topcoat operations, shall be made according to procedures detailed in the Environmental Protection Agency (EPA) document entitled Protocol for Determining the Daily Volatile Organic Compound Emission Rate for Automobile and Light Duty Truck Topcoat Operations dated June 10, 1988.

2. For subsection (C)2.:

A. Compliance with emission limits may be demonstrated using the method as specified in 40 CFR 60, Appendix A - Test Methods, Method 24 – Determination of Volatile Matter Content, Water Content, Density, Volume, Solids and Weight Solids of Surface Coatings, using the one (1)-hour bake. Emission performance shall be on the basis of a daily volume-weighted average of all coatings used in each surface coating operation as delivered to the coating applicator(s) on a coating line. The daily volume-weighted average ($DAVG_{vw}$) is calculated by the following formula:

$$DAVGvw = \frac{\sum_{n}^{i=1}(Ai\ X\ Bi)}{C}$$

Where:

A= Daily gal. each coating used (minus water and exempt solvents) in a surface coating operation.
B= Lbs. VOC/gal coating (minus water and exempt solvents).
C= Total daily gal. coating used (minus water and exempt solvents) in a surface coating operation.
n= Number of all coating used in a surface coating operation

B. Compliance with the emission limits in subsection (c)2. may be demonstrated on pounds of VOC per gallon of coating

solids basis. The demonstration is made by first converting the emission limit in subsection (c)2. to pounds of VOC per gallon of coating solids as shown in the following three (3) steps:

1)	lbs. VOC per gallons of coating minus water & exempt solvents / 7.36 lbs. per gallon	(Emission Limit From (C)2.) / (average density of solvents used to originally establish the emission limit)	=	volume fraction of VOC
2)	1—Volume fraction	Volume fraction	=	volume fraction of Solids
3)	lbs. VOC per gallons of coating minus water & exempt solvents	(Emission Limit From (C)2.) / Volume fraction of solids	=	Lbs. VOC / gallon of coating solids

This value is the new compliance figure. The VOC per gallon of coating solids for each coating used is then determined using the method as specified in 40 CFR 60, Appendix A- Test Methods, Method 24 – Determination of Volatile Matter Content, Water Content, Density, Volume, Solids and Weight Solids of Surface Coatings using the one-hour bake. The composite daily volume-weighted average of pounds of VOC per gallon of coating solids as tested for in the actual coatings used is compared to the new compliance figure. Source operations on a coating line using coatings with a composite actual daily volume-weighted average value less than or equal to the new compliance figure are in compliance with this subsection.

3. As an alternative to the methods specified in (D)1. and 2. compliance with the emission limits specified in points (C)1. and 2. may be demonstrated by the implementation of an emission reduction equivalency compliance plan which utilizes a daily

weighted average of emissions from a single or combination of source operations provided that:

A. All source operations involved in the plan are subject to the emission limits of this subsection;

B. All source operations are part of the same installation;

C. The total actual VOC emissions for each twenty (24)-hour period do not exceed the sum of the allowable emissions determined from point (C) for each source operation for the same period;

D. Equivalent emission reductions are accomplished in the time intervals allowed in point (C)2. as would be required for individual source operations;

E. After December 24, 1987, testing of raw materials, emissions, equipment, or a combination of these, must be performed prior to initiation of an alternate compliance plan to verify any equivalent emission reductions claimed. All test methods and procedures, to be acceptable for use in the equivalency determination, must receive prior review and must have been approved by the director. Failure to gain test method and procedure approval of the director will invalidate the equivalency claim; and

F. The overall plan is approved by the director.

e. Record keeping

1. The owner or operator of a coating line shall keep records detailing specific VOC sources, as necessary to determine compliance. These may include:

(a) The type and the quantity of coatings used daily;

(b) The coating manufacturer's formulation data for each coating on forms provided or approved by the director

(c) The type and quantity of solvents for coating, thinning, purging and equipment cleaning used daily;

(d) All test results to determine capture and control efficiencies, transfer efficiencies and coating makeup;

(e) The type and quantity of waste solvents reclaimed or discarded daily;

(f) The quantity of pieces or materials coated daily; and

(g) Any additional information pertinent to determine compliance.

2. Records, such as daily production rates, may be substituted for actual daily coating use measurement provided the owner submits a demonstration approvable by the director that these records are adequate for the purposes of this subsection. This will apply for all surface coating industries until the EPA issues national daily emissions record keeping protocols for specific industrial classifications.

3. Records required under subsections (6) a. and b. shall be retained by the owner or operator

(4) *Restriction* of emission of VOC from petroleum liquid storage loading and transfer. This subsection restricts volatile organic compound emissions from the handling of petroleum liquids in petroleum storage tanks with a capacity greater than forty thousand (40,000) gallons, the loading of gasoline into delivery vessels and the transfer of gasoline from delivery vessels into stationary storage containers. Exemptions are provided for facilities that make transfers into stationary storage containers of certain sizes and types. This subsection is required in order to reduce hydrocarbon emissions that contribute to the formation of ozone.

a. Petroleum *storage tank.*

1. No owner or operator of petroleum storage tanks shall cause or permit the storage in any stationary storage tank of more than forty thousand (40,000) gallons capacity of any petroleum liquid having a true vapor pressure of one and one-half (1.5) pounds per square inch absolute (psia) or greater at ninety degrees Fahrenheit (90 °F), unless the storage tank is a pressure tank capable of maintaining working pressures sufficient at all times to prevent volatile organic compound (VOC) vapor or gas loss to the atmosphere or is equipped with one (1) of the following vapor loss control devices:

A. A floating roof, consisting of a pontoon type, double-deck type or internal floating cover, or external floating cover, that rests on the surface of the liquid contents and is equipped with a closure seal(s) to close the space between the roof edge and tank wall. Storage tanks with external

floating roofs shall meet the additional following requirements:

i. The storage tank shall be fitted with either—

a. A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

b. A closure or other device approved by the staff director that controls VOC emissions with an effectiveness equal to or greater than a seal required under point (A)1.(a)(I)[a] of this subsection;

ii. All seal closure devices shall meet the following requirements:

a. There are no visible holes, tears or other openings in the seal(s) or seal fabric;

b. The seal(s) is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and

c. For vapor-mounted primary seals, the accumulated area of gaps exceeding 0.32 centimeters, one-eighth inch (1/8") width, between the secondary seal and the tank wall shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 in^2 per foot of tank diameter)

iii. All openings in the external floating roof, except for automatic bleeder vents, rim space vents and leg sleeves shall be equipped with

a. Covers, seals or lids in the closed position except when the openings are in actual use; and

b. Projections into the tank which remain below the liquid surface at all times;

iv. Automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports;

v. Rim vents shall be set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and

vi. Emergency roof drains shall have slotted membrane fabric covers or equivalent covers which cover at least ninety percent (90%) of the area of the opening;

B. A vapor recovery system with all storage tank gauging and sampling devices gas-tight, except when gauging or sampling is taking place. The vapor disposal portion of the vapor recovery system shall consist of an adsorber system, condensation system, incinerator or equivalent vapor disposal system that processes the vapor and gases from the equipment being controlled; or

C. Other equipment or means of equal efficiency for purposes of air pollution control as approved by the staff director.

2. Control equipment described in point (4)(A)1.(a) of this subsection shall not be allowed if the petroleum liquid other than gasoline has a true vapor pressure of 11.1 psia or greater at ninety degrees Fahrenheit (90 °F). All storage tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

3. Owners and operators of petroleum storage tanks subject to this subsection shall maintain written records of maintenance (both routine and unscheduled) performed on the tanks, all repairs made, the results of all tests performed and the type and quantity of petroleum liquid stored in them.

d. This subsection shall not apply to petroleum storage tanks which

(a) Are used to store processed and/or treated petroleum or condensate when it is stored, processed and/or treated at a drilling and production installation prior to custody transfer;

(b) Contain a petroleum liquid with a true vapor pressure less than 27.6 kilopascals (kPa) (4.0 psia) at ninety degrees Fahrenheit (90 °F);

(c) Are of welded construction, and equipped with a metallic-type shoe primary seal and have a shoe-mounted secondary seal or closure

devices of demonstrated equivalence approved by the staff director; or

(d) Are used to store waxy, heavy pour crude oil.

b. *Gasoline* loading.

1. No owner or operator of a gasoline distribution facility or delivery vessel shall cause or permit the loading of gasoline into any delivery vessel from a distribution facility unless the distribution facility is equipped with a vapor recovery system or equivalent. The delivery vessel shall be in compliance with part (4)(D) of this subsection.

2. Loading shall be accomplished in a manner that the displaced vapors and air will be vented only to the vapor recovery system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. The vapor disposal portion of the vapor recovery system shall consist of one (1) of the following:

a. An adsorber system, condensation system, incinerator or equivalent vapor disposal system that processes the vapors and gases from the equipment being controlled and limits the discharge of VOC into the atmosphere to ten (10) milligrams of VOC vapor per liter of gasoline loaded;

b. A vapor handling system that directs the vapor to a fuel gas system; or

c. Other equipment of an efficiency equal to or greater than points (4)(B)2.(a) or (b) of this subsection if approved by the staff director.

3. Owners and operators of loading installations subject to this subsection shall maintain complete records documenting the number of delivery vessels loaded and their owners.

4. This subsection shall not apply to loading installations whose average monthly throughput of gasoline is less than or equal to one hundred twenty thousand (120,000) gallons when averaged over the most recent calendar year, provided that the installation loads gasoline by submerged loading.

(a) Upon request of the director, these installations shall submit to the staff director, a report stating gasoline throughput for each month of the previous calendar year

(b) Delivery vessels purchased after the April 30, 2004 shall be Stage I equipped.

(c) Delivery vessels operated by an exempt installation shall not deliver to Stage I controlled tanks unless the delivery vessel is equipped with and employs Stage I controls.

(d) A distribution facility that fails to meet the requirements of the exemption for one (1) calendar year shall not qualify for the exemption again.

(e) To maintain the exemption owners or operators shall maintain records of gasoline throughput and gasoline delivery.

(b) Gasoline Transfer and store

1. No owner or operator of a gasoline storage tank or delivery vessel shall cause or permit the transfer of gasoline from a delivery vessel into a gasoline storage tank with a capacity greater than five hundred fifty (550) gallons unless

(a) The storage tank is equipped with a submerged fill pipe extending unrestricted to within six inches (6") of the bottom of the tank, and not touching the bottom of the tank, or the storage tank is equipped with a system that allows a bottom fill condition;

(b) All storage tank caps and fittings are vapor-tight when gasoline transfer is not taking place; and

(c) Each storage tank is vented via a conduit that is:

i. At least two inches (2") inside diameter;

ii. At least twelve feet (12') in height above grade; and

iii. Equipped with a pressure/vacuum valve that is CARB certified or equivalent as approved by the staff director. The pressure specifications for the pressure/vacuum valves shall be a positive pressure setting of two and one-half to six inches (2.5–6") of water and a negative pressure setting of six to ten inches (6.0–10.0") of water.

2. Stationary storage tanks with a capacity greater than two thousand (2,000) gallons shall also be equipped with a Stage I vapor recovery system in addition to the requirements of paragraph (4)(C)1. of this subsection and the

delivery vessels to these tanks shall be in compliance with part (4)(D) of this subsection.

(a) The vapor recovery system shall collect no less than ninety percent (90%) by volume of the vapors displaced from the stationary storage tank during gasoline transfer and shall return the vapors via a vapor-tight return line to the delivery vessel. After the effective date of this subsection, all coaxial systems shall be equipped with poppeted fittings.

(b) At the time of installation and every six (6) years thereafter, each Stage I vapor recovery system shall be tested according to subsection (4)(G)5. of this rule. The department must be notified at least seven (7) days prior to the test date to allow an observer to be present. It is not required for the department to be present to observe the test. The test results must be submitted to the staff director within fourteen (14) days of test completion. Each system has to be capable of meeting the static pressure performance requirement of the following equation:

$$Pf = 2e^{-760.490/v}$$

Where:

Pf = Minimum allowable final pressure, inches of water.
v = Total ullage affected by the test, gallons.
e = Dimensionless constant equal to approximately 2.718.
2 = The initial pressure, inches water.

(c) Pressure/vacuum valves shall be tested according to subsection (4)(G)4. of this subsection at the time of installation and every three (3) years thereafter. The department must be notified at least seven (7) days prior to the test date to allow an observer the opportunity to be present. It is not required for the department to be present to observe the test. The test results must be submitted to the staff director within fourteen (14) days of test completion. The pressure specifications for pressure vacuum valves must be a positive pressure setting of two and one-half to six inches (2.5–6") of water and a negative pressure setting of six to ten inches (6–10") of water. The leak rate of each pressure/vacuum valve shall not exceed four tenths (0.40) cubic foot per hour at a pressure of two inches (2.0") of water and four tenths (0.40) cubic foot per hour at a vacuum of four inches (4.0") of water.

(d) A delivery vessel shall be refilled only at installations complying with the provisions of part (4)(B) of this subsection.

(e) This subsection shall not be construed to prohibit safety valves or other devices required by governmental regulations.

3. No owner or operator of a gasoline delivery vessel shall cause or permit the transfer of gasoline from a delivery vessel into a storage tank with a capacity greater than two thousand (2,000) gallons unless

(a) The owner or operator employs one (1) vapor line per product line during the transfer. The staff director may approve other delivery systems upon submittal to the department of test data demonstrating compliance with subparagraph (4)(C)2.(a). of this subsection;

(b) The vapor hose(s) employed is no less than three inches (3") inside diameter; and

(c) Each product hose employed is no more than four inches (4") inside diameter.

(d) Any component of the vapor recovery system that is not preventing vapor emission as designed is repaired.

4. The owner or operator of a vapor recovery system subject to this part shall maintain records of inspection reports, enforcement documents, gasoline deliveries, routine and unscheduled maintenance, repairs, and all results of tests conducted. Unless otherwise specified in this rule, records have to be kept for two (2) years and made available to the staff director within five (5) business days of a request.

5. The provisions of paragraph (4)(C)2. of this subsection shall not apply to transfers made to storage tanks equipped with floating roofs or their equivalent.

6. The provisions of paragraphs (4)(C) 1.–4. of this subsection shall not apply to stationary storage tanks having a capacity less than or equal to two thousand (2,000) gallons used exclusively for the fueling of implements of agriculture or were installed prior to June 12, 1986.

(c) Gasoline *Delivery Vessels.*

1. No owner or operator of a gasoline delivery vessel shall operate or use a gasoline delivery vessel which is loaded or unloaded at an installation subject to subsections (4)(B) or (C) of this subsection unless

(a) Cargo tank tightness test is conducted annually;

(b) The owner or operator obtains the completed test results signed by a representative of the testing facility upon successful completion of the leak test

(c) The delivery vessel is repaired by the owner or operator and retested within fifteen (15) days of testing if it does not pass the cargo tank tightness test; and

(d) A copy of the vessel's current cargo tank tightness test results are kept with the delivery vessel at all times and made immediately available to the staff director upon request.

2. This part shall not be construed to prohibit safety valves or other devices required by governmental regulations.

(d) *Owner/Operator Compliance.* The owner or operator of a vapor recovery system subject to this subsection shall

1. Operate the vapor recovery system and the gasoline loading equipment in a manner that prevents—

(a) Gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen inches (18") of water) in the delivery vessel;

(b) A reading equal to or greater than one hundred percent (100%) of the lower explosive limit (LEL, measured as propane) at two and one-half (2.5) centimeters from all points on the perimeter of a potential leak source when measured by the method specified in 40 CFR Part 60 Appendix A—Test Methods, Method 21—Determination of Volatile Organic Com pound Leaks during loading or transfer operations;

(c) Visible liquid leaks during loading or transfer operation;

2. Repair and retest within fifteen (15) days, a vapor recovery system that exceeds the limits in part(4)(E) of this subsection; and

3. The owner or operator of a vapor recovery system subject to part (4)(E) of this subsection shall maintain records of inspection reports, enforcement documents, gasoline deliveries, routine and unscheduled maintenance, repairs, and all results of tests conducted. Unless otherwise specified in this rule, records shall be kept for two (2) years and made available to the staff director within five (5) business days of a request.

(e) *Reporting and Record Keeping.* The reporting and record keeping requirements are located in paragraphs (4)(A)3., (4)(B)3., (4)(C)4., and (4)(E)3. of this

subsection. In addition, all records shall be maintained for a minimum of two (2) years, and shall be made immediately available to inspectors upon request.

(f) *Test Methods*

1. Testing procedures to determine compliance with subparagraph (4)(D)1.(a) shall be performed according to 40 CFR 63.425(e), Subpart R. 40 CFR 63.425(e), Subpart R, promulgated as of June 30, 2018 is hereby incorporated by reference in this rule, as published by the Office of the Federal Register. Copies can be obtained from the U.S. Publishing Office Bookstore, 710 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions.

2. Testing procedures to determine compliance with subparagraph (4)(B)2.(a) of this rule shall be conducted using Method 25— Determination of Total Gaseous Nonmethane Organic Emissions as Carbon as specified in 10 CSR 10-6.030(22) or by any method determined by the staff director.

3. The staff director, at any time, may monitor a delivery vessel, vapor recovery system or gasoline loading equipment by a method determined by the staff director to confirm continuing compliance with this subsection.

4. Testing procedures to determine compliance with subparagraph (4)(C)2.(c). of this rule shall be conducted using California Air Resources Board Vapor Recovery Test Procedure TP-201.1E—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003, or by any method determined by the staff director. Test Procedure TP-201.1E is hereby incorporated by reference in this rule, as published by the California Air Resources Board. Copies can be obtained from the California Air Resources Board, PO Box 2815, Sacramento, CA 95812. This rule does not incorporate any subsequent amendments or additions.

5. Testing procedures to determine compliance with subparagraph (4)(C)2.(b) of this subsection shall be conducted using California Air Resources Board Vapor Recovery Test Procedure TP-201.3—Determination of 2- Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999, or by any method determined by the staff director. Test Procedure TP-201.3 is hereby incorporated by reference in this rule, as published by the California Air Resources Board. Copies can be obtained from the California Air Resources Board, PO Box 2815, Sacramento, CA 95812. This rule does not incorporate any subsequent amendments or additions.

(5) Restriction of emission of VOC from rotogravure and flexographic printing facilities. This subsection applies to installations with uncontrolled potential emissions equal to or greater than two hundred and fifty kilograms (250 kg) per day

or one hundred (100) tons per year of volatile organic compounds (VOC) from the combination of rotogravure and flexographic printing presses. The uncontrolled potential emissions are the potential emissions (as defined) plus the amount by weight of VOCs whose emission into the atmosphere is prevented by the use of air pollution control devices.

(A) *Emission limits*

1. No owner or operator shall use or permit the use of any of the following printing presses unless they are equipped with a control device. The control device shall remove, destroy or prevent the emission of VOCs into the ambient air by at least the percentage indicated by weight of the uncontrolled VOC emissions on a daily basis.

Printing Press	Percentage
Flexographic	60
Publication rotogravure	75
Other rotogravure	65

2. Low solvent technology may be used as a means of control to achieve VOC reductions instead of the methods required in subsection (A)1., if low solvent technology is used, the following limits must be met for each press:

(a) For waterborne inks, the volatile portion of the ink as applied to the substrate must contain no more than twenty-five percent (25%) by volume of VOC; and

(b) For water-based or high solids inks, the ink as applied to the substrate must be at least sixty percent (60%) by volume non-VOC material.

3. No owner or operator shall use or permit the use of any flexographic or rotogravure printing press that uses cleanup solvents containing VOCs unless:

(a) The cleanup solvents are kept in tightly covered tanks or containers during transport and storage;

(b) The cleaning cloths used with the cleanup solvents are placed in tightly closed containers when not in use and while awaiting off-site transportation. The cleaning cloths should be properly cleaned and disposed of. The cloths, when properly cleaned or disposed of, are processed in a way that as much of the solvent as practicable is removed for some further use or destroyed. Cleaning and disposal methods shall be approved by the director; and

(c) An owner or operator may use an alternate method for reducing cleanup solvent VOC emissions, including the use of low VOC cleanup solvents, if the owner or operator shows the emission reduction is equal to or greater

than paragraphs (A)3.(a) and (b) This alternate method must be approved by the director.

(B) *Record keeping*

1. For owners or operators using an add-on control device to meet the requirements of paragraph (A)1., the following parameters shall be monitored and recorded to determine compliance with paragraph (A)1.:

   (a) Exhaust gas temperature of all incinerators or temperature rise across a catalytic incinerator bed on a continuous basis;

   (b) VOC breakthrough on a carbon adsorption unit on a continuous basis;

   (c) Results of emissions testing as required in part (C) of this subsection when performed;

   (d) Maintenance, repairs and malfunction of any air pollution control equipment when performed; and

   (e) Any other monitoring parameter required by the director to determine compliance with subsection (A)1.

2. For owners or operators meeting the requirements of paragraph (A)2. for each ink formulation used, the following shall be recorded for each press to determine continuous compliance with paragraph (A)2.:

   (a) Volume-weighted ink VOC content in percent by volume for each ink formulation as applied on a monthly basis;

   (b) Results of ink testing as required in part (C) of this subsection when performed; and

   (c) Any other information required by the director to determine compliance with subsection (A)2.

3. For owners and operators using low solvent technology without the use of control equipment to meet the requirements of paragraph (A)2., and for who subsection (B)2. does not apply, the following shall be recorded to determine daily compliance with subsection (A)2.:

   (a) Volume-weighted ink VOC content in percent by volume for each ink formulation as applied on a monthly basis;

   (b) Ink usage in gallons for each ink formulation as applied on a daily basis for each press;

(c) Volume-weighted density of VOCs in ink in pounds per gallon for each ink formulation as applied on a daily basis;

(d) Volume-weighted average of the VOC content of each ink formulation applied in percent by volume for each press on a daily basis;

(e) Ink water content in percent by volume for each ink formulation as applied on a daily basis for each press;

(f) Ink exempt solvent content in percent by volume for each ink formulation as applied on a daily basis for each press;

(g) Results of ink testing as required in part (C) of this subsection when performed; and

(h) Any other information required by the director to determine compliance with subsection (A)2.

4. Records of all information required in subsections (4) a. through c. shall be kept for at least two years. These records shall be available immediately upon request for review by air quality program personnel and other air pollution control agencies with proper authority.

(C) *Determination of Compliance.*

1. Testing and compliance demonstrations for the emission limits of paragraph (A)1. shall follow the procedures as specified in 40 CFR 60, Appendix A- Test Methods, Method 25- Determination of Total Gaseous Nonmethane Organic Emissions as Carbon and 10 CSR 10-6.030 (20). The averaging time for these tests shall be three (3) one (1)-hour tests. These procedures will determine control device capture efficiency and destruction efficiency. Control device testing will be required as the director determines necessary to verify the capture and destruction efficiencies. At a minimum, control device testing must be completed and submitted once to the appropriate air pollution control agency within 180 days (August 4, 1992) after this provision of the subsection is effective (February 6, 1992), unless the director determines that a valid test is already on file. Inlet and outlet gas temperature rise across a catalytic incinerator shall be used to determine daily compliance. These temperatures shall be monitored with an accuracy of the greater of plus or minus three-fourths percent (±0.75%) of the temperature being measured expressed in degrees Celsius or two and one-half degrees Celsius (2.5 °C).

2. Testing and compliance demonstrations for the emission limits of subsection (A)2. shall follow the procedures as specified in 40 CFR 60, Appendix A- Test Methods, Method 24- Determination of Volatile Matter Content, Water Content, Density, Volume, Solids and Weight Solids of Surface coatings. This procedure will

determine the VOC content of inks. Ink testing will be required as the director determines necessary to verify the manufacturer's formula specifications. At a minimum, ink testing will be required once after this provision of the subsection is effective (February 6, 1992). Ink manufacturer's formula specifications shall be used to determine daily compliance.

(6) Restriction of emissions of perchloroethylene dry cleaning installations. Reserved.

(7) Control of emissions from the manufacturing of paints, varnishes, lacquers, enamels and other allied surface coating products.

(A) *Applicability.* This subsection applies to those installations which have the uncontrolled potential to emit more than two hundred and fifty per day(250 kg/day) or one hundred (100) tons per year of volatile organic compounds (VOC) from the manufacture of paints, varnishes, lacquers, enamels and other allied surface coating products. This does not include any installation which does not have an allowable VOC emission limit established under 10 CSR 10-6.060 or legally enforceable state implementation plan revision and which has uncontrolled potential emissions less than two hundred and fifty per day (250) kg/day or one hundred (100) tons per year. The uncontrolled potential to emit is the potential emissions (as defined) plus the emissions removed by control devices.

(B) General Rule. No owner or operator of a manufacturing installation subject to this subsection and producing the products listed in paragraph (A) shall cause or allow the manufacture of these products unless the operating equipment meets the requirements contained in this subsection and without adhering to operating procedures recommended by the equipment manufacturer and approved by the director.

(C) Operating *equipment and operating procedure requirements.*

1. Tanks storing VOC with a vapor pressure greater than or equal to ten kilo pascals (10 kPa) (1.5 psi) at twenty degrees Celsius (20 °C), shall be equipped with pressure/vacuum conservation vents set at 0.2 kPa (.029 psi), except where more effective air pollution control is used and has been approved by the director. Stationary VOC storage containers with a capacity greater than two hundred and fifty (250) gallons shall be equipped with a submerged-fill pipe or bottom fill, except where more effective air pollution control is used and has been approved by the director.

2. Covers shall be installed on all open-top tanks used for the production of nonwaterbase coating products. These covers shall remain closed except when production, sampling, maintenance or inspection procedures require operator access.

3. Covers shall be installed on all tanks containing VOC used for cleaning equipment. These covers shall remain closed except when operator access is required.

4. All vapors from varnish cooking operations shall be collected and passed through a control device which removes at least eighty-five percent (85%) of the VOCs from these vapors before they are discharged to the atmosphere.

5. All grinding mills shall be operated and maintained in accordance with manufacturer's specifications. The manufacturer's specifications shall be kept on file and made available to the director upon his/her request.

6. The polymerization of synthetic varnish or resin shall be done in a completely enclosed operation with the VOC emissions controlled by the use of surface condensers or equivalent controls.

   (a) If surface condensers are used, the temperature of the exit stream shall not exceed the temperature at which the vapor pressure is 3.5 kPa (0.5 psi) for any organic compound in the exit stream.

   (b) If equivalent controls are used, the VOC emissions must be reduced by an amount equivalent to the reduction which would be achieved under paragraph (C)6.(a) Any owner or operator desiring to use equivalent controls to comply with this subsection shall submit proof of equivalency as part of the control plan required. Equivalent controls may not be used unless approved by the director.

(D) Compliance methods and record keeping

1. The VOC control efficiency in paragraphs (C)4. and 6. shall be determined by the testing methods as specified in 40 CFR 60, Appendix A- Test Methods, Method 25- Determination of Total Gaseous Nonmethane Organic Emissions as Carbon. The same method shall be used to sample emissions from alternate control measures subject to the director's review in subsection (C)1.

2. Owners or operators utilizing add-on control technology shall monitor the following parameters continuously while the affected equipment is in operation:

   (a) Exit stream temperature on all condensers;

   (b) Routine and unscheduled maintenance and repair activities on all air pollution control equipment; and

   (c) Any other parameter which the director determines is necessary to quantify emissions or otherwise determine compliance with this subsection.

3. Records shall be kept on production rates sufficient to determine daily VOC emissions and any equipment test results performed in conjunction with this subsection.

4. The owner or operator shall maintain all recorded information required under subsections (D)2. and 3. and shall keep the records for a period of not less than two (2) years. All these records shall be made available to the director upon his/her request.

(8) Control of emissions from the application of automotive underbody deadeners. Reserved.

(9) Control of emissions from production of pesticides and herbicides. This subsection restricts emissions of volatile organic compounds from the production of pesticides and herbicides.

(A) *Applicability.*

1. This subsection shall apply to any pesticide or herbicide manufacturing installation with an uncontrolled potential to emit equal to or greater than two hundred and fifty kilograms per day (250kg/day) or one hundred (100) tons per year of volatile organic compounds (VOCs). This subsection shall also apply to any installation which does not have an allowable VOC emission limit established under 10 CSR 10-6.060 or legally enforceable state implementation plan revision and which has uncontrolled potential emissions greater than or equal to two hundred and fifty kilograms per day (250kg/day) or one hundred (100) tons per year of VOC. The uncontrolled potential to emit is the potential emissions (as defined) plus the emissions removed by control devices.

2. This subsection does not apply to source operations used exclusively for chemical or physical analysis or determinations of product quality and commercial acceptance (such as pilot plant operations and laboratories) unless the operation is an integral part of the production process.

(B) *General provisions.* All source operations in installations affected by this subsection that are venting emissions to VOC emission control devices as of November 23, 1987 shall be required to continue venting emissions to these control devices and these emissions shall be controlled to the extent required in subsection (C) of this section.

(C) *Emission limitations.* Any pesticide or herbicide manufacturing installation using VOC emissions control devices subject to this subsection must achieve an instantaneous VOC destruction or removal efficiency greater than or equal to ninety-nine percent (99%).

(D) *Record keeping*

1. Owners or operators utilizing thermal oxidizers as control technology must maintain adequate records of the combustion chamber temperature and residence time to determine the VOC control compliance. Also, the owners or operators must maintain records of routine or unscheduled maintenance and repairs of the thermal

oxidizers. The director may require any other records of operating parameters as may be necessary to determine compliance.

2. Owners or operators using other control technology shall maintain records of all operating parameters and routine or unscheduled maintenance and repairs of air pollution control equipment as may be required by the director to determine compliance.

3. Records of all information required in paragraphs (D)1. and 2. shall be kept for a period of not less than two (2) years and all these records shall be made available to the director upon their request.

(E) *Compliance method.*

1. For any control technology employed to comply with this subsection, compliance shall be determined by the test method as specified in 40 CFR 60, Appendix A-Test Method 25- Determination of Total Gaseous Nonmethane Organic Emissions as Carbon.

2. For thermal oxidizers, compliance shall be determined by the combustion chamber temperature and residence time after adequate test results, as determined by the director, are provided by the owners or operators. These test results shall be subject to periodic confirmation at the discretion of the director. Combustion chamber gas temperature shall be monitored with an accuracy of the greater of ± 0.75% of the temperature being measured expressed in degrees Celsius or 2.5 degrees Celsius.

(10) Control of gasoline Reid vapor pressure. This subsection limits the volatility of motor vehicle gasoline. By reducing the amount of gasoline that evaporates into the atmosphere, emissions of volatile organic compounds will be reduced. Since volatile organic compounds are precursors to ozone formation, ambient ozone levels will be reduced.

(A) *General Provisions*

1. No person shall sell, dispense, supply, offer for sale, offer for supply, transport, or exchange in trade for use gasoline intended for final use in the applicable areas that exceeds the Reid Vapor Pressure (RVP) limit in paragraph (A)2.

2. The RVP of gasoline that is subject to this section shall be restricted as follows:

RVP (psi)	Facility	Time Period
7.0 or less	All facilities	6/1 through 9/15

3. Gasoline blends having at least nine percent (9%) but not more than ten percent (10%) ethyl alcohol by volume of the bended mixture shall have an RVP limit of

one (1) pound per square inch (psi) higher than the limit contained in paragraph (A)2.

(B) *Gasoline Sampling Procedures.* Gasoline sampling shall follow the procedures outlined ASTM D4057- 06(2011) Standard Practice for Manual Sampling of Petroleum and Petroleum Products, as published August 2011 (Approved June 1, 2011). This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.

(C) *Gasoline Testing Procedures for RVP and Determination of Compliance.*

1. Gasoline testing shall follow the procedures contained in either ASTM D6378-10 Standard Test Method for Determination of Vapor Pressure (VPX) of Petroleum Products, Hydrocarbons, and Hydrocarbon-Oxygenate Mixtures (Triple Expansion Method), as published November 2010 (Approved October 1, 2010) or ASTM D5191-10b Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method), as published November 2010 (Approved October 1, 2010). These standards are incorporated by reference in this subsection, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428- 2959. This subsection does not incorporate any subsequent amendments or additions.

2. To determine compliance when field analysis indicates the RVP is between seven and zero-tenths (7.0) psi and seven and three tenths (7.3) psi for conventional gasoline or between eight and zero-tenths (8.0) psi and eight and three-tenths (8.3) psi for nine to ten percent (9%–10%) ethyl alcohol blends, Kansas City Health Department's Air Quality Program will conduct additional testing. Additional testing shall include independent analysis by three (3) separate laboratories of three (3) independent samples taken sequentially, in accordance with sections (4) and (5) of this rule. If all of the measured RVP of the samples are above seven and zero-tenths (7.0) psi for conventional gasoline or above eight and zero-tenths (8.0) psi for nine to ten percent (9%–10%) ethyl alcohol blends, the department may take enforcement action.

(D) *Record keeping.*

1. All persons subject to this subsection shall maintain records of any RVP testing and test results during the compliance period specified in part (A). These records shall be kept for at least two (2) years after the date of a completed RVP test. These records shall be available immediately upon request for review by Kansas City Health Department's Air Quality Program personnel and Department of Natural Resources personnel and city and county personnel certified under 643.140, RSMo.

2. Each bill of lading, invoice, loading ticket, delivery ticket, and other document that accompanies a shipment of gasoline (which includes gasoline blended with ethyl

alcohol) shall contain a legible and conspicuous statement that the RVP of the gasoline does not exceed seven and zero-tenths (7.0) psi, in accordance with this rule for conventional gasoline, or that the RVP does not exceed eight and zero-tenths (8.0) psi for nine to ten percent (9%–10%) ethyl alcohol blends.

3. Each bill of lading, invoice, loading ticket, delivery ticket, and other document which accompanies a shipment of gasoline containing ethyl alcohol shall contain a legible and conspicuous statement that the gasoline being shipped contains ethyl alcohol and that the percentage concentration of ethyl alcohol is between nine percent to ten percent (9%–10%), as required under paragraph (A)3. of this subsection.

4. All persons subject to this subsection shall keep records of the bill of lading, invoice, loading ticket, delivery ticket, and other documents accompanying a shipment of gasoline during the compliance period specified in part (A). These records shall be kept for at least two (2) years after the date of delivery. These records shall be made available immediately upon request for review or duplication by Department of Natural Resources personnel and city and county personnel certified under 643.140, RSMo.

5. The director may require additional record keeping on a case-by-case basis. The director may require records be kept for additional periods of time for enforcement compliance.

(E) *Violations and penalties.* Persons violating this regulation shall be subject to enforcement action.

(F) *Exceptions.*

1. Gasoline that exceeds the RVP limits will not violate this subsection if that gasoline is separately stored, sealed, clearly labeled and not used until it is in compliance with this subsection. The label shall state that the gasoline is prohibited by Missouri law from being sold, dispensed, supplied, offered for sale, offered for supply, transported or exchanged in trade until the specific date when that activity will be in compliance with this subsection.

2. An individual consumer of gasoline who dispenses gasoline into his/her personal motor vehicle is exempt from this subsection.

3. Gasoline used only to fuel agricultural vehicles on property zoned for agricultural use is exempt from this subsection.

4. Owners and operators of facilities that dispense gasoline into individual motor vehicles are not required to conduct RVP testing specifies in part (C).

5. Federal specification reformulated gasoline (RFG) fully satisfies the requirements of part (A) of this subsection.

(11) Control of emissions from lithographic printing facilities. This subsection restricts volatile emissions form lithographic printing facilities.

(A) *Applicability.* This subsection shall apply to installations that have calculated actual volatile organic compound (VOC) emissions for a known number of crewed hours, increased by the amount by weight of VOCs whose emission into the atmosphere is prevented by the use of air pollution control devices and extrapolated to eight thousand seven hundred sixty (8,760) hours per year to be equal to or greater than one hundred (100) tons per year from offset lithographic printing presses after December 9, 1991. The following factors shall be taken into consideration unless an alternative method is approved by the director.

1. The installation shall assume fifty percent (50%) of the solvent used for cleanup is retained in the rag(s) when the used solvent- laden rag(s) are cleaned or disposed of. The installation must demonstrate to the director that the solvents are not evaporated into the air when the waste rags are properly cleaned and disposed of;

2. The installation shall assume forty percent (40%) of the heatset ink oils stay in the paper web;

3. The installation shall assume no VOCs are emitted from the inks used in sheet-fed presses and nonheatset web presses; and

4. The installation may assume that fifty percent (50%) of the alcohol from the fountain solution is emitted from the dryer.

5. This regulation shall not apply to:

   (a) Printing on fabric, metal or plastic;

   (b) Sheet-fed lithographic presses with cylinder widths of twenty-six inches (26") or less; or

   (c) Web lithographic presses with cylinder widths of eighteen inches (18") or less.

(B) Gen*eral Provisions.*

1. No owner or operator shall use or permit the use of any offset lithographic printing press unless:

   (a) The fountain solution contains ten percent (10%) or less by weight of alcohol;

(b) The fountain solution is refrigerated to a temperature of fifty-five degrees Fahrenheit (55 °F) or less for alcohol-based solutions;

(c) The fountain solution temperature at the mixing tank for alcohol-based solutions is monitored during each shift; and

(d) The fountain solution mixing tanks are covered for alcohol-based solutions.

2. No owner or operator shall use or permit the use of any offset lithographic printing press that uses cleanup solvents containing VOCs unless:

(a) The cleanup solvents are kept in tightly covered tanks or containers during transport and storage;

(b) The cleaning cloths used with the cleanup solvents are placed in tightly closed containers when not in use and while awaiting off-site transportation. The cleaning cloths should be properly cleaned and disposed of: The cloths, when properly cleaned or disposed of; are processed in a way that as much of the solvent, as practicable, is recovered for further use or destroyed. Cleaning and disposal methods shall be approved by the director; and

(c) An owner or operator may use an alternate method for reducing cleanup solvent VOC emissions, including the use of low VOC cleanup solvents, if the owner or operator shows the emission reduction is equal to or greater than those in paragraphs (B)2.(a) and (b). This alternate method must be approved by the director.

3. No owner or operator shall use or permit the use of any heatset web-offset lithographic printing press that uses a dryer that has ever had an actual emission rate of ten (10) tons per year or more VOCs after December 9, 1991, unless one hundred percent (100%) of the dryer exhaust is ducted to a control device that achieves eighty-five percent (85%) by weight or greater control efficiency.

4. Use of emission control equipment shall require that continuous monitors be installed, calibrated, operated and maintained. The monitors continuously shall measure:

(a) The exhaust gas temperature of all VOC destruction devices and the gas temperature immediately upstream and downstream of catalytic bed with an accuracy of plus or minus 0.75% measured in degrees Celsius, or 2.5 degrees Celsius;

(b) The cumulative amount of VOC recovered during a calendar month for all VOC recovery equipment attached to a dryer with an accuracy of plus or minus two percent (±2%); and

(c) Any other parameters considered necessary by the director to verify proper operation of emission control equipment.

(C) *Record keeping.*

1. All persons subject to this subsection shall maintain records as required by this part sufficient to determine continuous compliance with this subsection These records shall be kept for at least two (2) years. These records shall be available immediately upon request for review by air quality program personnel and other air pollution control agencies with proper authority.

2. All persons subject to paragraph (B)3. shall maintain records for each control device sufficient to demonstrate that the control efficiency is being maintained.

3. For each regulated printing press, records shall be maintained to show:

   (a) Quantity of alcohol added to the fountain solution of each regulated press in pounds each month;

   (b) Percent of alcohol in fountain solution by weight as monitored on a once per shift basis;

   (c) Results of any testing conducted on an emission unit at a regulated installation;

   (d) Maintenance records of any air pollution control equipment; and

   (e) The temperature of alcohol-based fountain solution as recorded on a once per shift basis.

4. For each lithographic installation subject to this subsection, records shall be maintained to show:

   (a) Properties of heatset inks as applied (determined by the manufacturer's formulation data), density of inks in pounds per gallon, and total VOC content in weight percent;

   (b) Quantity of heatset inks as applied to substrate in pounds on a monthly basis;

   (c) Quantity of cleanup solvents used on a monthly basis; and

   (d) Quantity of coatings used on a monthly basis and percent VOC in coating by weight on a formulation basis.

5. The director may require other records as reasonable and necessary to carry out the provisions of this Code.

(D) *Compliance.*

1. All persons subject to the provisions of this subsection shall provide to the director for approval a demonstration of final compliance with subsection (B)1.

   (a) Upon startup of presses which are not in existence and operating on December 9, 1991;

2. All persons subject to the provisions of this subsection shall provide to the director for approval a demonstration of final compliance with subsections (B)2. and 3.

   (a) Upon startup of presses which are not in existence and operating on December 9, 1991; and

(E) *Testing procedures.*

1. Testing and compliance demonstrations for paragraph (B)3. of this subsection shall follow the procedures contained in Environmental Protection Agency Reference Methods 25 or 25A found in 40 CFR 60, Appendix A.

2. Testing and compliance demonstrations for paragraph (B)1.(a) of this subsection shall be based on the results from a calibrated hydrometer or refractometer.

Sec. 8-9. Restriction of emission of hazardous air pollutants.

(a) The provisions of 40 CFR 61 shall apply and are adopted by reference.

(b) No person shall demolish or renovate any structure subject to the provisions of 40 CFR 61 Subpart M without first obtaining an operative permit from the director.

(c) Asbestos abatement projects; Permits, notification and performance requirements.

(1) *Application.*

a. This section shall apply to:

1. All persons that authorize, design, conduct and work in asbestos abatement projects; and

2. All persons that monitor air-borne asbestos and dispose of asbestos waste as a result of asbestos abatement projects.

b. In order to determine applicability for this section, the owner or operator of a demolition or renovation activity, prior to the commencement of the demolition or renovation, shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos-containing material.

(2) *General provisions for asbestos abatement projects.*

a. Registration. Any person that conducts an asbestos abatement project must register with the State of Missouri Department of Natural Resources (MODNR) according to 10 CSR 10-6.241. This registration is renewable annually.

b. Certification. Any individual that participates in an asbestos abatement project operating in Kansas City, Missouri must be certified by MODNR. This certification is renewable annually.

c. Notifications. Any person undertaking an asbestos abatement project shall provide, at least 10 days in advance, written notification of the project to the director according to section 8-9(c)(3). The person shall also provide notification of the project completion according to section (6). Emergency asbestos abatement projects shall comply with the provisions of section (5).

d. Permits

1. Qualifications and Responsibilities of Applicants. To qualify for a permit, an applicant shall:

(a) Comply with the requirements of this Code and the standards for worker protection established by OSHAA in 29 CFR 1926.1101 and 1910.1001.

(b) Be a registered as an Asbestos Abatement Contractor by the Missouri Department of Natural Resources.

(c) Pay applicable fees at the time the Asbestos Project Notification is submitted

e. Denial of Application for Permit, Notice. If an application for a permit is denied, the regulatory authority shall provide the applicant with a notice that include:

(a) The specific reasons and Code citations for the permit denial;

(b) The actions, if any, that the applicant must take to qualify for a permit; and

(c) Advisement of the applicant's right of appeal and the process and time frames for appeal that are provided in law.

f. Responsibilities of the Permit Holder. Upon acceptance of the permit issued by the regulatory authority, the permit holder in order to retain the permit shall:

(a) Comply with the requirements of this Code and the standards for worker protection established by OSHAA in 29 CFR 1926.1101 and 1910.1001.

(b) Comply with any reasonable additional safety requirements provided by the director

(c) Allow representatives of the regulatory authority access to the job site at all reasonable times

g. Permits Not Transferrable. A permit may not be transferred from one project to another project or from one contractor to another contractor.

h. Conditions Warranting Action.

1. The regulatory authority may summarily suspend a permit for an Asbestos Abatement Project if:

2. The regulatory authority determines through inspection or examination than an actual or imminent health hazard exists

3. The permit holder does not comply with the regulations specified in this code including 8-9 (2) *d (3)*; or

4. Interference with the regulatory authority in the performance of its duties has occurred

i. Summary Suspension, Warning or Hearing Not Required. The regulatory authority may summarily suspend a permit as specified in 8-30.15 by providing written notice of the summary suspension to the permit holder or the on-site supervisor, without prior warning, notice of a hearing, or a hearing.

j. Contents of the Notice. A summary suspension notice shall state:

(a) That the Asbestos Abatement Permit is immediately suspended and that all regulated asbestos abatement work shall immediately cease;

(b) The reasons for the summary suspension with reference to the provisions of this Code that are in violation;

(c) The name and address of the regulatory authority representative to whom a written request for re-instatement may be made and who may certify that reasons for the suspension are eliminated; and

(d) That the permit holder may request an appeal hearing by submitting a timely request

k. Terms of Suspension, Reinstatement of Permit

(a) A summary suspension shall remain in effect until the conditions cited in a notice of suspension no longer exist and their elimination has been confirmed by the regulatory authority through re-inspection and other means as appropriate.

(b) The regulatory authority may initiate any one, or a combination of, compliance methods that include, but are not limited to:

A. Holding a conference with the permit holder or on-site supervisor

B. Setting conditions for continued operations of an Asbestos Abatement Project

C. Requiring additional education and/or training of supervisors and workers

(c) The suspended permit may be re-instated if the regulatory authority determines that the public health hazard no longer exists and all requirements of the permit are met. A notice of re-instatement shall be provided to the permit holder or on-site supervisor.

l. Abatement procedures and practices.

1. Persons shall conduct asbestos abatement projects according to section (7) of this section.

2. At each asbestos abatement project site the person shall provide the following information for inspection by the department:

i. Proof of current MODNR registration;

ii. Proof of current MODNR occupational certification for those individuals on the project;

iii. Most recent available air sampling results;

iv. Current photo identification for all applicable individuals engaged in the project; and

v. Proof of passage of the training course for the air sampling technicians and photo identifications for air sampling technicians.

m. 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 10 CSR 10-6.241 and 10 CSR 10-6.250 and RSMO ch. 643. 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.

n. All information required must be submitted on forms as approved by the director. Failure to provide the required information in a legible manner, shall be a violation of this Code.

o. Failure to comply with this section is a violation of this section and RSMO ch. 643. Compliance with this section does not relieve the participants from compliance with any other applicable federal, city and state rules, laws, standards or building codes.

(3) ***Asbestos project notification.***

a. Any person undertaking an asbestos abatement project shall submit a notification to the department for review at least 10 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 10-day review period upon request for an emergency project. The person who applies for the 10-day waiver must obtain approval from the department before the project can begin.

1. The person shall submit the notification on a form approved by the director.

2. If an amendment to the notification is necessary, the person shall notify the department immediately by email, telephone or FAX. The department must receive the written amendment within 48 hours 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 at least 24 hours in advance of the change by email, telephone or FAX and then immediately follow-up with a written amendment stating the change.

4. A nonrefundable notification fee of $175.00 will be charged for each project constituting 10 square feet or 16 linear feet or greater. 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 subsection 8-9(c)(4) of this Code.

5. In projects constituting 160 square feet or 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 meets the following conditions:

   i. The MSDS includes the percentage of the asbestos content; and

   ii. The director can be reasonably assured that the information provided on the MSDS applies to the area of asbestos removed, enclosed, encapsulated or demolished.

(4) *Inspections.* There shall be a charge of $100 per inspection up to three inspections of any asbestos abatement project. The department shall bill the person for that inspection(s) and the person shall submit the fee(s) according to the requirements of the department.

(5) ***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 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. 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 approved by the director. It shall be submitted to the director within seven days after the onset of the emergency. The amendment requirements for notification found in 8-9(c)(3) of this Code are applicable to emergency projects.

(6) *Asbestos project post-notification.*

a. Any person undertaking an asbestos abatement project that requires notification according to section 8-9(c)(3) of this Code on the department form, shall notify the department within 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 requirement in section 8-9(c)(7)h. of this Code. 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.

(7) *Abatement work practices.*

a. Work practices for asbestos removal projects (gross removal). 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:

1. 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 doorways, 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 clear window in a temporary partition. The window shall be no less than 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 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 sections 8-9(c)(7)10. through 12. of this Code and all other requirements applicable to the project;

2. 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;

3. 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 mil thick. The person shall cover floors with a minimum of two layers plastic sheeting. Each sheet must be at least six 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 Code;

4. 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 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;

5. The person shall provide a decontamination facility between the work area and adjacent areas. The decontamination facility shall contain at least three 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 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 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 Code;

6. 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 control curtains separated by a minimum distance of three feet. 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 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 section 8-9(c)(7)g. of this Code. 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;

7. 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;

8. After removal of the ACM from the structural and equipment items, the person shall clean all plastic sheeting until free of visible debris with a HEPA-filtered vacuum or by wet cleaning methods. If the containment area contains more than one 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 mil or greater clear plastic and dispose of it in compliance with all applicable federal and state and local requirements. The person shall remove any liquid or solid material that leaks through the plastic sheeting by wet cleaning methods;

9. 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;

10. 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 requirement of section 8-9(c)(7)h. of this Code. State-certified air sampling professionals or their technicians shall conduct all air sampling required by this Code;

11. 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 six-mil or greater clear plastic leak-tight layers and dispose of it according to 8-9(c)(7)g. of this Code; and

12. 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:

i. The person shall use encapsulation only on ACM that is firmly bound to the underlying surface;

ii. 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 requirement of section 8.9(c)(7)a. of this Code. The person must dispose of the ACM according to the requirement of section 8.9(c)(7)g. of this Code;

iii. Encapsulant materials shall have acceptable adhesive and penetrating characteristic. 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;

iv. 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;

v. The person who repairs damaged portions of the surface before encapsulation shall use asbestos-free patching materials;

vi. 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;

vii. 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

viii. 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 section 8-9(c)(7)a. of this Code and shall dispose of waste according to section 8-9(c)(7)g. of this Code.

c. Work practices for outdoor areas. The department may waive the requirements of paragraph 8-9(c)(7)a.i. of this Code 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 100 feet of the work area with plastic sheeting. The person shall use at least four 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 50 feet 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 paragraph 8-9(c)(7)c.4., 5. of this Code 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 adequate wet condition during removal. The person shall maintain all debris in an adequate wet condition. The person shall place the wet debris in a double layer of clear six 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 8-9(c)(7)c.2. of this Code 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 8-9(c)(7)c.2. of this code 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 8.9(c)(7)c.2. of this Code.

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:

i. 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 8-9(c)(7)a. or i. of this Code; and

ii. Before removing structures or equipment from the work area, the person shall wrap the items in a double layer of six 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 a HEPA-filtered vacuum.

2. A person who removes structural or equipment items as described in paragraph 8-9(c)(7)d. of this Code shall comply with disposal requirements of subsection 8-9(c)(7)g. of this Code and applicable federal requirements or the person shall meet the following requirements:

i. If the person will sell or reuse items treated according to paragraph 8-9(c)(7)d.i. of this Code, the person shall clean all surfaces free of visible asbestos residue and cover the surfaces with a distinguishable sealing material;

ii. If the person removes friable ACM outdoors, the person shall comply with subsection 8-9(c)(7)c. of this Code and applicable federal requirements; and

iii. 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 8-9(c)(7)a. of this Code.

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:

i. The person shall remove ACM according to subsection 8-9(c)(7)d. of this Code and all applicable federal requirements; or

ii. 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 8-9(c)(7)a. of this Code 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.

i. 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 director.

ii. 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.

iii. 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.

iv. The person shall post signs notifying the public that an emergency exists.

v. 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 8-9(c)(7)g. of this Code. 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 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 specification;

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 8-9(c)(7)g. of this Code;

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 square feet or 16 linear feet or more of ACM, the person must meet the requirements of subsection 8-9(c)(7)a. of this Code.

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:

i. All friable asbestos-containing waste shall be placed in leaktight containers in an adequately wet condition before it is removed from the work area. Waste containers shall consist of not less than two six-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 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;

ii. 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;

iii. 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;

iv. 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 inches of soil or non-asbestos waste at the end of each operating day; and

v. Waste shall be transported in enclosed roll-offs or dumpsters, vehicles that have completely enclosed cargo areas, or four-sided cargo area which shall be completely covered with six 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 8-9(c)(7)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 160 square feet or 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:

i. 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

ii. 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 8-9(7)h.i. of this Code. Glove bag projects are exempt from aggressive air sampling. Glove bag

projects shall employ nonaggressive area sampling during operations.

3. Clearance criteria.

i. An indoor work area of 1000 cubic feet or greater shall be available for reoccupancy when the results of five phase contrast microscopy (PCM) or transmission electron microscopy (TEM) samples are all less than one-hundredth 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 of the five samples reveals an airborne fiber count greater than one-hundredth 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 f/cc.

ii. Indoor asbestos abatement work areas of less than 1000 cubic feet shall require two PCM or TEM samples taken from each work area. Both samples must be less than one-hundredth f/cc before the air sampling professional can clear the area for reoccupancy.

iii. If all sample results done on PCM are higher than one-hundredth 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 f/cc, the air sampling professional may clear the area for reoccupancy.

iv. The air sampling professional may request a waiver of the one-hundredth f/cc clearance level required by subparagraphs 8-9(c)(7)h.3.i. through iii. for an asbestos abatement project where the sampler can demonstrate that the background levels exceed the one-hundredth 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:

i. Utilize trained air sampling technicians;

ii. Assure that the microscopist employs the WIOSH 7400 method when performing PCM on air samples from an asbestos project;

iii. Assure that the microscopist employs the NIOSH 7402 or an equivalent method when performing TEM on non-AHERA air samples; and

iv. Assure that the 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 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 60 days of the close of the project. All AHERA projects shall comply with EPA air monitoring requirements as found in 40 CFR part 763.

i. Work practices for glove bag projects. The department limits use of glove bags to projects of less than 260 linear feet. The department requires precleaning of any loose asbestos debris in the immediate area of the glove bag project. The director may require portions of paragraph 8-9(c)(7)a.1. if the asbestos project warrants this action to protect health and the environment.

1. The person shall use six 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 150 degrees Fahrenheit 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 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 section of pipe. The person shall not move the glove bag from one 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 a 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 a 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 and demonstrate active supervision during the hours that a project is being conducted.

3. Waiver. The department may waive any individual requirements section 8-9(c)(7) on a form furnished by the director. The person requesting the waiver must receive 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 8-9(c)(7) for in-house asbestos abatement projects which have been specified as part of normal maintenance activities.

Sec. 8-10. Review of new sources and modifications; permit for construction or major modification.

This section 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 section 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.

(A) *Applicability*

1. Definitions

(a) Solely for the purposes of paragraph (A)1.(a) and subsection (G) of this section, the following definitions shall be used in place of the in place of the definitions of the same terms specified elsewhere in this subsection:

(i) Major stationary source is defined in 40 CFR 51.165(a)(1)(iv), promulgated as of July 1, 2011, and hereby incorporated by reference in this section, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This section does not incorporate any subsequent amendments or additions. The term major, as used in this definition, shall be major for the nonattainment pollutant;

(ii) Major modification is defined in 40 CFR 51.165(a)(1)(v), promulgated as of July 1, 2011, and hereby incorporated by reference in this section, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408, except that any incorporated provisions that are stayed shall not apply. This section does not incorporate any subsequent amendments or additions. The term major, as used in this definition, shall be major for the nonattainment pollutant;

(iii) Net emissions increase is defined in 40 CFR 51.165(a)(1)(vi), promulgated as of July 1, 2011, and hereby incorporated by reference in this section, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408, except that the term paragraph (a)(1)(xii)(B) shall be 40 CFR 52.21(b)(21)(ii). This section does not incorporate any subsequent amendments or additions; and

(iv) Significant is defined in 40 CFR 51.165(a)(1)(x), promulgated as of July 1, 2011, and hereby incorporated by reference in this section,

as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This section does not incorporate any subsequent amendments or additions;

(b) Solely for the purposes of subsection (I) of this subsection, the following definitions shall be used in addition to definitions specified elsewhere in this subsection:

i. Construct a major source—

a. 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. 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;

ii. Greenfield site—A contiguous area under common control that is an undeveloped site;

iii. Process or production—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;

iv. Reconstruct a major source—Replace components at an existing process or production unit where the replacement of components 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, 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 subsection;

v. Research and development activities—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;

vi. Similar source—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

vii. Definitions for certain terms, other than those defined in subparagraphs (A)1.(b)(I) through (VI) of this section, may be found in 40 CFR 63.41, promulgated as of July 1, 2011, and hereby incorporated by reference in this section, as published by the Office of the Federal Register, U.S. National Archives and records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This section does not incorporate any subsequent amendments or additions;

(c) Nonattainment pollutant—Each and every pollutant for which the location of the source is in an area designated to be in nonattainment of a National Ambient Air Quality Standard (NAAQS) under section 107(d)(1)(A)(i) of the Act. Any constituent or precursor of a nonattainment pollutant shall be a nonattainment pollutant, provided that the constituent or precursor pollutant may only be regulated under this section as part of regulation of the corresponding NAAQS pollutant. Both volatile organic compounds (VOC) and nitrogen oxides (NO_x) shall be nonattainment pollutants for a source located in an area designated nonattainment for ozone;

(d) Definitions for key words or phrases used in this section may be found in section 8-2.

2. Covered installations/changes. This section shall apply to installations with the potential to emit any pollutant in an amount equal to or greater than the de minimis levels. This section 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 subsections (F), (G), (H) or (I). This section shall apply to all incinerators, asphaltic concrete plants.

(a) Emergency Generators with an output greater than or equal to 185 kilowatts (kW):

i. Facilities are required to possess a valid construction permit when adding or replacing Emergency Generators at the facility no later than 60 days after installation.

ii. The emergency generator may not be operated more than 500 hours per year.

iii. The emergency generator may not be operated in an effort to remove the facility from the grid (peak shaving) nor to supply electrical power to the grid.

iv. Each emergency generator shall be equipped with a non-resettable hour meter. The meter must be maintained in good working condition.

v. Diesel fuel used to power the generator shall contain no greater than 0.5% sulfur by weight.

vi. Fuel delivery records must be maintained for five years.

vii. Maintain a log of the running hours of the generator.

viii. Total annual hours and fuel usage of Emergency Generators shall be reported to the Kansas City, Missouri Health Department's Air Quality Program no later than April 1st of each year.

3. Construction/operation prohibited. No owner or operator shall commence construction, modification or major modification of any installation subject to this section, begin operation after that construction, modification or major modification, or begin operation of any installation which has been shut down longer than five (5) years without first obtaining a permit from the director under this section.

4. Exempt emission units. The following combustion equipment is exempt from the requirements of this section if the equipment emits only combustion products, and the equipment produces less than 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 BTU's per hour heat input.

(c) Drying or heat treating ovens with less than ten (10) million Btus per hour capacity provided the oven does not emit pollutants other than the

combustion products and the oven is fired exclusively by natural gas, liquefied petroleum gas, or any combination thereof; and

(d) Any oven with a total production of yeast leavened bakery products of less than ten thousand (10,000) pounds per operating day heated either electrically or exclusively by natural gas firing with a maximum capacity of less than ten (10) million Btus per hour.

5. Other exemptions. The following establishments, systems, equipment and operations are also exempt from this section:

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

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

iii. Equipment used for any mode of transportation;

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

v. Any grain handling, storage and drying facility which:

a. Is in noncommercial use only, that is, used only to handle, dry or store grain produced by the owner if:

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

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

(3) 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

b. Is in commercial use or noncommercial use and

(1) The total storage capacity of the new and any existing facility(ies) does not exceed one hundred and ninety thousand (190,000) bushels;

(2) Has an installation of additional grain storage capacity in which there is no increase in hourly grain handling capacity and that utilizes existing grain receiving and loadout equipment; or

(3) Is a temporary installation used for temporary storage as a result of exceptional events (e.g., natural disasters or abundant harvests exceeding available storage capacity) that meets the following criteria:

(4) Outside storage structures shall have a crushed lime or concrete floor with retaining walls of either constructed metal or concrete block. These structures may be either oval or round and must be covered with tarps while storing grain. These structures may be filled by portable conveyor or by spouts added from existing equipment;

(5) Existing buildings may be filled by portable conveyors directly or by overhead fill conveyors that are already in the buildings;

(6) The potential to emit from the storage structures is less than one hundred (100) tons of each pollutant;

(7) The attainment or maintenance of ambient air quality standards is not threatened; and

(8) There is no significant impact on any Class I area.

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

vii. Equipment solely installed for the purpose of controlling fugitive dust;

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

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

x. Residential wood heaters, cookstoves or fireplaces;

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

xii. Recreational fireplaces; and

xiii. 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.

xiv. 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;

xv. The following miscellaneous activities:

i. Use of office equipment and products, not including printing establishments or businesses primarily involved in photographic reproduction. This exemption is solely for office equipment that is not part of the manufacturing or production process at the installation;

ii. Tobacco smoking rooms and areas;

iii. Hand-held applicator equipment for hot melt adhesives with no volatile organic compound (VOC) in the adhesive formula;

iv. Paper trimmers and binders;

v. Blacksmith forges, drop hammers, and hydraulic presses;

vi. Hydraulic and hydrostatic testing equipment; and

vii. Environmental chambers, shock chambers, humidity chambers, and solar simulators provided no hazardous air pollutants are emitted by the process;

a. The following internal combustion engines:

i. Portable electrical generators that can be moved by hand without the assistance of any motorized or non-motorized vehicle, conveyance, or device;

ii. Laboratory engines used in research, testing, or teaching;

b. The following quarries, mineral processing, and biomass facilities:

i. /Drilling or blasting activities;

ii. Concrete or aggregate product mixers or pug mills with a maximum rated capacity of less than fifteen (15) cubic yards per hour;

iii. Riprap production processes consisting only of a grizzly feeder, conveyors, and storage, not including additional hauling activities associated with riprap production;

iv. Sources at biomass recycling, composting, landfill, publicly owned treatment works (POTW), or related facilities specializing in the operation of, but not limited to, tub grinders powered by a motor with a maximum output rating of ten (10) horsepower, hoggers and shredders and similar equipment powered by a motor with a maximum output rating of twenty-five (25) horsepower, and other sources at such facilities with a total throughput less than five hundred (500) tons per year; and

v. Land farming of soils contaminated only with petroleum fuel products where the farming beds are located a minimum of three hundred feet (300') from the property.

c. The following kilns and ovens:

i. Kilns with a firing capacity of less than ten (10) million Btus per hour used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity, or any combination thereof; and

ii. Electric ovens or kilns used exclusively for curing or heat-treating provided no hazardous air pollutants (HAPs) or VOCs are emitted;

xvi. The following food and agricultural operations to grow crops:

i. Any equipment used in agricultural operations to grow crops;

ii. Equipment used exclusively to slaughter animals. This exemption does not apply to other slaughterhouse equipment such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;

iii. Commercial smokehouses or barbecue units in which the maximum horizontal inside cross-sectional area does not exceed twenty (20) square feet;

iv. Equipment used exclusively to grind, blend, package, or store tea, cocoa, spices, or coffee;

v. Equipment with the potential to dry, mill, blend, grind, or package less than one thousand (1,000) pounds per year of dry food products such as seeds, grains, corn, meal, flour, sugar, and starch;

vi. Equipment with the potential to convey, transfer, clean, or separate less than one thousand (1,000) tons per year of dry food products or waste from food production operations;

vii. Storage equipment or facilities containing dry food products that are not vented to the outside atmosphere or which have the potential to handle less than one thousand (1,000) tons per year;

viii. Coffee, cocoa, and nut roasters with a roasting capacity of less than fifteen (15) pounds of beans or nuts per hour, and any stoners or coolers operated with these roasters;

ix. Containers, reservoirs, tanks, or loading equipment used exclusively for the storage or loading of beer, wine, or other alcoholic beverages produced for human consumption;

x. Brewing operations at facilities with the potential to produce less than three (3) million gallons of beer per year; and

xi. Fruit sulfuring operations at facilities with the potential to produce less than ten (10) tons per year of sulfured fruits and vegetables;

xvii. Batch solvent recycling equipment provided the recovered solvent is used primarily on-site, the maximum heat input is less than one (1) million Btus per hour, the batch capacity is less than one hundred fifty (150) gallons, and there are no solvent vapor leaks from the equipment which exceed five hundred (500) parts per million;

xviii. The following surface coating and printing operations:

i. Batch mixing of inks, coatings, or paints provided good housekeeping is practiced, spills are cleaned up as soon as possible, equipment is maintained according to manufacturer's instruction and property is kept clean. In addition, all waste inks, coating, and paints shall be disposed of properly. Prior to disposal, all liquid waste shall be stored in covered containers. This exemption does not apply to ink, coatings, or paint manufacturing facilities;

ii. Any powder coating operation, or radiation cured coating operation where ultraviolet or electron beam energy is used to initiate a reaction to form a polymer network;

iii. Any surface-coating source that employs solely non-refillable hand-held aerosol cans; and

iv. Surface coating operations utilizing powder coating materials with the powder applied by an electrostatic powder spray gun or an electrostatic fluidized bed;

xix. The following metal working and handling equipment:

i. Carbon dioxide (CO_2) lasers, used only on metals and other materials that do not emit a HAP or VOC in the process;

ii. Laser trimmers equipped with dust collection attachments;

iii. Equipment used for pressing or storing sawdust, wood chips, or wood shavings;

iv. Equipment used exclusively to mill or grind coatings and molding compounds in a paste form provided the solution contains less than one percent (1%) VOC by weight;

v. Tumblers used for cleaning or deburring metal products without abrasive blasting;

vi. Batch mixers with a rated capacity of fifty-five (55) gallons or less provided the process will not emit hazardous air pollutants;

vii. Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives provided the process will not emit hazardous air pollutants;

viii. Equipment used exclusively for the packaging of lubricants or greases;

ix. Platen presses used for laminating provided the process will not emit hazardous air pollutants;

x. Roll mills or calendars for rubber or plastics provided the process will not emit hazardous air pollutants;

xi. Equipment used exclusively for the melting and applying of wax containing less than one percent (1%) VOC by weight;

xii. Equipment used exclusively for the conveying and storing of plastic pellets; and

xiii. Solid waste transfer stations that receive or load out less than fifty (50) tons per day of nonhazardous solid waste;

xx. The following liquid storage and loading equipment:

i. Storage tanks and vessels having a capacity of less than five hundred (500) gallons; and

ii. Tanks, vessels, and pumping equipment used exclusively for the storage and dispensing of any aqueous solution which contains less than one percent (1%) by weight of organic compounds. Tanks and vessels storing the following materials are not exempt:

a. Sulfuric or phosphoric acid with an acid strength of more than ninety-nine percent (99.0%) by weight;

b. Nitric acid with an acid strength of more than seventy percent (70.0%) by weight;

c. Hydrochloric or hydrofluoric acid with an acid strength of more than thirty percent (30.0%) by weight; or

d. More than one (1) liquid phase, where the top phase contains more than one percent (1%) VOC by weight;

xxi. The following chemical processing equipment or operations

i. Storage tanks, reservoirs, pumping, and handling equipment, and mixing and packaging equipment containing or processing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized; and

ii. Batch loading and unloading of solid phase catalysts;

xxii. Body repair and refinishing of motorcycle, passenger car, van, light truck, and heavy truck and other vehicle body parts, bodies, and cabs, provided—

i. Good housekeeping is practiced; spills are cleaned up as soon as possible, equipment is maintained according to manufacturers' instructions, and property is kept clean. In addition, all waste coatings, solvents, and spent automotive fluids including, but not limited to, fuels, engine oil, gear oil, transmission fluid, brake fluid, antifreeze, fresh or waste fuels, and spray

booth filters or water wash sludge are disposed of properly. Prior to disposal, all liquid waste shall be stored in covered containers. All solvents and cleaning materials shall be stored in closed containers;

ii. All spray coating operations shall be performed in a totally enclosed filtered spray booth or totally enclosed filtered spray area with an air intake area of less than one hundred (100) square feet. All spray areas shall be equipped with a fan which shall be operated during spraying, and the exhaust air shall either be vented through a stack to the atmosphere or the air shall be recirculated back into the shop through a carbon adsorption system. All carbon adsorption systems shall be properly maintained according to the manufacturer's operating instructions, and the carbon shall be replaced at the manufacturer's recommended intervals to minimize solvent emissions; and

iii. Spray booth, spray area, and preparation area stacks shall be located at least eighty feet (80') away from any residence, recreation area, church, school, child care facility, or medical or dental facility;

xxiii. Sawmills processing no more than twenty-five (25) million board feet, green lumber tally of wood per year, in which no mechanical drying of lumber is performed, in which fine particle emissions are controlled through the use of properly engineered baghouses or cyclones, and which meet all of the following provisions:

i. The mill shall be located at least five hundred feet (500') from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the installation is located;

ii. All sawmill residues (sawdust, shavings, chips, bark) from debarking, planing, saw areas, etc., shall be removed or contained to minimize fugitive particulate emissions. Spillage of wood residues shall be cleaned up as soon as possible and contained such that dust emissions from wind erosion and/or vehicle traffic are minimized. Disposal of collected sawmill residues must be accomplished in a manner that minimizes residues becoming airborne. Disposal by means of burning is prohibited unless it is conducted in a permitted incinerator; and

xxiv. Carving, cutting, routing, turning, drilling, machining, sawing, sanding, planing, buffing, or polishing solid materials, other than materials containing any asbestos, beryllium, or lead greater than one percent (1%) by weight as determined by Material Safety Data Sheets (MSDS), vendor material specifications and/or purchase order specifications, where equipment—

i. Directs a stream of liquid at the point where material is processed;

ii. Is used only for maintenance or support activity not conducted as part of the installation's primary business activity;

iii. Is exhausted inside a building; or

iv. Is ventilated externally to an operating cyclonic inertial separator (cyclone), baghouse, or dry media filter. Other particulate control devices such as electrostatic precipitators or scrubbers are subject to construction permitting or a permit-by-rule, unless otherwise exempted.

6. Excluded activities. This subsection does not apply to:

(a) 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:

i. Replacing the bags in a baghouse;

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

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

iv. Replacement of boiler tubes;

v. Replacement of piping, hoods and ductwork;

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

(b) 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:

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

ii. Change in the sequence of the process;

iii. Change in the method of raw material addition;

iv. Change in the method of product packaging;

v. Change in the process operating parameters;

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

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

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

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

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

(c) 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.

(d) The excluded activities in paragraphs (A)6.(a) through (c) 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 purpose of the definition of actual emissions in section 8-2.

(e) The following miscellaneous activities

i. Plant maintenance, and upkeep activities such as routine cleaning, janitorial services, use of janitorial products, grounds keeping, general repairs, architectural or maintenance painting, welding repairs, plumbing, roof repair, installing insulation, using air compressors and pneumatically operated equipment, and paving parking lots, provided these activities are not conducted as part of the installation's primary business activity

ii. Batteries and battery charging station;

iii. Fire suppression equipment and emergency road flares

iv. Plant maintenance, and upkeep activities such as routine cleaning, janitorial services, use of janitorial products, grounds keeping, general repairs, architectural or maintenance painting, welding repairs, plumbing, roof repair, installing insulation, using air compressors and pneumatically operated equipment, and paving parking lots, provided these activities are not conducted as part of the installation's primary business activity;

v. Steam emissions from leaks, safety relief valves, steam cleaning operations, and steam sterilizers;

vi. Any solvent cleaning or surface preparation source that employs only non-arefillable handheld aerosol can.

7. Construction or modifications are exempt if they meet the requirements of paragraph (A)7.(b) of this section for each hazardous air pollutant and the requirements of paragraph (A)7(a), (A)7(b) , or (A)7(d) of this section for each criteria pollutant. The director may require review of construction or modifications otherwise exempt under paragraph (A)7. of this section 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) At maximum design capacity the proposed construction or modification shall emit each pollutant at a rate of no more than the amount specified in Table 1.

TABLE 1: Insignificant Emission Exemption Levels

Pollutant	**Insignificance level (lbs per hr)**
Particulate Matter 10 Micron (PM10) (Emitted solely by equipment)	**1.00**
Sulfur Oxides (SOx)	**2.75**
Nitrogen Oxides (NOx)	**2.75**
Volatile Organic Compounds (VOCs)	**2.75**
Carbon Monoxide (CO)	**6.88**

(b) 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) pound per hour, or the hazardous emission threshold as established in point (L)8., whichever is less.

(c) Actual emissions of each criteria pollutant, except lead, will be no more than eight hundred seventy-six (876) pounds per year

(d) Actual emissions of volatile organic compounds that do not contain hazardous air pollutants will be no more than four (4) tons per year.

8. Exceptions to excluded activities. The exclusion provisions of subsection (A)6. Of this section notwithstanding, shall apply to any construction, reconstruction, alteration or modification which:

(a) Is expressly required by an operating permit; or

(b) Is subject to federally-mandated construction permitting requirements set forth in subsections 8-10(G), (H) or (I), or any combination of these, of this subsection.

(B) *Unified review.* When the construction or modification and operation of any installation requires a construction permit under this subsection, and an operating permit or its amendment, under section 8-11, 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 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.

1. Review of applications. The permitting authority shall complete any unified review within one hundred and eighty four (184) days, as provided under the procedures of this section and section 8-11, operating 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 section and section 8-11, 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.

3. Validation and 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, or its

amendment. 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:

(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 have occurred prior to validation to insure the inclusion of any new applicable requirements to which the part 70 permit is subject.

(C) *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 per year of each pollutant from any of the requirements of this section, 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.

(D) *Portable equipment permits.* Portable equipment must meet the following criteria:

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

2. The equipment was permitted previously under either subsection (E), (F), (G) or (H) and the previous permit is still valid;

3. The equipment is operated and maintained in a manner identical to that specified in the currently valid permit; and

4. The following conditions must be met when permitted portable equipment is to be operated at a different location:

   (a) 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 director a portable source relocation request, property boundary plot plan and the equipment layout for the site. A relocation request is subject to the fees and the time frames specified in this subsection, 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 director shall make the final determination and, if appropriate, approve the

relocation request no later than twenty one (21) calendar days after receipt of the completed portable source relocation request;

(b) 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 director 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

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

(E) *De minimis permits.*

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

2. This de minimis permit shall be issued and remain in effect only if all of the following conditions are met:

(a) The director is notified in writing of the proposed construction or modification prior to the commencement of construction;

(b) Information is submitted to the director which is sufficient for the director to verify annual emission rate, to verify that no applicable emission control regulations will be violated, and to verify that the net emission increase of the installation is below the de minimis levels;

(c) Net emissions do not increase above the de minimis levels established at an installation having a de minimis permit under this subsection. If net emissions at the installation do increase above the de minimis levels, the installation shall be in violation of this section until it obtains a permit under the other requirements of this section;

(d) All permit fees are paid.

3. 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 issued 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 section.

4. Air Quality Analysis Requirements.

(a) 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 (E)4.(b) of this section 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—

i. Interfere with the attainment or maintenance of NAAQS and the air quality standards established in 10 CSR 10-6.010; or

ii. Cause or contribute to ambient air concentrations in excess of any applicable maximum allowable increase listed in subsection (K)1. Table 1, of this section, over the baseline concentration in any attainment or unclassified area.

(b) Exceptions. The director may require an air quality analysis for applications if it is likely that emissions of the proposed construction or modification will—

i. Interfere with the attainment or maintenance of NAAQS and the air quality standards established in 10 CSR 10-6.010;

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

iii. Result in complaints filed in the vicinity of the proposed construction or modification warrant an air quality analysis.

(F) General *permit requirements for construction or emission increases greater than de minimis levels.*

1. A permit shall be issued pursuant to this section only if it is determined that the proposed source operation or installation will not do one (1) or more of the following:

(a) Violate any of the applicable provisions of this section;

(b) Interfere with the attainment or maintenance of ambient air quality standards established in 10 CSR 10-6.010;

(c) Cause or contribute to ambient air concentrations in excess of any applicable maximum allowable increase listed in subsection (K)1., of this section, over the baseline concentration in any attainment or unclassified area;

(d) Violate any applicable requirements of Air Conversation Law; and

(e) Cause an adverse impact on visibility in any Class I area (Those designated in paragraph (L)7.(c))

2. In order for the director to make this determination, each applicant shall:

(a) Complete and submit application forms supplied by the director. These forms shall consist of a "Permit To Construct" and an "Emissions Inventory Questionnaire" for the proposed change or modification. Both forms shall be completed such that all information necessary for processing the permit is supplied.

(b) Send to the director 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.

(c) 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 per year or more of particulate matter or sulfur dioxide. The modeling techniques to be used are as specified in the most recent version of the Environmental Protection Agency's (EPA) Guideline on Air Quality Models (EPA 450/2-78-027R), including supplements at the time of application, or another model which the director 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;

(d) Furnish any additional information, plans, specifications, evidence, documentation, modeling or monitoring data that the director may require to complete the review under this subsection.

(e) Submit fees for the filing and processing of their permit application. The amount of the fee will be determined from section 8-20.

(f) In addition to review fees as determined from section 8-20, the applicant shall pay for any publication of notice required by this subsection, and shall

pay for the original and one copy of the transcript, to be filed with the director, of any hearing required under this subsection. Notwithstanding the deadline for final permit determination by the director under this subsection, no permit shall be issued until all publication and transcript costs have been paid.

3. The review of each permit shall be accomplished within the procedures allowed under subsection (L)1. and, if applicable, the procedures of subsection (L)2.

4. Special considerations for stack heights and dispersion techniques.

(a) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by:

i. That amount of the stack height of any installation which exceeds good engineering practice (GEP) stack height; or

ii. Any other dispersion technique.

(b) Paragraph (F)4.(a) of this section 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.

(c) Before the director issues a permit under this section based on stack heights that exceed GEP, the director must notify the public of the availability of the demonstration study and must provide opportunity for a public hearing on it.

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

5. After a permit has been granted the owner or operator subject to this section shall furnish the director the following written notifications:

i. A notification of the anticipated date of initial start-up of the source operation or installation within thirty (30) days of the actual date of initial start-up; and

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

6. 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:

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

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

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

7. 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 section, is in violation of this section;

8. 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 any other regulations under local, state or federal law.

9. The director may require monitoring of visibility in any class I area near the new installation or major modification for these purposes and by such means as the director deems necessary and appropriate.

(G) *Nonattainment area permits.* This subsection applies to the construction of any new major stationary source or any project at an existing major stationary source in an area designated as nonattainment.

1. Applicability Procedures. The provisions of this subsection are used to determine, prior to beginning actual construction, if a project at an existing major stationary source is a major modification and thus subject to the permit application and review requirements of subsection (G)2. of this section.

(a) Except for sources with a Plantwide Applicability Limit (PAL), which shall comply with subsection (G)3. of this section, and in accordance with the definition of the term major modification contained in subsection (A)1. of this section, a project is a major modification if it causes two (2) types of emissions increases for the nonattainment pollutant, a significant emissions increase and a significant net emissions increase. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(b) The emissions increase from the project is determined by taking the sum of the emissions increases from each emissions unit affected by the project. An emissions unit is considered to be affected by the project if an emissions increase from the unit would occur as a result of the project, regardless of whether a physical change or change in the method of operation will occur at the particular emissions unit.

(c) For each existing emissions unit affected by the project, the emissions increase is determined by taking the difference between the projected actual emissions for the completed project and the baseline actual emissions. In accordance with the definition of the term projected actual emissions found in 40 CFR 52.21 as referred to in subsection A1. of this section, the owner or operator of the major stationary source may elect to use the existing emission unit's potential to emit in lieu of the projected actual emissions for this calculation.

(d) For each new emissions unit affected by the project, the emissions increase is equal to the potential to emit.

(e) The procedure for calculating the net emissions increase (the significance of which is the second criterion for determining if a project is a major modification) is contained in the definition of the term net emissions increase found in subsection (A)1. of this section.

(f) The provisions of subsection (G)2. of this section do not apply to a source or modification that would be a major stationary source or major modification only if fugitive emissions to the extent quantifiable are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to one (1) of the source categories listed in items (i)(1)(vii)(a)–(aa) of 40 CFR 52.21 which is incorporated by reference in subsection (H)1. of this section.

2. Permit Requirements. A permit shall not be issued, for the construction of a new major stationary source for the nonattainment pollutants, or for a major modification for the nonattainment pollutant of an existing major stationary source, unless the following requirements, in addition to section (F) of this section, are met:

(a) By the time the source is to commence operation, sufficient emissions offsets shall be obtained as required to ensure reasonable further progress toward attainment of the applicable national ambient air quality standard and consistent with the requirements of Section 173(a)(1)(A) of the Clean Air Act and paragraphs 40 CFR 51.165(a)(3) and (9);

(b) 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;

(c) Offsets have been obtained in accordance with paragraph (G)2.(a) and with the offset and banking procedures in 10 CSR 10-6.410;

(d) 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;

(e) Temporary installation and portable sources shall be exempt from this section provided that the source applies BACT for each pollutant emitted in a significant amount;

(f) 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;

(g) Permit applications shall include a control technology evaluation to demonstrate that any new major stationary source or major modification will meet the lowest achievable emission rate (LAER) for all new or modified emission units, unless otherwise provided in this section;

(h) Any new major stationary source or major modification to be constructed in an area designated nonattainment shall comply with LAER as determined by the director and set forth in the construction permit pursuant to this section, except where otherwise provided in this section;

(i) The applicant must provide an alternate site analysis; and

(j) The applicant shall provide an analysis of impairment to visibility in any Class I area 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.

3. Plantwide Applicability Limits (PALs). The provisions of subsection (aa) of 40 CFR 52.21, which is incorporated by reference in subsection (H)1. of this section, shall govern PALs of the nonattainment pollutant for projects at existing major stationary sources in an area designated nonattainment, except that

(a) The term Administrator shall be the director of the Missouri Department of Natural Resources' Air Pollution Control Program;

(b) The term BACT or LAER and the term BACT shall both be LAER for the nonattainment pollutant;

(c) The term PSD program, as it appears in 40 CFR 52.21(aa)(1)(ii)(b), and the term major NSR program, as it appears in 52.21(aa)(1)(ii)(c), both shall be Nonattainment Area Permit program of this section; and

(d) The director shall not allow a PAL for VOC or NO_x for any existing major stationary source located in an extreme ozone nonattainment area.

4. Reporting and Record Keeping. This subsection applies to projects at existing major stationary sources, without a PAL, which are exempt from the permit requirements of subsection (G)2. of this section as a result of the applicability determination made in subsection (G)1. of this section. The owner or operator of such sources shall comply, in regards to the nonattainment pollutant, with the provisions of paragraph (r)(6) of 40 CFR 52.21, which is incorporated by reference in subsection (H)1. of this section, except that the term Administrator shall be the director of the Missouri Department of Natural Resources' Air Pollution Control Program.

5. Any construction or modification that will impact a federal Class I area shall be subject to the provisions of subsection (L)(8) of this section.

6. All permit applications subject to subsection (G)2. of this section are subject to the public participation requirements in subsection (L)2. of this section.

(H) *Attainment and unclassified area permits.*

1. All of the subsections of 40 CFR 52.21, other than (a) Plan disapproval, (q) Public participation, (s) Environmental impact statements, and (u) Delegation of authority, promulgated as of July 1, 2012, and Federal Register Notice 77 FR 41051 promulgated July 12, 2012, Federal Register Notice 77 FR 65107 promulgated October 25, 2012, and Federal Register Notice 76 FR 28646 promulgated May 18, 2011, are hereby incorporated by reference in this subsection, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This subsection does not incorporate any subsequent amendments or additions.
2. Applicants must obtain emission reductions, obtained through binding agreement prior to commencing operations and subject to 10 CSR 10-6.410, equal to and of a comparable air quality impact to the new or increased emissions in the following circumstances when the:

(a) Area has no increment available; or

(b) Proposal will consume more increment than is available.

(I) *Major Case-by-Case Hazardous Air Pollutant Permits.* Case-by-case permits must meet the requirements of 40 CFR 63, subpart B as specified in paragraph (3)(A)1. of 10 CSR 10-6.075. Before issuing a permit subject to this section, the permitting authority will issue a draft

permit and related materials for public comment in accordance with the procedures for public participation as specified in subsection (L)2.

(J) *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 an applicant desires to make the change, the applicant shall submit in writing a request to the director 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 section. The accrued permit processing fee from the original application must be submitted to the director 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 section 8-20.

(K) Tables

1. Table 1 : Ambient Air Increment Table:

Pollutant	**Maximum Allowable Increase**
Class I Areas	
Particulate Matter 2.5 Micron:	
Annual arithmetic mean	1
24-hour maximum	2
Particulate Matter 10 Micron:	
Annual arithmetic mean	4
24-hour maximum	8
Sulfur Dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen Dioxide:	

Annual arithmetic mean	2.5
Class II Areas	
Particulate Matter 2.5 Micron:	
Annual arithmetic mean	4
24-hour maximum	9
Particulate Matter 10 Micron:	
Annual arithmetic mean	17
24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
Nitrogen Dioxide:	
Annual arithmetic mean	25
Class III Areas	
Particulate Matter 2.5 Micron:	
Annual arithmetic mean	8
24-hour maximum	18
Particulate Matter 10 Micron:	
Annual arithmetic mean	34
24-hour maximum	60
Sulfur Dioxide:	
Annual arithmetic mean	40
24-hour maximum	182
3-hour maximum	700
Nitrogen Dioxide:	
Annual arithmetic mean	50

Notes:

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

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

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

2. Table 2: Significant Monitoring Concentrations.

Pollutant	**Air Quality Impact**
Carbon monoxide	575, 8-hour average
Nitrogen dioxide	14, annual
Particulate matter—	
2.5 micron ($PM_{2.5}$)	4, 24-hour
Particulate matter—	

10 micron (PM_{10})	10, 24-hour
Sulfur dioxide	13, 24-hour
Ozone	*
Lead	0.1, 3-month
Mercury	0.25, 24-hour
Beryllium	0.001, 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 significant monitoring concentration is provided for ozone. However, any potential net increase of one hundred (100) tons per year, or more, of volatile organic compounds or nitrogen oxides subject to subsection (H) of this section would require an ambient impact analysis, including the gathering of ambient air quality data.*

3. Table 3: Missouri Guidelines for Valid Data Total Suspended Particulate.

Time Period	**Minimum Requirement for Validity**
Month	2, 24-hour samples
Quarter	10, 24-hour samples and 3 valid months
Year	45, 24-hour samples and 4 valid quarters
Continuously Monitored Data	
Time Period	**Minimum Requirement for Validity**
3-hour running average	3 consecutive hourly observations
8-hour running average	6 hourly observations
24-hour average (daily)	18 hourly observations
Monthly	21 daily averages
Quarterly[1]	3 consecutive monthly averages
Yearly[2]	11 monthly averages

[1]Quarter is defined as calendar quarter.

[2]Year is defined as four (4) consecutive calendar quarters

4. Table 4: Significant Levels for Air Quality Impact in Class II Areas.

Averaging Time (Hours)					
Pollutant	**Annual**	**24**	**8**	**3**	**1**
SO_2	1.0	5.0		25	
PM_{10}	1.0	5.0			
$PM_{2.5}$	0.3	1.2			
NO_2	1.0				
CO			0.5		2.0

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

(L) *Appendices.*

1. Appendix A, Permit review procedures.

(a) 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.

(b) Complete application.

i. The director 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 subsection (L)1.(d) of this section.

ii. If the director 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.

a. The director shall maintain a checklist to be used for the permit application's completeness determination. A copy of the checklist identifying the application's deficiencies shall be provided to the applicant along with notice of incompleteness.

b. If, while processing an application that has been determined or deemed to be complete, the director determines that additional information is necessary to evaluate or to take

final action on that application the director may request this additional information in writing. In requesting this information, the director 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.

c. 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 permits amendment application must contain information specified paragraph (L)1.(d) of this section for those products, processes, operations and emissions:

(1) That are not addressed in the previous permit or application;

(2) That are subject to applicable requirements that are not addressed in the previous permit or application; or

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

iii. Confidential information. An applicant may submit information to the director under a claim of confidentiality pursuant to section 8-13.

iv. Filing fee. Each application must be accompanied by a $100.00 filing fee.

(c) 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 supplemental 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.

(d) *Standard application form and required information.* An applicant shall submit an application package consisting of the standard application form and emission inventory questionnaire. 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:

i. 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 and name of the plant site manager or other contact person;

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

iii. Emissions-related information. The following emissions-related information shall be provided on the emission inventory forms.

a. 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 by this section. The installation shall submit additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable;

b. Identification and description of all emissions units whose emissions are included in paragraph (L)1.(d)(III)(1) of this section in sufficient detail to establish the applicability of all requirements;

c. 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;

d. Information to the extent needed to determine or regulate emissions, fuels, fuel use, raw materials, production rates and operating schedules;

e. Identification and description of air pollution control equipment;

f. Identification and description of compliance monitoring devices or activities;

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

h. Other information required by any applicable requirement (including information related to stack height limitations developed pursuant to Section 123 of the Act); and

i. Calculations on which the information in points (L)1.(d)(III)(1) through (8) of this section is based;

iv. Other specific information required under the director's rule to implement and enforce other applicable requirements of the Act or this Code, or to determine the applicability of these requirements.

(e) Certification by responsible official. Any application form or report submitted pursuant to this section 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."

(f) Receipt of the complete application. Upon receipt of a complete application and the required fee, the director shall proceed with an application review.

(g) Notification of processing fees. The director, as timely as possible, will notify the applicant in writing if the permit processing fee approaches one thousand dollars ($1,000.00) and in one thousand dollars ($1,000.00) increments after that.

(h) Public participation. For all applications of 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 subsection (G) and (H) of this section, the director shall follow the procedures for public participation as specified in subsection (L)2 of this section.

(i) Final completeness determination. Final determination will be made on the following schedules:

i. The director will make final determination for complete permit applications processed under subsections (G), (H) or (I) of this section no later than one hundred eighty-four (184) calendar days

after receipt of a complete application, taking into account any additional time necessary for missing information;

ii. The director will make final determination for complete permit applications processed under subsections (C), (D), (E) or (F) of this section no later than ninety (90) calendar days after receipt of a complete application, taking into account any additional time necessary for missing information;

iii. If the director exceeds the time for review described in paragraphs (L)1.(i)(I) and (II), the applicant shall not be required to pay the processing fee associated with the application.

(j) After making a final determination whether the permit should be approved, approved with conditions or denied, the director shall notify the applicant in writing of the final determination.

(k) Conditions required by the director. The director may impose those conditions in a permit as may be necessary to accomplish the purposes of this section, any applicable requirements, or the Air Conservation Law, Chapter 643, RSMo, and are no less stringent than any applicable requirements. Nothing in this section shall be deemed to limit the power of the director in this regard. Such conditions may include but are not limited to the following examples presented solely for the purposes of illustration which do not limit the generality of the preceding liberal sentence:

i. Sampling port(s) of a suitable size, number and location;

ii. Safe access to each port;

iii. Instrumentation to monitor and record emission data;

iv. Other sampling and testing facilities;

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

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

vii. Maximum level of emissions;

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

ix. Data reporting;

x. Post-construction ambient monitoring and reporting.

(l) Drafts for public comment. Following review of an application, the director shall issue a draft permit for public comment, in accordance with subsection (L)2. Of this section. 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 director shall send this statement to the administrator, to affected states and to the applicant, and shall place a copy in the public file.

(m) Additional procedures needed for unified reviews of subsection (F), (G), (H) or (I) of this section unified reviews construction permit applications and part 70 operating permit applications.

i. Permit review by the administrator and affected states.

a. Administrator review.

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

(2) Administrator's objection. No permit shall be issued under this section 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.

(3) Failure to respond to objection. If the director 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.

(4) 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.

[a] 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).

[b] If the administrator responds to a petition filed under this subsection by issuing an objection, the director 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 director 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.

b. Affected state review.

(1) Notice of draft actions. The director will give notice of each draft permit to any affected state or before the time that the director provides to the public. Affected states may comment on the draft notice permit action during the period allowed for public comment, as shall be set forth in a notice to affected states.

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

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

a. The proposed permit shall be issued no later than 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.

b. 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 director may elect to either:

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

(2) If the director determines that this extension or reopening of the public comment period would delay issuance of the permit unduly, the director 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 director elects to issue the proposed or final permit, or both, without incorporating the new requirements, the director, 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.

iii. Action following the administrator's review.

a. 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 subsection, the director 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.

b. Forty-five (45) days after transmittal of a proposed permit for the administrator's review, and if the administrator has not notified the director that she/he objects to the proposed permit action, the director shall promptly issue the permit,

but in no event later than the fiftieth day following transmittal to the administrator.

c. If the administrator objects to the proposed permit, the director 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 director does not revise the permit, the director 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 director, the administrator may issue the permit with the revisions incorporated.

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

(o) Notice of processing fees due. If payment of permit processing fees have not been received from the applicant forty-five (45) calendar days after the final determination, the director shall issue in writing to the applicant a final notice of payment due.

(p) 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 director shall notify the applicant that the permit has been denied, provided the application previously had been approved in the final determination. The director also shall advise the applicant that the fee is still due and as specified in section 8-20, the fee shall have interest imposed upon it from the date of billing until payment is made.

(q) Payment received. No later than three (3) calendar days after receipt of the whole amount of the fee due, the director 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.

2. Appendix B, Public participation.

(a) This subsection shall apply to review of applications under subsections (G) and (H) of this section, and 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 section 8.2.

(b) For those applications subject to subsections (G) or (H) of this section, 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:

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

ii. Draft for public comment and public hearing opportunity. No later than ten (10) days after the close of the preliminary review period, the director shall issue draft permit and solicit comments by publishing a notice 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 director shall give preliminary determination of whether to approve, approve with conditions or deny, and any reference to conditions relating to visibility. 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 state that the hearing will be canceled if a request for a hearing is not received with in twenty-eight (28) days of the publication of the notice. The hearing shall be scheduled 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 director, 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

office of the air quality program. The director shall submit copies of all such public notices to the administrator of the United States Missouri Department of Natural Resources.

iii. Availability of preliminary determination. After the close of the preliminary review period, but 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 air quality program office a copy of the preliminary determination and a copy of summary of other materials, if any, considered in making the preliminary determination;

iv. The director may designate another person to conduct any hearing under this section;

v. Distribution of public notice. Within ten (10) days after the close of the preliminary review period, 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 proposed construction or modification 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;

vi. Public comment and applicant response. The director 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 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 prehearing information relating to the proposed installation or modification. Further, the director shall prepare a written response to all comments and make them available at the locations referred to above.

vii. Final determination. The director shall make a final determination whether the construction or modification should be approved, approved with conditions, or denied and notify the applicant in writing of the final determination and make such notification available for public inspection at the same locations where the director made available prehearing information and public

comments relating to the installation or modification. The director shall submit a copy of this final determination to the Administrator of the Missouri Department of Naturals Resources.

viii. 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 director may make a final determination without providing public notice and opportunity for public comment and hearing required by this subsection.

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

a. For proposed installation subject to specific permit requirements in subsections (G) and (H) of this section, but not dependent on any quantity of lead emissions as stated in paragraph (L)2.(a) of this section, the director shall provide advance notification to any FLM where, in the judgment of the director, 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.

b. No later than thirty (30) days after receipt of a complete application, the director shall make written notification to the FLM whose class I area 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 director may also make this notification to any additional FLM whose class I area's visibility, in the judgment of the director, may be impacted.

c. The director shall consider any analysis performed by an FLM that is provided to the director within thirty (30) days of the FLM's receipt of the notification and analysis requested in subsection (L)2.(IX)b. of this section. Where the FLM's analysis indicates that an adverse impact on visibility (as defined in section 8-2) would occur in a class I area as a result of the proposed project, and analysis does not demonstrate an adverse impact to the director's satisfaction, the director 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 director's reasoning can be found, and that the explanation be available for public inspection no later than the date public notice is published.

(c) This paragraph is for those applications not subject to subsections (G) or (H) of this section, 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 subsections (G) or (H) of this section, but with shorter time frames. The following specifies the new time frames:

(I) Director's preliminary determination. No later than forty-five (45) calendar days after receipt of a complete application;

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

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

(IV) 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.

3. Appendix C, *Innovative* Control *Technology*

(a) An owner or operator of an installation subject to subsection (H) may employ a system of innovative control technology if:

i. The applicant demonstrates to the satisfaction of the director 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;

ii. The owner or operator demonstrates to the satisfaction of the director the ability of the proposed control system to achieve a level of continuous emission reduction equivalent to that which would have been required under subsection (H)1. of this section by a reasonable date specified by the director, taking into consideration the technical and economic feasibility. The date specified shall not be later than four (4) years from the time of start-up or seven (7) years from permit issuance.

iii. On the date specified by the director, the proposed construction employing the system of innovative control will meet the requirements of 40 CFR 52.21(l) and 40 CFR 52.21(v).

iv. The proposed construction would not cause or contribute to a violation of an applicable national ambient air quality standard, impact any class I area, or impact any area where an applicable

increment is known to be violated, before the date specified by the director.

v. Consent is gained from the governor of any adjacent state that will be significantly impacted by the proposed construction before the date specified by the director; and

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

(b) Any approval to employ a system of innovative control technology may be revoked by the director if:

(I) The proposed system fails or will fail by the specified date to achieve the required continuous emission reduction rate; or

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

(III) The director determines that the proposed system is unlikely to protect the public health, welfare or safety.

(c) 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 (L)3.(b) of this section, the owner or operator may request the director to grant an extension of time for such minimum period as may be necessary to meet the requirement for the application of best available control technology (BACT) through use of a demonstrated system of control. Such period shall not extend beyond the date three (3) years after termination of the same time period specified in paragraph (L)3.(a).

4. Appendix D, Air quality models.

(a) All estimates and analyses of ambient concentrations shall be based on the applicable air quality models, data bases, and other requirements specified in the Environmental Protection Agency's (EPA) Guideline on Air Quality Models (40 CFR 51, Appendix W) including supplements at the time of application.

(b) Any model(s) designated in paragraph (L)4.(a) of this section may be adjusted upon a determination by the administrator and the director, 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 Protocol for Determining the Best Performing Model (United States EPA publication No. EPA-454/R-92-025, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, 1992) and Standard Guide for Statistical Evaluation of Atmospheric Dispersion Model Performance (NTIS No. PB 93-226082) should be used to determine the comparability of air quality models.

(c) Where the Guideline on Air Quality Models (40 CFR 51, Appendix W) including supplements at the time of application 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.

5. Appendix E, Increment *tracking.*

(a) The director will track ambient air increment consumption at fixed baseline locations within the baseline areas.

(b) 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 director to determine which applicant is entitled to prior allocation of increments.

(c) At intervals of five (5) years from the baseline date, the director shall determine the actual air quality increment available or consumed for location(s) for which complete air monitoring data exists using subsection (K)3.

(d) 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 (L)2. Of this section, the director shall exclude the following concentrations in determining consumption of maximum allowable increase:

i. 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 and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from those sources before the effective date of such an order;

ii. 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 such sources before the effective date of such plan;

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

iv. However, no exclusion of these concentrations shall apply more than five (5) years after the effective date of the order to which paragraph (L)5.(d)(I) of this section refers or the plan to which paragraph (L)5.(d)(II) of this section 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 such effective dates.

6. Appendix F, *Impacts on class I areas*

(a) At any time prior to the close of the public comment period specified in subsection (L)2. Of this section, the FLM for any federal class I area may provide information to director 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 (K)1. Of this section, If the director concurs in the demonstration by the FLM, the permit shall be denied.

(b) 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 director, the director, providing that all other applicable requirements of this section 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:

Pollutant	Maximum Allowable Increase
Particulate Matter 2.5 Micron:	
Annual arithmetic mean	4
24-hour maximum	9
Particulate Matter 10 Micron:	
Annual arithmetic mean	17
24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325
Nitrogen Dioxide:	
Annual arithmetic mean	25

Note: Increases are in micrograms per cubic meter.

(c) Sulfur dioxide variance by governor with FLM's concurrence.

i. If the owner or operator of a proposed installation or major modification who has been denied an FLM's certification pursuant to paragraph (L)6.(a) of this section 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 their concurrence, may grant, after notice and an opportunity for a public hearing, a variance from these maximum allowable increases.

ii. If a variance is granted, the director may issue a permit to an installation or major modification in accordance with the requirements of paragraph (L)6.(e) of this rule, provided that all other applicable requirements of this section are met.

(d) Variance by the governor with the President's concurrence.

i. 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.

ii. If this variance is approved by the President pursuant to 42 U.S.C.A. Section 7475(d)(2)(D)(ii), the director may issue a permit in accordance with the requirements of paragraph (L)6.(e) provided that all other applicable requirements of this section are met.

(e) Emission limitations for presidential or gubernatorial variance.

i. In the case of a permit issued pursuant to paragraph (L)6.(c) or (d) of this section, the director 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 increase over the baseline concentrations:

Maximum Allowable Increase (micrograms per cubic meter)		
Period of Exposure	**Terrain Areas**	
	Low	**High**
24-hour maximum	36	62
3-hour	130	221

ii. 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.

(f) The director shall transmit to the administrator a copy of each permit application under this subsection (L)6. and provide notice to the administrator of every action related to the consideration of a permit.

7. *Appendix G, Attainment and unclassified area designations.*

(a) Area classification.

i. The following areas shall be class I areas and may not be redesignated:

a. Hercules Glade National Wilderness Area; and

b. Mingo National Wilderness Area.

ii. 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.

iii. The following areas may be redesignated only as class I or II:

a. 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

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

(b) Area redesignation.

i. All areas (except as otherwise provided under subsection (L)7.(a) of this section are designated class II as of December 5, 1974. Redesignation (except as precluded by subsection (L)7.(a) of this section may be proposed by the commission as provided in this section, subject to approval by the administrator.

ii. The commission may submit to the administrator a proposal to redesignate areas of the state as class I or class II provided that:

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

b. 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;

c. 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;

d. 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 requesting 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

e. The commission has proposed the redesignation after consultation with the elected leadership of local and other substance general purpose governments in the area covered by the proposed redesignation.

iii. Any area other than an area to which subsection (L)7.(a) refers maybe redesignated class III if:

a. The redesignation would meet the requirements of provisions established in accordance with subsection (L)7.(b)(II).;

b. The redesignation has been approved by the commission and the governor;

c. The redesignation has been approved by the governor after consultation with the appropriate communities of the legislature if it is in session or with the leadership of the legislature if it is not in session;

d. General purpose units of local government, representing a majority of the residents of the area to be redesignated, adopt resolutions concurring in the redesignation;

e. 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

f. Any permit application for any installation or major modification subject to provisions established in accordance

with subsection (L)7.(b)(I) of this section 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.

(c) 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

8. Appendix H, Air *Quality* Analysis for Hazardous Air Pollutants

(a) 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 (L)8.(b) of this section applies.

(b) 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.

Sec. 8-11. Permit to operate, notification and record keeping.

(A) *Permits required.*

1. No person shall operate or cause the operation of any installation without obtaining from the director an annual permit to operate. Obtaining a permit for construction or major modification shall not relieve a person's obligation to obtain an annual permit to operate. This permit to operate shall expire the following July 31 and shall be renewed annually thereafter.

2. Any owner or operator who shall operate or cause the operation of an installation where the director denies or revokes a permit to operate shall be subject to such fines and penalties as provided for in section 8-19.

3. No permit to operate shall be granted unless the applicant shows to the satisfaction of the director that the installation is in compliance with applicable rules and regulations.

4. The director may suspend or revoke a permit to operate for violation of applicable rules and regulations. Such suspension or revocation of a permit to operate shall become final ten (10) days after service of notice to the holder of the permit. A permit to operate which has been revoked pursuant to these regulations shall be surrendered forthwith to the director.

5. Permits to operate are not transferable.

6. Approval to operate shall not be required for:

   (a) Installation, alteration or repair of an air pollutant detector, air pollutant recorder, combustion controller or combustion shutoff.

   (b) Air conditioning or ventilating equipment or systems not designed to remove air pollutants generated by or released from specific units of equipment.

   (c) Gas-fired equipment used for space heating, air conditioning, heating water, or any other indirect heating installation with a heat input of not more than one million BTU per hour.

   (d) Equipment used for any mode of transportation.

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

   (f) 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;

   (g) 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;

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

   (i) Livestock markets, livestock operations and handling systems from which the only potential air contaminant is odorous gas;

(j) Restaurants and other retail establishments for the purpose of preparing food for employee and guest consumption;

(k) Fugitive dust controls unless a control efficiency can be assigned to the equipment or control equipment;

(l) Equipment or control equipment which eliminates all emissions to the ambient air;

(m) Equipment, including air pollution control equipment, but not including an anaerobic lagoon, that emits odors but no regulated air pollutants;

(n) Residential wood heaters, cookstoves or fireplaces;

(o) Recreational fireplaces;

(p) 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;

(q) Other installations of minor significance specified by the director.

7. Possession of a permit to construct or modify, or a permit to operate shall not relieve any person of the responsibility to comply with applicable emission limitations or other regulations.

8. The permit to operate shall be renewed annually on August 1 except for those required under section 8-4 and section 8-9. Operating permit fees shall be as prescribed in section 8-20(c). Permits required under section 8-4 or section 8-9 shall be issued for each location of temporary installations.

(B) Notification. The owner or operator of any new or modified installation shall notify the director in writing of such anticipated start-up no later than 15 days prior to the actual start-up of the new or modified installation.

(C) Recordkeeping. Any owner or operator of any installation subject to the provisions of this part shall maintain for a period of two years a record of the occurrence and duration of any start-up, shutdown, or malfunction in operation of the installation.

Sec. 8-12. Appeals and Variances.

(A) *Right to* appeal.

1. Any person adversely affected or otherwise aggrieved by an order or other decision issued by the director to enforce this chapter shall have the right to appeal that order or decision to the board. Such appeal must be taken within 15 days after the date of

receipt of the order or decision appealed by filing with the director a written notice of appeal setting forth the grounds therefor and the specific matters or issues to be considered upon appeal. A fee of $50.00 payable to the city treasurer must accompany the notice of appeal. Upon receipt of a written notice of appeal and the appropriate fee, the director shall promptly transmit the notice and all papers constituting the record upon which the order or decision appealed from was based to the board. All or a portion of this filing fee may be waived by the director for good cause shown.

2. Except in emergencies as set out in section 8-17, an appeal to the board stays enforcement of the order or decision being appealed.

3. Failure of a person entitled to appeal to do so, or to timely file his/her notice of appeal, shall constitute a waiver of his right to an administrative hearing; and such person shall be estopped to deny the validity of the or An appeal shall be set for a hearing not less than 30 days after the proper filing of the notice of appeal, unless continued by the board.

4. Subject to the provisions of section 8-13 hereof, all hearings held by the board shall be open to the public, and all testimony taken shall be under oath and recorded stenographically. The board may require the submission of voluminous, detailed or technical testimony in writing under oath. A transcript of the testimony so recorded shall be made available to any member of the public or to any participant in such hearing upon payment of reasonable charges for transcription thereof.

5. All hearings shall be heard before four or more members of the board.

6. Any person aggrieved or who would be aggrieved by the emissions from the alleged air contaminant source shall be entitled to appear to testify with respect to such matter, subject to such restrictions and procedures as the board may establish, but shall not be a party to such proceeding. In all appeals from any order issued by the director, the person or persons to whom such order is directed and the director shall be the parties in interest.

7. Every order by the board shall be in writing and approved by at least four members. Every order shall state separately the findings of fact and conclusions upon which the board based its decision.

8. Upon issuing its order, the board shall notify each party to the proceeding, in writing, by certified mail. In cases in which any party is found to have violated any provisions of this article, the order of the board shall fix a reasonable time for such person or persons to take such measures as may be necessary to prevent subsequent violation.

(B) *Variances.*

1. Petitions. Any person who owns or is in control of any air contaminant source may submit a petition to the director for a variance from any section of this chapter governing the quality, nature, duration or extent of discharge of air pollutants from such source. The petition shall be accompanied by a $300.00 fee made payable to the city treasurer and shall include the following information:

   (a) The name, address and telephone number of the petitioner or other person authorized to receive service of notice.

   (b) The type of business or activity conducted at the site of the air contaminant source and the street address at which it is conducted.

   (c) A brief description of the article, machine, equipment or other contrivance or process involved and the emission occurring therefrom.

   (d) The signature of the petitioner or some person authorized to sign on the petitioner's behalf. Where the person signing is not the petitioner, the petition shall set forth that person's authority to sign.

   (e) The section of this chapter from which the variance is sought.

   (f) Such other information and data with respect to such air contaminant source as may be required by the director of the board.

2. Investigation. The director shall promptly investigate such petition and submit it to the board with a recommendation as to the disposition thereof.

3. Grounds for variance. The board may grant such variance if it finds that compliance with the regulations from which the variance is sought would produce serious hardship without equal or greater benefits to the public; and

   (a) The emissions occurring or proposed to occur would not endanger human health or safety; and/or

   (b) Interfere with the attainment or maintenance of ambient air quality standards.

4. Notice of hearing. No variance shall be granted or denied until after notice of its filing and the date of the hearing thereon is published in a newspaper of general circulation within the county in which the source is located. Such notice shall be published at least once not more than 20 days, nor less than 15 days, before the hearing date.

5. Hearing. A petition for a variance shall be set for a hearing not less than 30 days after the filing of the petition, unless continued by the board.

6. Renewal. Variances may be granted for such periods of time and under such terms and conditions as shall be specified by the board. Variances may be renewed by the board upon application made at least 60 days prior to the expiration of the term. Renewal applications shall be considered by the board and shall require the same fee.

7. Conditions. Variances may be granted requiring a decrease of the emissions during the variance period and the making of periodic reports on an improvement program and on compliance with specific terms and conditions attached to the variance. A variance may be revoked or modified for failure to comply with the terms thereof or for failure to make a periodic report, if such is required.

8. Emergencies. Nothing in this subsection, and no variance or renewal granted pursuant hereto, shall be construed to prevent or limit the application of the emergency provisions and procedures of this article.

(C) *Judicial review of orders of the board.* Orders of the board shall, without the necessity for a motion for rehearing, be subject to judicial review pursuant to the provisions of RSMo ch. 536.

Sec. 8-13. Confidential information.

This section shall apply to all business information requested by an owner or operator to be designated confidential by the air quality section. This section shall not apply to emission data included in the information that shall not be entitled to confidential treatment, as provided by RSMo 643.050.4.

(A) *General provision.* Any information or records submitted or obtained pursuant to this section that contains, or from which could be derived, confidential business information, shall be kept confidential by the employees of the air quality section if a timely request for confidentiality is made by the person submitting the information.

(B) *Definitions.*

1. Definitions for key words used in this section may be found in section 8-2 of this code.

2. Additional definitions specific to this section are as follows:

   (a) 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

(b) Emission data:

i. The identity, amount, frequency, concentration or other characteristics (related to air quality) of any air contaminant which:

a. Has been emitted from an emission unit;

b. Results from any emission by the emissions unit;

c. Under an applicable standard or limitation, the emissions unit was authorized to emit; or

d. Is a combination of any of the parts (c)(2)b.1.i., ii. and iii. of this section;

ii. 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

iii. The results of any emission testing or monitoring required to be reported under chapter 8 of the Code of Ordinances of the City of Kansas City, Missouri or other rules at the Missouri Air Conservation Commission.

(C) *Procedures.*

1. An owner or operator who wishes to claim confidentiality for any information submitted pursuant to this section shall submit a claim of confidentiality when the information is initially submitted. Failure to submit a claim of confidentiality when the information is initially submitted may result in public disclosure.

2. The claim of confidentiality shall be accompanied by a justification that the information is entitled to confidential treatment.

3. When information claimed to be confidential is being submitted with a permit application, emissions report, or any other documentation containing information subject to public disclosure, a separate version that may be viewed by the public shall be provided by the owner or operator.

4. Upon receipt of a 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.

5. The owner or operator shall have 15 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 their final decision on whether the claim will be denied in whole or in part within ten days.

6. The owner or operator may appeal to the air quality appeals board from the director's final decision to deny a claim of confidentiality in whole or part by filing a notice of appeal as provided in section 8-3. 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 air quality appeals board.

7. If the air quality appeals board'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. 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 pursuant to RSMo 536.110.

8. A claim of confidentiality under this section shall be granted if:

   (a) The owner or operator has asserted a business confidentiality claim that has not expired by its terms, been waived or withdrawn;

   (b) The owner or operator has satisfactorily shown that it has taken reasonable measurers to protect the confidentiality of the information and that it intends to continue to take those measures;

   (c) 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);

   (d) No statute specifically requires public disclosure of the information;

   (e) The information is not emission data; and

   (f) The owner or operator has satisfactorily shown that public disclosure of the information:

      i. Is likely to cause substantial harm to the business' competitive position; or

      ii. 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 Kansas City, Missouri Air Quality Control Code, the state's version includes (for example, information required to obtain a permit or other approval is submitted to obtain a benefit from the air quality appeals board).

(D) *Conditions for any disclosure.*

1. 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 (d)(3)-(7) of this section.

2. 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.

3. Public release. The director and their 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 subsection (d)(3)-(7) and (e)(1) of this section have been observed.

4. Disclosure to other governmental agencies. Information submitted under a claim of confidentiality, and where the claim has not been finally denied, may be disclosed to other governmental agencies if:

   (a) The owner or operator is given prior notice 15 days in which to obtain an order from a court of competent jurisdiction restraining or enjoining the disclosure to the other agency, and if no such order is obtained, or obtained and later dissolved because of item c. being added; or

   (b) The other agency has ordinances or regulations respecting the treatment of confidential business information that is equivalent to this section, the director provides notice to the owner or operator that the information is being disclosed to the other agency, and the director informs the other agency that the information is subject to or because of item c. being added.

(c) Such information is otherwise required by law or regulation.

5. Disclosure to administrator. Information submitted under a claim of confidentiality, and where 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.

6. 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.

Sec. 8-14. Dilution of emission.

No person shall willfully cause or permit the installation or use of any device or use any means which dilutes an emission of an air contaminant which would otherwise violate this chapter without actually reducing the amount of air contaminant emitted. This section shall not apply when the only violation involved is a violation of a regulation based on the concentration or presence of one or more air contaminants at locations beyond the premises on which such air contaminant source is located. This section shall not apply for devices that are used for the sole purpose of cooling an exhaust gas stream.

Sec. 8-15. Start-up, shutdown, and malfunction condition.

This section is applicable to all installations and, 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.

(A) *General* Provisions.

1. 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 Air Quality Program and/or 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:

(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) Identity of the equipment causing the excess emissions;

(e) Time and duration of the period of excess emissions;

(f) Cause of the excess emissions;

(g) Air pollutants involved;

(h) 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;

(i) Measures taken to mitigate the extent and duration of the excess emissions; and

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

2. The owner or operator shall notify the Air Quality Program and/or the Missouri Department of Natural Resources' Air Pollution Control Program at least ten (10) days prior to any maintenance, start-up, or shutdown activity, which is expected to cause an excess release of emissions that exceeds one (1) hour. If notification cannot be given ten (10) days prior to any maintenance, start-up, or shutdown activity, which is expected to cause an excess release of emissions that exceeds one (1) hour, notification shall be given as soon as practicable prior to the maintenance, start-up, or shutdown activity. If prior notification is not given for any maintenance, start-up, or shutdown activity which resulted in an excess release of emissions that exceeded one (1) hour, notification shall be given within two (2) business days of the release. In all cases, the notification shall be a written report and 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) Identity of the equipment involved in the maintenance, start-up, or shutdown activity;

(d) Time and duration of the period of excess emissions;

(e) Type of activity and the reason for the maintenance, start-up, or shutdown;

(f) Type of air contaminant involved;

(g) 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;

(h) Measures taken to mitigate the extent and duration of the excess emissions; and

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

3. Upon receipt of a notice of excess emissions issued by the Missouri Department of Natural Resources or the Air Quality Program, 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.

(a) In determining whether enforcement action is warranted, the director or commission shall consider the following factors:

i. 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;

ii. 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;

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

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

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

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

vii. 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;

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

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

(b) The information provided by the source operator under subsection (A)3. of this section shall include, at a minimum, the following:

i. Written notification per subsection (A)1. of this section for malfunctions which resulted in excess emissions that exceeded one (1) hour; or

ii. Written notification per subsection (A)2. of this section for maintenance, start-up, or shutdown activities which resulted in excess emissions that exceeded one (1) hour.

4. Nothing in this section 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 section.

5. Compliance with this section does not automatically absolve the owner or operator of such facility of liability for the excess emissions reported.

(B) Reporting and Record Keeping.

1. The information specified in paragraph (A)3.(b) of this section 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.

2. The information submitted according to subsections (A)1. and (A)2. of this section and paragraph (A)3.(b) of this section 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.

(C) Test Methods *(Not Applicable)*

Sec. 8-16. Actionable rights; violations declared public nuisance.

(A) Actionable rights. Persons other than the city shall not acquire actionable rights by virtue of this chapter. A determination by the director or the board that air pollution or air contamination exists or that this chapter or any section of this chapter is being violated shall not create by reason thereof any presumption of law or finding of fact which shall inure to or be for the benefit of any person other than the city.

(B) Violations declared public nuisance. The emission into the ambient air of air contaminants resulting in air pollution in violation of any section of this chapter within the boundaries of the city and within unincorporated areas within one-half mile of those boundaries is hereby declared a public nuisance injurious to the health and welfare of the inhabitants of the city. It is further declared unlawful for any person to cause, permit or maintain any such public nuisance.

Sec. 8-17. Emergency condition.

(A) Issuance of emergency order. Notwithstanding other provisions of this article, if the director has cause to believe that a generalized or specific condition of air pollution exists in any area of the city and that such condition creates an emergency requiring immediate action to protect human health or safety in such area, the director may order the person(s) causing or contributing to such condition to reduce or discontinue immediately the emission of such air contaminants into the ambient air. Such an order can be issued only with the written approval of Air Quality Program. Upon receipt of any such order, the person(s) to whom it is directed shall immediately comply with such order(s).

(B) Notification to the public. Whenever the Director has issued an emergency order pursuant to this section, or whenever the Director has deemed a contamination an imminent public health hazard, the Director shall notify those persons the Director deems potentially affected by such contamination. Notice may be given through the most effective means available to the department.

Sec. 8-18. Rules for controlling emissions during periods of high air pollution potential.

PURPOSE: This section specifies the conditions that establish air pollution alert and emergency alert levels and the associated procedures and emissions reduction objectives.

(A) Applicability.

1. This rule shall apply to all sources and premises with air emissions that contribute to sulfur dioxide (SO2), carbon monoxide (CO), ozone (O3), nitrogen dioxide (NO2), or Particulate Matter—10 Micron (PM10) and 2.5 Micron (PM2.5).

2. 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.

(B) *General* Provisions.

1. Air Pollution Alerts.

(a) The Air Quality Index shall be reported to the general public on a daily basis by all metropolitan statistical areas with a population exceeding three hundred fifty thousand (350,000).

(b) Alert levels for applicable air pollutants are stated in terms of the Air Quality Index (AQI) as defined in 40 CFR 58, Appendix G. Table A shows the relation of the AQI ranges to alert categories.

Table A		
AQI		
AQI	**Alert Category**	**Alert Color**
0–50	Good	Green
51–100	Moderate	Yellow
101–150	Unhealthy for Sensitive groups	Orange
151–200	Unhealthy	Red
201–300	Very Unhealthy	Purple
301–400	Hazardous	Maroon
401–500	Hazardous	Maroon

(c) Alert types and levels of initiation. If an AQI value falls within the AQI range listed in Table A of this section, the corresponding alert color shall be initiated.

(d) Declaration of alerts. An orange alert, red alert, purple alert, or maroon emergency alert may be declared on the basis of deteriorating air quality alone; an Air Stagnation Advisory need not be in effect. The appropriate alert level should be declared by the director as ambient monitoring would indicate.

(e) 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.

2. Conditions. This subsection provides conditions that establish alert level categories.

Table B			
Conditions for Alert Level Categories			
Orange (101-150)	**Red (151-200)**	**Purple (201-300)**	**Maroon (301-500)**
This alert level AQI value is equaled or exceeded at any one (1) monitoring station within the affected area, unless there is a current forecast of meteorological improvement within the next twenty-four (24) hours. *-- and --* Meteorological conditions are such that the conditions can be expected to remain or reoccur in this alert level range during the next twenty-four (24) or more hours or increase unless control actions are taken.	This alert level AQI value is equaled or exceeded at any one (1) monitoring station within the affected area, unless there is a current forecast of meteorological improvement within the next twenty-four (24) hours. -- and -- Meteorological conditions are such that the conditions can be expected to remain or reoccur in this alert level range during the next twenty-four (24) or more hours or increase unless control actions are taken.	This alert level AQI value is equaled or exceeded at any one (1) monitoring station within the affected area. *-- or --* This alert level AQI value is equaled or exceeded as the arithmetic mean for twelve (12) consecutive hours and an Air Stagnation Advisory is in effect.	This alert level AQI value is equaled or exceeded at any one (1) monitoring station within the affected area. *-- or --* This alert level AQI value is equaled or exceeded as the arithmetic mean for twelve (12) consecutive hours and a forecast of stagnation for the following twelve (12) hours is received.
		-- or -- The red alert AQI value is equaled 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.	*-- or --* The purple alert AQI value is equaled 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.

			- *or* -- The red alert AQI value is equaled or exceeded as the arithmetic mean for thirty-six (36) consecutive hours and a forecast of stagnation for the following twelve (12) hours is received.

3. Procedures. This subsection establishes procedures for addressing alert level conditions.

Table C		
Procedures		
Red (151-200)	**Purple (201-300)**	**Maroon (301-500)**
The general public shall be informed through the news media that an alert of this level exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiated the alert, individual abatement actions that will help alleviate the problem, and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions.	The general public shall be informed through the news media that an alert of this level exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiated the alert, individual abatement actions that will help alleviate the problem, and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions.	The general public shall be informed through the news media that an alert of this level exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiated the alert, individual abatement actions that will help alleviate the problem, and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions.
All affected governmental control agencies shall be notified of the existing alert level and that coordination of action is required.	All affected governmental control agencies shall be notified of the existing alert level and that coordination of action is required.	All affected governmental control agencies shall be notified of the existing alert level and that coordination of action is required.

All hospitals within the affected area shall be notified of the existing alert level and be prepared for an increase in the number of patients seeking treatment.	All hospitals within the affected area shall be notified of the existing alert level and be prepared for an increase in the number of patients seeking treatment.	All hospitals within the affected area shall be notified of the existing alert level and be prepared for an increase in the number of patients seeking treatment.
The frequency of air monitoring shall be increased at all monitoring stations that 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.	The frequency of air monitoring shall be increased at all monitoring stations that 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.	The frequency of air monitoring shall be increased at all monitoring stations that are not continuous at intervals not exceeding one-half (1/2) hour with continual half-hour review at a central control location, if this equipment is available and it is deemed necessary by the director.
All open burning shall cease throughout the affected area.	All open burning and incineration shall cease throughout the affected area.	All open burning and incineration shall cease throughout the affected area.
The general public shall be requested through the news media to restrict the unnecessary use of motor vehicles.	The general public shall be told through the news media that local vehicular traffic shall avoid certain areas and all unnecessary use of motor vehicles is restricted. Nonlocal vehicular traffic may be diverted around the affected area depending upon which pollutant(s) caused the existing conditions.	The use of motor vehicles is prohibited except in emergencies with the approval of local or state police.

	Airlines operating within the purple alert area shall be notified that those conditions exist and that a reduction of flights out of the airport may be required.	All airplane flights originating within the area of the maroon emergency alert shall be cancelled.
	If requested by the director, facilities that are sources of air contaminant emissions are required to file alert plans in accordance with subsection (C) of this section and shall be prepared to implement the plan upon notification by the director in the event of a purple alert.	If requested by the director, facilities that are sources of air contaminant emissions are required to file alert plans in accordance with subsection (C) of this section and shall be prepared to implement the plan upon notification by the director in the event of a maroon emergency alert.
		All places of employment described as follows shall immediately cease operation during a maroon emergency alert: mining and quarrying; contract construction work; wholesale trade establishments; schools and libraries; governmental agencies except those needed to administer the 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 section; retail trade stores except those dealing primarily in sale of food or pharmacies; banks, real estate agencies, insurance offices, and similar business; laundries, cleaners and dryers, beauty and barber shops, and photographic studios; amusement,

		recreational, gaming, and entertainment service establishments; automobile repair and automobile service garages; and advertising offices, consumer credit reporting, adjustment and collection agencies, printing and duplicating services, rental agencies, and commercial testing laboratories.
		All manufacturing facilities except those required to submit alert plans 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.

Table D	
Purple Alert (201-300) Plan Objectives	
Sources	**Objectives**
Electric power generating facilities	Reduction of emissions by diverting electric power generation to facilities outside of area for which the alert is called.
	If applicable, reduce emissions by utilization of fuels having low ash and sulfur content. If applicable, soot blowing and boiler lancing to be allowed only during periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.).
Process steam generating facilities	Reduction of steam load demands consistent with continuing the operation of the plant.
	If applicable, reduce emissions by utilization of fuels having low ash and sulfur content. If applicable, soot blowing and boiler lancing to be allowed only during periods of high

	atmospheric turbulence (12:00 noon to 4:00 p.m.).
Manufacturing industries of the following Standard Industrial Classification Manual (SIC) group designations: grain industries, group 20; 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.	Reduction of heat load demands for processing to a minimum.
	Reduction of air contaminant emissions by curtailing, postponing, or deferring production and allied operations. Stoppage of all trade waste disposal practices that emit particles, gases, vapors, or malodorous substances including incineration.
Other manufacturing facilities required to submit alert plans by the director	Reduction of heat load demands for processing to a minimum.
	Reduction of air contaminant emissions by curtailing, postponing, or deferring production and allied operations. Stoppage of all trade waste disposal practices that emit particles, gases, vapors, or malodorous substances including incineration.
Private, public, and commercial operations	For refuse disposal, 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.
	For refuse disposal, operation of incinerators shall cease per Table C of this rule.
Transportation	See Table C of this rule for motor vehicle restrictions.

Table E	
Maroon Emergency Alert (301-400) Plan Objectives	
Sources	**Objectives**
Electric power generating facilities	Reduction of emissions by diverting electric power generation to facilities outside of area for which the alert is called.
	If applicable, reduce emissions by utilization of fuels having low ash and sulfur content. If applicable, soot blowing and boiler lancing to be allowed only during periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.).

Process steam generating facilities	If applicable, obtain maximum reduction of air contaminant emissions by utilization of fuels having the lowest ash and sulfur content.
	If applicable, maximize use of periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.) for soot blowing and boiler lancing.
Manufacturing industries of the following Standard Industrial Classification Manual (SIC) group designations: grain industries, group 20; 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	Maximum reduction of heat load demands for processing.
	Maximum reduction of air contaminant emissions by, if necessary, postponing production and allied operations. Stoppage of all trade waste disposal practices that emit particles, gases, vapors, or malodorous substances including incineration.
Other manufacturing facilities required to submit alert plans by the director	Maximum reduction of heat load demands for processing.
	Maximum reduction of air contaminant emissions by, if necessary, postponing production and allied operations. Stoppage of all trade waste disposal practices that emit particles, gases, vapors, or malodorous substances including incineration.
Private, public, and commercial operations	For refuse disposal, 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.
	For refuse disposal, operation of incinerators shall cease per Table C of this rule.
Transportation	See Table C of this rule for motor vehicle restrictions.

Table F	
Maroon Emergency Alert (401-500) Plan Objectives	
Sources	**Objectives**
Electric power generating facilities	Reduction of emissions by diverting electric power generation to facilities outside of area for which the alert is called.
	If applicable, reduce emissions by utilization of fuels having low ash and sulfur content. If applicable, soot blowing and boiler lancing to be allowed only during periods of high

	atmospheric turbulence (12:00 noon to 4:00 p.m.).
Process steam generating facilities	Maximum reduction of air contaminant emissions by reducing heat and steam load demands to values consistent with preventing equipment damage.
	If applicable, maximize use of periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.) for soot blowing and boiler lancing.
Manufacturing industries of the following Standard Industrial Classification Manual (SIC) group designations: grain industries, group 20; 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	Maximum reduction of heat load demands for processing.
	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.
Other manufacturing facilities required to submit alert plans by the director	Maximum reduction of heat load demands for processing.
	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.
Private, public, and commercial operations	For refuse disposal, 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.
	For refuse disposal, operation of incinerators shall cease per Table C of this rule.
	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, recreational, gaming, and entertainment facilities.
Transportation	See Table C of this rule for motor vehicle restrictions.

(C) *Reporting and Record Keeping.* Facilities that are sources of air contaminant emissions and required to file alert plans per Table C of this section shall file purple and maroon alert plans with the director within sixty (60) days of the director's request. Alert plans shall—

1. Address the objectives provided in Tables D, E, and F; and

2. Include the planning necessary for implementation.

3. Updates to alert plans, including requests for rescissions, shall be provided when changes to operations necessitate.

(D) Test *Methods.* The testing references for Missouri ambient air quality data are as specified in 10 CSR 10-6.040 Reference Methods.

Sec. 8-19. Penalties.

(A) It shall be unlawful for any person to cause or permit any air pollution by emission of any air contaminant source located in Kansas City, Missouri in violation of this article.

(B) Each day and/or occurrence that a violation shall continue after notice from the director or his/her designated representative shall constitute a separate offense.

(C) Violation of any provision of this chapter may be punished by a fine of not more than $1,000.00, by imprisonment for a period not to exceed six months, or by both fine and imprisonment.

(D) This shall not serve to limit any other remedies available to the city in law or equity.

Sec. 8-20. Fees.

(A) General *provisions.*

(1) Fees as set forth in this section shall be paid to the city treasurer upon receipt of notice from the director.

(2) Failure to pay such fee upon notice by the director that such fee is due shall be a violation of this chapter.

(3) The director shall notify each operator of the amount due for any fee imposed under this chapter.

(4) Upon receipt of notice that fees are due, the owner or the operator shall have 45 days to pay such fee to the city treasurer.

(5) The Director of Health shall have the authority to annually adjust all fees in this section to reflect an increase equal to an increase in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics. The authorization for the Director of Health to annually increase fees shall be cumulative and the failure of the City to raise fees in any one year shall not waive the Director of Health's authority to cumulatively raise fees by the consumer price index for missed years. The adjustments, if made, shall be made annually by the Director of Health in conjunction with the adoption of the annual budget of the City by filing a notice with the City Clerk.

(6) There shall be no refund of any fee paid.

(B) Calculation

(1) Permit to construct

a. The fee due shall be calculated by multiplying the amount of technical review hours necessary to review the permit application by an hourly rate of $50.00, but in no case shall exceed $10,000.00 for any one permit application.

b. The director shall notify the applicant within 30 days from receipt of a complete permit application of the maximum amount of technical review hours that will be necessary to review such application and the maximum amount of such fee.

(2) Permit to operate

a. The fee shall be computed by the director using the fee schedule contained in paragraph (c.) of this section and the information contained in the emission inventory for the most recent complete reporting period. The fee shall be that reflected in the fee schedule for each air contaminant.

b. Operating permits for temporary sources listed in the fee schedule: The fee due shall be the fee listed in the schedule for each location where the source or activity occurs.

c. *Fee schedules.*

1. *Annual operating permit schedule.*

Pollutant	Inventoried Annual Emissions	Fee
CO, No_x, SO_2, VOC	Greater than or equal to 5 but less than 40 tons per year	$175.00 per year per installation
CO, No_x, SO_2, VOC	Greater than or equal to 40 tons per year	$2,000.00 per year per installation
PM10	Greater than or equal to 5 but less than 15 tons per year	$175.00 per year per installation
PM10	Greater than or equal to 15 tons per year	$2,000.00 per year per installation
Pb	Greater than or equal to 0.6 but less than 10 tons per year	$1,500.00 per year per installation
Pb	Greater than or equal to 10 tons per year	$2,000.00 per year per installation

2. *Operating permit schedule by source category.*

Open burning	$250.00 each application
Asbestos demolition or renovation	$175.00 each application
Asbestos Inspection (Up to 3 times per project)	$100.00 each inspection
Incinerators rated greater than 500 lbs./hr.	$156.25 per year
Incinerators rated less than or equal to 500 lbs./hr.	$75.00 per year
Smoke school training	Not more than $150.00 per attendee per presentation

Sec. 8-21. Preventing Health Hazards, Provision for Conditions Not Addressed.

The Director shall document the conditions that necessitate the imposition of additional requirements and the underlying public health rationale.

Sec. 8-22. Conditions for retaining a permit

(a) Denial of Application, Notice. If an application to operate is denied, the Director shall provide the applicant with a notice that includes:

(1) The specific reasons and Code citations for the denial; and

(2) The actions, if any, that the applicant must take to reapply.

(b) Responsibilities of the Applicant. Upon acceptance of the application issued by the Director, the Applicant in order to retain the permit shall:

(1) Comply with the provisions of this chapter including the conditions of a granted permit as specified in this article;

(2) Immediately contact the Director to report a violation of this article;

(3) Immediately discontinue operations and notify the Director if an Imminent Health Hazard may exist;

(4) Allow the Director or a representatives of the Director access to the work site to conduct business as it pertains to this article;

(5) Comply with directives of the Director including timeframes for corrective actions specified in inspection reports, notices, orders, warnings, community emergencies, and other directives issued by the Director.

(c) Conditions Warranting Remedy, The Director may seek an administrative or judicial remedy to achieve compliance with the provisions of this chapter if a Person operating:

(1) Fails to have a valid Permit to operate as specified in this article;

(2) Violates any term or condition of a Permit as specified in this article;

(3) Allows critical or repeated code violations to remain uncorrected beyond time frames for correction approved, directed, or ordered by the Director as specified in this article;

(4) Fails to comply with a stop work order issued by the Director;

(5) Fails to comply with a summary suspension order issued by the Director.

(d) Conditions Warranting Action.

(1) The Director may summarily suspend a permit to operate if:

a. The Director determines through inspection, or examination of operation, records, or other means as specified in this article, that an Imminent Health Hazard exists;

b. Operations, facilities, or equipment in the work site fail to comply with conditions specified in this article;

c. The operator does not comply with regulations specified in this article; or

d. Interference with the Director in the performance of its duties has occurred.

(2) The Director may revoke a permit if:

a. Critical and repeated violation(s) of any requirements of these regulations according to this chapter have occurred; or

b. Repeated interference with, or assault upon a representative of the Director in the performance of his/her duty, has occurred.

c. Operator fails to comply with a permit suspension order.

d. The Director may adopt and use a permit suspension process different than specified under the provisions of this article.

(3) A summary suspension shall remain in effect until the conditions cited in the notice of suspension no longer exist and their elimination has been confirmed by the Director through reinspection and other means as appropriate.

(4) The Director may initiate any one, or a combination of, compliance methods that include, but are not limited to:

a. Holding an administrative conference with the operator or person in charge;

b. Placing the operator on probation;

c. Requiring additional education and/or training of the operator and/or employees, management, and owners of the operation; and

The suspended permit may be reinstated if the Director determines that the Imminent Health Hazard or nuisance no longer exists. A notice of reinstatement shall be provided to the operator or person in charge.

Sec. 8-23. Joint Department Review.

The director or their designee of the Health, Public Works, and Office of Environmental Quality shall meet on a quarterly basis to ensure compliance with air quality monitoring, and standards in the construction and preservation of citywide projects and the impacts it may have on the air quality of the City.

Authenticated as Passed

Quinton Lucas, Mayor

Marilyn Sanders, City Clerk

JUN 30 2022

Date Passed

Approved as to form and legality:

Joseph Guarino
Assistant City Attorney