

(5) Test Methods. The testing references for Missouri ambient air quality data are as specified in 10 CSR 10-6.040 Reference Methods.

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed May 11, 1984, effective Oct. 11, 1984. Amended: Filed Jan. 5, 1988, effective April 28, 1988. Amended: Filed March 13, 2002, effective Nov. 30, 2002. Amended: Filed Sept. 24, 2009, effective May 30, 2010. Amended: Filed May 7, 2013, effective Dec. 30, 2013.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.140 Restriction of Emissions Credit for Reduced Pollutant Concentrations From the Use of Dispersion Techniques

PURPOSE: This rule implements provisions of federal regulations which restrict credit in the calculation of emission limitations for reduced pollutant concentrations due to the use of dispersion techniques.

(1) Applicability. This rule shall apply to the procedures to account for emission dispersion techniques used in the calculation of any emission limitation or any revision of any limitation to be established by the director or to be considered for establishment by the Missouri Air Conservation Commission (MACC). This rule also requires that all emission limitations established by the director or by the MACC after December 31, 1970, be reviewed for compliance with this rule.

(2) General.

- (A) The degree of emission limitation required of any installation for control of any air pollutant must not be affected by that portion of any installation's stack height that exceeds good engineering practice (GEP) or by any other dispersion technique, except as provided in section (3).
- (B) Before the director or the MACC establishes an emission limitation that is based on a GEP stack height that exceeds the formula GEP height allowed by 10 CSR 10-6.020(2)(G)2.B., the director must notify the public of the availability of the demonstration study and must provide opportunity for public hearing on it.
- (C) This rule does not restrict the actual stack height of any installation or the use of any dispersion technique by any installation.
- (3) Exemptions. The provisions of section (2) shall not apply to emission limitation credits from—

- (A) Stack heights on which construction commenced on or before December 31, 1970, except where pollutants are being emitted from the stacks by source operations which were constructed, or reconstructed or on which major modifications were carried out after December 31, 1970; or
- (B) Dispersion techniques implemented before December 31, 1970, except where these dispersion techniques are being applied to source operations which were constructed, or reconstructed or on which major modifications were carried out after December 31, 1970.

AUTHORITY: section 643.050, RSMo Supp. 1992.* Original rule filed Jan. 6, 1986, effective May 11, 1986.

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

10 CSR 10-6.150 Circumvention

PURPOSE: This rule prohibits the installation or use of any device or means which conceals or dilutes an emission violating a rule.

(1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceal or dilute an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

AUTHORITY: section 643.050, RSMo Supp. 1992.* This rule was previously filed as 10 CSR 10-2.090, 10 CSR 10-4.130 and 10 CSR 10-5.230. Original rule filed April 18, 1990, effective Nov. 30, 1990.

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

10 CSR 10-6.160 Medical Waste and Solid Waste Incinerators

Editor's Note: On March 29, 1993, the Circuit Court of Cole County found that 10 CSR 10-6.160 was void since it exceeds the statutory cost analysis requirements of sections 536.200 and 536.205, RSMo.

10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators.

PURPOSE: This rule incorporates by reference the federal regulatory requirements for existing commercial and industrial solid waste incineration units in Missouri. The evi-

dence supporting the need for this proposed rulemaking, per 536.016, RSMo, is **Federal Register** Notice 78 FR 9112, dated February 7, 2013.

(1) Applicability.

- (A) This rule applies to commercial and industrial solid waste incinerator (CISWI) units, defined by section (2) of this rule, as follows:
- 1. Energy recovery units, waste burning kilns, and small remote incinerators that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013;
- 2. Other CISWI incinerators that commenced construction on or before November 30, 1999 and were not modified or reconstructed after June 1, 2001; and
- 3. Other CISWI incinerators that commenced construction after November 30, 1999, but no later than June 4, 2010, or commenced modification or reconstruction on or after June 1, 2001 but no later than August 7, 2013.
- (B) If the owner or operator of a CISWI unit makes changes that meet the definition of modification or reconstruction on or after June 1, 2001, the CISWI unit becomes subject to 40 CFR 60 subpart CCCC and the CISWI state plan no longer applies to that unit.
 - (C) Exemptions to this rule are as follows:
- 1. This rule does not apply to combustion units listed in 40 CFR 60.2555; and
- 2. If the owner or operator of a CISWI unit makes physical or operational changes to an existing CISWI unit primarily to comply with the CISWI state plan, 40 CFR 60 subpart CCCC does not apply to that unit because such changes do not qualify as modifications or reconstructions under 40 CFR 60 subpart CCCC.

(2) Definitions.

- (A) The provisions of 40 CFR 60.2875, promulgated as of February 7, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of 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.
- (B) Definitions of certain terms specified in this rule, other than those defined in subsection (2)(A) of this rule, may be found in 10 CSR 10-6.020.
- (3) General Provisions. The following references to 40 CFR 60.2575 through 60.2735,

- 40 CFR 60.2805 through 60.2870, and 40 CFR 60, Subpart DDDD Tables 1 through 9, promulgated February 7, 2013, shall apply and are 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.
- (A) Increments of Progress—40 CFR 60.2575 through 60.2615 and 40 CFR 60.2815 through 60.2855;
- (B) Waste Management Plan—40 CFR 60.2620 through 60.2630;
- (C) Operator Training and Qualification—40 CFR 60.2635 through 60.2665;
- (D) Emission Limitations and Operating Limits—40 CFR 60.2670 through 60.2685 and 40 CFR 60.2860;
- (E) Performance Testing—40 CFR 60.2690 through 60.2695;
- (F) Initial Compliance Requirements—40 CFR 60.2700 through 60.2706;
- (G) Continuous Compliance Requirements—40 CFR 60.2710 through 60.2725;
- (H) Monitoring—40 CFR 60.2730 through 60.2735 and 40 CFR 60.2865;
- (I) Title V Operating Permits—40 CFR 60.2805; and
- (J) Table 1 through Table 9. The compliance dates for the increments of progress are—
- 1. For Increment 1, the final control plan must be submitted within one (1) year of the effective date of this rule; and
- 2. For Increment 2, for CISWI units that commenced construction on or before June 4, 2010, the final compliance date is February 7, 2018.
 - (K) General reference notes:
- 1. Units applicable under paragraph (1)(A)1. of this rule must comply with the emission limits as follows:
- A. For energy recovery units, Table 7 of 40 CFR 60 subpart DDDD;
- B. For waste burning kilns, Table 8 of 40 CFR 60 subpart DDDD; and
- C. For small remote incinerators, Table 9 of 40 CFR 60 subpart DDDD;
- 2. Units applicable under paragraph (1)(A)2. of this rule, Table 2 of 40 CFR 60 subpart DDDD; and
- 3. Units applicable under paragraph (1)(A)3. of this rule, Table 6 of 40 CFR 60 subpart DDDD or Table 1 of 40 CFR 60 subpart CCCC, whichever is more stringent.
- (4) Reporting and Record Keeping. The provisions of 40 CFR 60.2740 through 60.2800 and 40 CFR 60.2870, promulgated as of February 17, 2013, shall apply and are here-

by incorporated by reference in this rule, as published by the Office of 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.

(5) Test Methods. (Not applicable)

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed July 12, 2013, effective March 30, 2014.

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

10 CSR 10-6.165 Restriction of Emission of Odors

PURPOSE: This rule restricts the emission of excessive odorous matter. The evidence supporting the need for this rule, per 536.016, RSMo, are minutes from a May 28, 2009, Missouri Air Conservation Commission meeting, letters from Washington University in St. Louis School of Law and the Attorney General's Office dated October 6, 2006, and odor workgroup meeting notes from 2007.

- (1) Applicability. This rule shall apply to any person that causes, permits, or allows emission of odorous matter throughout the state of Missouri, except—
- (A) The provisions of section (3) of this rule shall not apply to the emission of odorous matter from the pyrolysis of wood in the production of charcoal in a Missouri-type charcoal kiln:
- (B) The provisions of section (3) 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 with the exception of Class IA concentrated animal feeding operations; and
- (C) The provisions of this rule shall not apply to emissions of odorized natural gas, or the chemicals used to achieve the regulated odorization of natural gas, inherent to the operations of a natural gas utility.
- (2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.
- (3) General Provisions. No person may cause, permit, or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived

when one (1) volume of odorous air is diluted with seven (7) volumes of odor-free air for two (2) separate trials not less than fifteen (15) minutes apart within the period of one (1) hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

- (A) Control of Odors from Class IA Concentrated Animal Feeding Operations. Notwithstanding any provision in any other regulation to the contrary, all Class IA concentrated animal feeding operations shall operate under an odor control plan describing measures to be used to control odor emissions that are necessary to maintain compliance with the odor performance standard described in section (3). All new Class IA concentrated animal feeding operations and any operation that expands to become a Class IA concentrated animal feeding operation shall obtain approval from the department for an odor control plan at least sixty (60) days prior to commencement of operation.
- 1. The odor control plan shall contain the following:
- A. A listing of all sources of odor emissions and description of how odors are currently being controlled;
- B. A listing of all potentially innovative and proven odor control options for reducing odor emissions. Odor control options may include odor reductions achieved through: odor prevention, odor capture and treatment, odor dispersion, add-on control devices, management practices, modifications to feed-stock or waste handling practices, or process changes;
- C. A detailed discussion of feasible odor control options for odor emissions. The discussion shall include options determined to be infeasible. Determination of infeasibility should be well documented and based on physical, chemical, and engineering principles demonstrating that technical difficulties would preclude the success of the control option;
- D. A ranking of feasible odor control options from most to least effective. Ranking factors shall include odor control effectiveness, expected odor reduction, energy impacts, and economic impacts;
- E. An evaluation of the most effective odor control options. Energy, environmental, and economic impacts shall be evaluated on a case-by-case basis;
- F. Description of the odor control options to be implemented to reduce odor emissions:



- G. A schedule for implementation. The schedule shall establish interim milestones in implementing the odor control plan prior to the implementation deadline if the plan is not implemented at one time; and
 - H. An odor monitoring plan.
- 2. The Missouri Department of Natural Resources' Air Pollution Control Program shall review and approve or disapprove the odor control plan.
- A. After the program receives an odor control plan, they shall perform a completeness review. Within thirty (30) days of receipt, the program shall notify the plan originator if the plan contains all the elements of a complete odor control plan. If found incomplete, the program shall provide the originator a written explanation of the plan's deficiencies.
- B. Within sixty (60) days after determining an odor control plan submittal is deemed complete, the program shall approve or disapprove the plan. During this sixty (60)-day technical review period, the program may request additional information needed for review. If the plan is disapproved, the program shall give the plan originator a written evaluation explaining the reason(s) for disapproval.
- (B) Existing odor control plans shall be amended within thirty (30) calendar days of either—
- 1. A determination by the staff director that there has been a violation of any requirement of this rule; or
- 2. A determination by the staff director that an amended odor control plan is necessary to address recurring odor emissions.
- (4) Reporting and Record Keeping. Odor control plans shall be reviewed and updated as necessary a minimum of every five (5) years from the date last approved or when a modification occurs. In lieu of a full plan update, a letter may be provided to the department stating that a review was performed and the existing odor control plan is adequate. This review letter or odor control plan update shall be due to the department six (6) months before the current odor control plan expires or at least thirty (30) days prior to the modification occurring with the following provisions:
- (A) All existing odor control plans shall be updated by March 31, 2011; and
- (B) Any person may petition the department to be removed from the odor control plan requirement based on documentation that the odor source has been removed.

(5) Test Methods. Measurements shall be made with a Nasal Ranger as manufactured by St. Croix Sensory, Inc. or by a similar instrument or technique that will give substantially similar results, or as approved by the department.

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed April 14, 2010, effective Nov. 30, 2010. Amended: Filed Feb. 18, 2014, effective Sept. 30, 2014.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

PURPOSE: This rule restricts the emission of particulate matter to the ambient air beyond the premises of origin.

- (1) Restrictions to Limit Fugitive Particulate Matter Emissions. It shall be a violation of this regulation if, in the opinion of the staff director—
- (A) Any person causes or allows to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director; or
- (B) Any person causes or allows to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- (2) Should the director determine that non-compliance with section (1) has occurred at a location, the director may require reasonable control measures, as may be necessary. These measures may include, but are not limited to, the following:
- A. Revision of procedures involving construction, repair, cleaning and demolition

of buildings and their appurtenances that produce particulate matter emissions;

- B. Paving or frequent cleaning of roads, driveways and parking lots;
 - C. Application of dust-free surfaces;
 - D. Application of water; and
- E. Planting and maintenance of vegetative ground cover.
- (3) Exceptions. Section (1) shall not apply to the following:
- (A) Those portions of unpaved public roads that are not designated as nonattainment areas for particulate matter;
- (B) Agricultural operations including tilling, planting, cultivating or harvesting within a field, the moving of livestock on foot or the hauling of produce within the confines of a farm; and
 - (C) Driveways limited to residential use.
- (4) The staff director may allow an exemption for unusual and adverse weather conditions for any activity which would otherwise be a violation of section (1). These conditions may include, but are not limited to, high winds, extended dry weather periods and extreme cold weather periods.

AUTHORITY: section 643.050, RSMo Supp. 1997.* Original rule filed March 5, 1990, effective Nov. 30, 1990. Amended: Filed March 18, 1996, effective Oct. 30, 1996. Amended: Filed Jan. 2, 1998, effective Aug. 30, 1998.

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

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

PURPOSE: This rule provides that upon request any source shall complete, or have completed, tests of emissions or, at the option of the agency, make the source available for tests of emissions.

(1) Responsible Persons to Have Tests Made. The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be conducted by reputable, qualified personnel. The director shall be given a copy of the test results in writing and



signed by the person responsible for the tests.

(2) Director May Make Tests. The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

AUTHORITY: section 643.050, RSMo Supp. 1992.* Original rule filed Aug. 2, 1990, effective Dec. 31, 1990.

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

10 CSR 10-6.190 Sewage Sludge and Industrial Waste Incinerators

Editor's Note: On March 29, 1993 the Circuit Court of Cole County found that 10 CSR 10-6.190 was void since it exceeds the statutory cost analysis requirements of sections 536.200 and 536.205, RSMo.

10 CSR 10-6.191 Sewage Sludge Incinerators

PURPOSE: This rule incorporates by reference the federal regulatory requirements for existing sewage sludge incineration units in Missouri. The evidence supporting the need for this proposed rulemaking, per 536.016, RSMo, is Federal Register Notice 76 FR 15372, dated March 21, 2011.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Applicability.

- (A) This rule applies to each sewage sludge incineration (SSI) unit, as defined in section (2) of this rule, for which construction was commenced on or before October 14, 2010, except as provided in subsection (1)(C) of this rule.
- (B) If the owner or operator of an SSI unit makes physical or operational changes to an SSI unit for which construction commenced on or before September 21, 2011, primarily to comply with this rule, 10 CSR 10-6.070

New Source Performance Regulations does not apply to that unit.

- (C) Exemptions to this rule are as follows:
- 1. Combustion units that incinerate sewage sludge and are not located at a wastewater treatment facility designed to treat domestic sewage sludge. Owners or operators of combustion units claiming exemption under this paragraph must notify the director; and
- 2. Any SSI unit that becomes subject to 10 CSR 10-6.070 New Source Performance Regulations because the owner or operator made changes after September 21, 2011, that meet the definition of modification, as defined in section (2) of this rule.

(2) Definitions.

- (A) The provisions of 40 CFR 60.5250, promulgated as of July 1, 2011, shall apply and are hereby incorporated by reference in this rule, as published by the Office of 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.
- (B) Definitions of certain terms specified in this rule, other than those defined in subsection (2)(A) of this rule, may be found in 10 CSR 10-6.020.
- (3) General Provisions. The following references to 40 CFR 60.5085 through 60.5225, 40 CFR 60.5240 through 60.5245, and 40 CFR 60, Subpart MMMM Tables 1 through 6, promulgated as of July 1, 2011, shall apply and are 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.
- (A) Increments of Progress—40 CFR 60.5085 through 60.5125;
- (B) Operator Training and Qualifications—40 CFR 60.5130 through 60.5160;
- (C) Emission Limits, Emission Standards, and Operating Limits and Requirements—40 CFR 60.5165 through 60.5181;
- (D) Initial Compliance Requirements—40 CFR 60.5185 through 60.5200;
- (E) Continuous Compliance Requirements—40 CFR 60.5205 through 60.5215;
- (F) Performance Testing, Monitoring, and Calibration Requirements—40 CFR 60.5220 through 60.5225;
- (G) Title V Operating Permit—40 CFR 60.5240 through 60.5245; and
- (H) Table 1 though Table 6. The compliance dates for the increments of progress
- 1. For Increment 1, submit final control plan within one (1) year of the effective date of this rule; and

- 2. For Increment 2, final compliance by March 21, 2016.
- (4) Reporting and Record Keeping. The provisions of 40 CFR 60.5230 through 40 CFR 60.5235, promulgated as of July 1, 2011, shall apply and are hereby incorporated by reference in this rule, as published by the Office of 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.

(5) Test Methods. (Not applicable)

AUTHORITY: section 643.050, RSMo Supp. 2012.* Original rule filed Aug. 27, 2012, effective May 30, 2013.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.200 Hospital, Medical, Infectious Waste Incinerators

PURPOSE: This rule establishes emission limits for existing hospital, medical, and infectious waste incinerators. The pollutants regulated include metals, particulate matter, acid gases, organic compounds, carbon monoxide, and opacity. This rule includes requirements for operator training and qualification, waste management, compliance and performance testing, monitoring, and reporting/record keeping.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Applicability.

- (A) Except as provided in subsection (1)(B) through (H) of this rule, this rule applies to each individual hospital or medical/infectious waste incinerator (HMIWI)—
- 1. For which construction was commenced after June 20, 1996, but no later than December 1, 2008; or
- 2. For which modification is commenced after March 16, 1998, but no later than April 6, 2010.
- (B) A combustor is not subject to this rule during periods when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned, provided



the owner or operator of the combustor-

- 1. Notifies the director of an exemption claim; and
- 2. Keeps records on a calendar-quarter basis of the periods of time when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned.
- (C) Any co-fired combustor is not subject to this rule if the owner or operator of the co-fired combustor—
- 1. Notifies the director of an exemption claim:
- 2. Provides an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels and/or wastes to be combusted; and
- 3. Keeps records on a calendar-quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor.
- (D) Any combustor required to have a permit under section 3005 of the Solid Waste Disposal Act is not subject to this rule.
- (E) Any combustor which meets the applicability requirements under Subpart Cb, Ea, or Eb of 40 CFR 60 is not subject to this rule.
- (F) Any pyrolysis unit is not subject to this rule.
- (G) Cement kilns firing hospital waste and/or medical/infectious waste are not subject to this rule.
- (H) Physical or operational changes made to an HMIWI unit solely for the purpose of complying with this rule are not considered a modification and do not result in an HMIWI unit becoming subject to the provisions of 40 CFR 60, Subpart Ec.
- (I) Facilities subject to this rule shall operate pursuant to a permit issued under the permitting authorities operating permit program.

(2) Definitions.

- (A) Definitions of certain terms specified in this rule may be found in 40 CFR 60.21 and 40 CFR 60.51c, promulgated as of July 1, 2012, and are hereby incorporated by reference in this rule, as published by the Office of 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.
- (B) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

(A) Emission Limits.

1. No owner or operator of an HMIWI subject to this rule shall cause to be discharged into the atmosphere any gases that

contain stack emissions in excess of the limits presented in Table 1 of this subsection, except as provided for in paragraph (3)(A)2. of this rule.



Table 1—Emissions Limits for Small, Medium, and Large HMIWI

			Limits for Small, Medium, and			
	Units (7 percent		Emissions limits			Method for
Pollutant	oxygen, dry	Small	HMIWI size	Lauge	Averaging time ¹	demonstrating compliance ²
Pollutant Particulate matter	Milligrams per dry standard cubic meter (mg/dscm) (grains per dry standard cubic foot (gr/dscf))	66 (0.029)	46 (0.020) or 34 (.015) ³	25 (0.011)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 5 of 40 CFR 60, Appendix A–3 or EPA Reference Method 26A or 29 of 40 CFR 60, Appendix A–8.
Carbon monoxide	Parts per million by volume (ppmv)	20	5.5	11	3-run average (1-hour minimum sample time per run)	EPA Reference Method 10 or 10B of 40 CFR 60, Appendix A-4.
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (ng/dscm) (grains per billion dry standard cubic feet (gr/10°dscf)) or ng/dscm TEQ (gr/10°dscf)	16 (7.0) or 0.013 (0.0057)	0.85 (0.37) or 0.020 (0.0087)	9.3 (4.1) or 0.054 (0.024)	3-run average (4-hour minimum sample time per run)	EPA Reference Method 23 of 40 CFR 60, Appendix A–7.
Hydrogen chloride	ppmv	44 or 15 or 99% ³	7.7	6.6	3-run average (1-hour minimum sample time per run)	EPA Reference Method 26 or 26A of 40 CFR 60, Appendix A-8.
Sulfur dioxide	ppmv	4.2	4.2	9.0	3-run average (1-hour minimum sample time per run)	EPA Reference Method 6 or 6C of 40 CFR 60, Appendix A–4.
Nitrogen oxides	ppmv	190	190	140	3-run average (1-hour minimum sample time per run)	EPA Reference Method 7 or 7E of 40 CFR 60, Appendix A–4.
Lead	mg/dscm (grains per thousand dry standard cubic feet (gr/10 ³ dscf))	0.31 (0.14)	0.018 (0.0079)	0.036 (0.016)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of 40 CFR 60, Appendix A–8.
Cadmium	mg/dscm (gr/10³dscf)	0.017 (0.0074)	0.013 (0.0057)	0.0092 (0.0040)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of 40 CFR 60, Appendix A–8.
Mercury	mg/dscm (gr/10 ³ dscf)	0.014 (0.0061)	0.025 (0.011)	0.018 (0.0079)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of 40 CFR 60, Appendix A–8.

Except as allowed under section 60.56c(c) for HMIWI equipped with Continuous Emission Monitoring System (CEMS).

Does not include CEMS and approved alternative non-EPA test methods allowed under section 60.56c(b). HMIWI constructed after June 20, 1996, but no later than December 1, 2008, or for which modification is commenced after March 16, 1998, but no later than April 6, 2010.



2. No owner or operator of a small HMIWI constructed on or before June 20, 1996, which is located more than fifty (50) miles from the boundary of the nearest Standard Metropolitan Statistical Area and which burns less than two thousand (2,000) pounds per week of hospital waste and medical/infectious waste shall cause to be discharged into the atmosphere any gases that contain stack emissions in excess of the limits presented in Table 2 of this paragraph. The two thousand (2,000) pounds per week limitation does not apply during performance tests.

Table 2—Emissions Limits for Small HMIWI Which Meet the Criteria Under Paragraph (3)(A)2. of this Rule

Pollutant	Units (7 percent oxygen,	HMIWI Emissions	Averaging time ¹	Method for demonstrating compliance ²
	dry basis)	limits	3-run average	EPA Reference Method 5 of
Particulate matter	mg/dscm (gr/dscf)	87 (0.038)	(1-hour minimum sample time per run)	40 CFR 60, Appendix A–3 or EPA Reference Method 26A or 29 of 40 CFR 60, Appendix A–8.
Carbon monoxide	ppmv	20	3-run average (1-hour minimum sample time per run)	EPA Reference Method 10 or 10B of 40 CFR 60, Appendix A–4.
Dioxins/furans	ng/dscm total dioxins/furans (gr/10 ⁹ dscf) or ng/dscm TEQ (gr/10 ⁹ dscf)	240 (100) or 5.1 (2.2)	3-run average (4-hour minimum sample time per run)	EPA Reference Method 23 of 40 CFR 60, Appendix A–7.
Hydrogen chloride	ppmv	810	3-run average (1-hour minimum sample time per run)	EPA Reference Method 26 or 26A of 40 CFR 60, Appendix A–8.
Sulfur dioxide	ppmv	55	3-run average (1-hour minimum sample time per run)	EPA Reference Method 6 or 6C of 40 CFR 60, Appendix A-4.
Nitrogen oxides	ppmv	130	3-run average (1-hour minimum sample time per run)	EPA Reference Method 7 or 7E of 40 CFR 60, Appendix A–4.
Lead	mg/dscm (gr/10 ³ dscf)	0.50 (0.22)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of 40 CFR 60, Appendix A–8.
Cadmium	mg/dscm (gr/10 ³ dscf)	0.11 (0.048)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of 40 CFR 60, Appendix A–8.
Mercury	mg/dscm (gr/10 ³ dscf)	0.0051 (0.0022)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of 40 CFR 60, Appendix A–8.

Except as allowed under section 60.56c(c) for HMIWI equipped with CEMS.

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Does not include CEMS and approved alternative non-EPA test methods allowed under section 60.56c(b).

- 3. No owner or operator of an HMIWI subject to this rule shall cause to be discharged into the atmosphere from the stack of that HMIWI any gases that exhibit greater than six percent (6%) opacity (six (6)-minute block average).
- (B) Operator Training and Qualification Requirements.
- 1. No owner or operator of an HMIWI subject to this rule shall allow the HMIWI to operate at any time unless a fully trained and qualified HMIWI operator is accessible, either at the facility or available within one (1) hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one (1) or more HMIWI operators.
- 2. Operator training and qualification shall be obtained by completing the requirements included in paragraphs (3)(B)3. through 7. of this rule.
- 3. Training shall be obtained by completing an HMIWI operator training course that includes, at a minimum, the following provisions:
- A. Twenty-four (24) hours of training on the following subjects:
- (I) Environmental concerns, including pathogen destruction and types of emissions;
- (II) Basic combustion principles, including products of combustion;
- (III) Operation of the type of incinerator to be used by the operator, including proper start-up, waste charging, and shutdown procedures;
- (IV) Combustion controls and monitoring;
- (V) Operation of air pollution control equipment and factors affecting performance (if applicable);
- (VI) Methods to monitor pollutants and equipment calibration procedures (where applicable):
- (VII) Inspection and maintenance of the HMIWI, air pollution control devices, and continuous emission monitoring systems;
- (VIII) Actions to correct malfunctions or conditions that may lead to malfunction;
- (IX) Bottom and fly ash characteristics and handling procedures;
- (X) Applicable federal, state, and local regulations;
 - (XI) Work safety procedures;
- (XII) Inspections prior to start-up; and
 - (XIII) Record-keeping requirements;
- B. An examination designed and administered by the instructor; and
- C. Reference material distributed to the attendees covering the course topics.

- 4. Qualifications shall be obtained by—
- A. Completion of a training course that satisfies the criteria under paragraph (3)(B)3. of this rule; and
- B. Either six (6) months experience as an HMIWI operator, six (6) months experience as a direct supervisor of an HMIWI operator, or completion of at least two (2) burn cycles under the observation of two (2) qualified HMIWI operators.
- 5. Qualification is valid from the date on which the examination is passed or the completion of the required experience, whichever is later.
- 6. To maintain qualification, the trained and qualified HMIWI operator shall complete and pass an annual review or refresher course of at least four (4) hours covering, at a minimum, the following:
 - A. Update of regulations;
- B. Incinerator operation, including start-up and shutdown procedures;
 - C. Inspection and maintenance;
- D. Responses to malfunctions or conditions that may lead to malfunction; and
- E. Discussion of operating problems encountered by attendees.
- 7. A lapsed qualification shall be renewed by one (1) of the following methods:
- A. For a lapse of less than three (3) years, the HMIWI operator shall complete and pass a standard annual refresher course described in paragraph (3)(B)6. of this rule; or
- B. For a lapse of three (3) years or more, the HMIWI operator shall complete and pass a training course with the minimum criteria described in paragraph (3)(B)3. of this rule.
- 8. The owner or operator of an HMIWI shall maintain documentation at the facility that addresses the following:
- A. Summary of the applicable standards under this subpart:
- B. Description of basic combustion theory applicable to an HMIWI;
- C. Procedures for receiving, handling, and charging waste;
- D. HMIWI start-up, shutdown, and malfunction procedures;
- E. Procedures for maintaining proper combustion air supply levels;
- F. Procedures for operating the HMIWI and associated air pollution control systems within the standards established under this subpart;
- G. Procedures for responding to periodic malfunction or conditions that may lead to malfunction;
- H. Procedures for monitoring HMIWI emissions;
- I. Reporting and record-keeping procedures; and

- J. Procedures for handling ash.
- 9. The owner or operator of an HMIWI shall establish a program for reviewing the information listed in paragraph (3)(B)8. of this rule annually with each HMIWI operator
- A. The initial review of the information listed in paragraph (3)(B)8. of this rule shall be conducted prior to assumption of responsibilities affecting HMIWI operation.
- B. Subsequent reviews of the information listed in paragraph (3)(B)8. of this rule shall be conducted annually.
- 10. The information listed in paragraph (3)(B)8. of this rule shall be kept in a readily-accessible location for all HMIWI operators. This information, along with records of training, shall be available for inspection by the department or its delegated enforcement agent upon request.
- (C) Waste Management Plan. The owner or operator of an HMIWI shall prepare a waste management plan. The waste management plan shall identify both the feasibility and the approach to separate certain components of solid waste from the health care waste stream in order to reduce the amount of toxic emissions from incinerated waste. A waste management plan may include, but is not limited to, elements such as segregation and recycling of paper, cardboard, plastics, glass, batteries, food waste, and metals (e.g., aluminum cans, metals-containing devices); segregation of non-recyclable wastes (e.g., polychlorinated biphenyl-containing waste, pharmaceutical waste, and mercury-containing waste, such as dental waste); and purchasing recycled or recyclable products. A waste management plan may include different goals or approaches for different areas or departments of the facility and need not include new waste management goals for every waste stream. It should identify, where possible, reasonably available additional waste management measures, taking into account the effectiveness of waste management measures already in place, the costs of additional measures, the emission reductions expected to be achieved, and any other environmental or energy impacts they might have. The development of the waste management plan shall consider the publication entitled An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities (Catalog No. 057007), copyright year 1993, and hereby incorporated by reference in this rule, as published by the American Hospital Association Services, Inc., PO Box 92683, Chicago, IL 60675-2683. This rule does not incorporate any subsequent amendments or additions to this publication. The owner or operator of each commercial HMIWI company shall conduct training and



education programs in waste segregation for each of the company's waste generator clients and ensure that each client prepares its own waste management plan that includes, but is not limited to, the provisions listed previously in this subsection.

- (D) Inspection Guidelines.
- 1. Each HMIWI subject to the emission limits under paragraph (3)(A)1. of this rule and each small HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule shall undergo an initial equipment inspection that is at least as protective as the following:
- A. At a minimum, an inspection shall include the following:
- (I) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation, and clean pilot flame sensor, as necessary;
- (II) Ensure proper adjustment of primary and secondary chamber combustion air, and adjust as necessary;
- (III) Inspect hinges and door latches and lube as necessary;
- (IV) Inspect dampers, fans, and blowers for proper operation;
- (V) Inspect HMIWI door and door gaskets for proper sealing;
- (VI) Inspect motors for proper operation;
- (VII) Inspect primary chamber refractory lining and clean and repair/replace as necessary;
- (VIII) Inspect incinerator shell for corrosion and/or hot spots;
- (IX) Inspect secondary/tertiary chamber and stack; clean as necessary;
- (X) Inspect mechanical loader, including limit switches, for proper operation, if applicable;
- (XI) Visually inspect waste bed (grates) and repair/seal, as necessary;
- (XII) For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments;
- (XIII) Inspect air pollution control devices for proper operation, if applicable;
- (XIV) Inspect waste heat boiler systems to ensure proper operation, if applicable;
- (XV) Inspect bypass stack components;
- (XVI) Ensure proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment; and
- (XVII) Generally observe that the equipment is maintained in good operating condition; and
- B. Within ten (10) operating days following an equipment inspection all necessary

- repairs shall be completed unless the owner or operator obtains written approval from the department or local air pollution control authority establishing a date whereby all necessary repairs of the designated facility shall be completed.
- 2. Each HMIWI subject to the emissions limits under paragraph (3)(A)1. of this rule and each small HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule shall undergo an equipment inspection annually (no more than twelve (12) months following the previous annual equipment inspection), as outlined in paragraph (3)(D)1. of this rule.
- 3. Each HMIWI subject to the emissions limits under paragraph (3)(A)1. of this rule and each small HMIWI subject to the emissions limits under paragraph (3)(A)2. of this rule shall undergo an initial air pollution control device inspection, as applicable, that is at least as protective as the following:
- A. At a minimum, an inspection shall include the following:
- (I) Inspect air pollution control device(s) for proper operation, if applicable;
- (II) Ensure proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment; and
- (III) Generally observe that the equipment is maintained in good operating condition; and
- B. Within ten (10) operating days following an air pollution control device inspection, all necessary repairs shall be completed unless the owner or operator obtains written approval from the Missouri Department of Natural Resources' Air Pollution Control Program establishing a date whereby all necessary repairs of the designated facility shall be completed.
- 4. Each HMIWI subject to the emissions limits under paragraph (3)(A)1. of this rule and each small HMIWI subject to the emissions limits under paragraph (3)(A)2. of this rule shall undergo an air pollution control device inspection, as applicable, annually (no more than twelve (12) months following the previous annual air pollution control device inspection), as outlined in paragraph (3)(D)3. of this rule.
 - (E) Compliance and Performance Testing.
- 1. The emission limits under this rule apply at all times.
- 2. Except as provided in paragraph (3)(E)12. of this rule, the owner or operator of an HMIWI subject to this rule shall conduct an initial performance test to determine compliance with the emission limits using the procedures and test methods listed in subparagraphs (3)(E)2.A. through L. of this rule. The use of the bypass stack during a

performance test shall invalidate the performance test. For small HMIWIs as defined in paragraph (3)(A)2. of this rule, the two-thousand (2,000)-pound-per-week limitation does not apply during performance tests.

- A. All performance tests shall consist of a minimum of three (3) test runs conducted under representative operating conditions.
- B. The minimum sample time shall be one (1) hour per test run unless otherwise indicated.
- C. The sampling location and number of traverse points shall be determined using EPA Reference Method 1 of 40 CFR 60, Appendix A-1.
- D. Gas composition shall be analyzed and include a measurement of oxygen concentration using EPA Reference Method 3, 3A, or 3B of 40 CFR 60, Appendix A-2. EPA Reference Method 3, 3A, or 3B shall be used simultaneously with each of the other EPA reference methods. As an alternative to EPA Reference Method 3B, ASME PTC-19-10-1981-Part 10 may be used.
- E. The pollutant concentrations shall be adjusted to seven percent (7%) oxygen using the following equation:

$$C_{adi} = C_{meas} (20.9 - 7) / (20.9 - \% O_2)$$

where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen

C_{meas} = pollutant concentration measured on a dry basis

- (20.9 7) = 20.9 percent oxygen 7 percent oxygen (defined oxygen correction basis)
- 20.9 = oxygen concentration in air, percent
- % O₂ = oxygen concentration measured on a dry basis, percent
- F. Particulate Matter (PM) emissions shall be measured using EPA Reference Method 5 of 40 CFR 60, Appendix A-3. An acceptable alternate method for measuring PM emissions is EPA Reference Method 26A or Method 29 of 40 CFR 60, Appendix A-8. As an alternative, PM Continuous Emission Monitoring System (CEMS) may also be used as specified in subparagraph (3)(E)3.C. of this rule.
- G. Stack opacity shall be measured using EPA Reference Method 9 of 40 CFR 60, Appendix A-4. As an alternative, demonstration of compliance with the PM standards using bag leak detection systems as specified in paragraph (3)(E)11. of this rule or PM CEMS as specified in subparagraph (3)(E)3.C. of this



rule is considered demonstrative of compliance with the opacity requirements.

- H. Carbon monoxide (CO) emissions shall be measured using EPA Reference Method 10 or 10B of 40 CFR 60, Appendix A-4. As an alternative, CO CEMS may be used as specified in subparagraph (3)(E)3.C. of this rule.
- I. Total dioxin/furan emissions shall be measured using EPA Reference Method 23 of 40 CFR 60, Appendix A-7. As an alternative, an owner or operator may elect to sample dioxins/furans by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring dioxin/furan emissions. Sampling shall be done using EPA Reference Method 23 of 40 CFR 60, Appendix A-7. The minimum sample time shall be four (4) hours per test run. If the affected facility has selected the toxic equivalency standards for dioxin/furans the following procedures shall be used to determine compliance:
- (I) Measure the concentration of each dioxin/furan tetra- through octa-congener emitted using EPA Reference Method 23 of 40 CFR 60, Appendix A-7;
- (II) For each dioxin/furan congener measured in accordance with part (3)(E)2.I.(I) of this rule, multiply the congener concentration by its corresponding toxic equivalency factor specified in Table 3 of this part; and



Table 3—Toxic Equivalency Factors

Table 5—Toxic Equivalency Fac	
Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.001

(III) Sum the products calculated in accordance with part (3)(E)2.I.(II) of this rule to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

J. Hydrogen chloride (HCl) shall be measured using EPA Reference Method 26 or 26A of 40 CFR 60, Appendix A-8. As an alternative, HCl CEMS may be used as specified in subparagraph (3)(E)3.C. of this rule.

K. Lead (Pb), cadmium (Cd), and mercury (Hg) emissions shall be measured using EPA Reference Method 29 of 40 CFR 60, Appendix A-8. As an alternative, Hg emissions may be measured using ASTM D6784-02(2008). As an alternative for Pb, Cd, and Hg, multi-metals CEMS or Hg CEMS, may be used as specified in subparagraph (3)(E)3.C. of this rule. As an alternative, an owner or operator may elect to sam-

ple Hg by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring Hg emissions.

L. Compliance for fugitive ash emissions shall be determined using EPA Reference Method 22 of 40 CFR 60, Appendix A-7. The minimum observation time shall be a series of three (3) one (1)-hour observations.

3. Following the date on which the initial performance test is completed, the owner or operator of an affected facility shall—

A. Determine compliance with the opacity limit by conducting an annual performance test (no more than twelve (12) months following the previous performance test) using the applicable procedures and test methods listed in paragraph (3)(E)2. of this rule;

B. Determine compliance with the PM, CO, and HCl emission limits by con-

ducting an annual performance test (no more than twelve (12) months following the previous performance test) using the applicable procedures and test methods listed in paragraph (3)(E)2. of this rule. If all three (3) performance tests over a three (3)-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for the subsequent two (2) years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than thirty-six (36) months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for an additional two (2) years. If any performance



test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a three (3)-year period indicate compliance with the emission limit. The use of the bypass stack during a performance test shall invalidate the performance test; and

- C. Facilities using a Continuous Emission Monitoring System (CEMS) to demonstrate compliance with any of the emission limits under section (3) of this rule shall determine compliance with the appropriate emission limit(s) using a twelve (12)-hour rolling average, calculated each hour as the average of the previous twelve (12) operating hours.
- 4. The owner or operator of an affected facility equipped with a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and wet scrubber shall—
- A. Establish the appropriate maximum and minimum operating parameters, indicated in Table 4 of this subparagraph for each control system, as site-specific operating parameters during the initial performance test to determine compliance with the emission limits; and



Table 4—Operating Parameters to be Monitored and Minimum Measurement and Recording Frequencies

1711	nimum Measur				
	Minimum	frequency	Control system		
Operating parameters to be monitored	Data measurement	Data recording	Dry scrubber followed by fabric filter	Wet scrubber	Dry scrubber followed by fabric filter and wet scrubber
	MAXIMUM OPE	ERATING PARA	METERS		
Maximum charge rate	Continuous	1 per hour	√	√	√
Maximum fabric filter inlet temperature	Continuous	1 per minute	√		√
Maximum flue gas temperature	Continuous	1 per minute		√	√
	MIMIMUM OPE	ERATING PARA	METERS	,	
Minimum secondary chamber temperature	continuous	1 per minute	~	√	√
Minimum dioxin/furan sorbent flow rate	hourly	1 per hour	~		√
Minimum hydrogen chloride (HCl) sorbent flow rate	hourly	1 per hour	~		√
Minimum mercury (Hg) sorbent flow rate	hourly	1 per hour	~		√
Minimum pressure drop across the wet scrubber or minimum horsepower or amperage to wet scrubber	continuous	1 per minute		✓	√
Minimum scrubber liquor flow rate	continuous	1 per minute		√	√
Minimum scrubber liquor pH	continuous	1 per minute		✓	√

- B. Following the date on which the initial performance test is completed, ensure that the affected facility does not operate above any of the applicable maximum operating parameters or below any of the applicable minimum operating parameters listed in Table 4 and measured as three (3)-hour rolling averages (calculated each hour as the average of the previous three (3) operating hours) at all times. Operating parameter limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating parameter(s) shall constitute a violation of established operating parameter(s).
- 5. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a dry scrubber followed by a fabric filter—
- A. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;
- B. Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit:
- C. Operation of the affected facility above the maximum charge rate and below the minimum HCl sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;
- D. Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or
- E. Use of the bypass stack shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd, and Hg emission limits.
- 6. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a wet scrubber—
- A. Operation of the affected facility above the maximum charge rate and below the minimum pressure drop across the wet scrubber or below the minimum horsepower or amperage to the system (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the PM emission limit;
- B. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber tempera-

- ture (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;
- C. Operation of the affected facility above the maximum charge rate, below the minimum secondary temperature, and below the minimum scrubber liquor flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit:
- D. Operation of the affected facility above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;
- E. Operation of the affected facility above the maximum flue gas temperature and above the maximum charge rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or
- F. Use of the bypass stack shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd, and Hg emission limits.
- 7. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a dry scrubber followed by a fabric filter and a wet scrubber—
- A. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;
- B. Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit:
- C. Operation of the affected facility above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;
- D. Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or
- E. Use of the bypass stack shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd, and Hg emission limits.
- 8. The owner or operator of an affected facility may conduct a repeat performance test within thirty (30) days of violation of applicable operating parameter(s) to demon-

- strate that the affected facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph shall be conducted using the identical operating parameters that indicated a violation under paragraphs (3)(E)5., 6., or 7. of this rule.
- 9. The owner or operator of an affected facility using an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber, or selective noncatalytic reduction technology, to comply with the emission limits under section (3) of this rule shall petition the administrator for other site-specific operating parameters to be established during the initial performance test and continuously monitored thereafter. The owner or operator shall not conduct the initial performance test until after the petition has been approved by the administrator.
- 10. The owner or operator of an affected facility may conduct a repeat performance test at any time to establish new values for the operating parameters. The department may request a repeat performance test at any time.
- 11. The owner or operator of an affected facility that uses an air pollution control device that includes a fabric filter and is not demonstrating compliance using PM CEMS, determines compliance with the PM emissions limit using a bag leak detection system, and meets the requirements in subparagraphs (3)(E)11.A. through L. of this rule for each bag leak detection system.
- A. Each triboelectric bag leak detection system may be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). This document is available from the U.S. Environmental Protection Agency (U.S. EPA), Office of Air Quality Planning and Standards, Sector Policies and Programs Divi-Policy Measurement Group (D-243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emissions Measurement Center Continuous Emissions Monitoring. Other types of bag leak detection systems shall be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- B. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.



- C. The bag leak detection system sensor shall provide an output of relative PM loadings.
- D. The bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor.
- E. The bag leak detection system shall be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel.
- F. For positive pressure fabric filter systems, a bag leak detector shall be installed in each baghouse compartment or cell.
- G. For negative pressure or induced air fabric filters, the bag leak detector shall be installed downstream of the fabric filter.
- H. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- I. The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the "Fabric Filter Bag Leak Detection Guidance."
- J. Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted. In no case may the sensitivity be increased by more than one hundred percent (100%) or decreased more than fifty percent (50%) over a three-hundred-sixty-five (365)-day period unless such adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition. Each adjustment shall be recorded.
- K. Record the results of each inspection, calibration, and validation check.
- L. Initiate corrective action within one (1) hour of a bag leak detection system alarm; operate and maintain the fabric filter such that the alarm is not engaged for more than five percent (5%) of the total operating time in a six (6)-month block reporting period. If inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm is counted as a minimum of one (1) hour. If it takes longer than one (1) hour to initiate corrective action, the alarm time is counted as the actual amount of time taken to initiate corrective action.
- 12. Small HMIWI subject to the emissions limits under paragraph (3)(A)2. of this rule that is not equipped with an air pollution control device shall meet the following compliance and performance testing requirements:

- A. Establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits;
- B. Following the date on which the initial performance test is completed, ensure that the designated facility does not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three (3)-hour rolling averages (calculated as the average of the previous three (3) operating hours) at all times. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s);
- C. Except as provided in subparagraph (3)(E)12.D. of this rule, operation of the designated facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the PM, CO, and dioxin/furan emission limits; and
- D. The owner or operator of a designated facility may conduct a repeat performance test within thirty (30) days of the violation of applicable operating parameter(s) to demonstrate that the designated facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph must be conducted using the identical operating parameters that indicated a violation under subparagraph (3)(E)12.C. of this rule.
- 13. The owner or operator of a designated facility subject to this rule may use the results of previous emissions tests to demonstrate compliance with the emissions limits, provided that the following conditions are met:
- A. The designated facility's previous emissions tests must have been conducted using the applicable procedures and test methods listed in subparagraphs (3)(E)2.A.-L. of this rule. Previous emissions test results obtained using EPA-accepted voluntary consensus standards are also acceptable;
- B. The HMIWI at the designated facility shall currently be operated in a manner (e.g., with charge rate, secondary chamber temperature, etc.) that would be expected to result in the same or lower emissions than observed during the previous emissions test(s), and the HMIWI may not have been modified such that emissions would be expected to exceed (notwithstanding normal

- test-to-test variability) the results from previous emissions test(s); and
- C. The previous emissions test(s) must have been conducted in 1996 or later.
 - (F) Monitoring Requirements.
- 1. Except as provided for under paragraph (3)(F)5. of this rule, the owner or operator of an HMIWI subject to this rule shall install, calibrate (to manufacturers' specification), maintain, and operate devices (or establish methods) for monitoring the applicable maximum and minimum operating parameters listed in Table 4 of this rule (unless CEMS are used as a substitute for certain parameters as specified) such that these devices (or methods) measure and record values for these operating parameters at the frequency indicated in Table 4 of this rule at all times.
- 2. The owner or operator of an HMIWI shall install, calibrate (to manufacturers' specifications), maintain, and operate a device or method for measuring the use of the bypass stack including date, time, and duration.
- 3. The owner or operator of an HMIWI using something other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under section (3) of this rule shall install, calibrate (to manufacturers' specifications), maintain, and operate the equipment necessary to monitor the site-specific operating parameters developed pursuant to paragraph (3)(E)9. of this rule.
- 4. The owner or operator of an HMIWI shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for seventy-five percent (75%) of the operating hours per day for ninety percent (90%) of the operating days per calendar quarter that the HMIWI is combusting hospital waste and/or medical/infectious waste.
- 5. Small HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule not equipped with an air pollution control device shall meet the following monitoring requirements:
- A. Install, calibrate (to manufacturers' specification), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation;
- B. Install, calibrate (to manufacturers' specification), maintain, and operate a device that automatically measures and records the

date, time, and weight of each charge fed into the HMIWI; and

- C. The owner or operator of a designated facility shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for seventy-five percent (75%) of the operating hours per day for ninety percent (90%) of the operating days per calendar quarter that the designated facility is combusting hospital waste and/or medical/infectious waste.
- (4) Reporting and Record Keeping.
- (A) The owner or operator of an HMIWI subject to this rule shall maintain the following information (as applicable) for a period of at least five (5) years:
 - 1. Calendar date of each record;
 - 2. Records of the following data:
- A. Concentrations of any pollutant listed in section (3) of this rule or measurements of opacity as determined by the continuous emission monitoring system (if applicable);
- B. Results of fugitive emissions (by EPA Reference Method 22) tests, if applicable:
- C. HMIWI charge dates, times, and weights and hourly charge rates;
- D. Fabric filter inlet temperatures during each minute of operation, as applicable;
- E. Amount and type of dioxin/furan sorbent used during each hour of operation, as applicable;
- F. Amount and type of Hg sorbent used during each hour of operation, as applicable:
- G. Amount and type of HCl sorbent used during each hour of operation, as applicable:
- H. Amount and type of nitrogen oxides (NO_x) reagent used during each hour of operation, as applicable;
- I. Secondary chamber temperatures recorded during each minute of operation;
- J. Liquor flow rate to the wet scrubber inlet during each minute of operation, as applicable:
- K. Horsepower or amperage to the wet scrubber during each minute of operation, as applicable;
- L. Pressure drop across the wet scrubber system during each minute of operation, as applicable;
- M. Temperature at the outlet from the wet scrubber during each minute of operation, as applicable;
- N. pH of the scrubber liquor at the inlet to the wet scrubber during each minute of operation, as applicable;

- O. Records indicating use of the bypass stack, including dates, times, and durations;
- P. For HMIWI complying with paragraph (3)(E)9. and paragraph (3)(F)3. of this rule, the owner or operator shall maintain all operating parameter data collected; and
- Q. For affected facilities as defined in this rule, records of the annual equipment inspections, annual air pollution control device inspections, any required maintenance, and any repairs not completed within ten (10) days of an inspection or the time frame established by the director:
- 3. Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (4)(A)2. of this rule have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken;
- 4. Identification of calendar days, times, and durations of malfunctions, a description of the malfunction, and the corrective action taken;
- 5. Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (4)(A)2. of this rule exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken:
- 6. The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating parameters, as applicable, and a description, including sample calculations, of how the operating parameters were established or re-established, if applicable;
- 7. Records showing the names of HMIWI operators who have completed review of the information in paragraph (3)(B)8. of this rule as required by paragraph (3)(B)9. of this rule, including the date of the initial review and all subsequent annual reviews;
- 8. Records showing the names of the HMIWI operators who have completed the operator training requirements, including documentation of training and the dates of the training:
- 9. Records showing the names of the HMIWI operators who have met the criteria for qualification under subsection (3)(B) of this rule and the dates of their qualification; and
- 10. Records of calibration of any monitoring devices as required under paragraphs (3)(F)1. through 5. of this rule.
 - (B) The owner or operator of an HMIWI

- shall submit to the department the information specified in paragraphs (4)(B)1. through 3. of this rule no later than sixty (60) days following the initial performance test. All reports shall be signed by the facilities manager.
- 1. The initial performance test data as recorded under subparagraphs (3)(E)2.A. through L. of this rule, as applicable.
- 2. The values for the site-specific operating parameters established pursuant to paragraph (3)(E)4. or 9. of this rule, as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.
- 3. The waste management plan as specified in subsection (3)(C) of this rule.
- (C) An annual report shall be submitted to the department one (1) year following the submission of the information in subsection (4)(B) of this rule and subsequent reports shall be submitted no more than twelve (12) months following the previous report (once the unit is subject to permitting requirements under Title V of the Clean Air Act, the owner or operator of an affected facility must submit these reports semiannually). The annual report shall include the information specified in paragraphs (4)(C)1. through 8. of this rule. All reports shall be signed by the facilities manager.
- 1. The values for the site-specific operating parameters established pursuant to paragraph (3)(E)4., 8., or 9. of this rule, as applicable.
- 2. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the calendar year being reported, pursuant to paragraph (3)(E)4., 8., or 9. of this rule, as applicable.
- 3. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each operating parameter recorded pursuant to paragraph (3)(E)4., 8., or 9. of this rule for the calendar year preceding the year being reported, in order to provide the department with a summary of the performance of the affected facility over a two (2)-year period.
- 4. Any information recorded under paragraphs (4)(A)3. through 5. of this rule for the calendar year being reported.
- 5. Any information recorded under paragraphs (4)(A)3. through 5. of this rule for the calendar year preceding the year being reported, in order to provide the department with a summary of the performance of the affected facility over a two (2)-year period.
- 6. If a performance test was conducted during the reporting period, the results of that test.



- 7. If no exceedances or malfunctions were reported under paragraphs (4)(A)3. through 5. of this rule for the calendar year being reported, a statement that no exceedances occurred during the reporting period.
- 8. Any use of the bypass stack, the duration, reason for malfunction, and corrective action taken.
- (D) The owner or operator of an HMIWI shall submit to the department semiannual reports containing any information recorded under paragraphs (4)(A)3. through 5. of this rule no later than sixty (60) days following the reporting period. The first semiannual reporting period ends six (6) months following the submission of information in subsection (4)(B) of this rule. Subsequent reports shall be submitted to the department no later than six (6) calendar months following the previous report. All reports shall be signed by the facilities manager.
- (E) All records specified under subsection (4)(A) of this rule shall be maintained on-site in either paper copy or computer-readable format, unless an alternative format is approved by the department.
- (F) The owner or operator of an HMIWI shall submit an annual report to the department containing information recorded under subparagraph (4)(A)2.Q. of this rule no later than sixty (60) days following the year in which data were collected. Subsequent reports shall be sent no later than twelve (12) calendar months following the previous report (once the unit is subject to permitting requirements under Title V of the Clean Air Act, the owner or operator must submit these reports semiannually). The report shall be signed by the facilities manager.
- (5) Test Methods. Test methods can be found in subparagraphs (3)(E)2.A. through L. of this rule.

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed Dec. 1, 1998, effective July 30, 1999. Amended: Filed Oct. 13, 2000, effective July 30, 2001. Amended: Filed Nov. 26, 2010, effective Aug. 30, 2011. Amended: Filed Nov. 1, 2013, effective July 30, 2014.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.210 Confidential Information

PURPOSE: This rule provides procedures and conditions for handling confidential information.

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- (1) Applicability. This rule shall apply to all business information requested to be designated confidential under Chapter 643, RSMo.
- (2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.
- (3) General Provisions. Any information or records submitted or obtained pursuant to Chapter 643, RSMo, is subject to public disclosure unless a request for confidentiality is made by the person submitting the information or records and the request has been approved pursuant to the following procedures:
 - (A) Procedures.
- 1. An owner or operator who wishes to claim confidentiality for any information submitted pursuant to this rule or other rules of the commission should 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 approved, 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. If a claim of confidentiality is denied in the preliminary review, the owner or operator will have fifteen (15) days from the date of the denial letter to submit further justification or comments to the director for consideration in the final decision on confidentiality. The director shall inform the owner or operator of his/her final decision on whether the claim will be denied in whole or in part within ten (10) working days of receiving the owner or operator's further justification or comments.
- 6. The owner or operator may appeal the director's final decision to deny a claim of confidentiality, in whole or part, to the administrative hearing commission pursuant to 621.250, RSMo, and 10 CSR 10-1.030.

Upon the timely filing of a notice of appeal, the confidentiality of the information shall be preserved until the entry of a final order by the commission.

- 7. If the commission's final decision is to deny the claim of confidentiality, in whole or in part, the director shall treat the information as subject to public disclosure unless the owner or operator files a timely action for judicial review pursuant to 536.110, RSMo. If a timely action for judicial review is filed, the confidentiality of the information shall be preserved until adjudication of the matter upon judicial review.
- 8. A claim of confidentiality under this rule shall be approved if—
- A. The owner or operator has asserted a business confidentiality claim that has not expired by its terms or been withdrawn;
- B. The owner or operator has satisfactorily shown that it has taken reasonable measures 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 that is required to be reported to the U.S. Environmental Protection Agency under 40 CFR 51.15 with the exception of the following data elements which can be claimed to be confidential with justification the department approves:
- (I) Activity/throughput (for each period reported);
 - (II) Emission factor:
 - (III) Winter throughput (percent);
 - (IV) Spring throughput (percent);
 - (V) Summer throughput (percent);
 - (VI) Fall throughput (percent);
- (VII) Design capacity (including boiler capacity, if applicable) (MHDR);
- (VIII) Primary capture and control efficiencies (percent); and
- (IX) Total capture and control efficiency (percent); and
- F. The owner or operator has satisfactorily shown that—
- (I) Public disclosure of the information is likely to cause substantial harm to the business' competitive position; or
- (II) The information was voluntarily submitted and if disclosed, the submitter would be reluctant to provide additional information to the director in the future.

Information is voluntarily submitted if the facility has no statutory, regulatory, or contractual obligation to provide the information; or the director has no statutory, regulatory, or contractual authority to obtain the information under federal or state law; and

- (B) 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 paragraphs (3)(A)4.–8. of this rule.
- Confidential and public information.If information entitled to confidentiality cannot reasonably be separated from information not entitled to confidentiality, all the information must be treated as subject to public disclosure.
- 3. Public release. The director and his/her designees shall not release to the public, or place in the public file, any information for which a claim of confidentiality has been made until the procedures under paragraphs (3)(A)4.-8. and (3)(B)1. of this rule have been observed.
- 4. Disclosure to local agencies. Information submitted under a claim of confidentiality, where the claim has not been finally denied, may be disclosed to local air pollution control agencies if—
- A. The owner or operator is given prior notice fifteen (15) working days in which to obtain an order from a court of competent jurisdiction restraining or enjoining the disclosure to the local agency, and if no such order is obtained, or obtained and later dissolved; or
- B. The local agency has ordinances or regulations respecting the treatment of confidential business information that is equivalent to this rule, the director provides notice to the owner or operator that the information is being disclosed to the local agency, and the director informs the local agency that the information is subject to a claim of confidentiality.
- 5. Disclosure to administrator. Information submitted under a claim of confidentiality, 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.
- (4) Reporting and Record Keeping. (Not Applicable)
- (5) Test Methods. (Not Applicable)

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed Sept. 2, 1993, effective May 9, 1994. Amended: Filed May 2, 2016, effective Dec. 30, 2016.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

PURPOSE: This rule specifies the maximum allowable opacity of visible air contaminant emissions, unless specifically exempt or regulated by 10 CSR 10-6.070 and requires the use of continuous monitoring systems (CMS) on certain air contaminant emission units.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

- (1) Applicability. This rule applies to all sources of visible emissions, excluding water vapor, throughout the state of Missouri with the exception of the following:
 - (A) Internal combustion engines;
- (B) Wood burning stoves or fireplaces used for heating;
- (C) Fires used for recreational or ceremonial purposes or fires used for the noncommercial preparation of food by barbecuing;
- (D) Fires used solely for the purpose of fire-fighter training;
- (E) Smoke generating devices when a required permit (under 10 CSR 10-6.060 or 10 CSR 10-6.065) has been issued or a writ-

ten determination that a permit is not required has been obtained;

- (F) The pyrolysis of wood for the production of charcoal in batch-type charcoal kilns (Emissions from batch-type charcoal kilns shall comply with the requirements of 10 CSR 10-6.330 Restriction of Emissions From Batch-Type Charcoal Kilns);
- (G) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher;
- (H) Emission units regulated by 10 CSR 10-6.070 and the provisions of 40 CFR 60, promulgated as of July 1, 2013, 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. This rule does not incorporate any subsequent amendments or additions:
- (I) Any open burning that is exempt from open burning rule 10 CSR 10-6.045;
- (J) Emission units regulated by 40 CFR 63 subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters that meet one (1) of the following criteria:
- 1. Constructed or reconstructed after June 4, 2010;
- 2. The unit is subject to a ten percent (10%) opacity limit as described in Table 4 of 40 CFR 63 subpart DDDDD; or
- 3. The unit is in Table 2 of 40 CFR 63 subpart DDDDD and has a filterable particulate matter limitation of less than or equal to 4E-02 pounds per million British thermal units (lbs/MMBtu);
- (K) Fugitive emissions subject to 10 CSR 10-6.170;
- (L) Any emission unit burning only natural gas, landfill gas, propane, liquefied petroleum gas, digester gas, or refinery gas;
- (M) Emission units regulated by 40 CFR 63 subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources that meet all of the following criteria:
- Constructed or reconstructed after June 4, 2010;
- 2. In compliance with the 3.0E-02 lbs/MMBtu filterable particulate matter emission limit described in Table 1 of 40 CFR 63 subpart JJJJJJ or maintaining opacity to less than or equal to ten percent (10%) as described in Table 3 of 40 CFR 63 subpart JJJJJJ; and
- 3. Demonstrating compliance with a continuous monitoring system (CMS), including a continuous emission monitoring system (CEMS), a continuous opacity monitoring system (COMS), or a continuous parameter



monitoring system (CPMS);

- (N) Emission units regulated by 40 CFR 63 subpart UUUUU—Mercury and Air Toxics Standards, and demonstrating compliance with a particulate matter continuous emission monitoring system; and
- (O) Emission units that are contained within and emit only within a building space. This does not include emission units with a collection device vented outside the building space.
- (2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.

(3) General Provisions.

- (A) Visible Emissions Limitations.
- 1. Maximum Visible Emissions Limitations. Unless specified otherwise in this rule, no owner or operator shall cause or permit to be discharged into the atmosphere from any emission unit, not exempted under this rule, any visible emissions greater than the limitations in the following table for any continuous six (6)-minute period as measured by the test method used to demonstrate compliance with this rule:

	Visible Emission Limitations		
Area of State	Existing Emission	New Emission	
	Units	Units	
Kansas City Metropolitan Area	20%	20%	
St. Louis Metropolitan Area	20%*	20%	
Springfield-Greene County Area	40%	20%	
Outstate Area	40%	20%	

*Exception: Existing emission units in the St. Louis metropolitan area that are not incinerators and emit less than twenty-five (25) lbs/hr of particulate matter shall be limited to forty percent (40%) opacity.

2. Visible Emissions Limitations, Exceptions Allowed In One (1) Continuous Six (6)-Minute Period. The visible emissions limitations in the following table shall be allowed for one (1) continuous six (6)-minute period in any sixty (60) minutes as measured by the test method used to demonstrate compliance with this rule:

Area of State	Visible Emission Limitations, Exceptions		
Area of State	Existing Emission	New Emission	
	Units	Units	
Kansas City Metropolitan Area	60%**	60%**	
St. Louis Metropolitan Area	40%	40%	
Springfield-Greene County Area	60%**	60%**	
Outstate Area	60%	60%	

- **This exception does not apply to existing and new incinerators in the Kansas City metropolitan area and Springfield-Greene County.
 - (B) Failure to meet the requirements of

- subsection (3)(A) solely because of the presence of uncombined water shall not be a violation of this rule.
- (C) Compliance Determination. Compliance for any emission unit to which this rule applies shall be determined from opacity measurements taken in accordance with subsection (3)(D) or (3)(E) of this rule. If opacity measurements taken by a non-department qualified observer differ from visual measurements taken by a qualified department observer, the qualified department observer's opacity measurements shall be used to determine compliance.
- (D) The following emission units shall install a CMS in accordance with subsection (3)(F) of this rule:
- 1. Unless exempt under section (1) of this rule, 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; and
- Portland cement calcining kiln operations
- (E) Unless otherwise specified in this rule, owners or operators shall have the opacity of visible emissions determined by one (1) of the methods in section (5) of this rule.
- (F) Continuous Monitoring Requirements. Sources with emission units that are required to install a CMS must select one (1) of the following options:
- 1. Install, calibrate, and maintain a COMS according to the following conditions:
- A. Source operating time includes any time fuel is being combusted and/or a fan is being operated;
- B. Cycling time. Cycling times include the total time a monitoring system requires to sample, analyze, and record an emission measurement. Continuous monitoring systems for measuring opacity shall complete a minimum of one (1) cycle of operation (sampling, analyzing, and data recording) for each successive ten (10)-second period;
- C. Certification. All COMS shall be certified by the director after review and acceptance of a demonstration of conformance with 40 CFR 60, Appendix B, Performance Specification 1;
- D. Audit authority. All COMS shall be subject to audits conducted by the department, and all COMS records shall be made available upon request to department personnel: or
- 2. Install, calibrate, and maintain an alternative CMS according to the following conditions:
 - A. All alternative CMS, monitoring

- systems requirements, system locations, reporting and record keeping requirements, and procedures for operation and maintenance must be approved by the staff director and the U.S. Environmental Protection Agency (EPA); and incorporated into this rule and the state implementation plan (SIP) prior to implementation;
- B. Demonstrate that a requirement of paragraph (3)(F)1. or section (4) of this rule cannot be practically met; and
- C. Demonstrate that the alternative CMS produces results that adequately verify compliance.
- (G) If a CMS is malfunctioning, a nondepartment qualified observer measurement may be used as a temporary substitute.
 - (H) Time Schedule for Compliance.
- 1. All new emission units shall comply when operations begin; and
- 2. All existing emission units shall comply as of the effective date of this rule.
- (4) Reporting and Record Keeping.
- (A) COMS Reporting. Owners or operators required to install COMS shall submit a quarterly written report to the director. All quarterly reports shall be postmarked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data:
- 1. A summary including total time for each cause of excess emissions and/or monitor downtime:
- 2. Nature and cause of excess emissions, if known:
- 3. The six (6)-minute average opacity values greater than the opacity emission requirements (The average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions):
- 4. The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and
- 5. If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired, or adjusted, this information shall be stated in the report.
- (B) COMS Records to be Maintained. Owners or operators of affected emission units shall maintain a file (hard copy or electronic version) of the following information for a minimum of two (2) years from the date the data was collected:
- 1. All information reported in the quarterly summaries; and
 - 2. All six (6)-minute opacity averages



and daily Quality Assurance (QA)/Quality Control (QC) records.

(5) Test Methods.

- (A) Qualified observer in accordance with 10 CSR 10-6.030(9)(A), Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources.
- (B) Photogrammetric opacity measurement in accordance with EPA Method ALT-082—Digital camera opacity technique.
- (C) A modification of the test methods listed in subsections (5)(A) or (5)(B) of this rule. Any modification of a test method listed in subsections (5)(A) or (5)(B) of this rule must be approved by the director and the EPA; and incorporated into this rule and the SIP prior to implementation.

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed March 31, 1999, effective Nov. 30, 1999. Amended: Filed Feb. 28, 2002, effective Nov. 30, 2002. Amended: Filed Feb. 4, 2008, effective Sept. 30, 2008. Amended: Filed March 29, 2016, effective Dec. 30, 2016.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.230 Administrative Penalties

PURPOSE: This rule establishes the procedures for assessment of administrative penalties

(1) Applicability. This rule applies to installations and individuals throughout Missouri that are subject to sections 643.010–643.250, RSMo or any rule of the Missouri Air Conservation Commission or any site that is permitted by the Missouri Air Pollution Control Program.

(2) Definitions.

- (A) Definitions for key words used in this rule may be found in 10 CSR 10-6.020(2).
- (B) Additional definitions specific to this rule are as follows:
- 1. Conference, conciliation and persuasion—A process of verbal or written communications, including but not limited to meetings, reports, correspondence or telephone conferences between authorized representatives of the department and the alleged violator. The process shall, at minimum, consist of one offer to meet with the alleged violator tendered by the department. During any such meeting, the department and the alleged violator shall negotiate in good faith to eliminate the alleged violation and shall attempt to agree upon a plan to achieve compliance;

- 2. Economic benefit—Any monetary gain which accrues to a violator as a result of noncompliance;
- 3. Gravity-based assessment—The degree of seriousness of a violation taking into consideration the risk to human health and the environment posed by the violation and considering the extent of deviation from sections 643.010–643.250, RSMo;
- 4. Minor violation—A violation which possesses a small potential to harm the environment or human health or cause pollution, was not knowingly committed, and is not defined by the United States Environmental Protection Agency as other than minor;
- 5. Multi-day violation—A violation which has occurred on or continued for two (2) or more consecutive or nonconsecutive days; and
- 6. Multiple violation penalty—The sum of individual administrative penalties assessed when two (2) or more violations are included in the same complaint or enforcement action.

(3) General Provisions.

- (A) Pursuant to section 643.085, RSMo, and in addition to any other remedy provided by law, upon determination by the department that a provision of sections 643.010–643.250, RSMo, or a standard, limitation, order or rule promulgated, or a term or condition of any permit has been violated, the director may issue an order assessing an administrative penalty upon the violator. The amount of the administrative penalty will be determined according to section (6) of this rule. In no event may the total penalty assessed per day of violation exceed the statutory maximum specified in section 643.151, RSMo.
- (B) An administrative penalty shall not be imposed until the department has sought to resolve the violations through conference, conciliation and persuasion and shall not be imposed for minor violations. If the violation is resolved through conference, conciliation and persuasion, no administrative penalty shall be assessed unless the violation has caused, or had the potential to cause, a risk to human health or to the environment, or has caused or has potential to cause pollution, or was knowingly committed, or is not a minor violation.
- (C) An order assessing an administrative penalty shall be served upon the operator, owner or appropriate representative through United States Postal Service certified mail, return receipt requested, a private courier or messenger service which provides verification of delivery or by hand delivery to the operator's or owner's residence or place of

business. An order assessing an administrative penalty shall be considered served if verified receipt is made by the operator, owner or appropriate representative. A refusal to accept, or a rejection of certified mail, private courier or messenger service delivery or by hand delivery of an order assessing an administrative penalty constitutes service of the order.

- (D) The director may at any time withdraw without prejudice any administrative penalty order.
- (E) An order assessing an administrative penalty shall describe the nature of the violation(s), the amount of the administrative penalty being assessed and the basis of the penalty calculation.
- (4) Reporting and Record Keeping. (Not Applicable)
- (5) Test Methods. (Not Applicable)
- (6) Determination of Penalties. The amount of an administrative penalty will involve the application of a gravity-based assessment under subsection (6)(A) and may involve additional factors for multiple violations, (6)(B), multi-day violations, (6)(C) and economic benefit resulting from noncompliance, (6)(D). The resulting administrative penalty may be further adjusted as specified under (6)(E).
- (A) Gravity-Based Assessment. The gravity-based assessment is determined by evaluating the potential for harm posed by the violation and the extent to which the violation deviates from the requirements of the Missouri Air Conservation Law.
- 1. Potential for harm. The potential for harm posed by a violation is based on the risk to human health, safety or the environment or to the purposes of implementing the Missouri Air Conservation Law and associated rules or permits.
- A. The risk of exposure is dependent on both the likelihood that humans or the environment may be exposed to contaminants and the degree of potential exposure. Penalties will reflect the probability the violation either did result in or could have resulted in a release of contaminants in the environment, and the harm which either did occur or would have occurred if the release had in fact occurred.
- B. Violations which may or may not pose a potential threat to human health or the environment, but which have an adverse effect upon the purposes of or procedures for implementing the Missouri Air Conservation



Law and associated rules or permits may be assessed a penalty.

- C. The potential for harm shall be evaluated according to the following degrees of severity:
- (I) Major. The violation poses or may pose a substantial risk to human health and safety or to the environment, or has or may have a substantial adverse effect on the purposes of or procedures for implementing the Missouri Air Conservation Law and associated rules and/or permits;
- (II) Moderate. The violation poses or may pose a significant risk to human health and safety or to the environment, or has or may have a significant adverse effect on the purposes of or procedures for implementing the Missouri Air Conservation Law and associated rules and/or permits; and
- (III) Minor. The violation does not pose significant or substantial risk to human health and safety or to the environment, was not knowingly committed, and is not defined by the United States Environmental Protection Agency as other than minor.
- 2. Extent of deviation. The extent of deviation may range from slight to total disregard of the requirements of the Missouri Air Conservation Law and associated rules and/or permits. The assessment will reflect this range and will be evaluated according to the following degrees of severity:
- A. Major. The violator has deviated substantially from the requirements of the Missouri Air Conservation Law, associated rules, or permits resulting in substantial noncompliance;
- B. Moderate. The violator has deviated significantly from the requirements of the Missouri Air Conservation Law, associated rules, or permits resulting in significant noncompliance; and
- C. Minor. The violator has deviated slightly from the requirements of the Missouri Air Conservation Law, associated rules, or permits that does not result in substantial or significant noncompliance; most provisions were implemented as intended; the violation was not knowingly committed; and is not defined by the United States Environmental Protection Agency as other than minor.
- 3. Gravity-based penalty assessment matrix. The matrix that follows will be used to determine the gravity-based assessment portion of the administrative penalty. Potential for harm and extent of deviation form the axes of the matrix. The penalty range selected may be adapted to the circumstances of a particular violation.

Gravity-Based Penalty Assessment Matrix

Potential for Harm	Extent of Deviation			
	Major	Moderate	Minor	
Major	\$10,000 to \$8,750	\$8,750 to \$7,500	\$7,500 to \$6,250	
Moderate	\$6,250 to \$5,000	\$5,000 to \$3,750	\$3,750 to \$2,500	
Minor	\$2,500 to \$1,250	\$1,250 to \$500	\$0	

- (B) Multiple Violation Penalty. Penalties for multiple violations may be determined when a violation is independent of or substantially different from any other violation. The director may order a separate administrative penalty for that violation as set forth in this rule.
- (C) Multi-Day Penalty. Penalties for multi-day violations may be determined when the director has concluded that a violation(s) has continued or occurred for more than one (1) day. Multi-day penalty assessments will be determined by using the Gravity-Based Assessment Matrix in paragraph (6)(A)3. The director may seek penalties for each day of noncompliance not to exceed the amount of the civil penalty specified in section 643.151, RSMo.
- (D) Economic Benefit. Any economic benefits, including delayed and avoided costs that have accrued to the violator as a result of noncompliance, will be added to the penalty amount. The department using an economic benefit formula that provides a reasonable estimate of the economic benefit of noncompliance will make determination. Economic benefit may be excluded from the administrative penalty if—
- 1. The economic benefit is an insignificant amount;
- 2. There are compelling public concerns that would not be served by taking a case to trial: or
- 3. It is unlikely that the department would be able to recover the economic benefit in litigation based on the particular case.
- (E) Adjustments. The department may add to or subtract from the total amount of the penalty after consideration of the following adjustments:
- 1. Recalculation of penalty amount. After the issuance of an order by the director, if new information about a violation becomes available which indicates that the original

penalty calculation may have been incorrect, the department may recalculate the penalty;

- 2. Good faith efforts to comply. The department may adjust a penalty amount downward if good faith efforts have been adequately documented by the violator. Good faith efforts include, but are not limited to, documentation that the violator has reported noncompliance or instituted measures to remedy the violation prior to detection by the department. However, good faith efforts to achieve compliance after agency detection are assumed and are not grounds for decreasing the penalty amount;
- 3. Culpability. In cases of heightened culpability which do not meet the standard of criminal activity, the penalty may be increased at the department's discretion, within the ranges of the matrix. Likewise, in cases where there is a demonstrable absence of culpability, the department may decrease the penalty. Lack of knowledge of the Missouri Air Conservation Law and any associated rule and/or permit shall not be a basis of decreased culpability. The following criteria will be used to determine culpability:
- A. How much control the violator had over the events constituting the violation;
- B. The foreseeability of the events constituting the violation;
- C. Whether the violator took reasonable precautions against the events constituting the violation:
- D. Whether the violator knew or should have known of the hazards associated with the conduct; and
- E. Whether the violator knew or should have known of the legal requirement which was violated. This criteria shall be used only to increase a penalty, not to decrease it;
- 4. History of noncompliance. Where there has been a history of noncompliance with the Missouri Air Conservation Law or any associated rule or permit, to a degree deemed significant due to frequency, similarity or seriousness of past violations, and considering the violator's response to previous enforcement actions, the department may increase the administrative penalty. No downward adjustment is allowed because of this factor:
- 5. Ability to pay. When a violator has adequately documented that payment of all or a portion of the penalty will preclude the violator from achieving compliance or from carrying out important remedial measures, the department may—



- A. Waive any of the administrative penalty; or
- B. Negotiate a delayed payment schedule, installment plan or penalty reductions with stipulated penalties; and
- 6. Other adjustment factors. This rule allows for other penalty adjustments based on fairness and equity not mentioned in this rule which may arise on a case-by-case basis.
- (7) Proceeds from Administrative Penalties. The proceeds from any administrative penalty assessed in accordance with this rule shall be paid to the county treasurer of the county in which the violation(s) occurred for the use and benefit of the county schools within that county.
- (8) Natural Resource Damages. Nothing in this rule shall be construed as satisfying any claim by the state for natural resource damages.

AUTHORITY: sections 643.050 RSMo Supp. 1998 and 643.085, RSMo 1994.* Original rule Sept. 11, 1992, effective July 8, 1993. Rescinded and readopted: Filed April 15, 1999, effective Nov. 30, 1999.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995 and 643.085, RSMo 1991, amended 1992, 1993.

10 CSR 10-6.240 Asbestos Abatement Projects—Registration, Notification and Performance Requirements

(Rescinded September 30, 2004)

AUTHORITY: section 643.050, RSMo Supp. 1992. Original rule filed Dec. 14, 1992, effective Sept. 9, 1993. Rescinded: Filed Jan. 12, 2004, effective Sept. 30, 2004.

Corvera Abatement Technologies, Inc. v. Air Conservation Commission and Missouri Department of Natural Resources, Case No. CV 197-985 CC. An action for declaratory judgment and injunctive relief to challenge the final rulemaking decision of the commission was taken to the Cole County Circuit Court. After a hearing conducted January 30, 1998, the circuit court issued an order on February 3, 1998, finding that 10 CSR 10-6.240 is void from its inception. The Missouri Department of Natural Resources was permanently enjoined from enforcing 10 CSR 10-6.240. A notice of appeal for this case was filed February 10, 1998.

10 CSR 10-6.241 Asbestos Projects—Registration, Abatement, Notification, Inspection, Demolition, and Performance Requirements

PURPOSE: This rule requires asbestos contractors to register with the department, to notify the department of each asbestos project, to allow the department to inspect asbestos projects, and to pay inspection fees. Each person who intends to perform asbestos projects in Missouri must register annually with the Missouri Department of Natural Resources' Air Pollution Control Program. Any person undertaking a demolition or asbestos project must submit a notification to the appropriate agency of the department for each asbestos project and each notification must be accompanied by a fee. Asbestos contractors must allow representatives of the department to conduct inspections of projects and must pay inspection fees.

(1) Applicability.

- (A) This rule shall apply to—
- 1. All persons that authorize, design, conduct, and work in asbestos projects; and
- 2. All persons that undertake demolition projects or monitor air-borne asbestos and dispose of asbestos waste as a result of asbestos projects.
- (B) Exemptions. The department may exempt a person from registration, certification, and certain notification requirements provided the person conducts asbestos projects solely at the person's own place of business as part of normal operations in the facility and also is subject to the requirements and applicable standards of the United States Environmental Protection Agency (EPA) and United States Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101. This exemption shall not apply to asbestos contractors, to those subject to the requirements of the Asbestos Hazard Emergency Response Act (AHERA), and to those persons who provide a service to the public in their place(s) of business as the economic foundation of the facility. These shall include, but not be limited to, child daycare centers, restaurants, nursing homes, retail outlets, medical care facilities, hotels, and theaters. Business entities that have received state approved exemption status shall comply with all federal air sampling requirements for their planned renovation operations.
- (2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.
- (3) General Provisions.

- (A) Registration.
- 1. Any person that conducts an asbestos project shall register with the department. Business entities that qualify for exemption status from the state must reapply for exemption from registration.
- 2. The person shall apply for registration renewal on an annual basis, and two (2) months before the expiration date shall send the application to the department for processing. The contractor registration application or business exemption information shall be submitted on the forms provided by the department
- 3. Annually, the person submitting a registration application to the department shall remit a nonrefundable fee of one thousand dollars (\$1,000) to the department. Effective January 1, 2017, the registration fee is two thousand six hundred fifty dollars (\$2,650).
- 4. To determine eligibility for registration and registration renewal, the department may consider the compliance history of the applicant as well as that of all management employees and officers. The department may also consider the compliance record of any other entity of which those individuals were officers and management employees.
 - (B) Abatement Procedures and Practices.
- 1. Asbestos project contractors shall use only individuals that have been certified by the department in accordance with 10 CSR 10-6.250 and Chapter 643, RSMo on asbestos projects.
- 2. At each asbestos project site the person shall provide the following information for inspection by the department:
- A. Proof of current departmental registration;
- B. Proof of current departmental occupational certification for those individuals on the project;
- C. Most recent available air sampling results;
- D. Current photo identification for all applicable individuals engaged in the project; and
- E. Proof of passage of the training course for the air sampling technicians and photo identifications for air sampling technicians.
- (C) Revocation of Registration. The director may deny, suspend or revoke any person's registration obtained under section (3) of this rule if the director finds the person in violation of sections 643.225–643.250, RSMo or Missouri rules 10 CSR 10-6.241 or 10 CSR 10-6.250 or any applicable federal, state, or local standard for asbestos projects.



- (D) Any person that authorizes an asbestos project, asbestos inspection, or any AHERA-related work shall ensure that Missouri registered contractors and certified individuals are employed, and that all post-notification procedures on the project are in compliance with this rule and 10 CSR 10-6.250 and Chapter 643, RSMo. Business entities that have exemption status from the state are exempt from using registered contractors and from post-notification requirements, when performing in-house asbestos projects.
- (E) Asbestos Project Notification. Any person undertaking an asbestos project shall submit a notification to the department for review at least ten (10) working 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 notification is required by the EPA's National Emission Standards for Hazardous Air Pollutants (NESHAPS). The department may waive the ten (10)-working day review period upon request for good cause. To apply for this waiver, the person shall complete the appropriate sections of the notification form provided by the department. The person who applies for the ten (10)-working day waiver must obtain approval from the department before the project can begin.
- 1. The person shall submit the notification form provided by the department.
- 2. If an amendment to the notification is necessary, the person shall notify the department immediately by telephone or FAX. The department must receive the written amendment within five (5) working days following verbal agreement.
- 3. Asbestos project notifications shall state actual dates and times of the project, the on-site supervisor, and a description of work practices. If the person must revise the dates and times of the project, the person shall notify the department and the regional office or the appropriate local delegated enforcement agency at least twenty-four (24) hours in advance of the change by telephone or FAX and then immediately follow-up with a written amendment stating the change. The department must receive the written amendment within five (5) working days of the phone or FAX message.
- 4. A nonrefundable notification fee of one hundred dollars (\$100) will be charged for each project constituting one hundred sixty (160) square feet, two hundred sixty (260) linear feet, or thirty-five (35) cubic feet or greater. Effective January 1, 2017, the notification fee is two hundred dollars (\$200). If an asbestos project is in an area regulated by an authorized local air pollution control agency, and the person is required to

- pay notification fees to that agency, the person is exempt from paying the state fees. Persons conducting planned renovation projects determined by the department to fall under EPA's 40 CFR part 61 subpart M must pay this fee and the inspection fees required in subsection (3)(F) of this rule.
- 5. Emergency project. Any person undertaking an emergency asbestos project shall notify the department by telephone and must receive departmental approval of emergency status. The person must notify the department within twenty-four (24) hours of the onset of the emergency. Business entities with state-approved exemption status are exempt from emergency notification for state-approved projects that are part of a NESHAPS planned renovation annual notification. If the emergency occurs after normal working hours or weekends, the person shall contact the Environmental Services Program. The notice shall provide—
- A. A description of the nature and scope of the emergency;
- B. A description of the measures immediately used to mitigate the emergency; and
- C. A schedule for removal. Following the emergency notice, the person shall provide to the director a notification on the form provided by the department and the person shall submit it to the director within seven (7) days of the onset of the emergency. The amendment requirements for notification found in subsection (3)(E) of this rule are applicable to emergency projects.
- (F) Inspections. There shall be a charge of one hundred dollars (\$100) per inspection for the first three (3) inspections of any asbestos project. Effective January 1, 2017, the inspection fee is two hundred dollars (\$200) per inspection for the first two (2) inspections. The department or the local delegated enforcement agency shall bill the person for that inspection(s) and the person shall submit the fee(s) within sixty (60) days of the date of the invoice, or sooner, if required by a local delegated enforcement agency within its area of jurisdiction.
- (G) All information required under this rule must be submitted on the appropriate forms and contain accurate, legible information. Failure to provide the required information, failure to submit legible information, submission of false information, or failure to provide complete information as required, shall be a violation of this rule and may result in the director's denial or revocation of the forms submitted.
- (H) Failure to comply with this rule is a violation of this rule and Chapter 643, RSMo. Compliance with this rule does not

- relieve the participants from compliance with any other applicable federal and state rules, laws, standards, or building codes.
- (I) After the effective date of this rule, any revision to the department-supplied forms will be presented to the regulated community for a forty-five (45)-day comment period.
- (J) Demolition Projects. Effective January 1, 2017, a nonrefundable notification fee of one hundred dollars (\$100) will be charged for each demolition project regulated under 10 CSR 10-6.080. If a demolition project is in an area regulated by an authorized local air pollution control agency and the person is required to pay notification fees to that agency, the person is exempt from paying the state fees.
- (4) Reporting and Record Keeping.
 - (A) Post-Notification.
- 1. Any person undertaking an asbestos project that requires notification according to subsection (3)(E) of this rule, on the department-provided form shall notify the department within sixty (60) days of the completion of the project. This notice shall include a signed and dated receipt for the asbestos waste generated by the project issued by the landfill named on the notification. This notice also shall include any final clearance air monitoring results. The technician performing the analysis shall sign and date all reports of analyses.
- 2. Business entities are exempt from post-notification requirements, but shall keep records of waste disposal for department inspection.
- (B) Additional Record Keeping. The contractor and the owner shall keep the air monitoring results for three (3) years. The person shall make the results available to representatives of the department upon request. All AHERA projects shall comply with EPA air monitoring requirements in 40 CFR part 763.
- (5) Test Methods. (Not Applicable)

AUTHORITY: section 643.225, RSMo Supp. 2013.* Original rule filed Jan. 12, 2004, effective Sept. 30, 2004. Amended: Filed June 7, 2007, effective Jan. 30, 2008. Amended: Filed July 14, 2015, effective Feb. 29, 2016.

*Original authority: 643.225, RSMo 1989, amended 2011, 2012.



10 CSR 10-6.250 Asbestos Projects—Certification, Accreditation and Business Exemption Requirements

PURPOSE: This rule requires individuals who work in asbestos projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos occupations must first obtain accreditation from the department. Certain business entities who meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos projects.

- (1) Applicability. This rule shall apply to—
- (A) All persons who authorize, design, conduct, and work in asbestos projects;
- (B) Those who monitor airborne asbestos as a result of asbestos projects;
- (C) Individuals who conduct asbestos inspections and develop Asbestos Hazard Emergency Response Act (AHERA) management plans and project designs; and
- (D) Those who provide training for individuals involved in subsections (1)(A)–(C) of this rule.
- (2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.
- (3) General Provisions.
 - (A) Certification.
- 1. An individual must receive certification from the department before that individual participates in an asbestos project, inspection, AHERA management plan, abatement project design, or asbestos air sampling in the state of Missouri. This certification must be renewed annually with the exception of air sampling professionals. To become certified an individual must meet the qualifications in the specialty area as defined in the EPA's AHERA Model Accreditation Plan, 40 CFR part 763, Appendix C, subpart E. The individual must successfully complete a fully-approved EPA or Missouri-accredited

AHERA training course and pass the training course exam and pass the Missouri asbestos examination with a minimum score of seventy percent (70%) and submit a completed department-supplied application form to the department along with the appropriate certification fees. The department shall issue a certificate to each individual that meets the requirements for the job category.

- 2. In order to receive Missouri certification, individuals must be trained by Missouri accredited providers.
- 3. Qualifications. An individual shall present proof of these to the department with the application for certification. The following are the minimum qualifications for each job category:
- A. An asbestos air sampling professional conducts, oversees or is responsible for air monitoring of asbestos projects. Air sampling professionals must satisfy one (1) of the following qualifications for certification:
- (I) Bachelor of science degree in industrial hygiene plus one (1) year of field experience. The individual must provide a copy of his/her diploma, a certified copy of his/her transcript, and documentation of one (1) year of experience;
- (II) Master of science degree in industrial hygiene. The individual must provide a copy of his/her diploma and a certified copy of his/her transcript;
- (III) Certification as an industrial hygienist as designated by the American Board of Industrial Hygiene. The individual must provide a copy of his/her certificate and a certified copy of his/her transcript, if applicable;
- (IV) Three (3) years of practical industrial hygiene field experience including significant asbestos air monitoring and completion of a forty (40)-hour asbestos course including air monitoring instruction. At least fifty percent (50%) of the three (3)-year period must have been on projects where a degreed or certified industrial hygienist or a Missouri certified asbestos air sampling professional was involved. The individual must provide to the department written reference by the industrial hygienist or the asbestos air sampling professional stating the individual's performance of monitoring was acceptable and that the individual is capable of fulfilling the responsibilities associated with certification as an asbestos air sampling professional. The individual must also provide documentation of his/her experience and a copy of his/her asbestos course certificate: or

- (V) Other qualifications including but not limited to an American Board of Industrial Hygiene accepted degree or a health/safety related degree combined with related experience. The individual must provide a copy of his/her diploma and/or certification, a certified copy of his/her transcript, and letters necessary to verify experience;
- B. An asbestos air sampling technician is an individual who has been trained by an air sampling professional to do air monitoring and who conducts air monitoring of asbestos projects. Air sampling technicians need not be certified but are required to pass a training course and have proof of passage of the course at the site along with photo identification. This course shall include:
- (I) Air monitoring equipment and supplies;
- (II) Experience with pump calibration and location;
- (III) Record keeping of air monitoring data for asbestos projects;
- (IV) Applicable asbestos regulations;
- (V) Visual inspection for final clearance sampling; and
- (VI) A minimum of sixteen (16) hours of air monitoring field equipment training by a certified air sampling professional;
- C. An asbestos inspector is an individual who collects and assimilates information used to determine the presence and condition of asbestos-containing material in a building or other air contaminant source. An asbestos inspector must hold a diploma from a fully-approved EPA or Missouri-accredited AHERA inspector course and a high school diploma or its equivalent;
- D. An AHERA asbestos management planner is an individual who, under AHERA, reviews the results of inspections, reinspections or assessments and writes recommendations for appropriate response actions. An AHERA asbestos management planner must hold diplomas from a fully-approved EPA or Missouri-accredited AHERA inspector course and a fully approved EPA or Missouri-accredited management planner course. The individual must also hold a high school diploma or its equivalent;
- E. An abatement project designer is an individual who designs or plans asbestos abatement. An abatement project designer must hold a diploma from a fully-approved EPA or Missouri-accredited project designer course, must have an engineering or industrial hygiene degree, and must have working



knowledge of heating, ventilation and air conditioning systems or an abatement project designer must hold a high school diploma or its equivalent, must have a diploma from a fully-approved EPA or Missouri-accredited project designer course, and must have at least four (4) years experience in building design, heating, ventilation and air conditioning systems. The department may require individuals with professional degrees for complex asbestos projects;

- F. An asbestos supervisor is an individual who directs, controls or supervises others in asbestos projects. An asbestos supervisor shall hold a diploma from a fully-approved EPA or Missouri-accredited AHERA contractor/supervisor course and have one (1) year full-time prior experience in asbestos abatement work or in general construction work; and
- G. An asbestos worker is an individual who engages in asbestos projects. An asbestos worker shall hold a diploma from a fully-approved EPA or Missouri-accredited AHERA worker training course.
 - (B) Recertification.
- 1. All inspectors, management planners, abatement project designers, supervisors, and workers shall pass a Missouri-accredited annual AHERA refresher course and examination in their specialty area. The refresher course must be specific to the individual's initial certification and must meet the requirements of the EPA AHERA Model Accreditation Plan 40 CFR part 763.
- 2. In the case of significant changes in Missouri statutes or rules the department will require individuals to retake a revised version of the Missouri asbestos examination prior to being recertified.
- (C) Certification/Recertification Fees. The department shall assess—
- 1. A seventy-five dollar (\$75) application fee for each individual applying for certification except for asbestos workers. Effective January 1, 2017, the application fee is one hundred dollars (\$100);
- 2. A twenty-five dollar (\$25) application fee for each asbestos worker. Effective January 1, 2017, the application fee is forty dollars (\$40);
- 3. No application fees for asbestos air sampling technicians;
- 4. A twenty-five dollar (\$25) fee for each Missouri asbestos examination;
- 5. A five dollar (\$5) renewal fee for each renewal certificate for asbestos workers. Effective January 1, 2017, the renewal fee is

twenty dollars (\$20); and

- 6. A five dollar (\$5) renewal fee for each renewal certificate for non-asbestos workers. Effective January 1, 2017, the renewal fee is fifty dollars (\$50).
- (D) Accreditation of Training Programs. To be a training provider for the purposes of this rule, a person shall apply for accreditation to the department and comply with EPA's AHERA Model Accreditation Plan 40 CFR part 763, Appendix C, subpart E. Business entities that are determined by the department to fall under subsection (3)(E) of this rule are exempt from this section.
- 1. Training providers shall apply for approval of a training course(s) as provided in section 643.228, RSMo, on the department-supplied Asbestos Training Course Accreditation form.
- A. In addition to the written application, the training provider shall present each initial course for the department to audit. The department may deny accreditation of a course if the applicant fails to provide information required within sixty (60) days of receipt of written notice that the application is deficient. All training providers must apply for reaccreditation biennially.
- B. Training providers must submit documentation that their courses meet the criteria set forth in this rule. Out-of-state providers must submit documentation of biennial audit by an accrediting agency with a written verification that Missouri rules are addressed in the audited course.
- C. Providers must pay an accreditation fee of one thousand dollars (\$1,000) per course category prior to issuance or renewal of an accreditation. No person shall pay more than three thousand dollars (\$3,000) for all course categories for which accreditation is requested at the same time.
- 2. At least two (2) weeks prior to the course starting date, training providers shall notify the department of their intent to offer initial training and refresher courses. The notification shall include the course title, starting date, the location at which the course will take place and a list of the course instructors.
- 3. All training courses shall have a ratio of students to instructors in hands-on demonstrations that shall not exceed ten-to-one (10:1).
 - 4. Instructor qualifications.

A. An individual must be Missouricertified in a specialty area before they will be allowed to teach in that specialty area, except that instructors certified as supervisors may also instruct a worker course.

- B. An individual with experience and education in industrial hygiene shall teach the sections of the training courses concerning the performance and evaluation of air monitoring programs and the design and implementation of respiratory protection programs. The department does not require that the instructor hold a degree in industrial hygiene, but the individual must provide documentation and written explanation of experience and training.
- C. An individual who is a Missouricertified supervisor, and who has sufficient training and work experience to effectively present the assigned subject matter, shall teach the hands-on training sections of all courses.
- D. An individual who teaches the portions of the project designer's course involving heating, ventilation and air conditioning (HVAC) systems, must be a licensed architect, a licensed engineer or must provide documentation of training and at least five (5) years' experience in the field.
- 5. The course provider must administer and monitor all course examinations. The course provider assumes responsibility for the security of exam contents and shall ensure that the participant passes the exam on his/her own merit. Minimum security measures for the written exams include ample space between participants, absence of written materials other than the examination and supervision of the exam by course provider.
- 6. When the provider offers training on short notice, the training provider shall notify the department as soon as possible but no later than two (2) days prior to commencement of that training.
- 7. When the provider cancels the course, the training provider should notify the department at the same time s/he notifies course participants, and shall follow-up with written notification.
- 8. When rules, policies, or procedures change, the training provider must update the initial and refresher courses. The training provider must notify the department as soon as s/he makes the changes.
- 9. The department may withdraw accreditation from providers who fail to accurately portray their Missouri accreditation in advertisements, who fail to ensure security of examinations, who fail to ensure that each student passes the exam on his/her own merit, or who issue improper certificates.



- 10. Training course providers must notify the department of any changes in training course content or instructors. Training course providers must submit resumés of all new instructors to the department as soon as substitutions or additions are made.
- 11. The department may revoke or suspend accreditation of any course subject to this rule if alterations in the course cause it to fail the department's accreditation criteria.
- 12. Training providers shall have thirty (30) days to correct identified deficiencies in training course(s) before the department revokes accreditation.
- (E) Business Exemptions. The department may exempt a person from registration, certification, and certain notification requirements provided the person conducts asbestos projects solely at the person's own place(s) of business as part of normal operations in the facility and the person is also subject to the requirements and applicable standards of the EPA and United States Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101. The person shall submit an application for exemption to the department on the department-supplied form. This exemption shall not apply to asbestos contractors, to those subject to the requirements of AHERA, and to those persons who provide a service to the public in their place(s) of business as the economic foundation of the facility. These shall include, but not be limited to, child daycare centers, restaurants, nursing homes, retail outlets, medical care facilities, hotels, and theaters. The department shall review the exemption application within one hundred eighty (180) days. State-exempted business entities shall comply with all federal air sampling requirements for planned renovation operations.
 - 1. Training course requirements.
- A. The person shall fill out the department-supplied form describing training provided to employees and an explanation of how the training meets the applicable OSHA and EPA standards.
- B. The person shall notify the department two (2) weeks before the person conducts training programs. This notification shall include the course title, start-up date, location, and course instructor(s).
- C. If the person cancels the course, the person shall notify the department at the same time the person notifies course participants. The person shall follow up with written notification to the department.
 - D. When regulations, policies, or

- procedures change, the person must update the initial and refresher courses. The person must notify the department as soon as the person makes the changes.
- E. When the person conducts handson training, the ratio of students to instructors shall not exceed ten-to-one (10:1).
- F. The person must allow representative(s) of the department to attend the training course for purposes of determining compliance with this rule.
- G. Exempted persons shall submit to the director changes in curricula, instructors, and other significant revisions to the training program as they occur. The person must submit resumés of all new instructors to the department as soon as substitutions or additions are made.
- H. The department may revoke or suspend an exemption if on-site inspection indicates that the training fails the exemption requirements. These include, but are not limited to, a decrease in course length, a change in course content or use of different instructors than those indicated in the application. The department, in writing, shall notify the person responsible for the training of deficiencies. The person shall have thirty (30) days to correct the deficiencies before the department issues final written notice of exemption withdrawal.
- 2. If the department finds an exemption application deficient, the person has sixty (60) days to correct the deficiencies. If, within sixty (60) days, the person fails to provide the department with the required information, the department may deny approval of the exemption.
- 3. The person shall submit a fee of two hundred fifty dollars (\$250) with the application for exemption. This is a nonrefundable one (1)-time fee.
- (F) All information required under this rule must be submitted on the appropriate forms and contain accurate, legible information. Failure to provide the required information, failure to submit legible information, submission of false information or failure to provide complete information as required, shall be a violation of this rule and may result in the director's denial or revocation of the forms provided.
- (G) After the effective date of this rule, any revision to the department-supplied forms will be presented to the regulated community for a forty-five (45)-day comment period.

- (4) Reporting and Record Keeping. (Not Applicable)
- (5) Test Methods. (Not Applicable)

AUTHORITY: section 643.225, RSMo Supp. 2013.* Original rule filed Dec. 14, 1992, effective Sept. 9, 1993. Emergency amendment filed July 26, 1994, effective Aug. 5, 1994, expired Dec. 2, 1994. Emergency amendment filed Nov. 15, 1994, effective Dec. 2, 1994, expired March 31, 1995. Amended: Filed Aug. 1, 1994, effective March 30, 1995. Amended: Filed Jan. 12, 2004, effective Sept. 30, 2004. Amended: Filed June 7, 2007, effective Jan. 30, 2008. Amended: Filed July 14, 2015, effective Feb. 29, 2016.

*Original authority: 643.225, RSMo 1989, amended 2011, 2012.

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

(Rescinded November 30, 2015)

AUTHORITY: section 643.050, RSMo Supp. 2011. Original rule filed Jan. 19, 1996, effective Aug. 30, 1996. Amended: Filed Sept. 29, 2003, effective May 30, 2004. Amended: Filed June 26, 2007, effective Feb. 29, 2008. Amended: Filed Dec. 16, 2008, effective Sept. 30, 2009. Amended: Filed Jan. 31, 2012, effective Sept. 30, 2012. Rescinded: Filed April 10, 2015, effective Nov. 30, 2015.

10 CSR 10-6.261 Control of Sulfur Dioxide Emissions

PURPOSE: This rule establishes requirements for emission units emitting sulfur dioxide (SO₂). These requirements are necessary to comply with the one (1)-hour SO₂ National Ambient Air Quality Standard (NAAQS) and to maintain existing SO₂ regulatory requirements previously found in 10 CSR 10-6.260 that were in place prior to the establishment of the one (1)-hour SO₂ NAAQS. The rule consolidates, streamlines, and updates existing regulatory requirements in accordance with 536.175, RSMo. The evidence supporting the need for this proposed rulemaking, per 536.016, RSMo, is a June 22, 2010, Federal Register rule that established a new one (1)-hour SO₂ standard and an August 5, 2013, Federal Register rule that established one (1)-hour SO₂ nonattainment areas.



- (1) Applicability. This rule applies to any source that emits sulfur dioxide (SO₂). The following exceptions apply to any source not listed in Table I of this rule. Upon request of the director, owners or operators must furnish the director information to confirm that an exception criterion is met.
- (A) Individual units fueled exclusively with natural gas (as defined in 40 CFR 72.2) or liquefied petroleum gas as defined by American Society for Testing and Materials (ASTM) International or any combination of these fuels as of December 31, 2016;
- (B) Individual indirect heating units with a rated capacity less than or equal to three hundred fifty thousand British thermal units (350,000 Btus) per hour actual heat input; or
- (C) Individual units subject to a more restrictive SO₂ emission limit or more restrictive fuel sulfur content limit under
 - 1. 10 CSR 10-6.070; or
 - 2. Any federally enforceable permit.
- (2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.
- (3) General Provisions.
- (A) SO_2 Emission Limits. No later than January 1, 2017, owners or operators of sources and units listed in Table I of this rule must limit their SO_2 emissions as specified. As of the effective date of this rule, owners or operators of sources listed in Table II of this rule must limit their SO_2 emissions as specified.



Table I – Sources with SO₂ emission limits necessary to address the one (1)-hour SO₂ National Ambient Air Quality Standard*

Source	Source ID	Emission Limit per Source/Unit (Pounds SO ₂ per Hour)	Averaging Time
Ameren Missouri	0710003	40,837	24-hour
— Labadie Energy Center			block average
Ameren Missouri	1890010	7,371	24-hour
— Meramee Energy			block average
Center			
Ameren Missouri	0990016	13,600	24-hour
Rush Island Energy			block average
Center	····		
Independence Power and	0950050		
Light — Blue Valley			
Station			
Unit 1		Natural gas	N.A.
Unit 2		Natural gas	N.A.
Unit 3		Natural gas	N.A.
Kansas City Power and	0950022		
Light Co. — Hawthorn			
Station			
Boiler #5		785	30-day rolling
Combustion turbine 7		Natural gas	N.A.
Combustion turbine 8		Natural gas	N.A.
Combustion turbine 9	A WATER TO THE TOTAL TOTAL TO THE TOTAL TO T	Natural gas	N.A.
Kansas City Power and	0950031		
Light Co Sibley			
Generating Station		1.460.17	20.1.11
Boiler #1		1,468.17	30-day rolling
Boiler #2		1,447.01	30-day rolling
Boiler #3	005000	10,632.02	30-day rolling
Veolia Energy Kansas	0950021		}
City Inc. — Grand Ave.			
Station		0.5	1 1
Boiler 1A		0.5	1 hour
Boiler 6 & 8		351.8	1 hour
Boiler 7		0.5	l hour

^{*}Any Table I source/unit fueled by coal, diesel, or fuel oil shall require an SO₂ Continuous Emission Monitoring System (CEMS) and owners or operators must follow all applicable requirements per subparagraph (3)(E)1.B. of this rule. Any source/unit that is fueled by natural gas (or changes fuels to natural gas no later than January 1, 2017) shall no longer require SO₂ CEMS for such units beginning with the completion date of the fuel change to natural gas.



Table II - Sources s	subject to SO ₂	emission limits in	ı place prior to	2010
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Source	Source ID	Emission Limit per Source (Pounds SO ₂ per Million Btus Actual Heat Input)	Averaging Time
Associated Electric Coop, Inc. — Chamois Plant	1510002	6.7	3 hours
Empire District Electric Company — Asbury Plant	0970001	12.0	3 hours
New Madrid Power Plant — Marston	1430004	10.0	3 hours
Thomas Hill Energy Center Power Division — Thomas Hill	1750001	8.0	3 hours
University of Missouri (MU) Columbia Power Plant	0190004	8.0	3 hours
Kansas City Power and Light Co. — Montrose Generating Station	0830001	3.9	24 hours
Ameren Missouri — Sioux Plant	1830001	4.8	Daily average, 00:01 to 24:00
Doe Run Company — Buick Resource Recycling Facility	0930009	8,650 pounds SO ₂ /hr	1-hour test repeated 3 times

- (B) Owners or operators of indirect heating sources with a total capacity, excluding exempt units, greater than three hundred fifty thousand British thermal units (350,000 Btus) per hour actual heat input must limit their SO_2 emissions as follows:
- 1. For sources located in Missouri, other than in Franklin, Jefferson, St. Louis, St. Charles Counties, or City of St. Louis, no more than eight pounds (8 lbs.) of SO₂ per million Btus actual heat input averaged on any consecutive three (3)-hour time period unless that source is listed in Table I or II of this rule; and
- 2. For sources located in Franklin, Jefferson, St. Louis, St. Charles Counties, or

City of St. Louis, no more than two and threetenths pounds (2.3 lbs.) of SO₂ per million Btus actual heat input averaged on any consecutive three (3)-hour time period unless—

- A. The source is listed in Table I or II of this rule; or
- B. The source has a total rated capacity of less than two thousand (2,000) million Btus per hour and then the following restrictions apply.
- (I) During the months of October, November, December, January, February, and March of every year, no person shall burn or permit the burning of any coal containing more than two percent (2%) sulfur or of any fuel oil containing more than two percent

(2%) sulfur. Otherwise, no person shall burn or permit the burning of any coal or fuel oil containing more than four percent (4%) sulfur.

- (II) Part (3)(B)2.B.(I) of this rule shall not apply to any source if it can be shown that emissions of SO_2 from the source into the atmosphere will not exceed two and three-tenths pounds (2.3 lbs.) per million Btus actual heat input to the source.
- (C) Owners or operators of sources and units not covered under subsection (3)(A) or (3)(B) of this rule must limit the fuel sulfur content as specified below.

Source or unit	Liquid fuel sulfur content in parts per million (ppm) sulfur		
	Residual	Distillate	
New	8,509	8,812	
Existing	34,036	35,249	

- (D) No later than January 1, 2017, owners or operators of sources subject to this rule in Jackson and Jefferson Counties must accept for delivery only ultra-low sulfur distillate fuel oil with a maximum fuel sulfur content of fifteen (15) ppm for use in unit(s) fueled, in whole or in part, by diesel, No. 1 fuel oil and/or No. 2 fuel oil.
- (E) Compliance Determination. Compliance must be determined as follows:
- 1. For sources and/or units listed in Table I of this rule, SO₂ Continuous Emission Monitoring System (CEMS) data.
- A. SO₂ CEMS are not required for the following cases:
- (I) Units fueled exclusively by natural gas and not using any secondary fuel; or
- (II) Units fueled by natural gas and only using fuel oil for less than forty-eight (48) hours annually and only for qualifying situations (e.g., testing, maintenance, or operator training). The forty-eight (48)-hour annual limit for the use of fuel oil as a secondary fuel shall not include qualifying curtailment events and compliance must be demonstrated using paragraph (3)(D)3. of this rule;
- B. SO₂ CEMS must follow the requirements in 40 CFR 75 and/or 40 CFR 60, Appendices B and F, as incorporated by reference in subsection (5)(B) of this rule;
- For sources listed in Table II of this rule already subject to a SO₂ CEMS requirement, SO₂ CEMS data; and
- 3. For sources subject to subsection (3)(B) or (3)(C) of this rule not required to use SO₂ CEMS for compliance and for sources listed in Table II of this rule not required to use SO₂ CEMS for compliance—
 - A. Fuel delivery records;
 - B. Fuel sampling and analysis;
 - C. Performance tests;

or

- D. Continuous emission monitoring;
- E. Other compliance methods approved by the staff director and the U.S. Environmental Protection Agency and incorporated into the state implementation plan.
- (4) Reporting and Record Keeping.

- (A) Owners or operators of all sources subject to this rule must—
- 1. Report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the staff director for each calendar quarter within thirty (30) days following the end of the quarter. In all cases, the notification must be a written report and must include, at a minimum, the following:
 - A. Name and location of source;
- B. Name and telephone number of person responsible for the source;
- C. Identity and description of the equipment involved;
- D. Time and duration of the period of SO₂ excess emissions;
 - E. Type of activity;
- F. Estimate of the magnitude of the SO₂ excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude;
- $\rm G.$ Measures taken to mitigate the extent and duration of the $\rm SO_2$ excess emissions; and
- H. Measures taken to remedy the situation which caused the SO₂ excess emissions and the measures taken or planned to prevent the recurrence of these situations;
- Maintain a list of modifications to the source's operating procedures or other routine procedures instituted to prevent or minimize the occurrence of any excess SO₂ emissions;
- 3. Maintain a record of data, calculations, results, records, and reports from any SO₂ emissions performance test, SO₂ continuous emission monitoring, fuel deliveries, and/or fuel sampling tests; and
- 4. Maintain a record of any applicable SO₂ monitoring data, performance evaluations, calibration checks, monitoring system and device performance tests, and any adjustments and maintenance performed on these systems or devices.
- (B) Owners or operators of sources using SO₂ CEMS for compliance must also—

- 1. If SO₂ CEMS is already used to satisfy other requirements (other than only to demonstrate compliance with this rule), continue to follow all correlating SO₂ CEMS requirements; or
- 2. If SO₂ CEMS is used only to demonstrate compliance with this rule, the SO₂ CEMS and any necessary auxiliary monitoring equipment must follow the requirements in subsection (5)(B) of this rule.
- (C) Owners or operators of sources using fuel delivery records for compliance must also maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable to comply with the requirements of this rule:
- 1. The name, address, and contact information of the fuel supplier;
- 2. The type of fuel (bituminous or subbituminous coal, diesel, #2 fuel oil, etc.);
- 3. The moisture content of the coal (if applicable);
- 4. The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
 - 5. The heating value of the fuel.
- (D) Owners or operators of sources using fuel sampling and analysis for compliance must also follow the requirements in subsection (5)(D) of this rule.
- (E) Owners or operators of sources using SO₂ emissions performance tests for compliance must also follow the requirements in subsection (5)(A) of this rule.
- (F) All required reports and records must be retained on-site for a minimum of five (5) years and made available within five (5) business days upon written or electronic request by the director.
- (G) Owners or operators of sources subject to this rule must furnish the director all data necessary to determine compliance status.
- (5) Test Methods.
- (A) Owners or operators of sources must use one (1) or more of the following test methods contained in 40 CFR 60, Appendix A, published as of July 1, 2014, 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, to determine compliance with SO_2 emission limits in this rule. This rule does not incorporate any subsequent amendments or additions.



- 1. Method 1: Sample and velocity traverses for stationary sources;
- 2. Method 2: Determination of stack gas velocity and volumetric flow rate (Type S pitot tube);
- 3. Method 3: Gas analysis for the determination of dry molecular weight;
- 4. Method 4: Determination of moisture content in stack gases;
- 5. Method 6: Determination of Sulfur Dioxide Emissions from Stationary Sources;
- Method 6A: Determination of Sulfur Dioxide, Moisture, and Carbon Dioxide from Fuel Combustion Sources:
- 7. Method 6B: Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions from Fossil Fuel Combustion Sources;
- 8. Method 6C: Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental Analyzer Procedure); and/or
- 9. Method 8: Determination of sulfuric acid mist and sulfur dioxide emissions from stationary sources.
- (B) Owners or operators of sources using an SO₂ CEMS for demonstrating compliance with this rule must follow the requirements in 40 CFR 75 and/or 40 CFR 60, Appendices B and F, published as of July 1, 2014, which are 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.
- (C) Owners or operators of secondary lead smelters must operate an SO₂ CEMS as follows:
- 1. The SO₂ CEMS must be certified by the owner or operator in accordance with 40 CFR 60 Appendix B, Performance Specification 2 and Section 60.13 as is pertinent to SO₂ continuous emission monitors as adopted by reference in 10 CSR 10-6.070.
- 2. The span of SO_2 continuous emission monitors must be set at an SO_2 concentration of one-fifth percent (0.20%) by volume.
- (D) Owners or operators of sources must use fuel sampling and analysis to determine sulfur weight percent, or equivalent, of fuel(s) used to operate fuel emission sources and/or units regulated by this rule in accordance with 10 CSR 10-6.040.
- (E) The heating value of the fuel must be determined as specified in 10 CSR 10-6.040. The actual heat input must be determined by multiplying the heating value of the fuel by the amount of fuel burned during the source

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test period.

(F) Owners or operators of sources may use an alternative test method that provides results at least the same accuracy and precision as the replaced method, and is approved in advance by the staff director, the EPA, and incorporated into the state implementation plan.

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed April 10, 2015, effective Nov. 30, 2015.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.270 Acid Rain Source Permits Required

PURPOSE: This rule establishes certain general provisions and operating permit program requirements for affected sources and affected units under the federal Acid Rain Program.

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

- (1) Definitions—Terms and phrases used in this rule may be found in 10 CSR 10-6.020 Definitions and Common Reference Tables.
- (2) The Missouri Department of Natural Resources hereby adopts and incorporates by reference the provisions of 40 CFR part 72, then 40 CFR part 73, 40 CFR part 75, 40 CFR part 76, 40 CFR part 77, and 40 CFR part 78 as in effect in the *Code of Federal Regulations* on or after July 1993, for the purpose of establishing certain general provisions and operating permit program requirements for affected sources and affected units under the federal Acid Rain Program.
- (3) If the provisions or requirements of 40 CFR part 72 and 40 CFR part 75 conflict with or are not included in Missouri state rule

10 CSR 10-6.065 Operating Permits Required, the parts 72 and 75, provisions and requirements shall take precedence.

AUTHORITY: section 643.050, RSMo Supp. 1997.* Original rule filed June 2, 1994, effective Dec. 30, 1994. Amended: Filed Oct. 9, 1998, effective Aug. 30, 1999.

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

10 CSR 10-6.280 Compliance Monitoring Usage

PURPOSE: This rule is necessary to meet the federal Clean Air Act requirements for alternate compliance certification methods and to enhance the enforceability of the state implementation plan. This rule does this by establishing a methodology for identifying acceptable testing, monitoring or information.

- (1) Applicability. This regulation applies to air pollution sources throughout Missouri.
- (2) Definitions. Terms and phrases used in this rule may be found in 10 CSR 10-6.020 Definitions and Common Reference Tables.
- (3) General Provisions.
- (A) Compliance Certifications. Regardless of any other provision in any plan approved by the administrator, for the purpose of submission of compliance certificates the owner or operator is not prohibited from using the following in addition to any specified compliance methods:
- 1. Monitoring methods outlined in 40 CFR part 64;
- 2. Monitoring method(s) approved for the source pursuant to 10 CSR 10-6.065 Operating Permits, and incorporated into an operating permit; and
- 3. Any other monitoring methods approved by the director.
- (B) Enforcement. Regardless of any other provision in the state implementation plan, any credible evidence may be used for the purpose of establishing whether a source or facility has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
- 1. Monitoring methods outlined in 40 CFR part 64;
- 2. A monitoring method approved for the source pursuant to 10 CSR 10-6.065

Operating Permits, and incorporated into an operating permit; and

- 3. Compliance test methods specified in the rule cited as the authority for the emission limitations.
- (4) Reporting and Record Keeping. (Not Applicable)
- (5) Test Methods. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- (A) Applicable monitoring or testing methods, cited in: 10 CSR 10-6.030 Sampling Methods for Air Pollution Sources; 10 CSR 10-6.040 Reference Methods; 10 CSR 10-6.070 New Source Performance Standards; and 10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants; or
- (B) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method in subsection (3)(B) or subsection (5)(A).

AUTHORITY: section 643.050, RSMo 2000.* Original rule filed June 2, 1994, effective Dec. 30, 1994. Amended: Filed July 12, 2001, effective March 30, 2002.

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

10 CSR 10-6.300 Conformity of General Federal Actions to State Implementation Plans

PURPOSE: This rule implements section 176(c) of the Clean Air Act, as amended (42 U.S.C. 7401-7671q.), and regulations under 40 CFR 93, Subpart B, with respect to the conformity of general federal actions to the applicable implementation plan. Under those authorities, no department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan. This rule sets forth policy, criteria, and procedures for demonstrating and assuring conformity of such actions to the applicable implementation plan. This rule applies to all areas in the state of Missouri which are designated as nonattainment or maintenance for any criteria pollutant or standard for which there is a national ambient air quality standard.

- (1) Applicability.
- (A) Conformity determinations for federal actions related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.) must meet the procedures and criteria of 10 CSR 10-2.390 and 10 CSR 10-5.480 in lieu of the procedures set forth in this rule.
- (B) For federal actions not covered by subsection (1)(A) of this rule, a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a federal action would equal or exceed any of the rates in paragraph (1)(B)1. or paragraph (1)(B)2. of this rule.
- 1. For purposes of subsection (1)(B) of this rule, the following rates apply in nonattainment areas (NAAs):

	Tons/Year
Ozone (VOC or NO_x):	
Serious NAAs	50
Severe NAAs	25
Extreme NAAs	10
Other ozone NAAs outside an ozone transport region	100
Other ozone NAAs inside an ozone transport region:	
VOC	50
NO_x	100
Carbon monoxide: All NAAs	100
SO ₂ or NO ₂ : All NAAs	100
PM ₁₀ :	
Moderate NAAs	100
Serious NAAs	70
PM ₂₅ :	
Direct emissions	100
SO_2	100
NO _x (unless determined not to be significant precursor)	100
VOC or ammonia (if determined to be significant precursors)	100
Pb: All NAAs	25

2. For purposes of subsection (1)(B) of this rule, the following rates apply in maintenance areas:

	Tons/Year
Ozone (NO _x , SO ₂ , or NO ₂):	
All Maintenance Areas	100
Ozone (VOCs):	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon monoxide: All Maintenance Areas	100
PM ₁₀ : All Maintenance Areas	100
PM _{2.5} :	
Direct emissions	100
SO ₂	100
NO _x (unless determined not to be significant precursor)	100
VOC or ammonia (if determined to be significant precursors)	100
Pb: All Maintenance Areas	25

- (C) The requirements of this rule shall not apply to the following federal actions-
- 1. Actions where the total of direct and indirect emissions are below the emissions levels specified in subsection (1)(B) of this rule;
- 2. The following actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:
- A. Judicial and legislative proceedings;
- B. Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted;
- C. Rulemaking and policy development and issuance;
- D. Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities:
- E. Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law enforcement personnel;
- F. Administrative actions such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties, and fees;
- G. Routine, recurring transportation of material and personnel;
- H. Routine movement of mobile assets, such as ships and aircraft, in-home port reassignments, and stations (when no new support facilities or personnel are required) to perform as operational groups or for repair or overhaul;
- I. Maintenance dredging and debris disposal where no new depths are required,



applicable permits are secured, and disposal will be at an approved disposal site;

- J. Actions with respect to existing structures, properties, facilities, and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands; actions such as relocation of personnel, disposition of federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency;
- K. Granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted;
- L. Planning, studies, and provision of technical assistance;
- M. Routine operation of facilities, mobile assets, and equipment;
- N. Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer;
- O. Designation of empowerment zones, enterprise communities, or viticultural areas:
- P. Actions by any of the federal banking agencies or the federal reserve banks, including actions regarding charters, applications, notices, licenses, the supervision or examination of depository institutions or depository institution holding companies, access to the discount window, or the provision of financial services to banking organizations or to any department, agency, or instrumentality of the United States;
- Q. Actions by the Board of Governors of the Federal Reserve System or any federal reserve bank to effect monetary or exchange rate policy;
- R. Actions that implement a foreign-affairs function of the United States;
- S. Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and where the federal agency does not retain con-

- tinuing authority to control emissions associated with the lands, facilities, title, or real properties;
- T. Transfers of real property, including land, facilities, and related personal property from a federal entity to another federal entity and assignments of real property, including land, facilities, and related personal property from a federal entity to another federal entity for subsequent deeding to eligible applicants;
- U. Actions by the Department of the Treasury to effect fiscal policy and to exercise the borrowing authority of the United States; and
- V. Air traffic control activities and adopting approach, departure, and enroute procedures for aircraft operations above the mixing height specified in the applicable State Implementation Plan (SIP) or Tribal Implementation Plan (TIP). Where the applicable SIP or TIP does not specify a mixing height, the federal agency can use the three thousand feet (3,000') above ground level as a default mixing height, unless the agency demonstrates that use of a different mixing height is appropriate because the change in emissions at and above that height caused by the federal action is *de minimis*;
- 3. Actions where the emissions are not reasonably foreseeable, such as the following:
- A. Initial Outer Continental Shelf lease sales which are made on a broad scale and are followed by exploration and development plans on a project level; and
- B. Electric power marketing activities that involve the acquisition, sale, and transmission of electric energy; and
- 4. Actions which implement a decision to conduct or carry out a program that has been found to conform to the applicable implementation plan, such as prescribed burning actions which are consistent with a land management plan that has been found to conform to the applicable implementation plan.
- (D) Notwithstanding the other requirements of this rule, a conformity determination is not required for the following federal actions (or portion thereof):
- 1. The portion of an action that includes major or minor new or modified stationary sources that require a permit under the new source review (NSR) program (section 110 (a)(2)(c) and section 173 of the Clean Air Act (CAA)) or the prevention of significant deterioration (PSD) program (Title I, part C of the CAA);

- 2. Actions in response to emergencies which are typically commenced on the order of hours or days after the emergency or disaster and, if applicable, which meet the requirements of subsection (1)(E) of this rule;
- 3. Research, investigations, studies, demonstrations, or training other than those exempted under paragraph (1)(C)2. of this rule, where no environmental detriment is incurred or the particular action furthers air quality research, as determined by the department;
- 4. Alteration and additions of existing structures as specifically required by new or existing applicable environmental legislation or environmental regulations (for example, hush houses for aircraft engines and scrubbers for air emissions); and
- 5. Direct emissions from remedial and removal actions carried out under CERCLA and associated regulations to the extent such emissions either comply with the substantive requirements of the PSD/NSR permitting program or are exempted from other environmental regulation under the provisions of CERCLA and applicable regulations issued under CERCLA.
- (E) Federal actions which are part of a continuing response to an emergency or disaster under paragraph (1)(D)2. of this rule and which are to be taken more than six (6) months after the commencement of the response to the emergency or disaster under paragraph (1)(D)2. of this rule are exempt from the requirements of this rule only if—
- 1. The federal agency taking the actions makes a written determination that, for a specified period not to exceed an additional six (6) months, it is impractical to prepare the conformity analyses which would otherwise be required and the actions cannot be delayed due to overriding concerns for public health and welfare, national security interests, and foreign policy commitments; or
- 2. For actions which are to be taken after those actions covered by paragraph (1)(E)1. of this rule, the federal agency makes a new determination as provided in paragraph (1)(E)1. of this rule and—
- A. Provides a draft copy of the written determinations required to affected U.S. Environmental Protection Agency (EPA) regional office(s), the affected state(s) and/or air pollution control agencies, and any federal recognized Indian tribal government in the nonattainment or maintenance area. Those organizations must be allowed fifteen (15) days

from the beginning of the extension period to comment on the draft determination; and

- B. Within thirty (30) days after making the determination, publishes a notice of the determination by placing a prominent advertisement in a daily newspaper of general circulation in the area affected by the action; and
- 3. If additional actions are necessary in response to an emergency or disaster under paragraph (1)(D)2. of this rule beyond the specified time period in paragraph (1)(E)2. of this rule, a federal agency can make a new written determination as described in paragraph (1)(E)2. of this rule for as many six (6)-month periods as needed, but in no case shall this exemption extend beyond three (3) six (6)-month periods except where an agency provides information to EPA and the state or tribe stating that the conditions that gave rise to the emergency exemption continue to exist and how such conditions effectively prevent the agency from conducting a conformity evaluation.
- (F) Notwithstanding other requirements of this rule, actions specified by individual federal agencies that have met the criteria set forth in paragraphs (1)(G)1. through (1)(G)3. of this rule and the procedures set forth in subsection (1)(H) of this rule are presumed to conform, except as provided in subsection (1)(J) of this rule. Actions specified by individual federal agencies as presumed to conform may not be used in combination with one another when the total direct and indirect emissions from the combination of actions would equal or exceed any of the rates specified in paragraph (1)(B)1. or (1)(B)2. of this rule.
- (G) The federal agency must meet the criteria for establishing activities that are presumed to conform by fulfilling the requirements set forth in paragraphs (1)(G)1. through (1)(G)3. of this rule.
- 1. The federal agency must clearly demonstrate using methods consistent with this rule that the total of direct and indirect emissions from the type of activities which would be presumed to conform would not—
- A. Cause or contribute to any new violation of any standard in any area;
- B. Interfere with provisions in the applicable implementation plan for maintenance of any standard;
- C. Increase the frequency or severity of any existing violation of any standard in any area; or

- D. Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including, where applicable, emission levels specified in the applicable implementation plan for purposes of—
- (I) A demonstration of reasonable further progress;
- (II) A demonstration of attainment;
 - (III) A maintenance plan.
- 2. The federal agency must provide documentation that the total of direct and indirect emissions from such future actions would be below the emission rates for a conformity determination that are established in subsection (1)(B) of this rule, based, for example, on similar actions taken over recent years.
- 3. The federal agency must clearly demonstrate that the emissions from the type or category of actions and the amount of emissions from the action are included in the applicable SIP and the state, local, or tribal air quality agencies responsible for the SIP(s) or TIP(s) provide written concurrence that the emissions from the actions along with all other expected emissions in the area will not exceed the emission budget in the SIP.
- (H) In addition to meeting the criteria for establishing exemptions set forth in paragraphs (1)(G)1. through (1)(G)3. of this rule, the following procedures must also be complied with to presume that activities will conform:
- 1. The federal agency must identify through publication in the *Federal Register* its list of proposed activities that are presumed to conform and the basis for the presumptions. The notice must clearly identify the type and size of the action that would be presumed to conform and provide criteria for determining if the type and size of action qualifies it for the presumption;
- 2. The federal agency must notify the appropriate EPA regional office(s), state, local, and tribal air quality agencies and, where applicable, the agency designated under section 174 of the CAA and the Metropolitan Planning Organization (MPO) and provide at least thirty (30) days for the public to comment on the list of proposed activities presumed to conform. If the presumed-to-conform action has regional or national application (e.g., the action will cause emission increases in excess of the *de minimis* levels identified in subsection (1)(B) of this rule in more than one (1) of EPA's regions), the federal agency, as an alternative

- to sending it to EPA regional offices, can send the draft conformity determination to U.S. EPA, Office of Air Quality Planning and Standards;
- 3. The federal agency must document its responses to all the comments received and make the comments, responses, and final list of activities available to the public upon request; and
- 4. The federal agency must publish the final list of such activities in the *Federal Register*
- (I) Emissions from the following actions are presumed to conform:
- 1. Actions at installations with facility-wide emission budgets meeting the requirements in subsection (3)(H) of this rule provided that the state or tribe has included the emission budget in the EPA-approved SIP and the emissions from the action along with all other emissions from the installation will not exceed the facility-wide emission budget;
- 2. Prescribed fires conducted in accordance with a smoke management program which meets the requirements of EPA's Interim Air Quality Policy on Wildland and Prescribed Fires or an equivalent replacement EPA policy; and
- Actions that the state or tribe identifies in the EPA-approved SIP or TIP as presumed to conform.
- (J) Even though an action would otherwise be presumed to conform under subsection (1)(F) or (1)(I) of this rule, an action shall not be presumed to conform and the requirements of section (4), subsection (1)(L), subsections (3)(A) through (3)(G), and subsections (3)(I) through (3)(K) of this rule shall apply to the action if EPA or a third party shows that the action would—
- 1. Cause or contribute to any new violation of any standard in any area;
- 2. Interfere with provisions in the applicable SIP or TIP for maintenance of any standard:
- 3. Increase the frequency or severity of any existing violation of any standard in any area: or
- 4. Delay timely attainment of any standard or any required interim emissions reductions or other milestones in any area including, where applicable, emission levels specified in the applicable SIP or TIP for purposes of—
- A. A demonstration of reasonable further progress;
 - B. A demonstration of attainment; or
 - C. A maintenance plan.



- (K) The provisions of this rule shall apply in all nonattainment and maintenance areas except conformity requirements for newly-designated nonattainment areas are not applicable until one (1) year after the effective date of the final nonattainment designation for each National Ambient Air Quality Standards (NAAQS) and pollutant in accordance with section 176(c)(6) of the Act.
- (L) State Implementation Plan Revision. The federal conformity rules under 40 CFR 51, Subpart W and 40 CFR 93, Subpart B, in addition to any existing applicable state requirements, establish the conformity criteria and procedures necessary to meet the requirements of Clean Air Act section 176(c) until such time as this rule is approved by EPA as an implementation plan revision. Following EPA approval of this rule as a revision to the applicable implementation plan (or a portion thereof), the approved (or approved portion of the) state criteria and procedures will govern conformity determinations and the federal conformity regulations contained in 40 CFR 93 will apply only for the portion, if any, of the state's conformity provisions that is not approved by EPA. In addition, any previously-applicable implementation plan requirements relating to conformity remain enforceable until the state revises its applicable implementation plan to specifically remove them and that revision is approved by EPA.
- (2) Definitions. Terms used in this rule shall have the meaning given to them by the CAA, EPA regulations, and 10 CSR 10-6.020, in that order of priority.

(3) General Provisions.

(A) Prohibition.

- 1. No department, agency, or instrumentality of the federal government shall engage in, support in any way, or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan.
- 2. A federal agency must make a determination that a federal action conforms to the applicable implementation plan in accordance with the requirements of this rule before the action is taken.
- 3. Notwithstanding any provision of this rule, a determination that an action is in conformity with the applicable implementation plan does not exempt the action from any other requirements of the applicable implementation plan, the National Environmental Policy Act (NEPA), or the CAA.

- 4. If an action would result in emissions originating in more than one (1) nonattainment or maintenance area, the conformity must be evaluated for each area separately.
- (B) Federal Agency Conformity Responsibility. Any department, agency, or instrumentality of the federal government taking an action subject to this rule must make its own conformity determination consistent with the requirements of this rule. In making its conformity determination, a federal agency must follow the requirements in section (4), subsections (3)(C) through (3)(G), and subsections (3)(I) through (3)(L) of this rule and must consider comments from any interested parties. Where multiple federal agencies have jurisdiction for various aspects of a project, a federal agency may choose to adopt the analysis of another federal agency or develop its own analysis in order to make its conformity determination.
 - (C) Public Participation.
- 1. Upon request by any person regarding a specific federal action, a federal agency must make available, subject to the limitation in paragraph (3)(C)5. of this rule, for review its draft conformity determination under subsection (3)(B) of this rule with supporting materials which describe the analytical methods and conclusions relied upon in making the applicability analysis and draft conformity determination.
- 2. A federal agency must make public its draft conformity determination under subsection (3)(B) of this rule by placing a notice by prominent advertisement in a daily newspaper of general circulation in the areas affected by the action and by providing thirty (30) days for written public comment prior to taking any formal action on the draft determination. This comment period may be concurrent with any other public involvement, such as occurs in the NEPA process. If the action has multi-regional or national impacts (e.g., the action will cause emission increases in excess of the de minimis levels identified in subsection (1)(B) of this rule in three (3) or more of EPA's regions), the federal agency, as an alternative to publishing separate notices, can publish a notice in the Federal Register.
- 3. A federal agency must document its response to all the comments received on its draft conformity determination under subsection (3)(B) of this rule and make the comments and responses available, subject to the limitation in paragraph (3)(C)5. of this rule, upon request by any person regarding a specific federal action, within thirty (30) days of the final

conformity determination.

- 4. A federal agency must make public its final conformity determination under subsection (3)(B) of this rule for a federal action by placing a notice by prominent advertisement in a daily newspaper of general circulation in the areas affected by the action within thirty (30) days of the final conformity determination. If the action would have multi-regional or national impacts, the federal agency, as an alternative, can publish the notice in the *Federal Register*.
- 5. The draft and final conformity determination shall exclude any restricted information or confidential business information. The disclosure of restricted information and confidential business information shall be controlled by the applicable laws, regulations, or executive orders concerning the release of such materials.
 - (D) Re-evaluation of Conformity.
- 1. Once a conformity determination is completed by a federal agency, that determination is not required to be re-evaluated if the agency has maintained a continuous program to implement the action; the determination has not lapsed as specified in paragraph (3)(D)2. of this rule; or any modification to the action does not result in an increase in emissions above the levels as specified in subsection (1)(B) of this rule. If a conformity determination is not required for the action at the time NEPA analysis is completed, the date of the finding of no significant impact (FONSI) for an Environmental Assessment, a record of decision (ROD) for an Environmental Impact Statement, or a categorical exclusion determination can be used as a substitute date for the conformity determination date.
- 2. The conformity status of a federal action automatically lapses five (5) years from the date a final conformity determination is reported under section (4) of this rule, unless the federal action has been completed or a continuous program to implement the federal action has commenced.
- 3. Ongoing federal activities at a given site showing continuous progress are not new actions and do not require periodic redeterminations so long as such activities are within the scope of the final conformity determination reported under section (4) of this rule.
- 4. If the federal agency originally determined through the applicability analysis that a conformity determination was not necessary because the emissions for the action were below the limits in subsection (1)(B) of this rule and changes to the action would result in

the total emissions from the action being above the limits in subsection (1)(B) of this rule, then the federal agency must make a conformity determination.

- (E) Criteria for Determining Conformity of General Federal Actions.
- 1. An action required under section (1) of this rule, to have a conformity determination for a specific pollutant, will be determined to conform to the applicable implementation plan if, for each pollutant that exceeds the rates in subsection (1)(B) of this rule, or otherwise requires a conformity determination due to the total of direct and indirect emissions from the action, the action meets the requirements of paragraph (3)(E)3. of this rule, and meets any of the following requirements:
- A. For any criteria pollutant or precursor, the total of direct and indirect emissions from the action are specifically identified and accounted for in the applicable SIP attainment or maintenance demonstration or reasonable further progress milestone or in a facility-wide emission budget included in a SIP in accordance with subsection (3)(H) of this rule;
- B. For precursors of ozone, nitrogen dioxide, or particulate matter (PM), the total of direct and indirect emissions from the action are fully offset within the same nonattainment or maintenance area (or nearby area of equal or higher classification provided the emissions from that area contribute to the violations, or have contributed to violations in the past, in the area with the federal action) through a revision to the applicable SIP or a similarly-enforceable measure that effects emission reductions so that there is no net increase in emissions of that pollutant;
- C. For any directly-emitted criteria pollutant, the total of direct and indirect emissions from the action meet the requirements—
- (I) Specified in paragraph (3)(E)2. of this rule, based on area-wide air quality modeling analysis and local air quality modeling analysis; or
- (II) Specified in subparagraph (3)(E)1.E. of this rule and, for local air quality modeling analysis, the requirement of paragraph (3)(E)2. of this rule;
- D. For carbon monoxide or directly emitted PM—
- (I) Where the department determines that an area-wide air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in paragraph (3)(E)2. of this rule, based on local air quality modeling analysis; or
 - (II) Where the department deter-

- mines that an area-wide air quality modeling analysis is appropriate and that a local air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in paragraph (3)(E)2. of this rule, based on area-wide modeling, or meet the requirements of subparagraph (3)(E)1.E. of this rule; or
- E. For ozone or nitrogen dioxide, and for purposes of parts (3)(E)1.C.(II) and (3)(E)1.D.(II) of this rule, each portion of the action or the action as a whole meets any of the following requirements:
- (I) Where EPA has approved a revision to the applicable implementation plan after the area was designated as nonattainment and the state or tribe makes a determination as provided in subpart (3)(E)1.E.(I)(a) of this rule or where the state or tribe makes a commitment as provided in subpart (3)(E)1.E.(I)(b) of this rule.
- (a) The total of direct and indirect emissions from the action (or portion thereof) is determined and documented by the department to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would not exceed the emissions budgets specified in the applicable SIP.
- (b) The total of direct and indirect emissions from the action (or portion thereof) is determined by the department to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would exceed an emissions budget specified in the applicable implementation plan and the department makes a written commitment to EPA which includes the following:
- I. A specific schedule for adoption and submittal of a revision to the applicable implementation plan which would achieve the needed emission reductions prior to the time emissions from the federal action would occur;
- II. Identification of specific measures for incorporation into the applicable implementation plan which would result in a level of emissions which, together with all other emissions in the nonattainment or maintenance area, would not exceed any emissions budget specified in the applicable implementation plan;
- III. A demonstration that all existing applicable implementation plan requirements are being implemented in the area for the pollutants affected by the federal action, and that local authority to implement additional requirements has been fully pursued;
 - IV. A determination that the

- responsible federal agencies have required all reasonable mitigation measures associated with their action; and
- V. Written documentation including all air quality analyses supporting the conformity determination.
- (c) Where a federal agency made a conformity determination based on a state's or tribe's commitment under subpart (3)(E)1.E.(I)(b) of this rule and the state has submitted a SIP or TIP to EPA covering the time period during which the emissions will occur or is scheduled to submit such a SIP or TIP within eighteen (18) months of the conformity determination, the state commitment is automatically deemed a call for a SIP or TIP revision by EPA under section 110(k)(5) of the CAA, effective on the date of the federal conformity determination and requiring response within eighteen (18) months or any shorter time within which the state or tribe commits to revise the applicable SIP;
- (d) Where a federal agency made a conformity determination based on a state or tribal commitment under subpart (3)(E)1.E.(I)(b) of this rule and the state or tribe has not submitted a SIP covering the time period when the emissions will occur or is not scheduled to submit such a SIP within eighteen (18) months of the conformity determination, the state or tribe must, within eighteen (18) months, submit to EPA a revision to the existing SIP committing to include the emissions in the future SIP revision;
- (II) The action (or portion thereof), as determined by the MPO, is specifically included in a current transportation plan and transportation improvement program which have been found to conform to the applicable implementation plan under 10 CSR 10-2.390 or 10 CSR 10-5.480;
- (III) The action (or portion thereof) fully offsets its emissions within the same nonattainment or maintenance area (or nearby area of equal or higher classification provided the emissions from that area contribute to the violations, or have contributed to violations in the past, in the area with the federal action) through a revision to the applicable SIP or an equally-enforceable measure that effects emission reductions equal to or greater than the total of direct and indirect emissions from the action so that there is no net increase in emissions of that pollutant;
- (IV) Where EPA has not approved a revision to the relevant SIP since the area was designated or reclassified, the total of direct and indirect emissions from the action for the future years (described in paragraph (3)(F)4. of this rule) do not increase emissions with respect to the baseline emissions, and—



- (a) The baseline emissions reflect the historical activity levels that occurred in the geographic area affected by the proposed federal action during—
- I. The most current calendar year with a complete emission inventory available before an area is designated unless EPA sets another year;
- II. The emission budget in the applicable SIP; or
- III. The year of the baseline inventory in the PM_{10} applicable SIP; and
- (b) The baseline emissions are the total of direct and indirect emissions calculated for the future years (described in paragraph (3)(F)4. of this rule) using the historic activity levels (described in subpart (3)(E)1.E.(IV)(a) of this rule) and appropriate emission factors for the future years; or
- (V) Where the action involves regional water or wastewater projects, such projects are sized to meet only the needs of population projections that are in the applicable SIP.
- 2. The area-wide and local air quality modeling analyses must—
- A. Meet the requirements in subsection (3)(F) of this rule; and
 - B. Show that the action does not—
- (I) Cause or contribute to any new violation of any standard in any area: or
- (II) Increase the frequency or severity of any existing violation of any standard in any area.
- 3. Notwithstanding any other requirements of this section, an action subject to this rule may not be determined to conform to the applicable implementation plan unless the total of direct and indirect emissions from the action is in compliance or consistent with all relevant requirements and milestones contained in the applicable implementation plan, such as elements identified as part of the reasonable further progress schedules, assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and work practice requirements, and such action is otherwise in compliance with all relevant requirements of the applicable implementation plan.
- 4. Any analyses required under this section must be completed, and any mitigation requirements necessary for a finding of conformity must be identified before the determination of conformity is made.
- (F) Procedures for Conformity Determinations of General Federal Actions.
- 1. The analyses required under this rule must be based on the latest planning assumptions.
- A. All planning assumptions must be derived from the estimates of current and

- future population, employment, travel, and congestion most recently developed by the MPO or other agency authorized to make such estimates, where available.
- B. Any revisions to these estimates used as part of the conformity determination, including projected shifts in geographic location or level of population, employment, travel, and congestion, must be approved by the MPO or other agency authorized to make such estimates for the area.
- 2. The analyses required under this rule must be based on the latest and most accurate emission estimation techniques available as described below, unless such techniques are inappropriate, the federal agency may obtain written approval from the appropriate EPA regional administrator for a modification or substitution, of another technique on a case-by-case basis or, where appropriate, on a generic basis for a specific federal agency program.
- A. For motor vehicle emissions, the most current version of the motor vehicle emissions model specified by EPA and made available for use in the preparation or revision of SIPs in the state must be used for the conformity analysis as specified below—
- (I) The EPA must publish in the *Federal Register* a notice of availability of any new motor vehicle emissions model; and
- (II) A grace period of three (3) months shall apply during which the motor vehicle emissions model previously specified by EPA as the most current version may be used unless EPA announces a longer grace period in the *Federal Register*. Conformity analyses for which the analysis was begun during the grace period or no more than three (3) years before the *Federal Register* notice of availability of the latest emission model may continue to use the previous version of the model specified by EPA.
- B. For non-motor vehicle sources, including stationary and area source emissions, the latest emission factors specified by EPA in the "Compilation of Air Pollutant Emission Factors" (AP-42, http://www.epa.gov/ttn/chiefs/efpac) must be used for the conformity analysis unless more accurate emission data are available, such as actual stack test data from stationary sources which are part of the conformity analysis.
- 3. The air quality modeling analyses required under this rule must be based on the applicable air quality models, databases, and other requirements specified in the most recent version of the "Guideline on Air Quality Models" (40 CFR 51, Appendix W), unless—
- A. The guideline techniques are inappropriate, in which case the model may be

- modified or another model substituted on a case-by-case basis or, where appropriate, on a generic basis for a specific federal agency program; and
- B. Written approval of the EPA regional administrator is obtained for any modification or substitution.
- 4. The analyses required under this rule must be based on the total of direct and indirect emissions from the action and must reflect emission scenarios that are expected to occur under each of the following cases:
- A. The attainment year specified in the SIP or, if the SIP does not specify an attainment year, the latest attainment year possible under the Act;
- B. The last year for which emissions are projected in the maintenance plan;
- C. The year during which the total of direct and indirect emissions from the action is expected to be the greatest on an annual basis; and
- D. Any year for which the applicable SIP specifies an emissions budget.
 - (G) Mitigation of Air Quality Impacts.
- 1. Any measures that are intended to mitigate air quality impacts must be identified (including the identification and quantification of all emission reductions claimed) and the process for implementation (including any necessary funding of such measures and tracking of such emission reductions) and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation.
- 2. Prior to determining that a federal action is in conformity, the federal agency making the conformity determination must obtain written commitments from the appropriate persons or agencies to implement any mitigation measures which are identified as conditions for making conformity determinations
- 3. Persons or agencies voluntarily committing to mitigation measures to facilitate positive conformity determinations must comply with the obligations of such commitments.
- 4. In instances where the federal agency is licensing, permitting, or otherwise approving the action of another governmental or private entity, approval by the federal agency must be conditioned on the other entity meeting the mitigation measures set forth in the conformity determination.
- 5. When necessary because of changed circumstances, mitigation measures may be modified so long as the new mitigation measures continue to support the conformity determination. Any proposed change in the mitigation measures is subject to the reporting

requirements of section (4) of this rule and the public participation requirements of subsection (3)(C) of this rule.

- Written commitments to mitigation measures must be obtained prior to a positive conformity determination and such commitments must be fulfilled.
- 7. After a state or tribe revises its SIP or TIP and EPA approves that SIP revision, any agreements, including mitigation measures, necessary for a conformity determination will be both state or tribal and federally enforceable. Enforceability through the applicable SIP or TIP will apply to all persons who agree to mitigate direct and indirect emissions associated with a federal action for a conformity determination.
- (H) Conformity Evaluation for Federal Installations with Facility-Wide Emission Budgets.
- 1. The state, local, or tribal agency responsible for implementing and enforcing the SIP or TIP can, in cooperation with federal agencies or third parties authorized by the agency that operate installations subject to federal oversight, develop and adopt a facility-wide emission budget to be used for demonstrating conformity under subparagraph (3)(E)1.A. of this rule. The facility-wide budget must meet the following criteria:
 - A. Be for a set time period;
- B. Cover the pollutants or precursors of the pollutants for which the area is designated nonattainment or maintenance;
- C. Include specific quantities allowed to be emitted on an annual or seasonal basis;
- D. The emissions from the facility along with all other emissions in the area will not exceed the emission budget for the area;
- E. Include specific measures to ensure compliance with the budget, such as periodic reporting requirements or compliance demonstration, when the federal agency is taking an action that would otherwise require a conformity determination;
- F. Be submitted to EPA as a SIP revision; and
- G. The SIP revision must be approved by EPA.
- 2. The facility-wide budget developed and adopted in accordance with paragraph (3)(H)1. of this rule can be revised by following the requirements in paragraph (3)(H)1. of this rule.
- 3. Total direct and indirect emissions from federal actions in conjunction with all other emissions subject to general conformity from the facility that do not exceed the facility budget adopted pursuant to paragraph (3)(H)1. of this rule are "presumed to conform" to the SIP and do not require a conformity analysis.

- 4. If the total direct and indirect emissions from the federal actions in conjunction with the other emissions subject to general conformity from the facility exceed the budget adopted pursuant to paragraph (3)(H)1. of this rule, the action must be evaluated for conformity. A federal agency can use the compliance with the facility-wide emissions budget as part of the demonstration of conformity, i.e., the agency would have to mitigate or offset the emissions that exceed the emission budget.
- 5. If the SIP for the area includes a category for construction emissions, the negotiated budget can exempt construction emissions from further conformity analysis.
- (I) Emissions Beyond the Time Period Covered by the SIP. If a federal action would result in total direct and indirect emissions above the applicable thresholds which would be emitted beyond the time period covered by the SIP, the federal agency can—
- 1. Demonstrate conformity with the last emission budget in the SIP; or
- 2. Request the state or tribe to adopt an emissions budget for the action for inclusion in the SIP. The state or tribe must submit a SIP or TIP revision to EPA within eighteen (18) months either including the emissions in the existing SIP or establishing an enforceable commitment to include the emissions in future SIP revisions based on the latest planning assumptions at the time of the SIP revision. No such commitment by a state or tribe shall restrict a state's or tribe's ability to require Reasonably Available Control Technology (RACT), Reasonably Available Control Measures (RACM), or any other control measures within the state's or tribe's authority to ensure timely attainment of the NAAOS.
- (J) Timing of Offsets and Mitigation Measures.
- 1. The emissions reductions from an offset or mitigation measure used to demonstrate conformity must occur during the same calendar year as the emission increases from the action except as provided in paragraph (3)(J)2. of this rule.
- 2. The state or tribe may approve emissions reductions in other years provided—
- A. The reductions are greater than the emission increases by the following ratios:
 - (I) Extreme nonattainment areas 1.5:1
 (II) Severe nonattainment areas 1.3:1
 (III) Serious nonattainment areas 1.2:1
 (IV) Moderate nonattainment areas 1.15:1
 (V) All other areas 1.1:1

- B. The time period for completing the emissions reductions must not exceed twice the period of the emissions; and
- C. The offset or mitigation measure with emissions reductions in another year will not—
- (I) Cause or contribute to a new violation of any air quality standard;
- (II) Increase the frequency or severity of any existing violation of any air quality standard; or
- (III) Delay the timely attainment of any standard or any interim emissions reductions or other milestones in any area.
- 3. The approval by the state or tribe of an offset or mitigation measure with emissions reductions in another year does not relieve the state or tribe of any obligation to meet any SIP or CAA milestone or deadline. The approval of an alternate schedule for mitigation measures is at the discretion of the state or tribe, and they are not required to approve an alternate schedule.
- (K) Inter-Precursor Mitigation Measures and Offsets. Federal agencies must reduce the same type of pollutant as being increased by the federal action except the state or tribe may approve offsets or mitigation measures of different precursors of the same criteria pollutant, if such trades are allowed by a state or tribe in a SIP- or TIP-approved NSR regulation, is technically justified, and has a demonstrated environmental benefit.
- (L) Early Emission Reduction Credit Programs at Federal Facilities and Installations Subject to Federal Oversight.
- 1. Federal facilities and installations subject to federal oversight can, with the approval of the state or tribal agency responsible for the SIP or TIP in that area, create an early emissions reductions credit program. The federal agency can create the emission reduction credits in accordance with the requirements in paragraph (3)(L)2. of this rule and can use them in accordance with paragraph (3)(L)3. of this rule.
- 2. Creation of emission reduction credits.
- A. Emissions reductions must be quantifiable through the use of standard emission factors or measurement techniques. If non-standard factors or techniques to quantify the emissions reductions are used, the federal agency must receive approval from the state or tribal agency responsible for the implementation of the SIP or TIP and from EPA's regional office. The emission reduction credits do not have to be quantified before the reduction strategy is implemented but must be quantified before the credits are used in the general conformity evaluation.

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- B. The emission reduction methods must be consistent with the applicable SIP or TIP attainment and reasonable further progress demonstrations.
- C. The emissions reductions cannot be required by or credited to other applicable SIP or TIP provisions.
- D. Both the state or tribe and federal air quality agencies must be able to take legal action to ensure continued implementation of the emission reduction strategy. In addition, private citizens must also be able to initiate action to ensure compliance with the control requirement.
- E. The emissions reductions must be permanent or the time frame for the reductions must be specified.
- F. The federal agency must document the emissions reductions and provide a copy of the document to the state or tribal air quality agency and the EPA regional office for review. The documentation must include a detailed description of the emission reduction strategy and a discussion of how it meets the requirements of subparagraphs (3)(L)2.A. through (3)(L)2.E. of this rule.
- 3. Use of emission reduction credits. The emission reduction credits created in accordance with paragraph (3)(L)2. of this rule can be used, subject to the following limitations, to reduce the emissions increase from a federal action at the facility for the conformity evaluation.
- A. If the technique used to create the emission reduction is implemented at the same facility as the federal action and could have occurred in conjunction with the federal action, then the credits can be used to reduce the total direct and indirect emissions used to determine the applicability of the regulation as required in section (1) of this rule and as offsets or mitigation measures required by subsection (3)(E) of this rule.
- B. If the technique used to create the emission reduction is not implemented at the same facility as the federal action or could not have occurred in conjunction with the federal action, then the credits cannot be used to reduce the total direct and indirect emissions used to determine the applicability of the regulation as required in section (1) of this rule, but can be used to offset or mitigate the emissions as required by subsection (3)(E) of this rule.
- C. Emissions reductions credits must be used in the same year in which they are generated.
- D. Once the emission reduction credits are used, they cannot be used as credits for another conformity evaluation. However, unused credits from a strategy used for one (1) conformity evaluation can be used for another conformity evaluation as long as the reduction credits are not double counted.

E. Federal agencies must notify the state or tribal air quality agency responsible for the implementation of the SIP or TIP and EPA Regional Office when the emission reduction credits are being used.

(4) Reporting and Record Keeping.

- (A) A federal agency making a conformity determination under section (4), subsections (3)(B) through (3)(G), and subsections (3)(I) through (3)(K) of this rule must provide to the appropriate EPA regional office(s), state and local air quality agencies, any federallyrecognized Indian tribal government in the nonattainment or maintenance area, and, where applicable, affected federal land managers, the agency designated under section 174 of the CAA and the MPO, a thirty (30)day notice which describes the proposed action and the federal agency's draft conformity determination on the action. If the action has multi-regional or national impacts (e.g., the action will cause emission increases in excess of the de minimis levels identified in subsection (1)(B) of this rule in three (3) or more of EPA's regions), the federal agency, as an alternative to sending it to EPA regional offices, can provide the notice to EPA's Office of Air Quality Planning and Stan-
- (B) A federal agency must notify the appropriate EPA regional office(s), state and local air quality agencies, any federally-recognized Indian tribal government in the nonattainment or maintenance area, and, where applicable, affected federal land managers, the agency designated under section 174 of the CAA and the MPO, within thirty (30) days after making a final conformity determination under this rule.
- (C) The draft and final conformity determination shall exclude any restricted information or confidential business information. The disclosure of restricted information and confidential business information shall be controlled by the applicable laws, regulations, security manuals, or executive orders concerning the use, access, and release of such materials. Subject to applicable procedures to protect restricted information from public disclosure, any information or materials excluded from the draft or final conformity determination or supporting materials may be made available in a restricted information annex to the determination for review by federal and state representatives who have received appropriate clearances to review the information.

(5) Test Methods. (Not Applicable)

AUTHORITY: section 643.050, RSMo 2000.* Original rule filed Oct. 4, 1994, effective May 28, 1995. Amended: Filed Jan. 30, 1996, effective Sept. 30, 1996. Amended: Filed Feb. 9, 2007, effective Sept. 30, 2007. Amended: Filed Jan. 5, 2011, effective Aug. 30, 2011.

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

10 CSR 10-6.310 Restriction of Emissions From Municipal Solid Waste Landfills

PURPOSE: This rule requires owners of municipal solid waste landfills to report their landfill's design capacity and non-methane organic compound (NMOC) emissions. Landfills having design capacities of two and one-half (2.5) million cubic meters or greater and NMOC emission rates of fifty (50) megagrams or greater shall design, install and operate a gas collection and control system.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Applicability.

- (A) This rule applies to each municipal solid waste (MSW) landfill for which construction, reconstruction or modification was commenced before May 30, 1991, and has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition. Landfills for which construction, reconstruction or modification was commenced on May 30, 1991, or after, are covered under the Environmental Protection Agency's New Source Performance Standard for Municipal Solid Waste Landfills.
- (B) Physical or operational changes made to an existing MSW landfill solely to comply with this rule are not considered construction, reconstruction, or modification for the purposes of this rule.
- (C) MSW landfills covered by 10 CSR 10-5.490 are exempt from this rule.
- (D) For purposes of obtaining an operating permit under Title V of the Clean Air Act, the owner or operator of an MSW landfill subject to this rule with a design capacity less than two and one-half (2.5) million megagrams or two and one-half (2.5) million cubic meters is

not subject to the requirements to obtain an operating permit for the landfill under 40 Code of Federal Regulations (CFR) 70 or 71, unless the landfill is otherwise subject to either 40 CFR 70 or 71. For purposes of submitting a timely application for an operating permit under 40 CFR 70 or 71, the owner or operator of an MSW landfill subject to the rule with a design capacity greater than or equal to two and one-half (2.5) million megagrams and two and one-half (2.5) million cubic meters on the effective date of EPA approval of the state's program under section 111(d) of the Clean Air Act (June 23, 1998), and not otherwise subject to either 40 CFR 70 or 71, becomes subject to the requirements of 40 CFR 70.5(a)(1)(i) or 71.5(a)(1)(i) ninety (90) days after the effective date of such 111(d) program approval, even if the design capacity report is submitted earlier.

- (E) When an MSW landfill subject to this rule is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under 40 CFR 70 or 71 for the landfill if the landfill is not otherwise subject to the requirements of either 40 CFR 70 or 71 and if either of the following conditions is met:
- The landfill was never subject to a requirement for a control system under section (3) of this rule; or
- 2. The owner or operator meets the conditions for control system removal specified in section 60.752(b)(2)(v) of 40 CFR 60, Subpart WWW.
- (2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.
- (3) Standards for Air Emissions from Municipal Solid Waste Landfills. Provisions of 40 CFR 51, 40 CFR 52, 40 CFR 60, and 40 CFR 258 are incorporated by reference in subsection (3)(C) of this rule. Also, the *Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources*, AP-42, Fifth Edition, January 1995 (hereafter AP-42), as published by the Government Printing Office, 732 North Capitol Street NW, Washington, DC 20401, shall apply and is hereby incorporated by reference, including Supplement E dated November 1998. This rule does not incorporate any subsequent amendments or additions.
- (A) Each owner or operator of an MSW landfill having a design capacity less than two and one-half (2.5) million megagrams by mass or two and one-half (2.5) million cubic meters by volume shall submit an initial design capacity report to the director as pro-

- vided in subsection (8)(A) of this rule. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. Submittal of the initial design capacity report shall fulfill the requirements of this rule except as provided for in paragraphs (3)(A)1. and 2. of this rule.
- 1. The owner or operator shall submit to the director an amended design capacity report, as provided for in paragraph (8)(A)3. of this rule.
- 2. When an increase in the maximum design capacity of a landfill exempted from the provisions of subsection (3)(B) through section (10) of this rule on the basis of the design capacity exemption in subsection (3)(A) of this rule results in a revised maximum design capacity equal to or greater than two and one-half (2.5) million megagrams and two and one-half (2.5) million cubic meters, the owner or operator shall comply with the provisions of subsection (3)(B) of this rule.
- (B) Each owner or operator of an MSW landfill having a design capacity equal to or greater than two and one-half (2.5) million megagrams and two and one-half (2.5) million cubic meters shall either comply with paragraph (3)(B)2. of this rule or calculate an NMOC emission rate for the landfill using the procedures specified in section (5) of this rule. The NMOC emission rate shall be recalculated annually, except as provided in subparagraph (8)(B)1.B. of this rule. The owner or operator of an MSW landfill subject to this rule with a design capacity greater than or equal to two and one-half (2.5) million megagrams and two and one-half (2.5) million cubic meters is subject to 40 CFR 70 or 71 permitting requirements.
- 1. If the calculated NMOC emission rate is less than fifty (50) megagrams per year, the owner or operator shall—
- A. Submit an annual emission report to the director, except as provided for in subparagraph (8)(B)1.B. of this rule; and
- B. Recalculate the NMOC emission rate annually using the procedures specified in paragraph (5)(A)1. of this rule until such time as the calculated NMOC emission rate is equal to or greater than fifty (50) megagrams per year or the landfill is closed.
- (I) If the NMOC emission rate, upon recalculation required in subparagraph (3)(B)1.B. of this rule is equal to or greater than fifty (50) megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (3)(B)2. of this rule.

- (II) If the landfill is permanently closed, a closure notification shall be submitted to the director as provided for in subsection (8)(D) of this rule.
- 2. If the calculated NMOC emission rate is equal to or greater than fifty (50) megagrams per year, the owner or operator shall—
- A. Submit a collection and control system design plan prepared by a professional engineer to the director within one (1) year. Permit modification approval from the Missouri Department of Natural Resources' Solid Waste Management Program shall be required prior to construction of any gas collection system.
- (I) The collection and control system as described in the plan shall meet the design requirements of subparagraph (3)(B)2.B. of this rule.
- (II) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, record keeping, or reporting provisions of sections (4) through (9) of this rule proposed by the owner or operator.
- (III) The collection and control system design plan shall either conform with specifications for active collection systems in section (10) of this rule or include a demonstration to the director's satisfaction of the sufficiency of the alternative provisions to section (10) of this rule.
- (IV) The director shall review the information submitted under parts (3)(B)2.A.(I), (II), and (III) of this rule and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, horizontal trenches only, leachate collection components, and passive systems;
- B. Install a collection and control system that captures the gas generated within the landfill as required by part (3)(B)2.B.(I) or (II) and subparagraph (3)(B)2.C. of this rule within thirty (30) months after the first annual report in which the emission rate equals or exceeds fifty (50) megagrams per year, unless Tier 2 or Tier 3 sampling under section (5) of this rule demonstrates that the emission rate is less than fifty (50) megagrams per year, as specified in paragraph (8)(C)1. or 2. of this rule.
- (I) An active collection system shall—
- (a) Be designed to handle the maximum expected gas flow rate from the



entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

- (b) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of—
 - I. Five (5) years or more if

active; or

- II. Two (2) years or more if closed or at final grade;
- (c) Collect gas at a sufficient extraction rate; and
- (d) Be designed to minimize offsite migration of subsurface gas.
- (II) A passive collection system shall—
- (a) Comply with the provisions specified in subparts (3)(B)2.B.(I)(a), (b), and (d) of this rule; and
- (b) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under 40 CFR 258.40;
- C. Route all the collected gas to one (1) or more of the following control systems:
- (I) An open flare designed and operated in accordance with 40 CFR 60.18 except as noted in subsection (5)(E) of this rule;
- (II) A control system designed and operated to reduce NMOC by ninety-eight (98) weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by ninety-eight (98) weight-percent or reduce the outlet NMOC concentration to less than twenty parts per million by volume (20 ppmv), dry basis as hexane at three percent (3%) oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than one hundred eighty (180) days after the initial startup of the approved control system using the test methods specified in subsection (5)(D) of this rule.
- (a) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.
- (b) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in section (7) of this rule; or
- (III) A system that routes the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be

- subject to the requirements of part (3)(B)2.C.(I) or (II) of this rule;
- D. Operate the collection and control device installed to comply with this rule in accordance with the provisions of sections (4), (6), and (7) of this rule;
- E. The collection and control system may be capped or removed provided that all the conditions of parts (3)(B)2.E.(I), (II), and (III) of this rule are met—
- (I) The landfill shall be no longer accepting solid waste and be permanently closed under the requirements of 40 CFR 258.60. A closure report shall be submitted to the director as provided in subsection (8)(D) of this rule;
- (II) The collection and control system shall have been in operation a minimum of fifteen (15) years; and
- (III) Following the procedures specified in subsection (5)(B) of this rule, the calculated NMOC gas produced by the land-fill shall be less than fifty (50) megagrams per year on three (3) successive test dates. The test dates shall be no less than ninety (90) days apart, and no more than one hundred eighty (180) days apart; and
- F. The planning, awarding of contracts, and installation of MSW landfill air emission collection and control equipment capable of meeting the emission standards in subsection (3)(B) of this rule shall be accomplished within thirty (30) months after the date the initial NMOC emission rate report shows NMOC emissions equal or exceed fifty (50) megagrams per year.
- (C) The specific citations of 40 CFR 51, 40 CFR 52, 40 CFR 60, and 40 CFR 258 referenced in this rule and published July 1, 2011, shall apply and are 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. Certain terms used in 40 CFR refer to federal officers and agencies. The following terms applicable to Missouri shall be substituted where appropriate for the delegable federal counterparts: Director shall be substituted for Administrator, and Missouri Department of Natural Resources shall be substituted for EPA, EPA Regional Office, or Environmental Protection Agency.
- (4) Operational Standards for Collection and Control Systems. Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of subparagraph (3)(B)2.B. of this rule shall—

- (A) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for—
 - 1. Five (5) years or more if active; or
- 2. Two (2) years or more if closed or at final grade;
- (B) Operate the collection system with negative pressure at each wellhead except under the following conditions:
- 1. A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in paragraph (8)(F)1. of this rule;
- 2. Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan; and
- 3. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the director and EPA;
- (C) Operate each interior wellhead in the collection system with a landfill gas temperature less than fifty-five degrees Celsius (55 °C) and with either a nitrogen level less than twenty percent (20%) or an oxygen level less than five percent (5%). The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
- 1. The nitrogen level shall be determined using Method 3C of 40 CFR 60, Appendix A, unless an alternative test method is established as allowed by subparagraph (3)(B)2.A. of this rule.
- 2. Unless an alternative test method is established as allowed by subparagraph (3)(B)2.A. of this rule, the oxygen shall be determined by an oxygen meter using Method 3A or 3C of 40 CFR 60, Appendix A, except that—
- A. The span shall be set so that the regulatory limit is between twenty and fifty percent (20%-50%) of the span;
 - B. A data recorder is not required;
- C. Only two (2) calibration gases are required, a zero (0) and span, and ambient air may be used as the span;
- D. A calibration error check is not required; and

= average annual acceptance

rate, megagrams per

- E. The allowable sample bias, zero (0) drift, and calibration drift are plus or minus ten percent $(\pm 10\%)$;
- (D) Operate the collection system so that the methane concentration is less than five hundred (500) parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at thirty (30)-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the thirty (30)-meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing;
- (E) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with subparagraph (3)(B)2.C. of this rule. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one (1) hour:
- (F) Operate the control or treatment system at all times when the collected gas is routed to the system; and
- (G) If monitoring demonstrates that the operational requirements in subsection (4)(B), (C), or (D) of this rule are not met, corrective action shall be taken as specified in paragraph (3)(A)3. through 5. or subsection (6)(C) of this rule. If corrective actions are taken as specified in section (6) of this rule, the monitored exceedance is not a violation of the operational requirements in this section.

(5) Test Methods and Procedures.

(A) NMOC Emission Rate Calculation.

1. The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in subparagraph (5)(A)1.A. of this rule or the equation provided in subparagraph (5)(A)1.B. of this rule. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in subparagraph (5)(A)1.A. of this rule, for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in subparagraph (5)(A)1.B., for part of the life of the landfill. The values to be used in both equations are

0.05 per year for k, one hundred seventy (170) cubic meters per megagram for $L_{\rm o}$, and four thousand (4,000) parts per million by volume as hexane for the $C_{\rm NMOC}$. For land-fills located in geographical areas with a thirty (30)-year annual average precipitation of less than twenty-five inches (25"), as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.

A. The following equation shall be used if the actual year-to-year solid waste acceptance rate is known. The mass of non-degradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if the documentation of the nature and amount of such wastes is maintained.

$$\begin{array}{c} & n \\ M_{NMOC} = & \sum 2kL_o \ M_i \ (e^{-kt}i) \ (C_{NMOC}) \ (3.6 \times 10^{-9}) \\ i = & 1 \end{array}$$

where,

M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the ith section, megagrams

t_i = age of the ith section, years

C_{NMOC} = concentration of NMOC, parts per million by

volume as hexane

 3.6×10^{-9} = conversion factor

B. The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown. The mass of non-degradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for R, if the documentation provisions of paragraph (9)(D)2. of this rule are followed.

$$M_{NMOC} = 2 L_o R (e^{-kc} - e^{-kt})$$

 $(C_{NMOC}) (3.6 \times 10^{-9})$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per

= methane generation potential, cubic meters per

megagram solid waste

 $k = \begin{array}{r} year \\ = methane \ generation \ rate \\ constant, \ year^{-1} \\ t = age \ of \ land fill, \ years \\ C_{NMOC} = concentration \ of \ NMOC, \\ parts \ per \ million \ by \\ volume \ as \ hexane \\ c = time \ since \ closure, \ years. \\ For \ active \ land fill \ c = 0 \\ and \ e^{-kc} = 1 \\ 3.6 \times 10^{-9} = conversion \ factor \\ \end{array}$

R

2. Tier 1. The owner or operator shall compare the calculated NMOC mass emission rate to the standard of fifty (50) megagrams per year.

A. If the NMOC emission rate calculated in paragraph (5)(A)1. of this rule is less than fifty (50) megagrams per year, then the landfill owner shall submit an emission rate report as provided in paragraph (8)(B)1. of this rule, and shall recalculate the NMOC mass emission rate annually as required under paragraph (3)(B)1. of this rule.

B. If the calculated NMOC emission rate is equal to or greater than fifty (50) megagrams per year, then the landfill owner shall either comply with paragraph (3)(B)2. of this rule, or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in paragraph (5)(A)3. of this rule.

3. Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two (2) sample probes per hectare of landfill surface that has retained waste for at least two (2) years. If the landfill is larger than twentyfive (25) hectares in area, only fifty (50) samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one (1) sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of 40 CFR 60, Appendix A. Method 18 of 40 CFR 60, Appendix A may be used to analyze the samples collected by the Method 25 or 25C sampling procedure. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one (1) liter unless evidence can be provided to substantiate the accuracy of



smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If using Method 18, the minimum list of compounds to be tested shall be those published in AP-42, minus carbon monoxide, hydrogen sulfide, and mercury. As a minimum, the instrument must be calibrated for each of the compounds on the list. Convert the concentration of each Method 18 compound to C_{NMOC} as hexane by multiplying by the ratio of its carbon atoms divided by six (6). If more than the required number of samples are taken, all samples shall be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of 40 CFR 60, Appendix A by six (6) to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two (2) sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe before the gas moving or condensate removal equipment. For these systems, a minimum of three (3) samples must be collected from the header pipe.

A. The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in subparagraph (5)(A)1.A. or B. of this rule and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in paragraph (5)(A)1. of this rule.

B. If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than fifty (50) megagrams per year, then the landfill owner or operator shall either comply with paragraph (3)(B)2. of this rule, or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in paragraph (5)(A)4. of this rule.

- C. If the resulting NMOC mass emission rate is less than fifty (50) megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in paragraph (8)(B)1. of this rule and retest the site-specific NMOC concentration every five (5) years using the methods specified in this section.
- 4. Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E

of 40 CFR 60, Appendix A. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in sub-paragraph (5)(A)1.A. or B. of this rule and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in paragraph (5)(A)3. of this rule instead of the default values provided in paragraph (5)(A)1. of this rule. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of fifty (50) megagrams per year.

A. If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than fifty (50) megagrams per year, the owner or operator shall comply with paragraph (3)(B)2. of this rule.

B. If the NMOC mass emission rate is less than fifty (50) megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in paragraph (8)(B)1. of this rule and shall recalculate the NMOC mass emission rate annually, as provided in paragraph (8)(B)1. of this rule using the equations in paragraph (5)(A)1. of this rule and using the site-specific methane generation rate constant and NMOC concentration obtained in paragraph (5)(A)3. of this rule. The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

- 5. The owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in paragraphs (5)(A)3. and 4. of this rule if the method has been approved by the director and EPA.
- (B) After the installation of a collection and control system in compliance with section (6) of this rule, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in subparagraph (3)(B)2.E. of this rule, using the following equation:

$$M_{NMOC} = (1.89 \times 10^{-3}) (Q_{LFG}) (C_{NMOC})$$

where,

 M_{NMOC} = mass emission rate of NMOC, megagrams per

LFG = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane

- 1. The flow rate of landfill gas, Q_{LFG} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of 40 CFR 60, Appendix A.
- 2. The average NMOC concentration, $C_{\rm NMOC}$, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of 40 CFR 60, Appendix A. If using Method 18, the minimum list of compounds to be tested shall be those published in AP-42. The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C by six (6) to convert from $C_{\rm NMOC}$ as carbon to $C_{\rm NMOC}$ as hexane.
- 3. The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the director and EPA as provided in part (3)(B)2.A.(II) of this rule.
- (C) When calculating emissions for prevention of significant deterioration (PSD) purposes, the owner or operator of each MSW landfill subject to the provisions of this rule shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 52.21 using AP-42 or other approved measurement procedures.
- (D) For the performance test required in part (3)(B)2.C.(II) of this rule, Method 25, 25C, or Method 18 of 40 CFR 60, Appendix A shall be used to determine compliance with ninety-eight (98) weight-percent efficiency or the twenty (20) ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the director and EPA as provided by part (3)(B)2.A.(II) of this rule. Method 3 or 3A of 40 CFR 60, Appendix A shall be used to determine oxygen for correcting the NMOC concentration as hexane to three percent (3%). In cases where the outlet concentration is less than fifty (50) ppm NMOC as carbon (eight (8) ppm NMOC as hexane), Method 25A of 40 CFR 60, Appendix A should be used in place of Method 25. If using Method 18, the minimum list of compounds to be tested shall be those published in AP-42. The following equation shall be used to calculate efficiency:

Control Efficiency = $(NMOC_{in} - NMOC_{out})/(NMOC_{in})$ where,



 $NMOC_{in}$ = mass of NMOC entering control device

NMOC_{out} = mass of NMOC exiting control device

(E) For the performance test required in part (3)(B)2.C.(I), the net heating value of the combusted landfill gas as determined in 40 CFR 60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C of 40 CFR 60, Appendix A. A minimum of three (3) thirty (30)-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under 40 CFR 60.18(f)(4).

(6) Compliance Provisions.

(A) Except as provided in part (3)(B)2.A.(II) of this rule, the specified methods in paragraphs (6)(A)1. through (6)(A)6. of this rule shall be used to determine whether the gas collection system is in compliance with subparagraph (3)(B)2.B. of this rule—

1. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with subpart (3)(B)2.B.(I)(a) of this rule, one (1) of the following equations shall be used. The k and L₀ kinetic factors should be those published in AP-42 or other site specific values demonstrated to be appropriate and approved by the director and EPA. If k has been determined as specified in paragraph (5)(A)4. of this rule, the value of k determined from the test shall be used. A value of no more than fifteen (15) years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

A. For sites with unknown year-toyear solid waste acceptance rate—

$$Q_{\rm m} = 2L_{\rm o} R (e^{-kc} - e^{-kt})$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year⁻¹

age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years

c = time since closure, years (for an active landfill c = 0 and $e^{-kc} = 1$)

B. For sites with known year-to-year solid waste acceptance rate—

$$Q_{m} = \sum_{i=1}^{n} 2 k L_{o} M_{i} (e^{-kt_{i}})$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year

 methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the ith section, megagrams

t; = age of the ith section, years

C. If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in subparagraphs (6)(A)1.A. and B. of this rule. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in subparagraphs (6)(A)1.A. or B. of this rule or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment;

2. For the purposes of determining sufficient density of gas collectors for compliance with subpart (3)(B)2.B.(I)(b) of this rule, the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the director, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards;

3. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with subpart (3)(B)2.B.(I)(c) of this rule, the owner or operator shall measure gauge pressure in the gas collection header at each individual well,

monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within five (5) calendar days, except for the three (3) conditions allowed under subsection (4)(B) of this rule. If negative pressure cannot be achieved without excess air infiltration within fifteen (15) calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within one hundred twenty (120) days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the director for approval;

4. Owners or operators are not required to expand the system as required in paragraph (6)(A)3. of this rule during the first one hundred eighty (180) days after gas collection system start-up;

5. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in subsection (4)(C) of this rule. If a well exceeds one (1) of these operating parameters, action shall be initiated to correct the exceedance within five (5) calendar days. If correction of the exceedance cannot be achieved within fifteen (15) calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within one hundred twenty (120) days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the director for approval; and

6. An owner or operator seeking to demonstrate compliance with subpart (3)(B)2.B.(I)(d) of this rule through the use of a collection system not conforming to the specifications provided in section (10) of this rule shall provide information satisfactory to the director and EPA as specified in part (3)(B)2.A.(III) of this rule demonstrating that off-site migration is being controlled.

(B) For purposes of compliance with subsection (4)(A) of this rule, each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in subparagraph (3)(B)2.A. of this rule. Each well shall be installed no later than sixty (60) days of the date in which the initial solid waste has been in place for a period of—

1. Five (5) years or more if active; or

2. Two (2) years or more if closed or at final grade.



- (C) The following procedures shall be used for compliance with the surface methane operational standard as provided in subsection (4)(D) of this rule:
- 1. After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at thirty (30)-meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in subsection (6)(D) of this rule;
- 2. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least thirty (30) meters from the perimeter wells;
- 3. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of 40 CFR 60, Appendix A, except that the probe inlet shall be placed within five to ten centimeters (5–10 cm) of the ground. Monitoring shall be performed during typical meteorological conditions;
- 4. Any reading of five hundred (500) parts per million (ppm) or more above background at any location shall be recorded as a monitored exceedance and the actions specified in subparagraphs (6)(C)4.A. through E. of this rule shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of subsection (4)(D) of this rule.
- A. The location of each monitored exceedance shall be marked and the location recorded.
- B. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made, and the location shall be remonitored within ten (10) calendar days of detecting the exceedance.
- C. If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken, and the location shall be monitored again within ten (10) days of the second exceedance. If the remonitoring shows a third exceedance for the same location, the action specified in subparagraph (6)(C)4.E. of this rule shall be taken, and no further monitoring of that location is required until the action specified in subparagraph (6)(C)4.E. of this rule has been taken.
- D. Any location that initially showed an exceedance but has a methane concentration less than five hundred (500) ppm methane above background at the ten (10)-day remonitoring specified in subparagraph (6)(C)4.B. or C. of this rule shall be remon-

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- itored one (1) month from the initial exceedance. If the one (1)-month remonitoring shows a concentration less than five hundred (500) ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the one (1)-month remonitoring shows an exceedance, the actions specified in subparagraph (6)(C)4.C. or E. of this rule shall be taken.
- E. For any location where monitored methane concentration equals or exceeds five hundred (500) ppm above background three (3) times within a quarterly period, a new well or other collection device shall be installed within one hundred twenty (120) calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control device, and a corresponding timeline for installation may be submitted to the director for approval; and
- 5. The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
- (D) Each owner or operator seeking to comply with the provisions in subsection (6)(C) of this rule shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:
- 1. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of 40 CFR 60, Appendix A, except that "methane" shall replace all references to VOC:
- 2. The calibration gas shall be methane, diluted to a nominal concentration of five hundred (500) ppm in air;
- 3. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of 40 CFR 60, Appendix A, the instrument evaluation procedures of section 4.4 of Method 21 shall be used; and
- 4. The calibration procedures provided in section 4.2 of Method 21 of 40 CFR 60, Appendix A shall be followed immediately before commencing a surface monitoring survey.
- (E) The provisions of this rule apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed five (5) days for collection systems and shall not exceed one (1) hour for treatment or control devices.
- (7) Monitoring of Operations. Except as provided in part (3)(B)2.A.(II) of this rule—
- (A) Each owner or operator seeking to comply with part (3)(B)2.B.(I) of this rule for

- an active gas collection system shall install a sampling port and a thermometer or other temperature measuring device, or an access port for temperature measurements at each wellhead and—
- 1. Measure the gauge pressure in the gas collection header on a monthly basis as provided in paragraph (6)(A)3. of this rule;
- 2. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in paragraph (6)(A)5. of this rule; and
- 3. Monitor temperature of the landfill gas on a monthly basis as provided in paragraph (6)(A)5. of this rule;
- (B) Each owner or operator seeking to comply with subparagraph (3)(B)2.C. of this rule using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:
- 1. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of plus or minus one percent $(\pm 1\%)$ of the temperature being measured expressed in degrees Celsius or plus or minus one-half degree Celsius $(\pm 0.5\,^{\circ}\text{C})$, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than forty-four (44) megawatts; and
- 2. A device that records flow to or bypass of the control device. The owner or operator shall either—
- A. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every fifteen (15) minutes; or
- B. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line;
- (C) Each owner or operator seeking to comply with subparagraph (3)(B)2.C. of this rule using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
- 1. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame; and
- 2. A device that records flow to or bypass of the flare. The owner or operator shall either—

- A. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every fifteen (15) minutes; or
- B. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line;
- (D) Each owner or operator seeking to demonstrate compliance with subparagraph (3)(B)2.C. of this rule using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the director as provided in part (3)(B)2.A.(II) of this rule describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The director shall review the information and either approve it or request that additional information be submitted. The director may specify additional appropriate monitoring procedures;
- (E) Each owner or operator seeking to install a collection system that does not meet the specifications in section (10) of this rule or seeking to monitor alternative parameters to those required by sections (4) through (7) of this rule shall provide information satisfactory to the director as provided in parts (3)(B)2.A.(II) and (III) of this rule describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The director may specify additional appropriate monitoring procedures; or
- (F) Each owner or operator seeking to demonstrate compliance with subsection (6)(C) of this rule, shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in subsection (6)(D) of this rule. Any closed landfill that has no monitored exceedances of the operational standard in three (3) consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of five hundred (500) ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.
- (8) Reporting Requirements. Except as provided in part (3)(B)2.A.(II) of this rule—
- (A) Each owner or operator subject to the requirements of this rule shall submit an initial design capacity report to the director.

- 1. The initial design capacity report shall be submitted within ninety (90) days of the rule effective date.
- 2. The initial design capacity report shall contain the following information:
- A. A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the provisions of the state or local construction or operating permit; and
- B. The maximum design capacity of the landfill. Where the maximum design capacity is specified in the state or local construction permit, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters as part of the report. The state, local agency, or director may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.
- 3. An amended design capacity report shall be submitted to the director providing notification of any increase in the design capacity of the landfill, whether the increase results from an increase in the permitted area or depth of the landfill, a change in the operating procedures, or any other means which results in an increase in the maximum design capacity of the landfill above two and onehalf (2.5) million megagrams and two and one-half (2.5) million cubic meters. The amended design capacity report shall be submitted within ninety (90) days of the issuance of an amended construction or operating permit, or the placement of waste in additional land, or the change in operating procedures which will result in an increase in maximum design capacity, whichever occurs first:
- (B) Each owner or operator subject to the requirements of this rule shall submit an NMOC emission rate report to the director initially and annually thereafter, except as provided for in subparagraph (8)(B)1.B. or paragraph (8)(B)3. of this rule. The director may request such additional information as may be necessary to verify the reported NMOC emission rate.
- 1. The NMOC emission rate report shall contain an annual or five (5)-year estimate of the NMOC emission rate calculated using the formula and procedures provided in subsection (5)(A) or (B) of this rule, as applicable.
- A. The initial NMOC emission rate report shall be submitted within ninety (90) days of the rule effective date and may be combined with the initial design capacity

- report required in subsection (8)(A) of this rule. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in subparagraph (8)(B)1.B. and paragraph (8)(B)3. of this rule.
- B. If the estimated NMOC emission rate as reported in the annual report to the director is less than fifty (50) megagrams per year in each of the next five (5) consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next five (5)-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each vear of the five (5) years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the director. This estimate shall be revised at least once every five (5) years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the five (5)-year estimate, a revised five (5)-year estimate shall be submitted to the director. The revised estimate shall cover the five (5)-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
- 2. The NMOC emission rate report shall include all the data, calculations, sample reports, and measurements used to estimate the annual or five (5)-year emissions.
- 3. Each owner or operator subject to the requirements of this rule is exempted from the requirements of paragraphs (8)(B)1. and 2. of this rule after the installation of a collection and control system in compliance with paragraph (3)(B)2. of this rule, during such time as the collection and control system is in operation and in compliance with sections (4) and (6) of this rule:
- (C) Each owner or operator subject to the provisions of subparagraph (3)(B)2.A. of this rule shall submit a collection and control system design plan to the director within one (1) year of the first report, required under subsection (8)(B) of this rule, in which the emission rate equals or exceeds fifty (50) megagrams per year, except as follows:
- 1. If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in paragraph (5)(A)3. of this rule and the resulting rate is less than fifty (50) megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than fifty (50) megagrams per year or the landfill is closed. The revised NMOC emission rate



report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within one hundred eighty (180) days of the first calculated exceedance of fifty (50) megagrams per year; and

- 2. If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant k, as provided in Tier 3 in paragraph (5)(A)4. of this rule, and the resulting NMOC emission rate is less than fifty (50) Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant k shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of paragraph (5)(A)4. of this rule and the resulting site-specific methane generation rate constant k shall be submitted to the director within one (1) year of the first calculated emission rate exceeding fifty (50) megagrams per year;
- (D) Each owner or operator of a controlled landfill shall submit a closure report to the director within thirty (30) days of waste acceptance cessation. The director may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the director, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4);
- (E) Each owner or operator of a controlled landfill shall submit an equipment removal report to the director thirty (30) days prior to removal or cessation of operation of the control equipment.
- 1. The equipment removal report shall contain all of the following items:
- A. A copy of the closure report submitted in accordance with subsection (8)(D) of this rule:
- B. A copy of the initial performance test report demonstrating that the fifteen (15)year minimum control period has expired; and
- C. Dated copies of three (3) successive NMOC emission rate reports demonstrating that the landfill is no longer producing fifty (50) megagrams or greater of NMOC per year.
- 2. The director may request such additional information as may be necessary to verify that all of the conditions for removal in subparagraph (3)(B)2.E. of this rule have been met;
- (F) Each owner or operator of a landfill seeking to comply with paragraph (3)(B)2. of

- this rule using an active collection system designed in accordance with subparagraph (3)(B)2.B. of this rule shall submit to the director annual reports of the recorded information in paragraphs (8)(F)1. through 6. of this rule. The initial annual report shall be submitted within one hundred eighty (180) days of installation and start-up of the collection and control system and shall include the initial performance test report required under 40 CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under subsection (9)(C) of this rule.
- 1. Value and length of time for exceedance of applicable parameters monitored under subsections (7)(A), (B), (C), and (D) of this rule.
- 2. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under section (7) of this rule.
- 3. Description and duration of all periods when the control device was not operating for a period exceeding one (1) hour and length of time the control device was not operating.
- 4. All periods when the collection system was not operating in excess of five (5) days.
- 5. The location of each exceedance of the five hundred (500) ppm methane concentration as provided in subsection (4)(D) of this rule and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- 6. The date of installation and the location of each well or collection system expansion added pursuant to paragraph (6)(A)3., subsection (6)(B), and paragraph (6)(C)4. of this rule; and
- (G) Each owner or operator seeking to comply with subparagraph (3)(B)2.A. of this rule shall include the following information with the initial performance test report required under 40 CFR 60.8:
- 1. A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
- 2. The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based:
- 3. The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been

- excluded based on the presence of asbestos or nondegradable material;
- 4. The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area;
- 5. The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill: and
- 6. The provisions for the control of offsite migration.
- (9) Record Keeping Requirements. Except as provided in part (3)(B)2.A.(II) of this rule—
- (A) Each owner or operator of an MSW landfill subject to the provisions of subsection (3)(B) of this rule shall keep for at least five (5) years up-to-date, readily accessible, onsite records of the design capacity report which triggered subsection (3)(B) of this rule, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Records may be maintained off-site if they are retrievable within four (4) hours. A longer period is acceptable if records are needed for an unresolved enforcement action. Either paper copy or electronic formats are acceptable:
- (B) Each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (9)(B)1. through 4. of this rule as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five (5) years. Records of the control device vendor specifications shall be maintained until removal.
- 1. Where an owner or operator subject to the provisions of this rule seeks to demonstrate compliance with subparagraph (3)(B)2.B. of this rule—
- A. The maximum expected gas generation flow rate as calculated in paragraph (6)(A)1. of this rule. The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the director and EPA; and
- B. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in paragraph (10)(A)1. of this rule.
- 2. Where an owner or operator subject to the provisions of this rule seeks to demonstrate compliance with subparagraph

- (3)(B)2.C. of this rule through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than forty-four (44) megawatts—
- A. The average combustion temperature measured at least every fifteen (15) minutes and averaged over the same time period of the performance test; and
- B. The percent reduction of NMOC determined as specified in part (3)(B)2.C.(II) of this rule achieved by the control device.
- 3. Where an owner or operator subject to the provisions of this rule seeks to demonstrate compliance with subpart (3)(B)2.C.(II)(a) of this rule through use of a boiler or process heater of any size—a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.
- 4. Where an owner or operator subject to the provisions of this rule seeks to demonstrate compliance with part (3)(B)2.C.(I) of this rule through use of an open flare, the flare type (that is, steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent;
- (C) Each owner or operator of a controlled landfill subject to the provisions of this rule shall keep for five (5) years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in section (7) of this rule as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
- 1. The following constitute exceedances that shall be recorded and reported under subsection (8)(F) of this rule:
- A. For enclosed combustors except for boilers and process heaters with design heat input capacity of forty-four (44) megawatts (150 million British thermal units per hour) or greater, all three (3)-hour periods of operation during which the average combustion temperature was more than twenty-eight degrees Celsius (28 °C) below the average combustion temperature during the most recent performance test at which compliance with subparagraph (3)(B)2.C. of this rule was determined; and
- B. For boilers or process heaters, whenever there is a change in the location at

- which the vent stream is introduced into the flame zone as required under subparagraph (9)(B)3.A. of this rule.
- 2. Each owner or operator subject to the provisions of this rule shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under section (7) of this rule.
- 3. Each owner or operator subject to the provisions of this rule who uses a boiler or process heater with a design heat input capacity of forty-four (44) megawatts or greater to comply with subparagraph (3)(B)2.C. of this rule shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other state or local regulatory requirements.)
- 4. Each owner or operator seeking to comply with the provisions of this rule by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under subsection (7)(C) of this rule, and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent;
- (D) Each owner or operator subject to the provisions of this rule shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
- 1. Each owner or operator subject to the provisions of this rule shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under subsection (6)(B) of this rule.
- 2. Each owner or operator subject to the provisions of this rule shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in subparagraph (10)(A)3.A. of this rule as well as any nonproductive areas excluded from collection as provided in subparagraph (10)(A)3.B. of this rule;
- (E) Each owner or operator subject to the provisions of this rule shall keep for at least five (5) years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in section (4) of this rule, the reading in the subsequent month whether or not the second

- reading is an exceedance, and the location of each exceedance; and
- (F) Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than two and one-half (2.5) million megagrams or two and one-half (2.5) million cubic meters, as provided in the definition of design capacity, shall keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within four (4) hours of request. Either paper copy or electronic formats are acceptable.
- (10) Specifications for Active Collection Systems.
- (A) Each owner or operator seeking to comply with subparagraph (3)(B)2.A. of this rule shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the director and EPA as provided in parts (3)(B)2.A.(III) and (IV) of this rule:
- 1. The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat;
- 2. The sufficient density of gas collection devices determined in paragraph (10)(A)1. of this rule shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior; and
- 3. The placement of gas collection devices determined in paragraph (10)(A)1. of this rule shall control all gas producing areas, except as provided by subparagraphs (10)(A)3.A. and B. of this rule.
- A. Any segregated area of asbestos or nondegradable material may be excluded from collection if documentation is provided as specified under subsection (9)(D) of this rule. The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited



in the area, and shall be provided to the director upon request.

B. Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than one percent (1%) of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the director upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i$$
 = 2 k L_o M_i (e^{-kt_i}) (C_{NMOC})
(3.6 × 10⁻⁹)

where,

M;

Q_i = NMOC emission rate from the ith section, megagrams per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

> = mass of the degradable solid waste in the ith section, megagram

t_i = age of the solid waste in the ith section, years

C_{NMOC} = concentration of nonmethane organic compounds, parts per million by volume

 $3.6 \times 10^{-9} = \text{conversion factor}$

C. The values for k and $C_{\mbox{\scriptsize NMOC}}$ determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence (the distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k, Lo, and C_{NMOC} provided in paragraph (5)(A)1. of this rule or the alternative values from (5)(A)5. of this rule shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in subparagraph (10)(A)3.A. of this rule.

(B) Each owner or operator seeking to comply with part (3)(B)2.A.(I) of this rule

shall construct the gas collection devices using the following equipment or procedures:

- 1. The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to-convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards established in this rule. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration;
- 2. Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations; and
- 3. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one (1) sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.
- (C) Each owner or operator seeking to comply with part (3)(B)2.A.(I) of this rule shall convey the landfill gas to a control system in compliance with subparagraph (3)(B)2.C. of this rule through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:
- 1. For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (10)(C)2. of this rule shall be used; and

2. For new collection systems, the maximum flow rate shall be in accordance with paragraph (6)(A)1. of this rule.

AUTHORITY: section 643.050, RSMo Supp. 2011.* Original rule filed Jan. 14, 1997, effective Sept. 30, 1997. Amended: Filed Oct. 7, 1999, effective July 30, 2000. Amended: Filed Sept. 26, 2011, effective May 30, 2012.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.320 Sales Tax Exemption (Rescinded September 30, 2009)

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Dec. 13, 1996, effective July 30, 1997. Amended: Filed May 24, 2002, effective March 30, 2003. Rescinded: Filed Dec. 17, 2008, effective Sept. 30, 2009.

10 CSR 10-6.330 Restriction of Emissions From Batch-Type Charcoal Kilns

PURPOSE: This regulation establishes emission limits for batch-type charcoal kilns based on operational parameters that reflect the Best Available Control Technology (BACT) for this industry as of August 20, 1997.

(1) Applicability.

- (A) This regulation applies to all batchtype charcoal kilns throughout the entire state of Missouri.
- (B) In the event that other rules in the *Code* of *State Regulations* are also applicable to batch-type charcoal kilns, the more stringent rule requirement shall apply.

(2) Definitions.

- (A) "Batch-type charcoal kiln"—Charcoal kilns that manufacture charcoal with a batch process rather than a continuous process. The batch-type charcoal kiln process typically includes loading wood, sealing the kiln, igniting the wood and controlled burning of the wood to produce charcoal which is unloaded.
- (B) "Burn cycle"—The burn cycle for a charcoal kiln begins at the time that a batch of wood is initially lit and ends when the burn for that batch is completed and the kiln is sealed. The burn cycle does not include cool down time.
- (C) "Charcoal kiln"—Any closed structure used to produce charcoal by controlled burning (pyrolysis) of wood. Retorts and furnaces used for charcoal production are not charcoal kilns.

- (D) "Charcoal kiln control system"—A combination of an emission control device and connected charcoal kiln(s).
- (E) "Emission control device"—Any device used to reduce contaminant emissions into the air. Thermal oxidizers or afterburners are often used on charcoal kilns for burning exhaust gases to reduce particulate matter, carbon monoxide and volatile organic compound emissions.
- (F) "Fill capacity"—The maximum amount of wood that can be properly loaded into a charcoal kiln prior to the burn cycle.
- (G) "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.
- (H) "Particulate matter"—Particulate matter emissions from charcoal kilns and charcoal kiln control systems shall consist of all particulate matter including condensibles.
- (I) "Residence time"—Period of time in which gas in a thermal oxidizer, incinerator or afterburner is exposed to heat and oxygen at a specified temperature in order to destroy pollutants present in the gas.
- (J) "Treated wood"—Wood that has been subjected to a chemical process or applica-
- (K) Definitions of certain terms specified in this rule, other than those specified in this rule section, may be found in 10 CSR 10-6.020.
- (3) General Provisions.
 - (A) Restriction of Emissions.
- 1. No charcoal kiln control system shall emit visible emissions greater than ten percent (10%) opacity.
- 2. No charcoal kiln control system shall emit more than the following emissions:
- A. 1.5 pounds per hour of particulate matter;
- B. Either 0.24 pounds per hour volatile organic compounds (VOCs) or the emission rate equivalent to ninety-nine percent (99%) VOC control efficiency, whichever results in a lower emission rate; and
- C. 1.75 pounds per hour of carbon monoxide (CO).
- Charcoal kiln control systems shall be maintained to assure that no visible fugitive emissions result from equipment cracks or door seals.
- 4. Fugitive dust from other operations at charcoal manufacturing installations (such as

- charcoal handling, vehicle haul roads, crushing, screening, etc.) shall comply with the requirements of 10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin.
 - (B) Operating Requirements.
- 1. No charcoal kiln shall be operated without an emission control device installed and operated to meet the requirements of this rule and other applicable state and federal rules.
- 2. Each emission control device shall have a sight glass installed in the burning chamber such that the burn can be visually monitored.
- 3. All charcoal kiln emissions shall be ducted to an operating emission control device throughout the entire burn cycle.
- 4. Emission control devices shall be equipped with automatic temperature control systems which are set such that gas streams are heated and maintained at a nominal operating temperature of sixteen hundred degrees Fahrenheit (1600 °F), with a fifteen hundred twenty degree Fahrenheit (1520 °F) minimum temperature allowed, for a minimum residence time of 1.7 seconds.
- 5. All charcoal kiln control systems shall be operated using the same fuel(s) as used during performance testing.
- 6. No charcoal kiln shall burn treated wood at any time.
- 7. Rule 10 CSR 10-6.050 Startup, Shutdown, and Malfunction Conditions shall only be applicable to charcoal kiln control systems with regard to the malfunction provision, and not with regard to start-up and shutdown.
- 8. All charcoal kiln control systems shall be operated and maintained in accordance with the department approved standard operating procedures manual described in subsection (3)(D) of this rule and the department approved maintenance practices manual described in subsection (3)(E) of this rule.
- 9. All charcoal kiln control systems that have been performance tested shall continuously display and record the emission control device operating temperature with the permanently installed temperature recording device at all times of operation.
- (C) Each charcoal kiln shall have a unique identification number permanently affixed to the exterior of the charcoal kiln structure.
- (D) The owner or operator of charcoal kilns at charcoal manufacturing installations shall develop, submit for department approval and establish a standard operating procedures manual for each charcoal manufacturing installation. At a minimum, this manual shall describe—
 - 1. Safe charcoal kiln operation;

- 2. Bundle stacking (including adequate platform of logs to enhance combustion);
- 3. Use of properly seasoned wood (cover mixing of wood species, if applicable);
- Control of fugitive emissions from each charcoal kiln (e.g. "mudding" cracks and doors) and each emission control device; and
- 5. Methods of reporting and record keeping required by section (4) of this rule.
- (E) The owner or operator of charcoal kilns shall develop, submit for department approval and establish a maintenance practices manual for each charcoal kiln control system. This manual shall be maintained at each site for the specific emission control device(s) installed at the site. At a minimum, this manual shall include:
- 1. Maintenance of all equipment (e.g. proper cleaning of inlet ports);
- 2. Measures taken in the event of emission control device failure to minimize emissions (e.g. opening kiln caps and air vents to allow kiln wood to burn down to minimize smoking conditions or shutting all kiln inlets and outlets until all combustion in the chamber is extinguished);
- 3. Inspections performed and frequency (e.g. daily burner operation); and
- 4. Methods of reporting and record keeping required by section (4) of this rule.
- (F) Performance Testing and Compliance Determinations.
- 1. For compliance determination, each charcoal kiln control system shall be evaluated as a unit and performance tested for compliance with the emission limit requirements of paragraphs (3)(A)1. and 2. of this rule.
- 2. All charcoal kiln control system performance tests shall be conducted with each charcoal kiln of the system filled to at least ninety percent (90%) of fill capacity and at the midpoint of burn cycle unless otherwise noted. The midpoint of each charcoal kiln burn cycle shall be no less than forty percent (40%), and no more than sixty percent (60%) of the total burn cycle.
- 3. Emission control device fuel type(s) and quantity(ies) used during the performance test shall be recorded.
- 4. All performance test operating temperatures shall be recorded with a continuous recording device that is permanently installed and the temperature shall be continuously displayed and recorded throughout the entire performance test.
- 5. Each performance test shall consist of a minimum of three (3) runs for each pollutant specified in paragraph (3)(A)2. of this rule and shall be conducted using the test methods specified in section (5) of this rule. Each test run duration shall be one (1) hour

unless the test method requires a longer duration. Compliance shall not be considered demonstrated until the department has validated performance test results.

- 6. Compliance determinations for visible fugitive emission requirements of this rule shall use the test method specified in subsection (5)(E) of this rule.
- 7. The director may allow similar charcoal kiln control system units to operate without the individual performance tests required by paragraph (3)(F)1. if the following conditions are met:
- A. Similar units have the same number of charcoal kilns, the same construction, capacities within ten percent (10%) of each other and the same design;
- B. Similar units are controlled by emission control devices with the same construction, the same size and the same design; and
- C. Three (3) separate similar units have successfully demonstrated compliance with the emission limit requirements of paragraphs (3)(A)1. and 2. of this rule.
- 8. The director may allow a specific charcoal kiln control system to operate at a temperature lower than the paragraph (3)(B)4. temperature requirement of this rule if the owner or operator successfully demonstrates by performance test that the following conditions are met:
- A. All emission limit requirements of paragraphs (3)(A)1. and 2. of this rule are met; and
- B. The CO control efficiency is greater than or equal to ninety-nine percent (99%)
- 9. Control efficiency shall be calculated from performance test data using the following calculation:

$$CE = \left(1 - \frac{Outlet \ Emission \ Rate}{Inlet \ Emission \ Rate} \right) \times 100$$

10. The owner or operator of a charcoal kiln shall be allowed a period of one hundred eighty (180) days from the first time combustion occurs in the emission control device to get the charcoal kiln control system operating in compliance with this rule. Combustion in the emission control device of a charcoal kiln shall occur no later than December 31 of the applicable compliance year established in subsection (3)(G) of this rule. During this one hundred eighty (180)-day period, deviations from the emission limit and operating requirements of this rule shall not be considered violations subject to enforcement.

- 11. If any existing emission control device installed or fabricated prior to the effective date of this rule does not meet the requirements of this rule, the emission control device will be modified or replaced such that requirements of this rule are met no later than eighteen (18) months after the effective date of this rule. Accelerated time constraints established by the Environmental Protection Agency (EPA) Final Consolidated Consent Agreement and Consent Order dated September 30, 1997, take precedence over this requirement.
- 12. Any owner or operator may shut down existing charcoal kilns reported as active rather than installing required emission control devices. If the owner or operator subsequently decides to reactivate charcoal kilns, the charcoal manufacturing installation must have required emission control devices in operation on those kilns, prior to activation and the owner or operator must notify the department at least thirty (30) days prior to reactivation.
- 13. Charcoal kilns that were not reported as active, cannot be reactivated without required emission control devices installed. Any emission control device installed per subsection (3)(F) of this rule does not count towards the schedule for emission control devices in subsection (3)(G) of this rule.
- 14. Any existing charcoal kiln that has been inactive for sixty (60) months or longer shall comply with all federal and state rules, and obtain a construction permit prior to reactivation.
 - (G) Compliance Schedule.
- 1. For each charcoal manufacturing installation owned or operated, each owner or operator shall install an emission control device to meet the requirements of this rule on a minimum of two (2) active charcoal kilns by December 31, 1998. Accelerated compliance schedules established by the Environmental Protection Agency (EPA) Final Consolidated Consent Agreement and Consent Order dated September 30, 1997, take precedence over this requirement.
- 2. After December 31, 1998, each owner or operator shall install an emission control device to meet the requirements of this rule on remaining active charcoal kilns at the rate of a minimum of two (2) charcoal kilns per charcoal manufacturing installation per calendar year by December 31 of each year. All emission control devices must be installed no later than December 31, 2005. Accelerated compliance schedules established by the Environmental Protection Agency (EPA) Final Consolidated Consent Agreement and Consent Order dated September 30, 1997, take precedence over this requirement.

An owner or operator can install emission control devices early without accelerating the schedule for installation of control devices contained in this paragraph.

- 3. The standard operating procedures manual and maintenance practices manual described in subsection (3)(D) and (3)(E) of this rule shall be developed and submitted to the department for approval no later than December 31, 1998.
- 4. All new charcoal kilns shall comply with all federal and state rules and obtain all necessary permits prior to operation.
- (4) Reporting and Record Keeping.
- (A) Owners or operators of all charcoal kilns shall maintain a file on each active charcoal kiln with the following information for a minimum of five (5) years from the date the data was collected:
- 1. Average annual production (tons of charcoal per charcoal manufacturing installation per year divided by the number of charcoal kilns at the charcoal manufacturing installation);
- 2. Start-up time (hour and minute) for each burn cycle;
- 3. Emission control device temperature (in degrees Fahrenheit) throughout each burn cycle shall be measured at a point in the emission control device where gas residence time is no less than 1.7 seconds;
- 4. The emission control device temperature shall be continuously displayed and recorded by a continuous recording device. (For twelve months after the effective date of this rule, manual recording of the emission control device temperature every fifteen (15) minutes shall be allowed for charcoal kiln control systems that are not performance tested);
- 5. Daily log for each charcoal kiln control system that includes start-up time(s), cool-down time(s), re-light time(s) and inspections performed (e.g. burn chamber);
- 6. Monthly log for each charcoal kiln control system that includes fuel usage and, where more than one (1) type of fuel is used, fuel types and times of usage:
- 7. Malfunction log for each charcoal manufacturing installation that includes a description of each malfunction cause, duration and actions taken to remedy the malfunction; and
- 8. Performance test reports for all emission control devices tested.
- (B) No later than thirty (30) days after the effective date of this rule, owners or operators of all charcoal kilns shall provide the department with a list of the identification numbers of active charcoal kilns at each location at the time this rule becomes effective. If the active

status of any charcoal kiln changes, including the construction of new charcoal kilns, the owner or operator shall provide an updated list to the department no later than thirty (30) days after the status change.

(C) All information maintained in the charcoal kiln file shall be made immediately available to Missouri Department of Natural Resources representatives upon request.

(5) Test Methods.

- (A) Particulate matter emission level testing shall include condensibles and use the following methods:
- 1. 10 CSR 10-6.030(1), Reference Method 1—Sample and Velocity Traverses for Stationary Sources;
- 2. 10 CSR 10-6.030(2), Reference Method 2—Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube):
- 3. 10 CSR 10-6.030(3), Reference Method 3—Gas Analysis for Carbon Dioxide, Excess Air and Dry Molecular Weight;
- 4. 10 CSR 10-6.030(4), Reference Method 4—Determination of Moisture in Gases:
- 5. 10 CSR 10-6.030(5)(A), Reference Method 5—Determination of Particulate Emissions from Stationary Sources; and
- 6. 40 CFR part 51, Appendix M—Recommended Test Methods For State Implementation Plans, *Method 202—Determination of Condensible Particulate Emissions from Stationary Sources*.
- (B) VOC emission level testing shall use one (1) of the following methods as specified by 40 CFR part 60, Appendix A—Reference Methods:
- 1. Method 18—Measurement of Gaseous Organic Compound Emissions by Gas Chromatography; or
- 2. Method 25A—Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer.
- (C) CO emission level testing shall use 10 CSR 10-6.030(10), Reference Method 10—Determination of Carbon Monoxide Emissions from Stationary Sources.
- (D) Emissions percent opacity testing shall use 10 CSR 10-6.030(9), Reference Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources.
- (E) Visible fugitive emissions testing shall use *Method 22—Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares* as specified by 40 CFR part 60, Appendix A—Reference Methods.

AUTHORITY: sections 643.030, 643.075 and 643.078. RSMo 1994 and 643.050. RSMo

Supp. 1997.* Original rule filed Nov. 25, 1997, effective July 30, 1998.

*Original authority: 643.030, RSMo 1965, amended 1972, 1992, 1993; 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995; 643.075, RSMo 1972, amended 1988, 1992; and 643.078, RSMo 1992.

10 CSR 10-6.345 Control of NO_x Emissions From Upwind Sources

(Rescinded October 30, 2013)

AUTHORITY: section 643.050, RSMo 2000. Original rule filed May 4, 2006, effective Dec. 30, 2006. Rescinded: Filed March 13, 2013, effective Oct. 30, 2013.

10 CSR 10-6.350 Emission Limitations and Emissions Trading of Oxides of Nitrogen

PURPOSE: The purpose of this rule is to reduce the emissions of nitrogen oxides (NO_x) and establish a NO_x emissions trading program for the state of Missouri. The reductions in NO_x emissions will reduce the transport of ozone and its precursors within the state of Missouri and to other states as required under the Clean Air Act.

(1) Applicability.

- (A) This rule applies to any fossil fuelfired electric generating unit that serves a generator with a nameplate capacity of greater than twenty-five megawatts (25 MW).
 - (B) Exemptions.
- 1. Any unit under subsection (1)(A) of this rule which demonstrates, using the emission estimation methods outlined in paragraph (5)(E)1. of this rule, that the unit's mass NO_x emissions are twenty-five (25) tons or less during the control period is exempt from the requirements of this rule.
- 2. The provisions of section (3) of this rule shall not apply to any emergency stand-by generators, internal combustion engines and peaking combustion turbine units demonstrated to operate less than four hundred (400) hours per control period averaged over the three (3) most recent years of operation, which have installed and maintained in proper operation a nonresettable engine hour meter.
- (C) Loss of Exemption. If the exemption limit in paragraph (1)(B)1. or (1)(B)2. of this rule is exceeded, the exemption shall not apply and the owner or operator must notify the staff director or designee within thirty (30) days. If the owner or operator can demonstrate to the staff director or designee that the exemption limit was exceeded due to

emergency operations or uncontrollable circumstances, the exemption in paragraph (1)(B)1. or (1)(B)2. of this rule shall apply.

- (D) Compliance with this rule shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the Air Conservation Law and rules or any other requirements under local, state or federal law. Specifically, compliance with this rule shall not violate the permit conditions previously established under 10 CSR 10-6.060 or 10 CSR 10-6.065.
- (E) Affected sources in the counties of Bollinger, Butler, Cape Girardeau, Carter, Clark, Crawford, Dent, Dunklin, Franklin, Gasconade, Iron, Jefferson, Lewis, Lincoln, Madison, Marion, Mississippi, Montgomery, New Madrid, Oregon, Pemiscot, Perry, Pike, Ralls, Reynolds, Ripley, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Scott, Shannon, Stoddard, Warren, Washington and Wayne counties and the City of St. Louis may demonstrate compliance with the provisions of this rule using compliance with 10 CSR 10-6.360, provided that the emission rate of each unit does not exceed 0.25 or 0.18 pound per million British thermal units (mmBtu), whichever is applicable.
- (F) The requirements of sections (3), (4), and (5) of this rule will not apply to any entity or source subject to and implementing the requirements of 10 CSR 10-6.364.

(2) Definitions.

- (A) Definitions of certain terms in this rule, other than those specified in this rule section, may be found in 10 CSR 10-6.020.
- (B) Account certificate of representation—The completed and signed submission for certifying the designation of a NO_x authorized account representative for an affected unit or a group of identified affected units who is authorized to represent the owners or operators of such unit or units and of the affected units at such source or sources with regard to matters under the NO_x trading program.
- (C) Account number—The identification number given to each NO_x trading program account.
- (D) Automated data acquisition and handling system—That component of the Continuous Emissions Monitoring System, or other emissions monitoring system approved for use by the department, designed to interpret and convert individual output signals from pollutant concentration monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required in this rule.



- (E) Average emission rate—The simple average of the hourly NO_x emission rate as recorded by monitoring systems approved in section (5) of this rule.
- (F) 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.
- (G) Combined cycle system—A system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.
- (H) Combustion turbine—An enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.
- (I) Common stack—A single flue through which emissions from two or more NO_x units are exhausted.
- (J) Compliance account—A NO_x allowance tracking system account, established for an affected unit, in which the NO_x allowance allocations for the unit are initially recorded and in which are held NO_x allowances available for use by the unit for a control period for the purpose of meeting the unit's NO_x emission limitation.
- (K) Continuous emissions monitoring system (CEMS)—The equipment required by this rule to sample, analyze, measure, and provide, by readings taken at least once every fifteen (15) minutes of the measured parameters, a permanent record of NO_x emissions, expressed in tons per hour for NO_x.
- (L) Control period—The period beginning May 1 of a calendar year and ending on September 30 of the same calendar year.
- (M) Cyclone EGU—An electric generating unit (EGU) with a fossil fuel-fired boiler consisting of one or more horizontal cylindrical barrels that utilize tangentially applied air to produce a swirling combustion pattern of coal and air.
- (N) Early reduction credit (ERC)— NO_x emission reductions in the years 2000, 2001, 2002 and 2003 that are below the limits specified in subsection (3)(A) of this rule. ERCs will only be available for use during the years of 2004 and 2005. When calculating ERCs or performing calculations involving ERCs, ERCs shall always be rounded down to the nearest ton.
- (O) 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.
- (P) 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.
- (Q) Fossil fuel—Natural gas, petroleum, coal, or any form of solid, liquid or gaseous fuel derived from such material.
- (R) Fossil fuel-fired—With 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.
- (S) Generator—A device that produces electricity.
- (T) Heat input—The product (expressed as million British thermal units per hour) of the gross calorific value of the fuel (expressed as British thermal units per pound) and the fuel feed rate into a combustion device (expressed as pounds per hour), as measured, recorded and reported to the department by the NO_x authorized account representative and as determined by the director in accordance with this rule and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.
- (U) 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.
- (V) NO_x allowance—An authorization by the department under the NO_x trading program to emit one (1) ton of NO_x during the control period of the specified year or of any year thereafter.
- (W) NO_x allowance tracking system—The system by which the director records allocations, deductions and transfers of NO_x allowances under the NO_x trading program.
- (X) NO_x allowance transfer deadline—Close of business on December 31 following the control period or, if December 31 is not a business day, close of business on the first business day thereafter and is the deadline by which NO_x allowances may be submitted for recording in an affected unit's compliance account, or the overdraft account of the installation where the unit is located.

- (Y) NO_x authorized account representative—The person who is authorized by the owners or operators of the unit to represent and legally bind each owner and operator in matters pertaining to the NO_x trading program.
- (Z) NO_x emissions limitation—For an affected unit, the tonnage equivalent of the NO_x emissions rate available for compliance deduction for the unit and for a control period adjusted by any deductions of such NO_x allowances to account for actual utilization for the control period or to an account for excess emissions for a prior control period or to account for withdrawal from the NO_x trading program or for a change in regulatory status for an affected unit.
- (AA) NO_x emission rate—The amount of NO_x emitted by a combustion unit in pounds per million British thermal units of heat input as recorded by monitoring devices approved in section (5) of this rule.
- (BB) NO_x opt-in unit—An EGU whose owner or operator has requested to become an affected unit under the NO_x trading program and has been approved by the department.
- (CC) NO_x unit—Any fossil fuel-fired stationary boiler, combustion turbine, internal combustion engine or combined cycle system.
- (DD) Opt-in—To voluntarily become an affected unit under the NO_x trading program.
- (EE) Overdraft account—The NO_x allowance tracking system account established by the director for each NO_x authorized account representative.
- (FF) Passenger tire equivalent (PTE)—The weight of waste tires or parts of waste tires equivalent to the average weight of one (1) passenger tire. The average weight of one (1) passenger tire is equal to twenty (20) pounds.
- (GG) Peaking combustion unit—A combustion turbine normally reserved for operation during the hours of highest daily, weekly, or seasonal loads.
- (HH) Serial number—When referring to NO_x allowances, the unique identification number assigned to each NO_x allowance.
- (II) Tire-derived fuel—The end product of a process that converts whole scrap tires into a specific chipped form capable of being used as fuel.
- (JJ) Unit load—The total output of a unit in any control period produced by combusting a given heat input of fuel expressed in terms of the total electrical generation (expressed as megawatt) produced by the unit including generation for use within the plant, and/or in

the case of a unit that uses heat input for purposes other than electrical generation, the total steam flow (lb/hr) produced by the unit, including steam for use by the unit.

(KK) Unit operating day—A calendar day in which a unit combusts any fuel.

(LL) Unit operating hour or hour of unit operation—Any hour or fraction of an hour during which a unit combusts fuel.

(MM) Utilization—The heat input (expressed as million British thermal units per hour) for a unit.

(3) General Provisions.

(A) NO_x Emissions Limitations. Beginning May 1, 2004, the following NO_x emission rates shall apply:

- 1. EGUs located in the counties of Bollinger, Butler, Cape Girardeau, Carter, Clark, Crawford, Dent, Dunklin, Gasconade, Iron, Lewis, Lincoln, Madison, Marion, Mississippi, Montgomery, New Madrid, Oregon, Pemiscot, Perry, Phelps, Pike, Ralls, Reynolds, Ripley, St. Charles, St. Francois, Ste. Genevieve, Scott, Shannon, Stoddard, Warren, Washington, and Wayne shall limit emissions of NO_x to the more stringent of a rate of 0.25 lbs NO_x/million British thermal units (mmBtu) of heat input during the control period or any applicable permitted NO_x limitation under 10 CSR 10-6.060.
- 2. EGUs located in the City of St. Louis and the counties of Franklin, Jefferson, and St. Louis shall limit emissions of NO_x to the more stringent rate of 0.18 lbs NO_x /mmBtu of heat input during the control period, or any applicable permitted NO_x limitation under 10 CSR 10-6.060. For the purpose of calculating ERCs under subparagraph (3)(B)5.C. of this rule, the regulated NO_x emission rate (NO_x -ER_r) for units located in these areas shall be 0.25 lbs NO_x /mmBtu.
- 3. EGUs located in the counties of Buchanan, Jackson, Jasper, or Randolph shall limit emissions of $\mathrm{NO_x}$ to the more stringent rate of any applicable permitted $\mathrm{NO_x}$ limitation under 10 CSR 10-6.060 or the less stringent of:
- A. 0.35 lbs NO_x/mmBtu of heat input during the control period; or

B. 0.68 lbs NO_x/mmBtu of heat input during the control period, provided that the unit is a cyclone EGU and burns tire-derived fuel in a quantity of at least one hundred thousand (100,000) PTEs per year. For installations with multiple cyclone EGUs, compliance with the one hundred thousand (100,000) PTE burned per year may also be based on the average number of PTEs burned

per cyclone EGU.

- 4. EGUs located in any county not identified in paragraph (3)(A)1., (3)(A)2., or (3)(A)3. of this rule shall limit emissions of NO_x to the more stringent of a rate of 0.35 lbs NO_x /mmBtu of heat input during the control period or any applicable permitted NO_x limitation under 10 CSR 10-6.060.
- 5. In lieu of complying with the applicable emission limitations in paragraphs (3)(A)1. through (3)(A)4. of this rule, any affected unit may comply through the NO_x emissions trading program under subsection (3)(B) of this rule.
 - (B) NO_x Emissions Trading Program.
- 1. NO_x authorized account representative. The NO_x authorized account representative shall have the responsibilities and meet the requirements identified in this subsection.
- A. Each affected unit shall have only one NO_x authorized account representative with respect to all matters under the NO_x trading program. Each affected unit may have only one (1) alternate NO_x authorized account representative who may act on behalf of the NO_x authorized account representative.
- B. A NO_x authorized account representative may be responsible for multiple units at an installation or within a system of installations with the same owner.
- C. The department will act on a valid submission made on behalf of owners or operators of an affected unit only if the submission has been made, signed and certified by the NO_x authorized account representative or the alternate NO_x authorized account representative.
- D. Each unit must submit an account certificate of representation no later than January 1, 2004 or December 31 of the year in which the rule becomes applicable for units installed after January 1, 2004.
 - 2. NO_x allowance tracking system.
- A. NO_x allowance tracking system accounts. The department will establish one (1) compliance account for each NO_x unit and one (1) overdraft account for each NO_x authorized account representative with one (1) or more NO_x units. Allocations of NO_x allowances pursuant to paragraphs (3)(B)3. or (3)(B)10. of this rule and deductions or transfers of NO_x allowances pursuant to paragraphs (3)(B)3., (3)(B)7., (3)(B)9., or (3)(B)10. of this rule will be recorded in the compliance accounts or overdraft accounts.
 - B. Establishment of accounts.

- (I) Compliance accounts and overdraft accounts. Upon receipt of a complete account certificate of representation, the department will establish—
- (a) A compliance account for each affected NO_{x} unit for which the account certificate of representation was submitted; and
- (b) An overdraft account for each NO_x authorized account representative for which the account certificate of representation was submitted.
- (II) Account identification. The department will assign a unique identifying number to each compliance account and each overdraft account.
- C. Recording of NO_x allowance allocations.
- (I) The department will record the NO_x allowances for the 2004 control period in the NO_x units' compliance accounts.
- (II) Serial numbers for allocated NO_x allowances. The department will assign each NO_x allowance a unique identification number that will include digits identifying the year for which the NO_x allowance is allocated.
 - 3. NO_v allowances.
 - A. Projected NO_x allowances.
- (I) By March 1, 2004, the NO_x authorized account representative for each affected unit shall submit to the department a report containing the following:
- (a) The projected control period NO_x emission rate for each affected unit;
- (b) The average of the three (3) most recent control period heat inputs, unless those three (3) periods are not representative of normal operation; and
- (c) A plan identifying the methodology for compliance with subsection (3)(A) of this rule.
- (II) The department will review each report and make any amendments within fifteen (15) working days.
- (III) The department will develop a summary of projected NO_{x} allowances on a unit by unit and statewide basis for distribution on or before May 1 of each year using Equation 1 of this rule.

Equation 1:

$$\frac{\mathrm{HI_p \times ER_p}}{2000} = \mathrm{NO_x AL_p}$$

where:

HI_p = the projected control period heat input for each NO_x unit;



ER_p = the projected control period emission rate for each NO_x unit; and

NO_xAL_p = the projected NO_x allowance for each NO_x unit rounded down to the nearest ton (in tons).

B. Control period NO_x allowances.

(I) By October 31 following each control period, each NO_x authorized account representative shall submit to the department the actual total control period heat input and actual average emission rate in a compliance report consistent with requirements of section (4) of this rule for each affected NO_x unit.

(II) By November 15 following each control period, the department will issue a notice to each $\mathrm{NO_x}$ authorized account representative of the actual $\mathrm{NO_x}$ allowances recorded in the unit compliance account for each affected $\mathrm{NO_x}$ unit using Equation 2 of this rule.

Equation 2:

$$\frac{\mathrm{HI}_{\mathrm{a}} \times \mathrm{ER}_{\mathrm{r}}}{2000} = \mathrm{NO}_{\mathrm{x}} \mathrm{AL}_{\mathrm{a}}$$

where:

HI_a = the actual control period heat input for each NO_v unit;

ER_r = the allowable control period emission rate for each NO_x unit as determined in paragraphs (3)(A)1. through (3)(A)4. of this rule; and

 ${
m NO_x AL_a}$ = the actual ${
m NO_x}$ allowance for each unit for the control period rounded down to the nearest ton (in tons).

4. Compliance. By the end of the NO_x allowance transfer deadline, each NO_x unit shall have sufficient NO_x allowances in their compliance account to allow for the deductions in subparagraph (3)(B)4.B. of this rule.

A. NO_x allowance transfer deadline. The NO_x allowances are available to be deducted for compliance with a unit's NO_x emissions limitation for a control period in a given year only if the NO_x allowances—

(I) Were allocated for a control period in a prior year or the same year; and

(II) Are held in the unit's compliance account or the unit's overdraft account as of the NO_x allowance transfer deadline for that control period.

B. Deductions for compliance.

(I) The director will deduct NO_x allowances to cover the unit's NO_x emissions for the control period—

(a) From the compliance account;

and

(b) Only if no more NO_x allowances available under subparagraph (3)(B)4.A. of this rule remain in the compliance account, from the overdraft account. In

deducting allowances for units from the overdraft account, the director will begin with the unit having the compliance account with the lowest NO_{x} Allowance Tracking System account number and end with the unit having the compliance account with the highest NO_{x} Allowance Tracking System account number.

(II) The director will deduct NO_x allowances until the number of NO_x allowances deducted for the control period equals the number of tons of NO_x emissions, determined in accordance with part (3)(B)4.B.(III) of this rule, from the unit for the control period for which compliance is being determined; or until no more NO_x allowances available under subparagraph (3)(B)4.A. of this rule remain in the respective account.

(III) For a $\mathrm{NO_x}$ unit that is allocated $\mathrm{NO_x}$ allowances under part (3)(B)3.B.(II) of this rule for a control period, the department will deduct $\mathrm{NO_x}$ allowances under subparagraph (3)(B)4.B. or (3)(B)4.E. of this rule to account for the actual utilization of the unit during the control period. The department will calculate the number of $\mathrm{NO_x}$ allowances to be deducted to account for the unit's actual utilization using Equation 3 of this rule.

Equation 3:

$$\Sigma HI_a \times ER_a = NO_x AL_d$$

where:

 HI_a = the actual control period heat input for each NO_x unit;

 $\mathrm{ER_{a}}$ = the actual control period emission rate for each $\mathrm{NO_{x}}$ unit; and

 ${
m NO_x AL_d} =$ the number of ${
m NO_x}$ allowances that will be deducted from each ${
m NO_x}$ unit's compliance account (rounded down to the nearest allowance).

C. Identification of NO_x allowances by serial number.

(I) The NO_x authorized account representative may identify by serial number the NO_x allowances to be deducted from the unit's compliance account under subparagraph (3)(B)4.B., (3)(B)4.D., or (3)(B)4.E. of this rule. Such identification will be made in the compliance certification report submitted in accordance with paragraph (4)(A)1. of this rule.

(II) The staff director will deduct NO_x allowances for a control period from the compliance account, in the absence of an identification or in the case of a partial identification of NO_x allowances by serial number

under part (3)(B)4.C.(I) of this rule, or the overdraft account in the following order:

(a) Those NO_x allowances that were allocated for the control period to the unit under part (3)(B)3.B.(II) of this rule;

(b) Those NO_x allowances that were allocated for the control period to any unit and transferred and recorded in the account pursuant to paragraphs (3)(B)7. and (3)(B)8. of this rule, in order of their date of recording;

(c) Those NO_{x} allowances that were allocated for a prior control period to the unit under part (3)(B)3.B.(II) of this rule; and

(d) Those NO_x allowances that were allocated for a prior control period to any unit and transferred and recorded in the account pursuant to paragraphs (3)(B)7. and (3)(B)8. of this rule, in order of their date of recording.

D. Deductions for units sharing a common stack. In the case of units sharing a common stack and having emissions that are not separately monitored or apportioned in accordance with section (4) of this rule—

(I) The NO_x authorized account representative of the units shall identify the percentage of NO_x allowances to be deducted from each such unit's compliance account to cover the unit's share of NO_x emissions from the common stack for a control period. Such identification shall be made in the compliance certification report submitted in accordance with paragraph (4)(A)1. of this rule.

Notwithstanding (II)(3)(B)4.B.(II) of this rule, the director will deduct NOx allowances for each unit until the number of NO_x allowances deducted equals the unit's identified percentage (under part (3)(B)4.D.(I) of this rule) of the number of tons of NO_x emissions, as determined in accordance with section (4) of this rule, from the common stack for the control period for which compliance is being determined or, if no percentage is identified, an equal percentage for each unit, plus the number of allowances required for deduction to account for actual utilization under subparagraph (4)(A)1.G. of this rule for the control period.

E. The director will record in the appropriate compliance account or overdraft account all deductions from such an account pursuant to subparagraphs (3)(B)4.B. and (3)(B)4.D. of this rule.

5. Banking.

A. $\mathrm{NO_x}$ allowances may be banked for future use or transfer into a compliance account or an overdraft account, as follows:

- (I) Any $\mathrm{NO_x}$ allowance that is held in a compliance account or an overdraft account, will remain in such account until the $\mathrm{NO_x}$ allowance is deducted or transferred under paragraphs (3)(B)4., (3)(B)5., (3)(B)6., or (3)(B)7. of this rule.
- (II) The director will designate, as a banked $\mathrm{NO_x}$ allowance, any $\mathrm{NO_x}$ allowance that remains in a compliance account or an overdraft account after the director has made all deductions for a given control period from the compliance account or overdraft account pursuant to paragraph (3)(B)4. of this rule.
- B. Each year, starting in 2005, after the director has completed the designation of banked NO_x allowances under part (3)(B)5.A.(II) of this rule and before May 1 of the year, the department will determine the extent to which banked NO_x allowances may be used for compliance in the control period for the current year, as follows:
- (I) The director will determine the total number of banked NO_x allowances held in compliance accounts or overdraft accounts.
- (II) If the total number of banked NO_x allowances determined, under part (3)(B)5.B.(I) of this rule, to be held in compliance accounts or overdraft accounts is less than or equal to ten percent (10%) of the sum of the NO_x trading program allocations for the previous control period, any banked NO_x allowance may be deducted for compliance in accordance with paragraph (3)(B)4. of this rule
- (III) If the total number of banked ${\rm NO}_{\rm x}$ allowances determined, under part (3)(B)5.B.(I) of this rule, and held in compliance accounts or overdraft accounts exceeds ten percent (10%) of the sum of the state trading program allocations for the previous control period, any banked allowance may be deducted for compliance in accordance with paragraph (3)(B)4. of this rule, except as follows:
- (a) The director will determine the adjustment factor using Equation 4 of this rule.

Equation 4:

$$AF = \frac{0.1 \times \sum NO_{x}AL_{a}}{\sum NO_{y}AL_{b}}$$

where:

AF = the adjustment factor;

 \sum NO_xAL_a = the sum of the statewide NO_x allowance allocated for the previous control period; and

 $\sum NO_xAL_b$ = the sum of the banked NO_x al-

lowances as determined under part (3)(B)5.B.(I) of this rule on January 1 of the current year;

(b) The director will determine the number of banked NO_x allowances in the account that may be deducted for compliance in accordance with paragraph (3)(B)4. of this rule using Equation 5 of this rule. Any banked NO_x allowances in excess of the product of Equation 5 may be deducted for compliance in accordance with paragraph (3)(B)4. of this rule, except that, if such NO_x allowances are used to make a deduction, two (2) such NO_x allowances must be deducted for each deduction of one (1) NO_x allowance required under paragraph (3)(B)4. of this rule.

Equation 5:

$$AF \times NO_xAL_b$$

where

AF = the adjustment factor calculated in Equation 4; and

 NO_xAL_b = the number of NO_x allowances in a NO_x unit's account;

(IV) Geographic flow control.

- (a) Banked NO_x allowances made available for use in parts (3)(B)5.B.(II) and (3)(B)5.B.(III) of this rule may be traded on a one to one (1:1) basis unless otherwise specified in subparts (3)(B)5.B.(IV)(b) and (3)(B)5.B.(IV)(c) of this rule.
- (b) Banked NO_x allowances made available for use in parts (3)(B)5.B.(II) and (3)(B)5.B.(III) of this rule may be traded from the control region for which paragraphs (3)(A)3. and (3)(A)4. of this rule are applicable to the control region for which paragraph (3)(A)1. of this rule is applicable on a one and one-half to one (1.5:1) basis.
- (c) Banked NO_x allowances made available for use in part (3)(B)5.B.(II) and (3)(B)5.B.(III) of this rule may be traded from the control region for which paragraphs (3)(A)1., (3)(A)3. and (3)(A)4. of this rule are applicable to the control region for which paragraph (3)(A)2. of this rule is applicable on a one and one-half to one (1.5:1) basis.
- C. Early reductions. For any affected $\mathrm{NO_x}$ unit that reduces its $\mathrm{NO_x}$ emission rate in the 2000, 2001, 2002 or 2003 control period, the owner or operator of the unit may request early reduction credits, and the department will allocate ERCs by January 31 of each year to the unit in accordance with the following requirements.
- (I) Each NO_{x} unit for which the owner or operator requests any ERCs under part (3)(B)5.C.(IV) of this rule shall monitor

 ${
m NO}_{
m x}$ emissions in accordance with section (4) of this rule for each control period for which such ERCs are requested. The unit's monitoring system availability shall be not less than ninety percent (90%) during the control period, and the unit must not have been found to be in violation of any applicable state or federal emissions or emissions-related requirements.

- (II) NO_x emission rate and heat input under parts (3)(B)5.C.(III) through (3)(B)5.C.(V) of this rule shall be determined in accordance with section (4) of this rule.
- (III) Each $\mathrm{NO_x}$ unit for which the owner or operator requests any ERCs under part (3)(B)5.C.(IV) of this rule shall reduce its $\mathrm{NO_x}$ emission rate, for each control period for which ERCs are requested, to less than the applicable requirement of subsection (3)(A) of this rule.
- (IV) The $\mathrm{NO_x}$ authorized account representative of a $\mathrm{NO_x}$ unit that meets the requirements of parts (3)(B)5.C.(I) and (3)(B)5.C.(III) of this rule may submit to the department a request for ERCs for the unit based on $\mathrm{NO_x}$ emission rate reductions made by the unit in the control period for 2000, 2001, 2002 or 2003 in accordance with part (3)(B)5.C.(III) of this rule.
- (a) In the ERC request, the $\mathrm{NO_x}$ authorized account representative may request ERCs for such control period using Equation 6 of this rule.

Equation 6:

$$ERC = HI_a \times (NO_x ER_r - NO_x ER_a) \div 2000$$

where:

ERC = the ERCs accrued rounded down to the nearest ton of NO_v;

 ${
m HI}_{
m a}$ = the actual control period heat input for each ${
m NO}_{
m x}$ unit;

NO_xER_r = the regulated NO_x emission rate as identified in paragraphs (3)(A)1. through (3)(A)4. of this rule: and

NO_xER_a = the actual control period emission rate for each NO_x unit.

- (b) The ERC request must be submitted, in a format specified by the department, by October 31 of the year in which the NO_{x} emission rate reductions are made.
- (V) The department will allocate NO_x allowances no later than January 31 to NO_x units meeting the requirements of parts (3)(B)5.C.(I) and (3)(B)5.C.(III) of this rule



and covered by early reduction requests meeting the requirements of subpart (3)(B)5.C.(IV)(b) of this rule.

- (VI) NO_x allowances recorded under part (3)(B)5.C.(V) of this rule may be deducted for compliance under paragraph (3)(B)3. of this rule for the control periods in 2004 or 2005. Notwithstanding subparagraph (3)(B)5.A. of this rule, the director will deduct as retired any NO_x allowance that is recorded under part (3)(B)5.C.(V) of this rule and is not deducted for compliance in accordance with paragraph (3)(B)3. of this rule for the control period in 2004 or 2005.
- (VII) $\mathrm{NO_x}$ allowances recorded under part (3)(B)5.C.(V) of this rule are not treated as banked allowances in 2005 for the purposes of subparagraphs (3)(B)5.A. and (3)(B)5.B. of this rule.
- (VIII) Compliance set-aside account.
- (a) The department will establish a compliance set-aside account, which will contain fifty percent (50%) of the ERCs, rounded down to the nearest ton, that are issued in accordance with part (3)(B)5.C.(II) of this rule.
- (b) Fifty percent (50%) of the ERCs, rounded down to the nearest ton, in the compliance set-aside account will be sold to the $\mathrm{NO_x}$ authorized account representatives that apply for the ERCs and can demonstrate that the ERCs will be used for compliance by a unit that is in a research, development or trial stage for new air pollution control technology. If less than fifty percent (50%) of the ERCs are needed for these units, the remainder will be sold in accordance with subpart (3)(B)5.C.(VIII)(c) of this rule.
- (c) The remaining ERCs in the compliance set-aside account will be sold in the order of request.
- (d) NO_x authorized account representatives must request all of the ERCs needed from the compliance set-aside account for the 2004 and 2005 control periods by February 28, 2004. The request for ERCs shall include the following information:
 - I. The owner and operator;
- $\label{eq:initial_initial} III. \ \ The \ \ NO_x \ \ unit \ \ identification number and name;$
- IV. The number of ERCs being requested; and
- V. The overdraft or compliance account number.
- (e) The department shall set the market rate for ERCs by February 1, 2004. Market rate shall not be set at a value below

five hundred dollars (\$500) per ERC nor in excess of one thousand dollars (\$1,000) per ERC, and shall be established based on the following in the order listed:

- II. The most recent control cost data available.
- (f) The department shall notify the successful purchasers of ERCs by April 1, 2004 and payment shall be made by the purchaser to the sellers by April 15, 2004 for ERCs purchased. Once payment has been received by the sellers, they shall notify the department and the appropriate ERCs shall be transferred to the appropriate account by May 1, 2004.
- (g) The ERCs will be sold from the compliance set-aside account on a percentage basis. Each purchaser will purchase a portion of each seller's ERCs.
- (h) Once the appropriate ERCs are transferred to the purchaser's account, the ERCs are non-transferrable.
- (i) Any ERC allowances remaining in the compliance set-aside account after May 1, 2004, will be returned to the unit that generated the ERCs by May 15, 2004.
- (IX) All ERCs will be retired on January 31, 2006.
- 6. Account error. The director may correct any error in any NO_{x} Allowance Tracking System account. Within ten (10) business days of making such correction, the director will notify the NO_{x} authorized account representative for the account. The NO_{x} authorized account representative will then have ten (10) business days to appeal the correction if they feel the correction was made in error.
- 7. NO_x allowance transfers. The NO_x authorized account representatives seeking the recording of a NO_x allowance transfer shall submit the transfer request to the director. To be considered correctly submitted, the NO_x allowance transfer shall include the following elements in a format specified by the director:
- A. The numbers identifying both the transferor and transferee accounts;
- B. A specification by serial number of each NO_{x} allowance to be transferred; and
- C. The printed name and signature of the NO_x authorized account representative of the transferor account and the date signed.
 - 8. Department recording.

- A. Within five (5) business days of receiving a NO_x allowance transfer, except as provided in subparagraph (3)(B)9.B. of this rule, the department will record a NO_x allowance transfer by moving each NO_x allowance from the transferor account to the transferee account as specified by the request, provided that—
- (I) The transfer is correctly submitted under paragraph (3)(B)8. of this rule;
- (II) The transferor account includes each NO_x allowance identified by serial number in the transfer; and
- (III) The transfer meets all other requirements of this paragraph.
- B. A NO_x allowance transfer that is submitted for recording following the NO_x allowance transfer deadline and that includes any NO_x allowances allocated for a control period prior to or the same as the control period to which the NO_x allowance transfer deadline applies will not be recorded until after completion of the process of recording of NO_x allowance allocations of this rule.
- C. Where a $\mathrm{NO_x}$ allowance transfer submitted for recording fails to meet the requirements of subparagraph (3)(B)7. of this rule, the department will not record such transfer.
 - 9. Notification.
- A. Notification of recording. Within five (5) business days of recording of a NO_x allowance transfer under paragraph (3)(B)8. of this rule, the department will notify each NO_x authorized account representative of the transfer in writing.
- B. Notification of nonrecording. Within ten (10) business days of receipt of a $\mathrm{NO_x}$ allowance transfer that fails to meet the requirements of paragraph (3)(B)7. of this rule, the department will notify in writing the $\mathrm{NO_x}$ authorized account representatives of both accounts subject to the transfer of—
- (I) A decision not to record the transfer; and
- (II) The reasons for such non-recording.
- 10. Individual EGU opt-ins. An EGU that is not an affected unit under subsection (1)(A) of this rule that vents all of its emissions to a stack may qualify to become a NO_x opt-in unit under this paragraph of this rule. A NO_x opt-in unit will not be allowed to participate in the NO_x trading program without prior approval.
- A. A NO_x opt-in unit shall have a NO_x authorized account representative.

- B. Request for initial NO_x opt-in. In order to request to opt-in to the trading program, the NO_x authorized account representative of the unit must submit to the department at any time the following:
- (I) The projected NO_x emission rate for each affected unit;
- (II) The average of the three (3) most recent years heat input on a monthly basis over the control period for each affected unit; and
- (III) A plan detailing the methodology for compliance with paragraph (3)(B)10. of this rule.
- C. The department will review the request and respond within ninety (90) days of the date of receipt of the request.
- D. Request for opting-in to the $\mathrm{NO_x}$ trading program must be received by the department no later than February 1 of the same year as the control period that the $\mathrm{NO_x}$ opt-in unit requests to begin participation in the $\mathrm{NO_x}$ trading program.
- E. The $\mathrm{NO_x}$ opt-in units shall establish a baseline heat input and a baseline $\mathrm{NO_x}$ emissions rate under the requirements of subsection (5)(G) of this rule. After calculating the baseline heat input and the baseline $\mathrm{NO_x}$ emissions rate for the $\mathrm{NO_x}$ opt-in unit, the department will notify the $\mathrm{NO_x}$ authorized account representative of the unit of the resulting baseline.
- F. The established baseline shall be the regulated NO_x emission rate for the optin unit. The NO_x opt-in unit shall meet the same schedule as all NO_x units with respect to all deadlines and schedules. The allowances issued to the opt-in unit under this paragraph shall be calculated using Equation 7 of this rule.

Equation 7:

$$\frac{\mathrm{HI}_{\mathrm{opt}} \times \mathrm{ER}_{\mathrm{opt}}}{2000} = \mathrm{NO_x AL}_{\mathrm{opt}}$$

where:

HI_{opt} = the actual control period heat input for the NO_x opt-in unit;

 ER_{opt} = the baseline emission rate for the NO_x opt-in unit as determined under subsection (5)(F) of this rule; and

 NO_xAL_{opt} = the actual NO_x allowances for the opt-in unit for the control period (in tons).

G. If at any time before the approval of a $\mathrm{NO_x}$ opt-in unit, the department determines that the unit does not qualify as a $\mathrm{NO_x}$

opt-in unit under this paragraph, the department will issue a denial of the NO_x opt-in request for the unit.

- H. Withdrawal of NO_x opt-in request. A NO_x authorized account representative of a unit may withdraw its request to opt-in at any time prior to the approval for the NO_x opt-in unit. Once the request for a NO_x opt-in unit is withdrawn, a NO_x authorized account representative seeking to reapply must submit a new request for a NO_x opt-in unit under this subsection.
- I. Effective date. The effective date of the initial $\mathrm{NO_x}$ opt-in shall be May 1 of the first control period starting after the approval of the $\mathrm{NO_x}$ opt-in unit by the department. The unit shall be a $\mathrm{NO_x}$ opt-in unit and an affected $\mathrm{NO_x}$ unit as of the effective date of the approval and be subject to the requirements of this rule.
- J. Change in regulatory status. When a $\mathrm{NO_x}$ opt-in unit becomes an affected unit, the $\mathrm{NO_x}$ authorized account representative shall notify the department in writing of such change in the $\mathrm{NO_x}$ opt-in unit's regulatory status within thirty (30) days of such change.
- K. Withdrawal from NO_x trading program. A NO_x opt-in unit may withdraw from the NO_x trading program if it meets the following requirements:
- (I) To withdraw from the $\mathrm{NO_x}$ trading program, the $\mathrm{NO_x}$ authorized account representative of a $\mathrm{NO_x}$ opt-in unit shall submit to the department a request to withdraw effective as of a specified date prior to May 1 or after September 30. The submission shall be made no later than ninety (90) days prior to the requested effective date of withdrawal.
- (II) Before a NO_x opt-in unit may withdraw from the NO_x trading program, the following conditions must be met.
- (a) For the control period immediately before the withdrawal is to be effective, the NO_{x} authorized account representative must submit or must have submitted to the department an annual compliance certification report.
- (b) If the $\mathrm{NO_x}$ opt-in unit has excess emissions for the control period immediately before the withdrawal is to be effective, the department will deduct from the $\mathrm{NO_x}$ opt-in unit's compliance account, or the overdraft account of the affected unit where the affected unit is located, the full amount required for the control period.

- (III) A $\mathrm{NO_x}$ opt-in unit that with-draws from the $\mathrm{NO_x}$ trading program shall comply with all requirements under the $\mathrm{NO_x}$ trading program concerning all years for which such $\mathrm{NO_x}$ opt-in unit was a $\mathrm{NO_x}$ opt-in unit, even if such requirements must be complied with after the withdrawal takes effect.
- (IV) Notification procedures shall be as follows:
- (a) After the requirements for withdrawal under this paragraph have been met, the department will issue a notification to the NO_x authorized account representative of the NO_x opt-in unit of the acceptance of the withdrawal of the NO_x opt-in unit as of a specified effective date that is after such requirements have been met and that is prior to May 1 or after September 30.
- (b) If the requirements for withdrawal under this paragraph have not been met, the department will issue a notification to the NO_x authorized account representative of the NO_x opt-in unit that the NO_x opt-in unit's request to withdraw is denied. If the NO_x opt-in unit's request to withdraw is denied, the NO_x opt-in unit shall remain subject to the requirements for a NO_x opt-in unit.
- (V) A NO_x opt-in unit shall continue to be a NO_x opt-in unit until the effective date of the withdrawal.
- (VI) Once a NO_{x} opt-in unit with-draws from the NO_{x} trading program, the NO_{x} authorized account representative may not submit another application for the NO_{x} opt-in unit prior to the date that is four (4) years after the date on which the withdrawal became effective.
- 11. Output based emissions trading of NO_x. (Reserved)
- (4) Reporting and Record Keeping.

(A) Reporting.

- 1. A compliance certification report for each affected unit subject to section (3) of this rule shall be submitted to the department by October 31 following each control period. The report shall include:
 - A. The owner and operator;
- B. The NO_x authorized account representative;
- C. NO_x unit name, compliance and overdraft account numbers;
- D. NO_x emission rate limitation (lb/mmBtu);
- E. Actual NO_x emission rate (lb/mmBtu) for the control period;



- F. Actual heat input (mmBtu) for the control period. The unit's total heat input for the control period in each year will be determined in accordance with section (5) of this rule; and
- G. Actual NO_x mass emissions (tons) for the control period.
- 2. Reporting shall be based on the test methods identified in section (5) of this rule. Any unit with valid continuous emission monitoring system (CEMS) data for the control period must use that data to determine compliance with the provisions of this rule. The owner or operator for each affected unit which performs non-CEMS testing to demonstrate compliance of a unit subject to section (3) of this rule shall submit:
- A. A control period report identifying monthly fuel usage and monthly total heat input by December 31 of the same year as the control period; and
- B. A written report of all stack tests completed after controls are effective to the department within sixty (60) days after completion of sample and data collection.
 - (B) Record Keeping.
- 1. Each owner or operator of an affected unit subject to section (3) of this rule shall maintain records of the following:
- A. Total fuel consumed during the control period;
- B. The total heat input for each emissions unit during the control period;
- C. Reports of all stack testing conducted to meet the requirements of this rule;
- D. All other data collected by a CEMS necessary to convert the monitoring data to the units of the applicable emission limitation:
- E. All performance evaluations conducted in the past year;
- F. All monitoring device calibration checks;
- G. All monitoring system, monitoring device and performance testing measurements:
- H. Records of adjustments and maintenance performed on monitoring systems and devices: and
- I. A log identifying each period during which the CEMS or alternate procedure was inoperative, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.
- 2. All records must be kept on-site for a period of five (5) years and made available to the department upon request.
- 3. Each owner or operator of any gas- or oil-fired unit that qualifies for the low-emitter exemption in paragraph (1)(B)1. of this rule or the low hours of operation exemption in

- paragraph (1)(B)2. of this rule, shall maintain records of the total operating hours during which fuel is consumed for each emission unit during the control period. In the event that another record keeping schedule has been previously approved for the EGU and is included as an operating permit condition, the EGU may use that schedule to comply with this requirement.
- (5) Test Methods and Monitoring. For units subject to this rule, the following requirements shall apply:
- (A) Compliance shall be measured during the control period;
- (B) All valid data shall be used for calculating NO_v emissions rates;
- (C) Coal-Fired Units. Any coal-affected unit subject to this rule shall install, certify, operate, maintain, and quality assure a NO_x and diluent CEMS pursuant to the requirements in 40 CFR part 75;
- (D) Non-Exempt Peaking Units. Any gasor oil-fired peaking unit that is subject to the emission limitation or trading aspects of this rule shall:
- 1. Install, certify, operate, maintain, and quality assure a NO_x and diluent CEMS; or
- 2. Install, certify, operate, and quality assure fuel-metering equipment pursuant to 40 CFR part 75, Appendix D and shall establish a $\mathrm{NO_x}$ -to-load curve pursuant to 40 CFR part 75, Appendix E;
 - (E) Exempt Units.
- 1. The following hierarchy of methods may be used to determine if a unit qualifies for the low-emitter exemption in paragraph (1)(B)1. of this rule. If data is not available for an emission estimation method or an emission estimation method is impractical for a source, then the subsequent emission estimation method should be used in its place:
- A. CEMS as specified in 10 CSR 10-6.110;
- B. Stack tests as specified in 10 CSR 10-6.110;
 - C. Material/mass balance;
- D. AP-42 (Environmental Protection Agency (EPA) Compilation of Emission Factors) or FIRE (Factor Information and Retrieval System) (as updated);
- E. Other EPA documents as specified in 10 CSR 10-6.110;
 - F. Sound engineering calculations; or
- G. Facilities shall obtain department pre-approval of emission estimation methods other than those listed in subparagraphs (5)(E)1.A. through (5)(E)1.F. of this rule before using such method to estimate emissions. In the event that such method has previously been approved for the EGU and

included as an operating permit condition, the EGU may use that method to comply with this requirement.

- 2. Any gas- or oil-fired unit that qualifies for the low-emitter exemption in paragraph (1)(B)1. or the low hours of operation exemption in paragraph (1)(B)2. shall install and operate a non-resettable hour meter or determine the hours of operation for each emission unit during the control period. In the event that another monitoring method has previously been approved for the EGU and included as an operating permit condition, the EGU may use that method to comply with this requirement.
- (F) Opt-In Units. Any unit that opts into the trading program, pursuant to paragraph (3)(B)10., shall be monitored consistent with the provisions of subsections (5)(D) and (5)(E) above. For the purpose of establishing the baseline allowance allocation, an opt-in unit shall install, certify, operate, maintain, and quality assure the monitoring device(s) and collect data for at least one (1) control season prior to submission of an opt-in application.

AUTHORITY: section 643.050, RSMo 2000.*
Original rule filed Feb. 15, 2000, effective
Sept. 30, 2000. Amended: Filed Dec. 4,
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30, 2009.

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

10 CSR 10-6.360 Control of NO_x Emissions From Electric Generating Units and Non-Electric Generating Boilers

PURPOSE: This rule reduces emissions of oxides of nitrogen (NO_x) to ensure compliance with the federal NO_x control plan to reduce the transport of air pollutants. The rule establishes an emission budget for large electric generating units and non-electric generating boilers. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the U.S. Environmental Protection Agency NO_x State Implementation Plan (SIP) Call dated April 21, 2004.

(1) Applicability.

(A) This rulemaking shall apply throughout Bollinger, Butler, Cape Girardeau, Carter, Clark, Crawford, Dent, Dunklin, Franklin, Gasconade, Iron, Jefferson, Lewis, Lincoln, Madison, Marion, Mississippi, Montgomery, New Madrid, Oregon, Pemiscot, Perry, Pike, Ralls, Reynolds, Ripley, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Scott, Shannon, Stoddard, Warren, Washington and Wayne counties and the City of St. Louis.

- (B) The following units shall be NO_x budget units, and any source that includes one (1) or more such units shall be a NO_x budget source, subject to the requirements of this rule:
- 1. Electric generating units that serve a generator with a nameplate capacity greater than twenty-five megawatts (25 MW) and—
 - A. For non-cogeneration units—
- (I) Commenced operation before January 1, 1997, and served a generator producing electricity for sale under a firm contract to the electric grid during 1995 or 1996; or
- (II) Commenced operation in 1997 or 1998 and served a generator producing electricity for sale under a firm contract to the electric grid during 1997 or 1998; or
- (III) Commenced operation on or after January 1, 1999, and served or serves at any time a generator producing electricity for sale: and
 - B. For cogeneration units—
- (I) Commenced operation before January 1, 1997, and failed to qualify as an unaffected unit under 40 CFR 72.6(b)(4) for 1995 or 1996 under the Acid Rain Program; or
- (II) Commenced operation in 1997 or 1998 and failed to qualify as an unaffected unit under 40 CFR 72.6(b)(4) for 1997 or 1998 under the Acid Rain Program; or
- (III) Commenced operation on or after January 1, 1999, and failed or fails to qualify as an unaffected unit under 40 CFR 72.6(b)(4) for any year under the Acid Rain Program; and
- 2. Non-electric generating boilers, combined cycle systems, and combustion turbines that have a maximum design heat input greater than two hundred fifty (250) million British thermal units per hour (mmBtu/hr) and—
 - A. For non-cogeneration units-
- (I) Commenced operations before January 1, 1997, and did not serve a generator producing electricity for sale under a firm contract to the electric grid during 1995 or 1996; or
- (II) Commenced operations in 1997 or 1998 and did not serve a generator producing electricity for sale under a firm contract to the electric grid during 1997 or 1998; or
- (III) Commenced operation on or after January 1, 1999, and:

- (a) At no time served or serves a generator producing electricity for sale; or
- (b) At any time served or serves a generator with a nameplate capacity of twenty-five (25) MW or less producing electricity for sale, and with the potential to use no more than fifty percent (50%) of the potential electrical output capacity of the unit; and
 - B. For cogeneration units—
- (I) Commenced operation before January 1, 1997, and qualified as an unaffected unit under 40 CFR 72.6(b)(4) for 1995 or 1996 under the Acid Rain Program; or
- (II) Commenced operation in 1997 or 1998 and qualified as an unaffected unit under 40 CFR 72.6(b)(4) for 1997 or 1998 under the Acid Rain Program; or
- (III) Commenced operation on or after January 1, 1999, and qualified or qualifies as an unaffected unit under 40 CFR 72.6(b)(4) for each year under the Acid Rain Program.
- (C) Exemptions. The director shall provide the administrator written notice of the issuance of any permit under subsection (3)(C) of this rule and, upon request, a copy of the permit. Notwithstanding subsection (1)(A) of this rule, a unit shall not be a NO_{x} budget unit if the unit has a federally enforceable permit that:
- 1. Restricts the unit to burning only natural gas or fuel oil;
- 2. Restricts the unit's operating hours to the number calculated by dividing twenty-five (25) tons of potential mass emissions by the unit's maximum potential hourly NO_x mass emissions;
- 3. Requires that the unit's maximum potential NO_x mass emissions be calculated by multiplying the unit's maximum rated hourly heat input by the highest default NO_x emission rate applicable to the unit under 40 CFR 75.19(c), Table LM-2;
- 4. Requires that the owner or operator of the unit shall retain at the source that includes the unit, for five (5) years, records demonstrating that the operating hours restriction, the fuel use restriction, and the other requirements of the permit related to these restrictions were met; and
- 5. Requires that the owner or operator of the unit shall report the unit's hours of operation (treating any partial hour of operation as a whole hour of operation) during each control period to the director by November 1 of each year for which the unit is subject to the federally enforceable permit.
- (D) Loss of Exemption. If, for any control period, the unit does not comply with the fuel use restriction under paragraph (1)(C)1. of

- this rule or the operating hours restriction under paragraphs (1)(C)2. and 3. of this rule, or the fuel use or the operating hour restrictions are removed from the unit's federally enforceable permit or otherwise becomes no longer applicable, the unit shall be a NO_x budget unit, subject to the requirements of this rule. Such unit shall be treated as commencing operation and, for a unit under paragraph (1)(B)1, of this rule, commencing commercial operation on September 30 of the control period for which the fuel use restriction or the operating hours restriction is no longer applicable or during which the unit does not comply with the fuel use restriction or the operating hours restriction.
- (E) Retired Unit Exemption. This subsection applies to any NO_x budget unit that is permanently retired.
 - 1. Standard provisions.
- A. Any NO_x budget unit that is permanently retired shall be exempt from the NO_x budget trading program, except for the provision of subsection (1)(E), sections (1) and (2), subsections (3)(E), (3)(F) and (3)(G) of this rule.
- B. The exemption under subparagraph (1)(E)1.A. of this rule shall become effective the day on which the unit is permanently retired. Within thirty (30) days of permanent retirement, the NO_x authorized account representative shall submit a statement to the director. A copy of the statement shall be submitted to the administrator. The statement shall state that the unit is permanently retired and will comply with the requirements of paragraph (1)(E)2. of this rule.
- C. After receipt of the notice under subparagraph (1)(E)1.B. of this rule, the director will amend any permit covering the source at which the unit is located to add the provisions and requirements of the exemption under subparagraph (1)(E)1.A. and paragraph (1)(E)2. of this rule.
 - 2. Special provisions.
- A. A unit exempt under this subsection shall not emit any nitrogen oxides, starting on the date that the exemption takes effect.
- B. The owners and operators and, to the extent applicable, the NO_{x} authorized account representative of a unit exempt under this section shall comply with the requirements of the NO_{x} budget trading program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
 - C. Reserved



- D. For a period of five (5) years from the date the records are created, the owners and operators of a unit exempt under this section shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The five (5)-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the director or the administrator. The owners and operators bear the burden of proof that the unit is permanently retired.
- E. A unit exempt under subsection (1)(E) of this rule and located at a source that is required, except for this exemption, would be required to have a Title V or a non-Title V operating permit, shall not resume operation unless the NO_x authorized account representative of the source submits a complete NO_x budget permit application for the unit not less than eighteen (18) months prior to the later of May 1, 2007 or the date on which the unit is to first resume operation.
- 3. Loss of exemption. For the purpose of applying monitoring requirements under section (4) of this rule, a unit that loses its exemption under subsection (1)(E) of this rule shall be treated as a unit that commences operation or commercial operation on the first date on which the unit resumes operation. On the earlier of the following dates, a unit exempt under subsection (1)(E) of this rule shall lose its exemption:
- A. The date on which the NO_x authorized account representative submits a NO_x budget permit application under subparagraph (1)(E)2.E. of this rule; or
- B. The date on which the NO_x authorized account representative is required under subparagraph (1)(E)2.E. of this rule to submit a NO_x budget permit application.
- (F) Compliance with this rule shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the Air Conservation Law and rules or any other requirements under local, state or federal law. Specifically, compliance with this rule shall not violate the permit conditions previously established under 10 CSR 10-6.060 or 10 CSR 10-6.065.
 - (G) Computation of Time.
- 1. Unless otherwise stated, any time period scheduled under the $\mathrm{NO_x}$ budget trading program to begin on the occurrence of an act or event, shall begin on the day the act or event occurs.
- 2. Unless otherwise stated, any time period scheduled under the NO_{x} budget trading program to begin before the occurrence of an act or event, shall be computed so that the

- period ends the day before the act or event occurs.
- 3. Unless otherwise stated, if the final day of any time period under the NO_x budget trading program falls on a weekend or a state or federal holiday, the time period shall be extended to the next business day.
- (H) The requirements of sections (3), (4), and (5) of this rule will not apply to any entity or source subject to and implementing the requirements of 10 CSR 10-6.364.
- (2) Definitions.
- (A) Account certificate of representation—The completed and signed submission required by subsection (3)(B) of this rule for certifying the designation of a NO_x authorized account representative for a NO_x budget source or a group of identified NO_x budget sources who is authorized to represent the owners and operators of such source or sources and of the NO_x budget units at such source or sources with regard to matters under the NO_x budget trading program.
- (B) Account number—The identification number given by the administrator to each NO_x allowance tracking system account.
- (C) Acid rain emissions limitation—As defined in 40 CFR 72.2, a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program under Title IV of the Clean Air Act.
- (D) Administrator—The administrator of the United States Environmental Protection Agency or the administrator's duly authorized representative.
- (E) Affiliate—Any person including an individual, corporation, service company, corporate subsidiary, firm, partnership, incorporated or unincorporated association, political subdivision including a public utility district, city, town, county, or a combination of political subdivisions, which directly or indirectly, through one (1) or more intermediaries, controls, is controlled by, or is under common control with the regulated electrical corporation.
- (F) Allocate or allocation—The determination by the director or the administrator of the number of NO_x allowances to be initially credited to a NO_x budget unit or an allocation set-aside.
- (G) Automated data acquisition and handling system (DAHS)—That component of the continuous emissions monitoring system (CEMS), or other emissions monitoring system approved for use under section (4) of this rule, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas

- monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required in this rule.
- (H) 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.
- (I) CAA—The Clean Air Act, 42 U.S.C. 7401, as amended by Pub. L. No. 101-595 (November 15, 1990).
- (J) Combined cycle system—A system comprised of one (1) or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.
- (K) Combustion turbine—An enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.
- (L) Commence commercial operation— With regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. Except as provided in subsection (1)(E) of this rule, for a unit that is a NO_x budget unit under section (1) of this rule on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered. Except as provided in subsections (1)(E) or (3)(H) of this rule, for a unit that is not a NO_x budget unit under section (1) of this rule on the date the unit commences commercial operation, the date the unit becomes a NO_x budget unit under section (1) of this rule shall be the unit's date of commencement of commercial operation.
- (M) Commence operation—To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber. Except as provided in subsection (1)(E) of this rule, for a unit that is a NO_x budget unit under section (1) of this rule on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered. Except as provided in subsection (1)(E) of this rule or subsection (3)(H) of this rule, for a unit that is not a NO_x budget unit under section (1) of this rule on the date of commencement of operation, the date the unit becomes a NO_x budget unit under section (1) of this rule shall be the unit's date of commencement of operation.

- (N) Common stack—A single flue through which emissions from two (2) or more units are exhausted.
- (O) Compliance account— NO_x allowance tracking system account, established by the administrator for a NO_x budget unit under subsection (3)(F) of this rule, in which the NO_x allowance allocations for the unit are initially recorded and in which are held NO_x allowances available for use by the unit for a control period for the purpose of meeting the unit's NO_x emissions limitation.
- (P) Compliance certification—A submission to the director or the administrator, that is required under subsection (3)(D) of this rule to report a NO_x budget source's or a NO_x budget unit's compliance or noncompliance with this part and that is signed by the NO_x authorized account representative in accordance with subsection (3)(B) of this rule.
- (Q) Continuous emissions monitoring system (CEMS)—The equipment required under section (4) of this rule 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, in a continuous emissions monitoring system:
 - 1. Flow monitor;
- 2. Nitrogen oxides pollutant concentration monitors;
- 3. Diluent gas monitor (oxygen or carbon dioxide) when such monitoring is required by section (4) of this rule;
- 4. A continuous moisture monitor when such monitoring is required by section (4) of this rule; and
- An automated data acquisition and handling system.
- (R) Control period—The period beginning May 1 of a calendar year and ending on September 30 of the same calendar year.
- (S) Emissions—Air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the administrator by the NO_{x} authorized account representative and as determined by the administrator in accordance with section (4) of this rule.
- (T) Energy Information Administration— The Energy Information Administration of the United States Department of Energy.
- (U) Fossil fuel—Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

- (V) Fossil fuel-fired—With regard to a unit, the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel—
- 1. Actually combusted comprises more than fifty percent (50%) of the annual heat input on a Btu basis during any year starting in 1995 or, if a unit had no heat input starting in 1995, during the last year of operation of the unit prior to 1995; or
- 2. Is projected to comprise more than fifty percent (50%) of the annual heat input on a Btu basis during any year; provided that the unit shall be "fossil fuel-fired" as of the date, during such year, on which the unit begins combusting fossil fuel.
- (W) General account—A NO_x allowance tracking system account, established under subsection (3)(F) of this rule, that is not a compliance account or an overdraft account.
- (X) Generator—A device that produces electricity.
- (Y) 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 NO_{x} authorized account representative and as determined by the administrator in accordance with section (4) of this rule, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.
- (Z) Life-of-the-unit, firm power contractual arrangement—A unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy from any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract—
 - 1. For the life of the unit;
- 2. For a cumulative term of no less than thirty (30) years, including contracts that permit an election for early termination; or
- 3. For a period equal to or greater than twenty-five (25) years or seventy percent (70%) of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.
- (AA) 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.
- (BB) Maximum potential hourly heat input—An hourly heat input used for reporting

- purposes when a unit lacks certified monitors to report heat input. If the unit intends to use Appendix D of 40 CFR 75 to report heat input, this value should be calculated, in accordance with 40 CFR 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 CFR 75, using the maximum potential flow rate and either the maximum potential flow rate and either the maximum carbon dioxide concentration (in percent CO_2) or the minimum oxygen concentration (in percent O_2).
- (CC) Maximum potential NO_x emission rate—The NO_x emission rate of nitrogen oxides (in lb/mmBtu) calculated in accordance with section 3 of Appendix F of 40 CFR 75, using the maximum potential nitrogen oxides concentration as defined in section 2 of Appendix A of 40 CFR 75, and either the maximum oxygen concentration (in percent O₂) or the minimum carbon dioxide concentration (in percent CO₂), under all operating conditions of the unit except for unit start-up, shutdown, and upsets.
- (DD) 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.
- (EE) Monitoring system—Any monitoring system that meets the requirements of section (4) of this rule, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.
- (FF) Nameplate capacity—The maximum electrical generating output (in MW) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.
- (GG) Non-Title V permit—A federally enforceable permit administered by the director pursuant to the CAA and regulatory authority under the CAA, other than Title V of the CAA and 40 CFR 70 or 40 CFR 71.
- (HH) $\mathrm{NO_x}$ allowance—An authorization by the department or the administrator under the $\mathrm{NO_x}$ budget trading program to emit up to one (1) ton of nitrogen oxides during the control period of the specified year or of any year thereafter.
- (II) NO_x allowance deduction or deduct NO_x allowances—The permanent withdrawal of NO_x allowances by the administrator from a NO_x allowance tracking system compliance



account or overdraft account to account for the number of tons of emissions from a NO_{x} budget unit for a control period, determined in accordance with section (4) of this rule, or for any other NO_{x} allowance surrender obligation under this part.

- (JJ) NO_x allowances held or hold NO_x allowances—The NO_x allowances recorded by the administrator, or submitted to the administrator for recordation, in accordance with subsections (3)(F) and (G) of this rule, in a NO_x allowance tracking system account.
- (KK) $\mathrm{NO_x}$ allowance tracking system— The system by which the administrator records allocations, deductions, and transfers of $\mathrm{NO_x}$ allowances under the $\mathrm{NO_x}$ budget trading program.
- (LL) NO_{x} allowance tracking system account—An account in the NO_{x} allowance tracking system established by the administrator for purposes of recording the allocation, holding, transferring, or deducting of NO_{x} allowances.

(MM) $\mathrm{NO_x}$ allowance transfer deadline—Midnight of November 30 or, if November 30 is not a business day, midnight of the first business day thereafter and is the deadline by which $\mathrm{NO_x}$ allowances may be submitted for recordation in a $\mathrm{NO_x}$ budget unit's compliance account, or the overdraft account of the source where the unit is located, in order to meet the unit's $\mathrm{NO_x}$ budget emissions limitation for the control period immediately preceding such deadline.

(NN) $\mathrm{NO_x}$ authorized account representative—For a $\mathrm{NO_x}$ budget source or $\mathrm{NO_x}$ budget unit at the source, the natural person who is authorized by the owners and operators of the source and all $\mathrm{NO_x}$ budget units at the source, in accordance with subsection (3)(B) of this rule, to represent and legally bind each owner and operator in matters pertaining to the $\mathrm{NO_x}$ budget trading program or, for a general account, the natural person who is authorized, in accordance with subsection (3)(F) of this rule, to transfer or otherwise dispose of $\mathrm{NO_x}$ allowances held in the general account.

(OO) NO_x budget emissions limitation—For a NO_x budget unit, the tonnage equivalent of the NO_x allowances available for compliance deduction for the unit and for a control period under subparagraph (3)(F)5.A. or B. of this rule for the control period or to account for excess emissions for a prior control period under subparagraph

(3)(F)5.D. of this rule or to account for withdrawal from the NO_x budget program.

- (PP) $\mathrm{NO_x}$ budget permit—The legally binding and federally enforceable written document, or portion of such document, issued by the director, including any permit revisions, specifying the $\mathrm{NO_x}$ budget trading program requirements applicable to a $\mathrm{NO_x}$ budget source, to each $\mathrm{NO_x}$ budget unit at the $\mathrm{NO_x}$ budget source, and to the owners and operators and the $\mathrm{NO_x}$ authorized account representative of the $\mathrm{NO_x}$ budget source and each $\mathrm{NO_x}$ budget unit.
- (QQ) NO_x budget source—A source that includes one (1) or more NO_x budget units.
- (RR) NO_x budget trading program—A multi-state nitrogen oxides air pollution control and emission reduction program established in accordance with this rule and pursuant to 40 CFR 51.121, as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor.
- (SS) NO_x budget unit—A unit that is subject to the NO_x budget trading program emissions limitation under section (1) or paragraph (3)(H)1. of this rule.
- (TT) Operating—With regard to a unit under part (3)(C)3.D.(II) and paragraph (3)(H)1. of this rule, having documented heat input for more than eight hundred seventy-six (876) hours in the six (6) months immediately preceding the submission of an application for an initial NO_x budget permit under subparagraph (3)(H)4.A. of this rule.
- (UU) Operator—Any person who operates, controls, or supervises a NO_x budget unit, or a NO_x budget source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.
- (VV) Overdraft account—The NO_x allowance tracking system account, established by the administrator under subsection (3)(F) of this rule, for each NO_x budget source where there are two (2) or more NO_x budget units.

(WW) Owner—Any of the following persons:

- 1. Any holder of any portion of the legal or equitable title in a NO_x budget unit;
- 2. Any holder of a leasehold interest in a NO_x budget unit;
- 3. Any purchaser of power from a NO_x budget unit under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive

lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the NO_x budget unit; or

4. With respect to any general account, any person who has an ownership interest with respect to the NO_{x} allowances held in the general account and who is subject to the binding agreement for the NO_{x} authorized account representative to represent that person's ownership interest with respect to NO_{x} allowances.

(XX) Receive or receipt of—When referring to the director or the administrator, to come into possession of a document, information, or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the director or the administrator in the regular course of business.

(YY) Recordation, record, or recorded—With regard to NO_x allowances, the movement of NO_x allowances by the administrator from one (1) NO_x allowance tracking system account to another, for purposes of allocation, transfer, or deduction.

(ZZ) Reference method—Any direct test method of sampling and analyzing for an air pollutant as specified in Appendix A of 40 CFR 60.

(AAA) Serial number—When referring to NO_x allowances, the unique identification number assigned to each NO_x allowance by the administrator, under subparagraph (3)(F)4.C. of this rule.

(BBB) 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 CAA. For purposes of section 502(c) of the CAA, a "source," including a "source" with multiple units, shall be considered a single "facility."

(CCC) State—One (1) of the forty-eight (48) contiguous states and the District of Columbia specified in 40 CFR 51.121, or any non-federal authority in or including such states or the District of Columbia (including local agencies, and statewide agencies) or any eligible Indian tribe in an area of such state or the District of Columbia, that adopts a NO_x budget trading program pursuant to 40 CFR 51.121. To the extent a state incorporates by reference the provisions of this part, the term "state" shall mean the incorporating state. The term "state" shall have its conventional

meaning where such meaning is clear from the context.

(DDD) State trading program NO_x budget—The total number of tons apportioned to all NO_x budget units in a given state, in accordance with the NO_x budget trading program, for use in a given control period.

(EEE) Submit or serve—To send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation—

- 1. In person;
- 2. By United States Postal Service; or
- 3. By other means of dispatch or transmission and delivery. Compliance with any "submission," "service," or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.
- (FFF) Title V operating permit—A permit issued under Title V of the CAA and 40 CFR 70 or 40 CFR 71.
- (GGG) Title V operating permit regulations—The regulations that the administrator has approved or issued as meeting the requirements of Title V of the CAA and 40 CFR 70 or 40 CFR 71.

(HHH) Ton or tonnage—Any "short ton" (i.e., two thousand (2,000) pounds). For the purpose of determining compliance with the NO_{x} budget emissions limitation, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with section (4) of this rule, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one (1) ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons.

- (III) Unit—a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.
- (JJJ) Unit load—The total (i.e., gross) output of a unit in any control period (or other specified time period) produced by combusting a given heat input of fuel, expressed in terms of:
- 1. The total electrical generation (MW) produced by the unit, including generation for use within the plant; or
- 2. In the case of a unit that uses heat input for purposes other than electrical generation, the total steam pressure (psia) produced by the unit, including steam for use by the unit
- (KKK) Unit operating day—A calendar day in which a unit combusts any fuel.
- (LLL) Unit operating hour or hour of unit operation—Any hour or fraction of an hour during which a unit combusts fuel.

(MMM) Utilization—The heat input (expressed in mmBtu/time) for a unit. The unit's total heat input for the control period in each year will be determined in accordance with 40 CFR 75 if the NO_x budget unit was otherwise subject to the requirements of 40 CFR 75 for the year, or will be based on the best available data reported to the administrator for the unit if the unit was not otherwise subject to the requirements of 40 CFR 75 for the year.

(NNN) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6 020

(3) General Provisions.

(A) Standard Requirements.

1. Permit requirements.

A. The NO_{x} authorized account representative of each NO_{x} budget source required to have a federally enforceable permit and each NO_{x} budget unit required to have a federally enforceable permit at the source shall:

- (I) Submit to the director a complete NO_x budget permit application under paragraph (3)(C)3. of this rule in accordance with the deadlines specified in subparagraphs (3)(C)2.B. and C. of this rule; and
- (II) Submit in a timely manner any supplemental information that the director determines is necessary in order to review a NO_x budget permit application and issue or deny a NO_x budget permit.
- B. The owners and operators of each NO_x budget source required to have a federally enforceable permit and each NO_x budget unit required to have a federally enforceable permit at the source shall have a NO_x budget permit issued by the director and operate the unit in compliance with such NO_x budget permit
- C. The owners and operators of a NO_x budget source that is not otherwise required to have a federally enforceable permit are not required to submit a NO_x budget permit application, and to have a NO_x budget permit, under subsection (3)(C) of this rule for such NO_x budget source.
 - 2. Monitoring requirements.

A. The owners and operators and, to the extent applicable, the $\mathrm{NO_x}$ authorized account representative of each $\mathrm{NO_x}$ budget source and each $\mathrm{NO_x}$ budget unit at the source shall comply with the monitoring requirements of section (4) of this rule.

B. The emissions measurements

recorded and reported in accordance with section (4) of this rule shall be used to determine compliance by the unit with the NO_x budget emissions limitation under paragraph (3)(A)3. of this rule.

3. Nitrogen oxides requirements.

A. The owners and operators of each NO_{x} budget source and each NO_{x} budget unit at the source shall hold NO_{x} allowances available for compliance deductions under paragraph (3)(F)5. of this rule, as of the NO_{x} allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total emissions for the control period from the unit, as determined in accordance with section (4) of this rule.

B. Each ton of nitrogen oxides emitted in excess of the NO_x budget emissions limitation shall constitute a separate violation of this rule, the CAA, and applicable state law.

- C. A NO_x budget unit shall be subject to the requirements under subparagraph (3)(A)3.A. of this rule starting on the later of May 1, 2007 or the date on which the unit commences operation.
- D. NO_x allowances shall be held in, deducted from, or transferred among NO_x allowance tracking system accounts in accordance with subsections (3)(E), (F), (G), and (H) of this rule.
- E. A NO_x allowance shall not be deducted, in order to comply with the requirements under subparagraph (3)(A)3.A. of this rule, for a control period in a year prior to the year for which the NO_x allowance was allocated.
- F. A NO_x allowance allocated by the director or the administrator under the NO_x budget trading program is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the NO_x budget trading program. No provision of the NO_x budget trading program, the NO_x budget permit application, the NO_x budget permit, or an exemption under subsection (1)(E) of this rule and no provision of law shall be construed to limit the authority of the United States or the state to terminate or limit such authorization.
- G. A NO_x allowance allocated by the director or the administrator under the NO_x budget trading program does not constitute a property right.
- H. Upon recordation by the administrator under subsections (3)(F), (G), or (H) of this rule, every allocation, transfer, or deduction of a NO_{x} allowance to or from a



- NO_x budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_x budget permit of the NO_x budget unit by operation of law without any further review.
- 4. Excess emissions requirements. The owners and operators of a NO_x budget unit that has excess emissions in any control period shall:
- A. Surrender the NO_x allowances required for deduction under part (3)(F)5.D.(I) of this rule; and
- B. Pay any fine, penalty, or assessment or comply with any other remedy imposed under part (3)(F)5.D.(III) of this rule.
- 5. Record keeping and reporting requirements.
- A. Unless otherwise provided, the owners and operators of the NO_x budget source and each NO_x budget unit at the source shall keep on-site at the source each of the following documents for a period of five (5) years from the date the document is created. This period may be extended for cause, at any time prior to the end of five (5) years, in writing by the director or the administrator.
- (I) The account certificate of representation for the NO_x authorized account representative for the source and each NO_x budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (3)(B)4.; provided that the certificate and documents shall be retained on-site at the source beyond such five (5)-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative
- (II) All emissions monitoring information, in accordance with section (4) of this rule; provided that to the extent that section (4) of this rule provides for a three (3)-year period for record keeping, the three (3)-year period shall apply.
- (III) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x budget trading program.
- (IV) Copies of all documents used to complete a NO_{x} budget permit application and any other submission under the NO_{x} budget trading program or to demonstrate compliance with the requirements of the NO_{x} budget trading program.

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- B. The NO_{x} authorized account representative of a NO_{x} budget source and each NO_{x} budget unit at the source shall submit the reports and compliance certifications required under the NO_{x} budget trading program, including those under subsections (3)(D), (3)(H), or section (4) of this rule.
 - 6. Liability.
- A. Any person who knowingly violates any requirement or prohibition of the NO_x budget trading program, a NO_x budget permit, or an exemption under subsection (1)(E) of this rule shall be subject to enforcement pursuant to applicable state or federal law
- B. Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.
- C. No permit revision shall excuse any violation of the requirements of the NO_x budget trading program that occurs prior to the date that the revision takes effect.
- D. Each $\mathrm{NO_x}$ budget source and each $\mathrm{NO_x}$ budget unit shall meet the requirements of the $\mathrm{NO_x}$ budget trading program.
- E. Any provision of the NO_x budget trading program that applies to a NO_x budget source (including a provision applicable to the NO_x authorized account representative of a NO_x budget source) shall also apply to the owners and operators of such source and of the NO_x budget units at the source.
- F. Any provision of the NO_x budget trading program that applies to a NO_x budget unit (including a provision applicable to the NO_x authorized account representative of a NO_x budget unit) shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under section (4) of this rule, the owners and operators and the NO_x authorized account representative of one NO_x budget unit shall not be liable for any violation by any other NOx budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.
- 7. Effect on other authorities. No provision of the NO_x budget trading program, a NO_x budget permit application, a NO_x budget permit, or an exemption under subsection

- (1)(E) of this rule shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x budget source or NO_x budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.
- (B) NO_x Authorized Account Representative for NO_x Budget Sources.
- Responsibilities of the NO_x authorized account representative.
- A. Except as provided under paragraph (3)(B)2. of this rule, each NO_x budget source, including all NO_x budget units at the source, shall have one (1) and only one (1) NO_x authorized account representative, with regard to all matters under the NO_x budget trading program concerning the source or any NO_x budget unit at the source.
- B. The $\mathrm{NO_x}$ authorized account representative of the $\mathrm{NO_x}$ budget source shall be selected by an agreement binding on the owners and operators of the source and all $\mathrm{NO_x}$ budget units at the source.
- C. Upon receipt by the administrator of a complete account certificate of representation under paragraph (3)(B)4. of this rule, the NO_x authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the NO_x budget source represented and each NO_x budget unit at the source in all matters pertaining to the NO_x budget trading program, not withstanding any agreement between the NO_x authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the NO_x authorized account representative by the director, the administrator, or a court regarding the
- D. No $\mathrm{NO_x}$ budget permit shall be issued, and no $\mathrm{NO_x}$ allowance tracking system account shall be established for a $\mathrm{NO_x}$ budget unit at a source, until the administrator has received a complete account certificate of representation under paragraph (3)(B)4. of this rule for a $\mathrm{NO_x}$ authorized account representative of the source and the $\mathrm{NO_x}$ budget units at the source.
- E. NO_x budget trading program submissions.
- (I) Each submission under the NO_x budget trading program shall be submitted,

signed, and certified by the NO_x authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NO_x authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_v budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

- (II) The director and the administrator will accept or act on a submission made on behalf of owner or operators of a NO_x budget source or a NO_x budget unit only if the submission has been made, signed, and certified in accordance with part (3)(B)1.E.(I) of this rule.
- 2. Alternate NO_x authorized account representative.
- A. An account certificate of representation may designate one (1) and only one (1) alternate NO_{x} authorized account representative who may act on behalf of the NO_{x} authorized account representative. The agreement by which the alternate NO_{x} authorized account representative is selected shall include a procedure for authorizing the alternate NO_{x} authorized account representative to act in lieu of the NO_{x} authorized account representative.
- B. Upon receipt by the administrator of a complete account certificate of representation under paragraph (3)(B)4. of this rule, any representation, action, inaction, or submission by the alternate NO_x authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO_x authorized account representative.
- C. Except in paragraphs (3)(B)2. through 4., (3)(F)2. and subparagraph (3)(B)1.A. of this rule, whenever the term "NO_x authorized account representative" is used in this part, the term shall be construed to include the alternate NO_x authorized

account representative.

- 3. Changing the NO_x authorized account representative and the alternate NO_x authorized account representative; changes in the owners and operators.
- A. Changing the NO_x authorized account representative. The NO_x authorized account representative may be changed at any time upon receipt by the administrator of a superseding complete account certificate of representation under paragraph (3)(B)4. of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO_x authorized account representative prior to the time and date when the administrator receives the superseding account certificate of representation shall be binding on the new NO_x authorized account representative and the owners and operators of the NOx budget source and the NO_x budget units at the source.
- B. Changing the alternate NO_x authorized account representative. The alternate NO_x authorized account representative may be changed at any time upon receipt by the administrator of a superseding complete account certificate of representation under paragraph (3)(B)4. of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NO_x authorized account representative prior to the time and date when the administrator receives the superseding account certificate of representation shall be binding on the new alternate NO_x authorized account representative and the owners and operators of the NOx budget source and the NO, budget units at the source.
- C. Changes in the owners and operators.
- (I) In the event a new owner or operator of a NO_x budget source or a NO_x budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the NO_x authorized account representative and any alternate NO_x authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the director or the administrator, as if the new owner or operator were included in such list.
- (II) Within thirty (30) days following any change in the owners or operators of a NO_x budget source or a NO_x budget unit,

including the addition of a new owner or operator, the $\mathrm{NO_x}$ authorized account representative or alternate $\mathrm{NO_x}$ authorized account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

- 4. Account certificate of representation.
- A. A complete account certificate of representation for a NO_x authorized account representative or an alternate NO_x authorized account representative shall include the following elements in a format prescribed by the administrator:
- (I) Identification of the NO_x budget source and each NO_x budget unit at the source for which the account certificate of representation is submitted.
- (II) The name, address, email address (if any), telephone number, and facsimile transmission number (if any) of the NO_x authorized account representative and any alternate NO_x authorized account representative.
- (III) A list of the owners and operators of the NO_x budget source and of each NO_x budget unit at the source.
- (IV) The following certification statement by the NO_x authorized account representative and any alternate NO_x authorized account representative: "I certify that I was selected as the NOx authorized account representative or alternate NO_x authorized account representative, as applicable, by an agreement binding on the owners and operators of the NO_x budget source and each NO_x budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NO_x budget trading program on behalf of the owners and operators of the NOx budget source and of each NOx budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the director, the administrator, or a court regarding the source or unit."
- (V) The signature of the $\mathrm{NO_x}$ authorized account representative and any alternate $\mathrm{NO_x}$ authorized account representative and the dates signed.
- B. Unless otherwise required by the director or the administrator, documents of agreement referred to in the account certificate of representation shall not be submitted to the director or the administrator. Neither



the director nor the administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

- 5. Objections concerning the NO_x authorized account representative.
- A. Once a complete account certificate of representation under paragraph (3)(B)4. of this rule has been submitted and received, the director and the administrator will rely on the account certificate of representation unless and until a superseding complete account certificate of representation under paragraph (3)(B)4. of this rule is received by the administrator.
- B. Except as provided in subparagraph (3)(B)3.A. or B. of this rule, no objection or other communication submitted to the director or the administrator concerning the authorization, or any representation, action, inaction, or submission of the NO_x authorized account representative shall affect any representation, action, inaction, or submission of the NO_x authorized account representative or the finality of any decision or order by the director or the administrator under the NO_x budget trading program.
- C. Neither the director nor the administrator will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any NO_{x} authorized account representative, including private legal disputes concerning the proceeds of NO_{x} allowance transfers.
 - (C) NO_x Budget Permits.
- 1. General NO_x budget trading program permit requirements.
- A. For each NO_x budget source required to have a federally enforceable permit, such permit shall include a NO_x budget permit administered by the director.
- (I) For NO_x budget sources required to have a Title V operating permit, the NO_x budget portion of the Title V permit shall be administered in accordance with the director's Title V operating permits regulations promulgated under 40 CFR 70 or 71, except as provided otherwise by subsection (3)(C) or (H) of this rule.
- (II) For NO_x budget sources required to have a non-Title V permit, the NO_x budget portion of the non-Title V permit shall be administered in accordance with the director's regulations promulgated to administer non-Title V permits, except as provided otherwise by subsection (3)(C) or (H) of this rule.
- B. Each NO_x budget permit (including a draft or proposed NO_x budget permit, if

- applicable) shall contain all applicable $\mathrm{NO_x}$ budget trading program requirements and shall be a complete and segregable portion of the permit under subparagraph (3)(C)1.A. of this rule.
- 2. Submission of NO_x budget permit applications.
- A. The $\mathrm{NO_x}$ authorized account representative of any $\mathrm{NO_x}$ budget source required to have a federally enforceable permit shall submit to the director a complete $\mathrm{NO_x}$ budget permit application under paragraph (3)(C)3. of this rule by the applicable deadline in subparagraph (3)(C)2.B. of this rule.
 - B. Application time.
- (I) For NO_x budget sources required to have a Title V operating permit:
- (a) For any source, with one (1) or more $\mathrm{NO_x}$ budget units under section (1) of this rule that commence operation before January 1, 2006, the $\mathrm{NO_x}$ authorized account representative shall submit a complete $\mathrm{NO_x}$ budget permit application under paragraph (3)(C)3. of this rule covering such $\mathrm{NO_x}$ budget units to the director at least eighteen (18) months (or such lesser time provided under the director's Title V operating permits regulations for final action on a permit application) before May 1, 2007.
- (b) For any source, with any NO_x budget unit under section (1) of this rule that commences operation on or after January 1, 2006, the NO_x authorized account representative shall submit a complete NO_x budget permit application under paragraph (3)(C)3. of this rule covering such NO_x budget unit to the director at least eighteen (18) months (or such lesser time provided under the director's Title V operating permits regulations for final action on a permit application) before the later of May 1, 2007, or the date on which the NO_x budget unit commences operation.
- (II) For NO_x budget sources required to have a non-Title V permit:
- (a) For any source, with one (1) or more $\mathrm{NO_x}$ budget units under section (1) of this rule that commence operation before January 1, 2006, the $\mathrm{NO_x}$ authorized account representative shall submit a complete $\mathrm{NO_x}$ budget permit application under paragraph (3)(C)3. of this rule covering such $\mathrm{NO_x}$ budget units to the director at least eighteen (18) months (or such lesser time provided under the director's non-Title V permits regulations for final action on a permit application) before May 1, 2007.

- (b) For any source, with any $\mathrm{NO_x}$ budget unit under section (1) of this rule that commences operation on or after January 1, 2006, the $\mathrm{NO_x}$ authorized account representative shall submit a complete $\mathrm{NO_x}$ budget permit application under paragraph (3)(C)3. of this rule covering such $\mathrm{NO_x}$ budget unit to the director at least eighteen (18) months (or such lesser time provided under the director's non-Title V permits regulations for final action on a permit application) before the later of May 1, 2007, or the date on which the $\mathrm{NO_x}$ budget unit commences operation.
 - C. Duty to reapply.
- (I) For a NO_x budget source required to have a Title V operating permit, the NO_x authorized account representative shall submit a complete NO_x budget permit application under paragraph (3)(C)3. of this rule for the NO_x budget source covering the NO_x budget units at the source in accordance with the director's Title V operating permits regulations addressing operating permit renewal.
- (II) For a NO_x budget source required to have a non-Title V permit, the NO_x authorized account representative shall submit a complete NO_x budget permit application under paragraph (3)(C)3. of this rule for the NO_x budget source covering the NO_x budget units at the source in accordance with the director's non-Title V permits regulations addressing permit renewal.
- 3. Information requirements for NO_x budget permit applications. A complete NO_x budget permit application shall include the following elements concerning the NO_x budget source for which the application is submitted, in a format prescribed by the director:
- A. Identification of the NO_x budget source, including plant name and the Office of Regulatory Information Systems (ORIS) or facility code assigned to the source by the Energy Information Administration, if applicable;
- B. Identification of each NO_x budget unit at the NO_x budget source and whether it is a NO_x budget unit under section (1) of this rule or under subsection (3)(H) of this rule; and
- C. The standard requirements under subsection (3)(A) of this rule.
 - 4. NO_x budget permit contents.
- A. Each NO_x budget permit (including any draft or proposed NO_x budget permit, if applicable) will contain, in a format prescribed

by the director, all elements required for a complete NO_x budget permit application under paragraph (3)(C)3. of this rule as approved or adjusted by the director.

- B. Each NO_x budget permit is deemed to incorporate automatically the definitions of terms under section (2) of this rule and, upon recordation by the administrator under subsections (3)(F), (G), or (H) of this rule, every allocation, transfer, or deduction of a NO_x allowance to or from the compliance accounts of the NO_x budget units covered by the permit or the overdraft account of the NO_x budget source covered by the permit.
- 5. Effective date of initial NO_x budget permit. The initial NO_x budget permit covering a NO_x budget unit for which a complete NO_x budget permit application is timely submitted under subparagraph (3)(C)2.B. of this rule shall become effective by the later of:
 - A. May 1, 2007;
- B. May 1 of the year in which the NO_x budget unit commences operation, if the unit commences operation on or before May 1 of that year;
- C. The date on which the NO_x budget unit commences operation, if the unit commences operation during a control period; or
- D. May 1 of the year following the year in which the NO_x budget unit commences operation, if the unit commences operation on or after October 1 of the year.
 - 6. NO_x budget permit revisions.
- A. For a $\mathrm{NO_x}$ budget source with a Title V operating permit, except as provided in subparagraph (3)(C)4.B. of this rule, the director will revise the $\mathrm{NO_x}$ budget permit, as necessary, in accordance with the director's Title V operating permits regulations addressing permit revisions.
- B. For a $\mathrm{NO_x}$ budget source with a non-Title V permit, except as provided in subparagraph (3)(C)4.B. of this rule, the director will revise the $\mathrm{NO_x}$ budget permit, as necessary, in accordance with the director's non-Title V permits regulations addressing permit revisions.
 - (D) Compliance Certification.
 - 1. Compliance certification report.

A. For each control period in which one (1) or more $\mathrm{NO_x}$ budget units at a source are subject to the $\mathrm{NO_x}$ budget emissions limitation, the $\mathrm{NO_x}$ authorized account representative of the source shall submit to the director and the administrator by November 30 of that year, a compliance certification report for each source covering all such units.

- B. The $\mathrm{NO_x}$ authorized account representative shall include in the compliance certification report under subparagraph (3)(D)1.A. of this rule the following elements, in a format prescribed by the administrator, concerning each unit at the source and subject to the $\mathrm{NO_x}$ budget emissions limitation for the control period covered by the report:
- (I) Identification of each NO_x budget unit;
- (II) At the NO_x authorized account representative's option, the serial numbers of the NO_x allowances that are to be deducted from each unit's compliance account under paragraph (3)(F)5. of this rule for the control period;
- (III) At the NO_x authorized account representative's option, for units sharing a common stack and having emissions that are not monitored separately or apportioned in accordance with section (4) of this rule, the percentage of NO_x allowances that is to be deducted from each unit's compliance account under subparagraph (3)(F)5.E. of this rule; and
- (IV) The compliance certification under subparagraph (3)(D)1.C. of this rule.
- C. In the compliance certification report under subparagraph (3)(D)1.A. of this rule, the $\mathrm{NO_x}$ authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the $\mathrm{NO_x}$ budget units at the source in compliance with the $\mathrm{NO_x}$ budget trading program, whether each $\mathrm{NO_x}$ budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the $\mathrm{NO_x}$ budget trading program applicable to the unit, including:
- (I) Whether the unit was operated in compliance with the NO_{x} budget emissions limitation;
- (II) Whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute emissions to the unit, in accordance with section (4) of this rule;
- (III) Whether all the emissions from the unit, or a group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with section (4) of this rule. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all

necessary quarterly report resubmissions have been made;

- (IV) Whether the facts that form the basis for certification under section (4) of this rule of each monitor at the unit or a group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under section (4) of this rule, if any, has changed; and
- (V) If a change is required to be reported under part (3)(D)1.C.(IV) of this rule, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.
- 2. Director's and administrator's action on compliance certifications.
- A. The director or the administrator may review and conduct independent audits concerning any compliance certification or any other submission under the NO_x budget trading program and make appropriate adjustments of the information in the compliance certifications or other submissions.
- B. The administrator may deduct NO_x allowances from or transfer NO_x allowances to a unit's compliance account or a source's overdraft account based on the information in the compliance certifications or other submissions, as adjusted under subparagraph (3)(D)2.A. of this rule.
 - (E) NO_v Allowance Allocations.
- 1. The state trading program NO_x budget allocated by the director under paragraphs (3)(E)2. and (3)(E)3. of this rule for a control period will equal the total number of tons of emissions apportioned to the NO_x budget units in Missouri for the control period, as determined by the applicable, approved state implementation plan.
- 2. The following NO_x budget units shall be allocated NO_x allowances for each control period in accordance with Table I of paragraph (3)(E)2.

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Table I				
NO Product Unit	T I:4	Percentage of	NO _x Allowances	
NO _x Budget Unit	Unit	1995 Heat Input	by Unit	
Associated Electric Cooperative— New Madrid	1	8.49	1126	
Associated Electric Cooperative— New Madrid	2	8.91	1182	
Ameren—Howard Bend	1	0.02	3	
Ameren—Labadie	1	8.64	1146	
Ameren—Labadie	2	9.52	1263	
Ameren—Labadie	3	10.92	1449	
Ameren—Labadie	4	10.09	1339	
Ameren—Meramec	1	0.86	114	
Ameren—Meramec	2	0.66	88	
Ameren—Meramec	3	1.14	152	
Ameren—Meramec	4	2.11	280	
Ameren—Meramec	5	0.04	5	
Ameren—Rush Island	1	10.59	1405	
Ameren—Rush Island	2	10.52	1395	
Ameren—Sioux	1	6.10	809	
Ameren—Sioux	2	5.47	726	
Ameren—Viaduct	1	0.03	4	
City of Sikeston	1	5.88	780	
Energy efficiency and renewable generation projects set-aside			134	

3. The following existing non-EGU boilers shall be allocated $\mathrm{NO_x}$ allowances for each control period in accordance with Table II of paragraph (3)(E)3.

Table II

		NO _x Limitation per Unit	
Non-EGUs Boilers	Unit	Tons Per Ozone Season	
Anheuser Busch	6	14	
Trigen Ashley Street Station Boiler	5	9	
Trigen Ashley Street Station Boiler	6	36	

- 4. Any unit subject to subsection (1)(B) other than those listed in Tables I and II of this subsection will not be allocated NO_x budget allowances under this rule.
 - 5. Reserved
- 6. Any person seeking set aside NO_x allowances for energy efficiency and renewable generation projects shall meet the requirements of paragraph (3)(E)6. of this rule.
- A. The purpose for establishing these set-asides is to allocate NO_{x} allowances to serve as incentives for saving or generating electricity through the implementation of energy efficiency and renewable generation projects as defined in this section.
- (I) Each energy efficiency and renewable generation set-aside shall contain the number of NO_{x} allowances as provided in Table I of this subsection.
- ${\rm (II)\ Awards\ of\ NO_x\ allowances\ will}$ be available only to eligible energy efficiency or renewable generation projects that—
- (a) Commence operation after September 1, 2005;
- (b) Reduce electricity use, generate electricity from renewable resources or provide combined heat and power benefits during the period of May 1 through September 30, 2006, or subsequent control periods; and
- (c) In an application submitted by November 30 of each year, include adequate documentation of these energy savings, renewable energy generation or combined heat and power benefits.
- (III) Projects will be awarded NO_x allowances denominated for the control period following the control period during which the qualifying project activities took place. For example, sponsors of project activities that take place during the 2006 control period will receive NO_x allowances denominated for the 2007 control period.
- (IV) Projects may qualify for awards from the set-aside for up to five (5) consecutive control periods.
- (V) Department actions on applications for awards from the set-aside. The department shall act upon applications as follows:
- (a) By March 1 preceding the control period for which NO_x allowances are requested, the department shall take the following actions:
- I. For each application, the department shall determine whether the project is eligible and the application is complete and shall notify the applicant of its determination.

- II. For the eligible and complete applications, the department shall calculate the total number of NO_{x} allowances which the projects are qualified to receive, not to exceed the total number of NO_{x} allowances allocated to the set-aside as provided in Table I of this subsection, and shall award said NO_{x} allowances to eligible energy efficiency or renewable generation projects.
- (b) If the number of NO_x allowances awarded is fewer than NO_x allowances allocated to the set-aside as provided in Table I of this subsection, the department shall transfer surplus NO_x allowances to the accounts of the electric utilities listed in Table I of this subsection on a pro rata basis in the same proportion as allocations to NO_x budget units set forth in Table I of this subsection.
- (c) If the number of NO_x allowances claimed for award is more than NO_x allowances allocated to the set-aside as provided in Table I of this subsection, the department shall determine awards based on each applicant's position in an eligible projects queue that will be established by the department.
- B. Project eligibility. Allocations from the energy efficiency and renewable generation set-aside may be requested by any entity, including an electric utility listed in Table I of this subsection or its affiliate, that implements and demonstrates eligible projects as defined in this subparagraph.
- (I) Eligibility requirements. The department shall establish requirements for project eligibility and shall determine which projects are eligible to receive awards from the set-aside.
- (II) Only the following shall be eligible for awards from the set-aside:
- (a) Energy efficiency projects resulting in reduced or more efficient electricity use through the voluntary modification of maintenance and operating procedures in a building or facility or the voluntary installation, replacement, or modification of equipment, fixtures, or materials in a building or facility.
- I. Energy efficiency projects may be directed toward or located within buildings or facilities owned, leased, operated or controlled by an electric utility listed in Table I of this subsection or its affiliate. Eligibility requirements for these projects shall be the same as for any other energy efficiency project.
- II. Energy efficiency projects may include demand side programs that

result in reduced or more efficient electricity use;

- (b) Renewable generation projects, including electric generation from wind, photovoltaic systems, biogas, geothermal and hydropower projects. Renewable generation projects do not include nuclear power projects. Eligible biogas projects include projects to generate electricity from methane gas captured from sanitary landfills, wastewater treatment plants, sewage treatment plants or agricultural livestock waste treatment systems. Eligible hydropower projects are restricted to systems—
- I. That are certified by the Low Impact Hydropower Institute;
- II. That employ a head of ten feet (10') or less; or
- III. Employing a head greater than ten feet (10') that make use of a dam that existed prior to the effective date of this rule;
- (c) Renewable biomass generation projects including projects in which one (1) or more biomass fuels is fired separately or co-fired with one (1) or more fossil fuels to generate electricity. Biomass includes wood and wood waste, energy crops such as switchgrass and agricultural wastes such as crop and animal waste. Electric generation from combustion of municipal solid waste is not included; and
- (d) Combined heat and power projects that use integrated technologies, including cogeneration, which convert fuel to electric, thermal, and mechanical energy for on-site or local use. In the case of electricity generation combined heat and power can include export of power to the local electric utility transmission grid. The thermal energy from combined heat and power systems can be created and used in the form of steam, hot or chilled water for process, space heating or cooling, or other applications. To be eligible, the combined heat and power installation must meet or exceed technology-specific efficiency thresholds that will be established by the department.
- (III) Additional eligibility requirements shall include the following:
- (a) NO_x authorized account representative must be designated for the project on forms provided by the department;
- (b) Only projects that are not required by federal government regulation and that are not and will not be used to generate compliance or permitting credits otherwise in the SIP are eligible to receive NO_x allowances from the set-aside;
- (c) Only projects that equal at least one (1) ton of NO_x emissions, using conventional arithmetic rounding, are eligible



to receive NO_x allowances from the set-aside. Multiple projects may be aggregated into a single NO_x allowance allocation request to equal one (1) or more tons of NO_x emissions;

- (d) Only projects that commence operation after September 1, 2005 are eligible to receive $\mathrm{NO_{x}}$ allowances from the setaside;
 - (e) Location of the project:
- I. Renewable generation projects and renewable biomass generation projects, as defined in subpart (3)(E)6.B.(II)(C) of this rule located anywhere in the state of Missouri are eligible if the generation facility meets all other eligibility requirements and—
- a. The facility is owned, leased, operated or controlled by an electric utility listed in Table I of this subsection or an affiliate and generates electricity that is primarily intended to be marketed or distributed to end users who are included in the utility's native load or who are located in the Missouri SIP region; or
- b. The facility supplies power through a power purchase contract to an electric utility listed in Table I of this subsection or an affiliate and the power purchased is primarily intended to be marketed or distributed to end users who are included in the utility's native load or who are located in the Missouri SIP region.
- II. Energy efficiency projects and combined heat and power projects, as defined in subpart (3)(E)6.B.(II)(d) of this rule, must be located in the area described in subsection (1)(A) of this rule to be eligible to receive NO_x allowances from the set-aside.
- (IV) Pre-application eligibility review. Project sponsors may request a pre-application eligibility review preceding project activities that will serve as the basis for an application for awards from the set-aside. The review will cover eligibility requirements that can be determined prior to receipt of a complete application for awards. The request for early eligibility review must be submitted on forms provided by the department.
- (V) Eligibility for any project may be claimed by only one (1) entity. The department shall determine procedures to be followed if multiple claims of eligibility for the same project are received.
- C. Applications and calculations of awards. To qualify for an award of NO_x allowances from the set-aside an applicant must meet the following requirements:
- (I) The project must be eligible as provided in paragraph (3)(E)6. of this rule;
- (II) A complete application must be received by the last business day of Novem-

- ber following the period of May 1 through September 30 during which the eligible project activities occurred. The application shall—
- (a) Be prepared on forms provided by the department and must be submitted by the project's NO_x authorized account representative;
- (b) Be submitted with certification by a professional engineer attesting that information and calculations submitted in the application are complete and accurate.
- I. The department shall have the right to require verification of data and calculations that are presented in an application as a condition for awarding NO_{x} allowances to the applicant; and
- II. Verification may include site visits by agents of the department;
- (c) Demonstrate electricity savings or renewable generation and calculate the NO_{x} allowance award requested using methods that adhere to measurement and verification standards approved by the department; and
- (d) If the applicant intends to reapply in subsequent years, the application must indicate the stream of benefits that is expected in subsequent years;
- (III) The department shall determine methods for calculating awards of NO_x allowances based upon the following principles:
- (a) NO_x allowances awarded to end-use electrical energy efficiency projects shall be calculated as the number of megawatt hours (MWh) of electricity saved during a control period multiplied by an emissions factor of 1.5 pounds of NO_x per MWh appropriately converted and rounded to tons using conventional arithmetic rounding. The department shall provide a factor to adjust the calculation of electricity saved to account for transmission and distribution line losses;
- (b) NO_x allowances awarded to renewable generation projects from wind, photovoltaic systems, biogas, geothermal and hydropower projects shall be calculated as the number of kilowatt hours of electricity generated during a control period multiplied by an emissions factor of 1.5 pounds of NO_x per MWh appropriately converted and rounded to tons using conventional arithmetic rounding;
- (c) NO_{x} allowances awarded to renewable biomass generation projects shall be calculated based on net NO_{x} emission reductions, appropriately converted and

rounded to tons using conventional arithmetic rounding where—

- I. Net NO_x emissions shall be calculated as the number of kilowatt hours of electricity generated during a control period multiplied by an emissions factor of 1.5 pounds of NO_x per MWh, minus the tons of NO_x emitted by the renewable generating project during the control period; and
- II. When biomass is co-fired with other fuels, its share of electric generation and NO_x emissions shall be calculated based on its share of the total heat content of all fuels used in the co-firing process; and
- (d) The department shall determine methods for calculating NO_x allowances for combined heat and power projects; and
- (IV) A project's NO_x authorized account representative may reapply for set-aside awards for up to five (5) consecutive control periods by meeting the following requirements:
- (a) Reapplication must be received by the last business day of November following the last day of the control period during which the energy efficiency and renewable electric generation activities took place;
- (b) The reapplication must be prepared on forms provided by the department and must be submitted by the project's NO_x authorized account representative; and
- (c) The application must be submitted with certification by a professional engineer attesting that information and calculations submitted in the application are complete and accurate.
 - (F) NO_x Allowance Tracking System.
- 1. NO_x allowance tracking system accounts.
- A. Nature and function of compliance accounts and overdraft accounts. Consistent with subparagraph (3)(F)2.A. of this rule, the administrator will establish one (1) compliance account for each NOx budget unit and one (1) overdraft account for each source with one (1) or more NO_x budget units. Allocations of NOx allowances pursuant to subsection (3)(E) or paragraph (3)(H)9. of this rule and deductions or transfers of NO_v allowances pursuant to paragraphs (3)(D)2., (3)(F)5., (3)(F)7., subsection (3)(G), or subsection (3)(H) of this rule will be recorded in the compliance accounts or overdraft accounts in accordance with subsection (3)(F) of this rule.
- B. Nature and function of general accounts. Consistent with subparagraph (3)(F)2.B. of this rule, the administrator will

establish, upon request, a general account for any person. Transfers of NO_x allowances pursuant to subsection (3)(G) of this rule will be recorded in the general account in accordance with subsection (3)(F) of this rule.

2. Establishment of accounts.

- A. Compliance accounts and overdraft accounts. Upon receipt of a complete account certificate of representation under paragraph (3)(B)4. of this rule, the administrator will establish—
- (I) A compliance account for each NO_x budget unit for which the account certificate of representation was submitted; and
- (II) An overdraft account for each source for which the account certificate of representation was submitted and that has two (2) or more NO_x budget units.

B. General accounts.

- (I) Any person may apply to open a general account for the purpose of holding and transferring NO_x allowances. A complete application for a general account shall be submitted to the administrator and shall include the following elements in a format prescribed by the administrator:
- (a) Name, mailing address, email address (if any), telephone number, and facsimile transmission number (if any) of the NO_{x} authorized account representative and any alternate NO_{x} authorized account representative;
- (b) At the option of the NO_{x} authorized account representative, organization name and type of organization;
- (c) A list of all persons subject to a binding agreement for the NO_x authorized account representative or any alternate NO_x authorized account representative to represent their ownership interest with respect to the NO_x allowances held in the general account;
- (d) The following certification statement by the NO_x authorized account representative and any alternate NOx authorized account representative: "I certify that I was selected as the NOx authorized account representative or the alternate NO_x authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to NO_v allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NO_x budget trading program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by

the administrator or a court regarding the general account.";

- (e) The signature of the NO_x authorized account representative and any alternate NO_x authorized account representative and the dates signed; and
- (f) Unless otherwise required by the director or the administrator, documents of agreement referred to in the account certificate of representation shall not be submitted to the permitting authority or the administrator. Neither the director nor the administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.
- (II) Upon receipt by the administrator of a complete application for a general account under part (3)(F)2.B.(I) of this rule:
- (a) The administrator will establish a general account for the person or persons for whom the application is submitted;
- (b) The NO_x authorized account representative and any alternate NOx authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to NO_x allowances held in the general account in all matters pertaining to the NO_x budget trading program, notwithstanding any agreement between the NOx authorized account representative or any alternate NOx authorized account representative and such person. Any such person shall be bound by any order or decision issued to the NO_x authorized account representative or any alternate NO_x authorized account representative by the administrator or a court regarding the general account;
- (c) Each submission concerning the general account shall be submitted, signed, and certified by the NO_x authorized account representative or any alternate NO_x authorized account representative for the persons having an ownership interest with respect to NOx allowances held in the general account. Each such submission shall include the following certification statement by the NO_x authorized account representative or any alternate NO_x authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the NO_v allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this

- document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."; and
- (d) The administrator will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with subpart (3)(F)2.B.(II)(c) of this rule.
- $\mbox{(III) NO}_{\mbox{\tiny X}} \mbox{ authorized account representative for general accounts}.$
- (a) An application for a general account may designate one (1) and only one (1) NO_x authorized account representative and one (1) and only one (1) alternate NO_x authorized account representative who may act on behalf of the NO_x authorized account representative. The agreement by which the alternate NO_x authorized account representative is selected shall include a procedure for authorizing the alternate NO_x authorized account representative to act in lieu of the NO_x authorized account representative.
- (b) Upon receipt by the administrator of a complete application for a general account under part (3)(F)2.B.(I) of this rule, any representation, action, inaction, or submission by any alternate NO_x authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO_x authorized account representative.
- (IV) Changes in account representatives for general accounts; changes in owners and operators.
- (a) The NO_x authorized account representative for a general account may be changed at any time upon receipt by the administrator of a superseding complete application for a general account under part (3)(F)2.B.(I) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO_x authorized account representative prior to the time and date when the administrator receives the superseding application for a general account shall be binding on the new NO_x authorized account representative and the persons with an ownership interest with respect to the NO_x allowances in the general account.



- (b) The alternate NO_x authorized account representative for a general account may be changed at any time upon receipt by the administrator of a superseding complete application for a general account under part (3)(F)2.B.(I) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NO_x authorized account representative prior to the time and date when the administrator receives the superseding application for a general account shall be binding on the new alternate NO_x authorized account representative and the persons with an ownership interest with respect to the NO_v allowances in the general account.
- (c) Changes in the owners and operators.
- I. In the event a new person having an ownership interest with respect to NO_{x} allowances in the general account is not included in the list of such persons in the account certificate of representation, such new person shall be deemed to be subject to and bound by the account certificate of representation, the representation, actions, inactions, and submissions of the NO_{x} authorized account representative and any alternate NO_{x} authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the administrator, as if the new person were included in such list.
- II. Within thirty (30) days following any change in the persons having an ownership interest with respect to NO_x allowances in the general account, including the addition of persons, the NO_x authorized account representative or any alternate NO_x authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the NO_x allowances in the general account to include the change.
- $\mbox{(V)}$ Objections concerning the \mbox{NO}_{χ} authorized account representative for a general account.
- (a) Once a complete application for a general account under part (3)(F)2.B.(I) of this rule has been submitted and received, the administrator will rely on the application unless and until a superseding complete application for a general account under part (3)(F)2.B.(I) of this rule is received by the administrator.
- (b) Except as provided in part (3)(F)2.B.(IV) of this rule, no objection or other communication submitted to the administrator concerning the authorization, or any

- representation, action, inaction, or submission of the NO_{x} authorized account representative or any alternate NO_{x} authorized account representative for a general account shall affect any representation, action, inaction, or submission of the NO_{x} authorized account representative or any alternate NO_{x} authorized account representative or the finality of any decision or order by the administrator under the NO_{x} budget trading program.
- (c) The administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the $\mathrm{NO_x}$ authorized account representative or any alternate $\mathrm{NO_x}$ authorized account representative for a general account, including private legal disputes concerning the proceeds of $\mathrm{NO_x}$ allowance transfers.
- C. Account identification. The administrator will assign a unique identifying number to each account established under subparagraphs (3)(F)2.A. or B. of this rule.
- 3. Responsibilities of NO_x authorized account representative.
- A. Following the establishment of a NO_{x} allowance tracking system account, all submissions to the administrator pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of NO_{x} allowances in the account, shall be made only by the NO_{x} authorized account representative for the account.
- B. NO_x authorized account representative identification. The administrator will assign a unique identifying number to each NO_x authorized account representative.
- 4. Recordation of NO_x allowance allocations.
- A. The administrator will record the NO_x allowances for 2007 and 2008 in the NO_x budget units' compliance accounts and the allocation set-asides, as allocated under subsection (3)(E) of this rule.
- B. Each year, after the administrator has made all deductions from a NO_x budget unit's compliance account and the overdraft account pursuant to paragraph (3)(F)5. of this rule, the administrator will record NO_x allowances, as allocated to the unit under subsection (3)(E) of this rule or under part (3)(H)9.A.(II) of this rule, in the compliance account for the year after the last year for which NO_x allowances were previously allocated to the compliance account. Each year, the administrator will also record NO_x

- allowances, as allocated under subsection (3)(E) of this rule, in the allocation set-aside for the year after the last year for which NO_x allowances were previously allocated to an allocation set-aside.
- C. Serial numbers for allocated NO_x allowances. When allocating NO_x allowances to and recording them in an account, the administrator will assign each NO_x allowance a unique identification number that will include digits identifying the year for which the NO_x allowance is allocated.
 - 5. Compliance.
- A. \overline{NO}_x allowance transfer deadline. The NO_x allowances are available to be deducted for compliance with a unit's NO_x budget emissions limitation for a control period in a given year only if the NO_x allowances—
- (I) Were allocated for a control period in a prior year or the same year; and
- (II) Are held in the unit's compliance account, or the overdraft account of the source where the unit is located, as of the NO_x allowance transfer deadline for that control period or are transferred into the compliance account or overdraft account by a NO_x allowance transfer correctly submitted for recordation under paragraph (3)(G)1. of this rule by the NO_x allowance transfer deadline for that control period.
 - B. Deductions for compliance.
- (I) Following the recordation, in accordance with paragraph (3)(G)2. of this rule, of NO_x allowance transfers submitted for recordation in the unit's compliance account or the overdraft account of the source where the unit is located by the NO_x allowance transfer deadline for a control period, the administrator will deduct NO_x allowances available under subparagraph (3)(F)5.A. of this rule to cover the unit's emissions (as determined in accordance with section (4) of this rule) for the control period—
- (a) From the compliance account; and
- (b) Only if no more NO_x allowances available under subparagraph (3)(F)5.A. of this rule remain in the compliance account, from the overdraft account. In deducting NO_x allowances for units at the source from the overdraft account, the administrator will begin with the unit having the compliance account with the lowest NO_x allowance tracking system account number and end with the unit having the compliance account with the highest NO_x allowance

tracking system account number (with account numbers sorted beginning with the left-most character and ending with the right-most character and the letter characters assigned values in alphabetical order and less than all numeric characters).

- (II) The administrator will deduct NO_x allowances first under subpart (3)(F)5.B.(I)(a) of this rule and then under subpart (3)(F)5.B.(I)(b) of this rule—
- (a) Until the number of NO_x allowances deducted for the control period equals the number of tons of emissions, determined in accordance with section (4) of this rule, from the unit for the control period for which compliance is being determined; or
- (b) Until no more NO_x allowances available under subparagraph (3)(F)5.A. of this rule remain in the respective account.
 - C. Identification of NO_x allowances.
- (I) Identification of NO_x allowances by serial number. The NO_x authorized account representative for each compliance account may identify by serial number the NO_x allowances to be deducted from the unit's compliance account under subparagraph (3)(F)5.B., D., or E. of this rule. Such identification shall be made in the compliance certification report submitted in accordance with paragraph (3)(D)1. of this rule.
- (II) First-in, first-out. The administrator will deduct NO_x allowances for a control period from the compliance account, in the absence of an identification or in the case of a partial identification of NO_x allowances by serial number under part (3)(F)5.C.(I) of this rule, or the overdraft account on a first-in, first-out (FIFO) accounting basis in the following order:
- (a) Those NO_x allowances that were allocated for the control period to the unit under subsection (3)(E) or (H) of this rule:
- (b) Those NO_x allowances that were allocated for the control period to any unit and transferred and recorded in the account pursuant to subsection (3)(G) of this rule, in order of their date of recordation;
- (c) Those NO_{x} allowances that were allocated for a prior control period to the unit under subsection (3)(E) or (H) of this rule; and
- (d) Those NO_x allowances that were allocated for a prior control period to any unit and transferred and recorded in the account pursuant to subsection (3)(G) of this rule, in order of their date of recordation.

- D. Deductions for excess emissions.
- (I) After making the deductions for compliance under subparagraph (3)(F)5.B. of this rule, the administrator will deduct from the unit's compliance account or the overdraft account of the source where the unit is located a number of NO_{x} allowances, allocated for a control period after the control period in which the unit has excess emissions, equal to three (3) times the number of the unit's excess emissions.
- (II) If the compliance account or overdraft account does not contain sufficient NO_x allowances, the administrator will deduct the required number of NO_x allowances, regardless of the control period for which they were allocated, whenever NO_x allowances are recorded in either account.
- (III) Any $\mathrm{NO_x}$ allowance deduction required under subparagraph (3)(F)5.D. of this rule shall not affect the liability of the owners and operators of the $\mathrm{NO_x}$ budget unit for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under the CAA or applicable state law. The following guidelines will be followed in assessing fines, penalties or other obligations:
- (a) For purposes of determining the number of days of violation, if a NO_x budget unit has excess emissions for a control period, each day in the control period (one hundred fifty-three (153) days) constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered; and
- (b) Each ton of excess emissions is a separate violation.
- E. Deductions for units sharing a common stack. In the case of units sharing a common stack and having emissions that are not separately monitored or apportioned in accordance with section (4) of this rule—
- (I) The NO_{x} authorized account representative of the units may identify the percentage of NO_{x} allowances to be deducted from each such unit's compliance account to cover the unit's share of emissions from the common stack for a control period. Such identification shall be made in the compliance certification report submitted in accordance with paragraph (3)(D)1. of this rule; and
- (II) Notwithstanding subpart (3)(F)5.B.(II)(a) of this rule, the administrator will deduct NO_x allowances for each such unit until the number of NO_x allowances deducted equals the unit's identified percentage (under part (3)(F)5.E.(I)) of this rule) of

the number of tons of emissions, as determined in accordance with section (4) of this rule, from the common stack for the control period for which compliance is being determined or, if no percentage is identified, an equal percentage for each such unit.

F. The administrator will record in the appropriate compliance account or overdraft account all deductions from such an account pursuant to subparagraph (3)(F)5.B., D., or E. of this rule.

6. Banking.

- A. NO_x allowances may be banked for future use or transfer in a compliance account, an overdraft account, or a general account, as follows:
- (I) Any $\mathrm{NO_x}$ allowance that is held in a compliance account, an overdraft account, or a general account will remain in such account unless and until the $\mathrm{NO_x}$ allowance is deducted or transferred under paragraphs (3)(D)2., (3)(F)5., (3)(F)7., subsection (3)(G), or subsection (3)(H) of this rule
- (II) The administrator will designate, as a "banked" $\mathrm{NO_x}$ allowance, any $\mathrm{NO_x}$ allowance that remains in a compliance account, an overdraft account, or a general account after the administrator has made all deductions for a given control period from the compliance account or overdraft account pursuant to paragraph (3)(F)5. of this rule and that was allocated for that control period or a control period in a prior year.
- B. Each year starting in 2008, after the administrator has completed the designation of banked $\mathrm{NO_x}$ allowances under part (3)(F)6.A.(II) of this rule and before May 1 of the year, the administrator will determine the extent to which banked $\mathrm{NO_x}$ allowances may be used for compliance in the control period for the current year, as follows:
- (I) The administrator will determine the total number of banked NO_x allowances held in compliance accounts, overdraft accounts, or general accounts.
- (II) If the total number of banked NO_x allowances determined, under part (3)(F)6.B.(I) of this rule, to be held in compliance accounts, overdraft accounts, or general accounts is less than or equal to ten percent (10%) of the sum of the state trading program NO_x budgets for the control period for the states in which NO_x budget units are located, any banked NO_x allowance may be deducted for compliance in accordance with paragraph (3)(F)5. of this rule.
- (III) If the total number of banked NO_x allowances determined, under part



- (3)(F)6.B.(I) of this rule, to be held in compliance accounts, overdraft accounts, or general accounts exceeds ten percent (10%) of the sum of the state trading program NO_x budgets for the control period for the states in which NO_x budget units are located, any banked NO_x allowance may be deducted for compliance in accordance with paragraph (3)(F)5. of this rule, except as follows:
- (a) The administrator will determine the following ratio: 0.10 multiplied by the sum of the state trading program NO_x budgets for the control period for the states in which NO_x budget units are located and divided by the total number of banked NO_x allowances determined, under part (3)(F)6.B.(I) of this rule, to be held in compliance accounts, overdraft accounts, or general accounts.
- (b) The administrator will multiply the number of banked NO_x allowances in each compliance account or overdraft account. The resulting product is the number of banked NO_x allowances in the account that may be deducted for compliance in accordance with paragraph (3)(F)5. of this rule. Any banked NO_x allowances in excess of the resulting product may be deducted for compliance in accordance with paragraph (3)(F)5. of this rule, except that, if such NO_x allowances are used to make a deduction, two (2) such NO_x allowances must be deducted for each deduction of one (1) NO_x allowance required under paragraph (3)(F)5. of this rule.
- C. Any $\mathrm{NO_x}$ budget unit may reduce its $\mathrm{NO_x}$ emission rate in the 2002 through the 2006 control period, the owner or operator of the unit may request early reduction credits, and the permitting authority may allocate $\mathrm{NO_x}$ allowances in 2007 to the unit in accordance with the following requirements:
- (I) Each $\mathrm{NO_x}$ budget unit for which the owner or operator requests any early reduction credits under part (3)(F)6.C.(IV) of this rule shall monitor emissions in accordance with section (4) of this rule starting prior to the first control period for which ERCs are requested and for each control period for which such early reduction credits are requested. The unit's monitoring system availability shall be not less than ninety percent (90%) during the applicable control period, and the unit must be in compliance with any applicable state or federal emissions or emissions-related requirements;
- $(II) \ \ NO_x \ \ emission \ \ rate \ \ and \ \ heat \\ input \ under \ part \ (3)(F)6.C.(III) \ \ through \ (V)$

- of this rule shall be determined in accordance with section (4) of this rule;
- (III) Each NO_x budget unit for which the owner or operator requests any early reduction credits under part (3)(F)6.C.(IV) of this rule shall reduce its NO_x emission rate, for each control period for which early reduction credits are requested, to:
- (a) Less than 0.25 lb/mmBtu in the years 2002 and 2003;
- (b) Less than 0.25 lb/mmBtu in the years 2004 and 2005 for sources located in an area listed in subsection (1)(A) other than the City of St. Louis and the counties of Franklin, Jefferson, and St. Louis; or
- (c) Less than 0.18 lb/mmBtu in the years 2004 through 2006 for sources located in the City of St. Louis and the counties of Franklin, Jefferson, and St. Louis.
- (d) The calculation of early reduction credits in any year from 2002 through 2006 must be below any applicable limitation, which is more stringent than the requirements of subparts (a) through (c) of this part.
- (IV) The $\mathrm{NO_x}$ authorized account representative of a $\mathrm{NO_x}$ budget unit that meets the requirements of part (3)(F)6.C.(I) and (III) of this rule may submit to the director a request for early reduction credits for the unit based on $\mathrm{NO_x}$ emission rate reductions made by the unit in the control period for 2002 or 2006 in accordance with part (3)(F)6.C.(III) of this rule.
- (a) In the early reduction credit request, the $\mathrm{NO_x}$ authorized account representative may request early reduction credits for such control period in an amount equal to the unit's heat input for such control period multiplied by the difference between the applicable $\mathrm{NO_x}$ emission rate in part (3)(F)6.C.(III) of this rule and the unit's $\mathrm{NO_x}$ emission rate rounded to the nearest ton.
- (b) The early reduction credit request must be submitted, in a format specified by the director, by October 31 of the year in which the NO_x emission rate reductions on which the request is based are made or such later date approved by the permitting authority;
- (V) The director will allocate NO_{x} allowances, to NO_{x} budget units meeting the requirements of part (3)(F)6.C.(I) and (III) of this rule and covered by early reduction requests meeting the requirements of subpart (3)(F)6.C.(IV)(b) of this rule, in accordance with the following procedures:

- (a) Upon receipt of each early reduction credit request, the director will accept the request only if the requirements of parts (3)(F)6.C.(I), (III), and subpart (3)(F)6.C.(IV)(b) of this rule are met and, if the request is accepted, will make any necessary adjustments to the request to ensure that the amount of the early reduction credits requested meets the requirement of parts (3)(F)6.C.(II) and (IV) of this rule;
- (b) The director will allocate not more than five thousand six hundred thirty (5,630) ERCs over the period from 2002 through 2006, as follows:
- I. The director will allocate not more than one half (1/2) of the total ERCs in the years 2002 and 2003;
- II. The director will allocate not more than one half (1/2) of the total ERCs in the years 2004 and 2005; and
- III. The director will allocate any remaining allowances during the year 2006;
- (c) If the number of ERC allowances requested for a reduction achieved in a given control period from 2002 through 2006 is less than the number of ERCs to be distributed in accordance with the requirements of part (b) of this subparagraph, the director will allocate to each budget EGU one (1) allowance for each accepted ERC requested: and
- (d) If the number of ERC allowances requested for a reduction achieved in a given control period from 2002 through 2006 is greater than the number of ERCs to be distributed in accordance with the requirements of part (b) of this subparagraph, the director will allocate to each budget EGU allowances for accepted requests on a pro rata basis:
- (VI) The director will submit to the administrator the allocations of NO_x allowances determined under part (3)(F)6.C.(V) of this rule by the dates listed in subparts (a) and (b) of this part. The administrator will record such allocations to the extent that they are consistent with the requirements of parts (3)(F)6.C.(I) through (V) of this rule:
- (a) For the years 2002 and 2003, the director will submit NO_x allowances on or before April 1, 2006;
- (b) For the years 2004 through 2006, the director will submit NO_x allowances on or before April 1, 2007;
- (VII) NO_x allowances recorded under part (3)(F)6.C.(VI) of this rule may be deducted for compliance under paragraph (3)(F)5. of this rule for the control periods in 2007 or 2008. Notwithstanding subparagraph

(3)(F)6.A. of this rule, the administrator will deduct as retired any NO_x allowance that is recorded under part (3)(F)6.C.(VI) of this rule and is not deducted for compliance in accordance with paragraph (3)(F)5. of this rule for the control period in 2007 or 2008; and

- (VIII) NO_x allowances recorded under part (3)(F)6.C.(VI) of this rule are not treated as banked NO_x allowances in 2007, and are treated as banked allowances in 2008, for the purposes of subparagraphs (3)(A)3., (3)(A)4. and (3)(A)5. of this rule.
- 7. Account error. The administrator may, at his or her sole discretion and on his or her own motion, correct any error in any NO_{x} allowance tracking system account. Within ten (10) business days of making such correction, the administrator will notify the NO_{x} authorized account representative for the account.
 - 8. Closing of general accounts.
- A. The $\mathrm{NO_x}$ authorized account representative of a general account may instruct the administrator to close the account by submitting a statement requesting deletion of the account from the $\mathrm{NO_x}$ allowance tracking system and by correctly submitting for recordation under paragraph (3)(G)1. of this rule a $\mathrm{NO_x}$ allowance transfer of all $\mathrm{NO_x}$ allowances in the account to one (1) or more other $\mathrm{NO_x}$ allowance tracking system accounts.
- B. If a general account shows no activity for a period of a year or more and does not contain any NOx allowances, the administrator may notify the NO_x authorized account representative for the account that the account will be closed and deleted from the NO_x allowance tracking system following twenty (20) business days after the notice is sent. The account will be closed after the twenty (20)-day period unless before the end of the twenty (20)-day period the administrator receives a correctly submitted transfer of NO_x allowances into the account under paragraph (3)(G)1. of this rule or a statement submitted by the NOx authorized account representative demonstrating to the satisfaction of the administrator good cause as to why the account should not be closed.
 - (G) NO_x Allowance Transfers.
- 1. Submission of NO_{x} allowance transfers. The NO_{x} authorized account representatives seeking recordation of a NO_{x} allowance transfer shall submit the transfer to the administrator. To be considered correctly submitted, the NO_{x} allowance transfer shall

include the following elements in a format specified by the administrator:

- A. The numbers identifying both the transferor and transferee accounts;
- B. A specification by serial number of each NO_x allowance to be transferred; and
- C. The printed name and signature of the NO_x authorized account representative of the transferor account and the date signed.
 - 2. EPA recordation.
- A. Within five (5) business days of receiving a $\mathrm{NO_x}$ allowance transfer, except as provided in subparagraph (3)(G)2.B. of this rule, the administrator will record a $\mathrm{NO_x}$ allowance transfer by moving each $\mathrm{NO_x}$ allowance from the transferor account to the transferee account as specified by the request, provided that—
- (I) The transfer is correctly submitted under paragraph (3)(G)1. of this rule;
- (II) The transferor account includes each NO_x allowance identified by serial number in the transfer; and
- (III) The transfer meets all other requirements of this rule.
- B. A $\mathrm{NO_x}$ allowance transfer that is submitted for recordation following the $\mathrm{NO_x}$ allowance transfer deadline and that includes any $\mathrm{NO_x}$ allowances allocated for a control period prior to or the same as the control period to which the $\mathrm{NO_x}$ allowance transfer deadline applies will not be recorded until after completion of the process of recordation of $\mathrm{NO_x}$ allowance allocations in subparagraph (3)(F)4.B. of this rule.
- C. Where a NO_x allowance transfer submitted for recordation fails to meet the requirements of subparagraph (3)(G)2.A. of this rule, the administrator will not record such transfer.
 - 3. Notification.
- A. Notification of recordation. Within five (5) business days of recordation of a $\mathrm{NO_x}$ allowance transfer under paragraph (3)(G)2. of this rule, the administrator will notify each party to the transfer. Notice will be given to the $\mathrm{NO_x}$ authorized account representatives of both the transferor and transferee accounts.
- B. Notification of non-recordation. Within ten (10) business days of receipt of a $\mathrm{NO_x}$ allowance transfer that fails to meet the requirements of subparagraph (3)(G)2.A. of this rule, the administrator will notify the $\mathrm{NO_x}$ authorized account representatives of both accounts subject to the transfer of—
- (I) A decision not to record the transfer; and

- (II) The reasons for such nonrecordation.
- C. Nothing in this section shall preclude the submission of a NO_{x} allowance transfer for recordation following notification of non-recordation.
 - (H) Reserved
- (4) Reporting and Record Keeping.
- (A) General Requirements. The owners and operators, and to the extent applicable, the NO_x authorized account representative of a NOx budget unit, shall comply with the monitoring and reporting requirements as provided in this rule and in subpart H of 40 CFR part 75. For purposes of complying with such requirements, the definitions in section (2) of this rule and in 40 CFR 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR 75 shall be replaced by the terms "NO_x budget unit," "NO_x authorized account representative," and "continuous emission monitoring system" (or "CEMS"), respectively, as defined in section (2) of this rule.
- 1. Requirements for installation, certification, and data accounting. The owner or operator of each NO_x budget unit must meet the following requirements:
- A. Install all monitoring systems required under section (4) for monitoring mass. This includes all systems required to monitor NO_x emission rate, concentration, heat input, and flow, in accordance with 40 CFR 75.72 and 75.76;
- B. Install all monitoring systems for monitoring heat input, if required under subsection (4)(G) of this rule for developing NO_x allowance allocations;
- C. Successfully complete all certification tests required under subsection (4)(B) of this rule and meet all other provisions of this rule and 40 CFR 75 applicable to the monitoring systems under subparagraphs (4)(A)1.A. and B. of this rule; and
- D. Record, and report data from the monitoring systems under subparagraphs (4)(A)1.A. and B. of this rule.
- 2. Compliance dates. The owner or operator must meet the requirements of sub-paragraphs (4)(A)1.A. through C. of this rule on or before the following dates and must record and report data on and after the following dates:
- A. NO_x budget units for which the owner or operator intends to apply for early reduction credits under subparagraph (3)(F)6.C. of this rule must comply with the



requirements of section (4) of this rule by May 1, 2006;

- B. Except for NO_x budget units under subparagraphs (4)(A)2.A. of this rule, NO_x budget units under section (1) of this rule that commence operation before January 1, 2006, must comply with the requirements of section (4) of this rule by May 1, 2006;
- C. NO_x budget units under section (1) of this rule that commence operation on or after January 1, 2006 and that report on an annual basis under paragraph (4)(E)4. of this rule must comply with the requirements of section (4) of this rule by the later of the following dates:
 - (I) May 1, 2006; or
 - (II) The earlier of:
- (a) One hundred eighty (180) days after the date on which the unit commences operation; or
- (b) For units under paragraph (1)(B)1. of this rule, ninety (90) days after the date on which the unit commences commercial operation;
- D. NO_x budget units under section (1) of this rule that commence operation on or after January 1, 2006 and that report on a control season basis under paragraph (4)(E)4. of this rule must comply with the requirements of section (4) of this rule by the later of the following dates:
 - (I) The earlier of:
- (a) One hundred eighty (180) days after the date on which the unit commences operation; or
- (b) For units under paragraph (1)(B)1. of this rule, ninety (90) days after the date on which the unit commences commercial operation;
- (II) However, if the applicable deadline under part (4)(A)2.D.(I) of this rule does not occur during a control period, May 1, immediately following the date determined in accordance with part (4)(A)2.D.(I) of this rule;
- E. For a NO_x budget unit with a new stack or flue for which construction is completed after the applicable deadline under subparagraphs (4)(A)2.A., B., or C. or subsection (3)(H) of this rule:
- (I) Ninety (90) days after the date on which emissions first exit to the atmosphere through the new stack or flue;
- (II) However, if the unit reports on a control season basis under paragraph (4)(E)4. of this rule and the applicable deadline under part (4)(A)2.E.(I) of this rule does not occur during the control period, May 1 immediately following the applicable deadline in part (4)(A)2.E.(I) of this rule.

- 3. Reporting data prior to initial certification.
- A. The owner or operator of a NO_x budget unit that misses the certification deadline under subparagraph (4)(A)2.A. of this rule is not eligible to apply for early reduction credits. The owner or operator of the unit becomes subject to the certification deadline under subparagraph (4)(A)2.B. of this rule.
- B. The owner or operator of a NO_x budget unit under subparagraph (4)(A)2.C. or D. of this rule must determine, record and report mass, heat input (if required for purposes of allocations) and any other values required to determine mass (e.g. NO_x emission rate and heat input or concentration and stack flow) using the provisions of 40 CFR 75.70(g), from the date and hour that the unit starts operating until all required certification tests are successfully completed.
 - 4. Prohibitions.
- A. No owner or operator of a NO_x budget unit or a non- NO_x budget unit monitored under 40 CFR 75.72(b)(2)(ii) shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring system without having obtained prior written approval in accordance with subsection (4)(F) of this rule.
- B. No owner or operator of a NO_x budget unit or a non- NO_x budget unit monitored under 40 CFR 75.72(b)(2)(ii) shall operate the unit so as to discharge, or allow to be discharged, emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of section (4) of this rule and 40 CFR 75 except as provided for in 40 CFR 75.74.
- C. No owner or operator of a NO_x budget unit or a non-NO_x budget unit monitored under 40 CFR 75.72(b)(2)(ii) shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of section (4) of this rule and 40 CFR 75 except as provided for in 40 CFR 75.74.
- D. No owner or operator of a NO_x budget unit or a non- NO_x budget unit monitored under 40 CFR 75.72(b)(2)(ii) shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved

emission monitoring system under section (4) of this rule, except under any one (1) of the following circumstances:

- (I) During the period that the unit is covered by a retired unit exemption under subsection (1)(E) of this rule that is in effect;
- (II) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of section (4) and 40 CFR 75, by the director for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or
- (III) The NO_{x} authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with subparagraph (4)(B)2.B. of this rule.
- (B) Initial Certification and Recertification Procedures.
- 1. The owner or operator of a NO_x budget unit that is subject to an acid rain emissions limitation shall comply with the initial certification and recertification procedures of 40 CFR 75, except that:
- A. If, prior to January 1, 2005, the administrator approved a petition under 40 CFR 75.17(a) or (b) for apportioning the $\mathrm{NO_x}$ emission rate measured in a common stack or a petition under 40 CFR 75.66 for an alternative to a requirement in 40 CFR 75.17, the $\mathrm{NO_x}$ authorized account representative shall resubmit the petition to the administrator under paragraph (4)(F)1. of this rule to determine if the approval applies under the $\mathrm{NO_x}$ budget trading program.
- B. For any additional CEMS required under the common stack provisions in 40 CFR 75.72, or for any concentration CEMS used under the provisions of 40 CFR 75.71(a)(2), the owner or operator shall meet the requirements of paragraph (4)(B)2. of this rule.
- 2. The owner or operator of a NO_x budget unit that is not subject to an acid rain emissions limitation shall comply with the following initial certification and recertification procedures, except that the owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under 40 CFR 75.19 shall also meet the requirements of paragraph (4)(B)3. of this rule and the owner or operator of a unit that qualifies to use an alternative monitoring system under subpart E of 40 CFR 75 shall also meet the requirements of paragraph (4)(B)4. of this rule. The owner or operator of a NO_x budget unit that is subject to an acid rain emissions limitation, but requires additional

CEMS under the common stack provisions in 40 CFR 75.72, or that uses a concentration CEMS under 40 CFR 75.71(a)(2) also shall comply with the following initial certification and recertification procedures.

- A. Requirements for initial certification. The owner or operator shall ensure that each monitoring system required by subpart H of 40 CFR 75 (which includes the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 CFR 75.20. The owner or operator shall ensure that all applicable certification tests are successfully completed by the deadlines specified in paragraph (4)(A)2. of this rule. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of this rule in a location where no such monitoring system was previously installed, initial certification according to 40 CFR 75.20 is required.
- B. Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in a certified monitoring system that the administrator or the director determines significantly affects the ability of the system to accurately measure or record mass emissions or heat input or to meet the requirements of 40 CFR 75.21 or Appendix B to 40 CFR 75, the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that the administrator or the director determines to significantly change the flow or concentration profile, the owner or operator shall recertify the continuous emissions monitoring system according to 40 CFR 75.20(b). Examples of changes which require recertification include: replacement of the analyzer, change in location or orientation of the sampling probe or site, or changing of flow rate monitor polynomial coefficients.
- C. Certification approval process for initial certifications and recertification.
- (I) Notification of certification. The NO_{x} authorized account representative shall submit to the appropriate EPA regional office and the permitting authority a written notice of the dates of certification in accordance with subsection (4)(D) of this rule.
- (II) Certification application. The $\mathrm{NO_x}$ authorized account representative shall submit to the director a certification application for each monitoring system required under subpart H of 40 CFR 75. A complete certification application shall include the

information specified in subpart H of 40 CFR 75

- (III) Except for units using the low mass emission excepted methodology under 40 CFR 75.19, the provisional certification date for a monitor shall be determined using the procedures set forth in 40 CFR 75.20(a)(3). A provisionally certified monitor may be used under the NO_x budget trading program for a period not to exceed one hundred twenty (120) days after receipt by the director of the complete certification application for the monitoring system or component thereof under part (4)(B)2.C.(II) of this rule. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 CFR 75, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the director does not invalidate the provisional certification by issuing a notice of disapproval within one hundred twenty (120) days of receipt of the complete certification application by the director.
- (IV) Certification application formal approval process. The director will issue a written notice of approval or disapproval of the certification application to the owner or operator within one hundred twenty (120) days of receipt of the complete certification application under part (4)(B)2.C.(II) of this rule. In the event the permitting authority does not issue such a notice within such one hundred twenty (120)-day period, each monitoring system which meets the applicable performance requirements of 40 CFR 75 and is included in the certification application will be deemed certified for use under the NO_x budget trading program.
- (a) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75, then the director will issue a written notice of approval of the certification application within one hundred twenty (120) days of receipt.
- (b) Incomplete application notice. A certification application will be considered complete when all of the applicable information required to be submitted under part (4)(B)2.C.(II) of this rule has been received by the director. If the certification application is not complete, then the director will issue a written notice of incompleteness that sets a reasonable date by which the NO_x authorized account representative must submit the additional information required to complete the certification application. If the NO_x authorized account representative does

- not comply with the notice of incompleteness by the specified date, then the director may issue a notice of disapproval under subpart (4)(B)2.C.(IV)(c) of this rule.
- (c) Disapproval notice. If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of this rule, or if the certification application is incomplete and the requirement for disapproval under subpart (4)(B)2.C.(IV)(b) of this rule has been met, the director will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the director and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality-assured data beginning with the date and hour of provisional certification. The owner or operator shall follow the procedures for loss of certification in part (4)(B)2.C.(V) of this rule for each monitoring system or component thereof which is disapproved for initial certifica-
- (d) Audit decertification. The director may issue a notice of disapproval of the certification status of a monitor in accordance with paragraph (4)(C)2. of this rule.
- (V) Procedures for loss of certification. If the permitting authority issues a notice of disapproval of a certification application under subpart (4)(B)2.C.(IV)(c) of this rule or a notice of disapproval of certification status under subpart (4)(B)2.C.(IV)(d) of this rule, then—
- (a) The owner or operator shall substitute the following values, for each hour of unit operation during the period of invalid data beginning with the date and hour of provisional certification and continuing until the time, date, and hour specified under 40 CFR 75.20(a)(5)(i):
- I. For units using or intending to monitor for NO_x emission rate and heat input or for units using the low mass emission excepted methodology under 40 CFR 75.19, the maximum potential NO_x emission rate and the maximum potential hourly heat input of the unit; and
- II. For units intending to monitor for mass emissions using a pollutant concentration monitor and a flow monitor, the maximum potential concentration of and the maximum potential flow rate of the unit under section 2.1 of Appendix A of 40 CFR 75;
- (b) The NO_x authorized account representative shall submit a notification of



certification retest dates and a new certification application in accordance with parts (4)(B)2.C.(I) and (II) of this rule; and

- (c) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the director's notice of disapproval, no later than thirty (30) unit operating days after the date of issuance of the notice of disapproval.
- 3. Initial certification and recertification procedures for low mass emission units using the excepted methodologies under 40 CFR 75.19. The owner or operator of a gas-fired or oil-fired unit using the low mass emissions excepted methodology under 40 CFR 75.19 shall meet the applicable general operating requirements of 40 CFR 75.10, the applicable requirements of 40 CFR 75.19, and the applicable certification requirements of subsection (4)(B) of this rule, except that the excepted methodology shall be deemed provisionally certified for use under the NO_x budget trading program, as of the following dates:
- A. For units that are reporting on an annual basis under paragraph (4)(E)4. of this rule—
- (I) For a unit that commenced operation before its compliance deadline under paragraph (4)(B)2. of this rule, from January 1 of the year following submission of the certification application for approval to use the low mass emissions excepted methodology under 40 CFR 75.19 until the completion of the period for the director review; or
- (II) For a unit that commenced operation after its compliance deadline under paragraph (4)(B)2. of this rule, the date of submission of the certification application for approval to use the low mass emissions excepted methodology under 40 CFR 75.19 until the completion of the period for director review: or
- B. For units that are reporting on a control period basis under part (4)(E)2.C.(II) of this rule:
- (I) For a unit that commenced operation before its compliance deadline under paragraph (4)(B)2. of this rule, where the certification application is submitted before May 1, from May 1 of the year of the submission of the certification application for approval to use the low mass emissions excepted methodology under 40 CFR 75.19 until the completion of the period for the director review;
- (II) For a unit that commenced operation before its compliance deadline under paragraph (4)(B)2. of this rule, where the certification application is submitted after May 1, from May 1 of the year following sub-

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mission of the certification application for approval to use the low mass emissions excepted methodology under 40 CFR 75.19 until the completion of the period for the director review; or

- (III) For a unit that commences operation after its compliance deadline under paragraph (4)(B)2. of this rule, where the unit commences operation before May 1, from May 1 of the year that the unit commenced operation, until the completion of the period for the director's review; or
- (IV) For a unit that has not operated after its compliance deadline under paragraph (4)(B)2. of this rule, where the certification application is submitted after May 1, but before October 1, from the date of submission of a certification application for approval to use the low mass emissions excepted methodology under 40 CFR 75.19 until the completion of the period for the director's review.
- 4. Certification/recertification procedures for alternative monitoring systems. The NO_v authorized account representative representing the owner or operator of each unit applying to monitor using an alternative monitoring system approved by the administrator and, if applicable, the director under subpart E of 40 CFR 75 shall apply for certification to the permitting authority prior to use of the system under the trading program. The NO_x authorized account representative shall apply for recertification following a replacement, modification or change according to the procedures in paragraph (4)(B)2. of this rule. The owner or operator of an alternative monitoring system shall comply with the notification and application requirements for certification according to the procedures specified in subparagraph (4)(B)2.C. of this rule and 40 CFR 75.20(f).
 - (C) Out of Control Periods.
- 1. Whenever any monitoring system fails to meet the quality assurance requirements of Appendix B of 40 CFR 75, data shall be substituted using the applicable procedures in subpart D, Appendix D, or Appendix E of 40 CFR 75.
- 2. Audit decertification. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement under subsection (4)(B) of this rule or the applicable provisions of 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the director will issue a notice of disapproval of the certification sta-

- tus of such system or component. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the permitting authority or the administrator. By issuing the notice of disapproval, the director revokes prospectively the certification status of the system or component. The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests. The owner or operator shall follow the initial certification or recertification procedures in subsection (4)(B) of this rule for each disapproved system.
- (D) Notifications. The $\mathrm{NO_x}$ authorized account representative for a $\mathrm{NO_x}$ budget unit shall submit written notice to the permitting authority and the administrator in accordance with 40 CFR 75.61, except that if the unit is not subject to an acid rain emissions limitation, the notification is only required to be sent to the director.
 - (E) Record Keeping and Reporting.
 - 1. General provisions.
- A. The $\mathrm{NO_x}$ authorized account representative shall comply with all record keeping and reporting requirements in this section and with the requirements of subparagraph (3)(B)1.E. of this rule.
- B. If the $\mathrm{NO_x}$ authorized account representative for a $\mathrm{NO_x}$ budget unit subject to an acid rain emission limitation who signed and certified any submission that is made under subpart F or G of 40 CFR 75 and which includes data and information required under section (4) of this rule or subpart H of 40 CFR 75 is not the same person as the designated representative or the alternative designated representative for the unit under 40 CFR 72, the submission must also be signed by the designated representative or the alternative designated representative.
 - 2. Monitoring plans.
- A. The owner or operator of a unit subject to an acid rain emissions limitation shall comply with requirements of 40 CFR 75.62, except that the monitoring plan shall also include all of the information required by subpart H of 40 CFR 75.
- B. The owner or operator of a unit that is not subject to an acid rain emissions limitation shall comply with requirements of 40 CFR 75.62, except that the monitoring plan is only required to include the information required by subpart H of 40 CFR 75.

- 3. Certification applications. The NO_{x} authorized account representative shall submit an application to the permitting authority within forty-five (45) days after completing all initial certification or recertification tests required under subsection (4)(B) of this rule including the information required under subpart H of 40 CFR 75.
- 4. Quarterly reports. The NO_x authorized account representative shall submit quarterly reports, as follows:
- A. If a unit is subject to an acid rain emission limitation or if the owner or operator of the NO_x budget unit chooses to meet the annual reporting requirements of section (4) of this rule, the NO_x authorized account representative shall submit a quarterly report for each calendar quarter beginning with:
- (I) For units that elect to comply with the early reduction credit provisions under paragraph (3)(F)6. of this rule, the calendar quarter that includes the date of initial provisional certification under part (4)(B)2.C.(III) of this rule. Data shall be reported from the date and hour corresponding to the date and hour of provisional certification;
- (II) For units commencing operation prior to May 1, 2006 that are not required to certify monitors by May 1, 2005 under subparagraph (4)(A)2.A. of this rule, the earlier of the calendar quarter that includes the date of initial provisional certification under part (4)(B)2.C.(III) of this rule or, if the certification tests are not completed by May 1, 2006, the partial calendar quarter from May 1, 2006 through June 30, 2006. Data shall be recorded and reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour on May 1, 2006; or
- (III) For a unit that commences operation after May 1, 2006, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour corresponding to when the unit commenced operation.
- B. If a NO_x budget unit is not subject to an acid rain emission limitation, then the NO_x authorized account representative shall either:
- (I) Meet all of the requirements of 40 CFR 75 related to monitoring and reporting mass emissions during the entire year and meet the reporting deadlines specified in subparagraph (4)(E)4.A. of this rule; or
- (II) Submit quarterly reports only for the periods from the earlier of May 1 or the date and hour that the owner or operator successfully completes all of the recertifica-

- tion tests required under 40 CFR 75.74(d)(3) through September 30 of each year in accordance with the provisions of 40 CFR 75.74(b). The NO_x authorized account representative shall submit a quarterly report for each calendar quarter, beginning with:
- (a) For units that elect to comply with the early reduction credit provisions under paragraph (3)(F)6. of this rule, the calendar quarter that includes the date of initial provisional certification under part (4)(B)2.C.(III) of this rule. Data shall be reported from the date and hour corresponding to the date and hour of provisional certification;
- (b) For units commencing operation prior to May 1, 2006 that are not required to certify monitors by May 1, 2005 under subparagraph (4)(A)2.A. of this rule, the earlier of the calendar quarter that includes the date of initial provisional certification under part (4)(B)2.C.(III) of this rule, or if the certification tests are not completed by May 1, 2006, the partial calendar quarter from May 1, 2006 through June 30, 2006. Data shall be reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour of May 1, 2006;
- (c) For units that commence operation after May 1, 2006 during the control period, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour corresponding to when the unit commenced operation;
- (d) For units that commence operation after May 1, 2006 and before May 1 of the year in which the unit commences operation, the earlier of the calendar quarter that includes the date of initial provisional certification under part (4)(B)2.C.(III) of this rule or, if the certification tests are not completed by May 1 of the year in which the unit commences operation, May 1 of the year in which the unit commences operation. Data shall be reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour of May 1 of the year after the unit commences operation; or
- (e) For units that commence operation after May 1, 2006 and after September 30 of the year in which the unit commences operation, the earlier of the calendar quarter that includes the date of initial provisional certification under part (4)(B)2.C.(III) of this rule or, if the certification tests are not completed by May 1 of the year after the unit commences operation, May 1 of the year after the unit commences operation. Data shall be reported from the earlier of the date and hour corresponding to

the date and hour of provisional certification or the first hour of May 1 of the year after the unit commences operation.

- C. The $\mathrm{NO_x}$ authorized account representative shall submit each quarterly report to the administrator within thirty (30) days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in subpart H of 40 CFR 75 and 40 CFR 75.64.
- (I) For units subject to an acid rain emissions limitation, quarterly reports shall include all of the data and information required in subpart H of 40 CFR 75 for each NO_x budget unit (or group of units using a common stack) as well as information required in subpart G of 40 CFR 75.
- (II) For units not subject to an acid rain emissions limitation, quarterly reports are only required to include all of the data and information required in subpart H of 40 CFR 75 for each NO_x budget unit (or group of units using a common stack).
- D. Compliance certification. The NO_{x} authorized account representative shall submit to the administrator a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:
- (I) The monitoring data submitted were recorded in accordance with the applicable requirements of this rule and 40 CFR 75, including the quality assurance procedures and specifications;
- (II) For a unit with add-on emission controls and for all hours where data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the monitoring plan and the substitute values do not systematically underestimate emissions; and
- (III) For a unit that is reporting on a control period basis under paragraph (4)(E)4. of this rule, the NO_x emission rate and concentration values substituted for missing data under subpart D of 40 CFR 75 are calculated using only values from a control period and do not systematically underestimate emissions.
 - (F) Petitions.
- 1. The $\mathrm{NO_x}$ authorized account representative of a $\mathrm{NO_x}$ budget unit that is subject to an acid rain emissions limitation may submit a petition under 40 CFR 75.66 to the administrator requesting approval to apply an



alternative to any requirement of section (4) of this rule.

- A. Application of an alternative to any requirement of section (4) of this rule is in accordance with section (4) of this rule only to the extent that the petition is approved by the administrator, in consultation with the permitting authority.
- B. Notwithstanding subparagraph (4)(F)1.A. of this rule, if the petition requests approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR 75.72, the petition is governed by paragraph (4)(F)2. of this rule.
- 2. The $\mathrm{NO_x}$ authorized account representative of a $\mathrm{NO_x}$ budget unit that is not subject to an acid rain emissions limitation may submit a petition under 40 CFR 75.66 to the director and the administrator requesting approval to apply an alternative to any requirement of section (4) of this rule.
- A. The NO_x authorized account representative of a NO_x budget unit that is subject to an acid rain emissions limitation may submit a petition under 40 CFR 75.66 to the director and the administrator requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR 75.72 or a concentration CEMS used under 40 CFR 75.71(a)(2).
- B. Application of an alternative to any requirement of section (4) of this rule is in accordance with section (4) of this rule only to the extent the petition under paragraph (4)(F)2. of this rule is approved by both the permitting authority and the administrator.
- (G) Additional Requirements to Provide Heat Input Data for Allocations Purposes.
- 1. The owner or operator of a unit that elects to monitor and report mass emissions using a concentration system and a flow system shall also monitor and report heat input at the unit level using the procedures set forth in 40 CFR 75 for any source located in a state developing source allocations based upon heat input.
- 2. The owner or operator of a unit that monitors and reports mass emissions using a concentration system and a flow system shall also monitor and report heat input at the unit level using the procedures set forth in 40 CFR 75 for any source that is applying for early reduction credits under paragraph (3)(F)6. of this rule.
- (H) Record Keeping and Reporting Maintenance.
- 1. Unless otherwise provided, the owners and operators of the NO_x budget source

and each NO_x budget unit at the source shall keep on-site at the source each of the following documents for a period of five (5) years from the date the document is created. This period may be extended for cause, at any time prior to the end of five (5) years, in writing by the director or the administrator.

A. The account certificate of representation for the NO_{x} authorized account representative for the source and each NO_{x} budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (3)(B)4.; provided that the certificate and documents shall be retained on-site at the source beyond such five (5)-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_{x} authorized account representative.

- B. All emissions monitoring information, in accordance with section (4) of this rule; provided that to the extent that section (4) of this rule provides for a three (3)-year period for record keeping, the three (3)-year period shall apply.
- C. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x budget trading program.
- D. Copies of all documents used to complete a $\mathrm{NO_x}$ budget permit application and any other submission under the $\mathrm{NO_x}$ budget trading program or to demonstrate compliance with the requirements of the $\mathrm{NO_x}$ budget trading program.
- 2. The NO_x authorized account representative of a NO_x budget source and each NO_x budget unit at the source shall submit the reports and compliance certifications required under the NO_x budget trading program, including those under subsections (3)(D), (3)(H), or section (4) of this rule.

(5) Test Methods. (Not Applicable)

AUTHORITY: section 643.050, RSMo 2000.* Original rule filed Feb. 14, 2005, effective Oct. 30, 2005. Amended: Filed Oct. 2, 2006, effective May 30, 2007. Amended: Filed Oct. 24, 2008, effective July 30, 2009.

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

10 CSR 10-6.362 Clean Air Interstate Rule Annual NO_x Trading Program

PURPOSE: This rule adopts the U.S. Environmental Protection Agency's (EPA) regional trading program for nitrogen oxides, which was developed to meet the requirements of the Clean Air Interstate Rule. The Clean Air Interstate Rule was published on May 12, 2005. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the U.S. Environmental Protection Agency's Clean Air Interstate Rule published on May 12, 2005.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

- (1) Applicability.
- (A) Except as provided in subsection(1)(B) of this rule—
- 1. The following units in this state shall be Clean Air Interstate Rule (CAIR) nitrogen oxides ($\mathrm{NO_x}$) units, and any source that includes one (1) or more such units shall be a CAIR $\mathrm{NO_x}$ source, subject to the requirements of this rule: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than twenty-five (25) megawatts electric (MWe) producing electricity for sale.
- 2. If a stationary boiler or stationary combustion turbine that, under paragraph (1)(A)1. of this rule, is not a CAIR NO_x unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than twenty-five (25) MWe producing electricity for sale, the unit shall become a CAIR NO_x unit as provided in paragraph (1)(A)1. of this rule on the first date on which it both combusts fossil fuel and serves such generator.
- (B) The units in the state that meet the requirements set forth in subparagraph (1)(B)1.A., (1)(B)2.A., or (1)(B)2.B. of this rule shall not be CAIR NO_x units—
 - 1. Cogenerator exemption.
- A. Any unit that is a CAIR NO_x unit under paragraph (1)(A)1. or 2. of this rule—

- (I) Qualifying as a cogeneration unit during the twelve (12)-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and
- (II) Not serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than twenty-five (25) MWe supplying in any calendar year more than one-third of the unit's potential electric output capacity or two hundred nineteen thousand (219,000) megawatt hours (MWh), whichever is greater, to any utility power distribution system for sale.
- B. If a unit qualifies as a cogeneration unit during the twelve (12)-month period starting on the date the unit first produces electricity and meets the requirements of subparagraph (1)(B)1.A. of this rule for at least one (1) calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO_x unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of part (1)(B)1.A.(II) of this rule.
 - 2. Solid waste incinerator exemption.
- A. Any unit that is a CAIR NO_x unit under paragraph (1)(A)1. or 2. of this rule commencing operation before January 1, 1985—
- (I) Qualifying as a solid waste incineration unit; and
- (II) With an average annual fuel consumption of non-fossil fuel for 1985–1987 exceeding eighty percent (80%) (on a British thermal unit (Btu) basis) and an average annual fuel consumption of non-fossil fuel for any three (3) consecutive calendar years after 1990 exceeding eighty percent (80%) (on a Btu basis).
- B. Any unit that is a CAIR NO_x unit under paragraph (1)(A)1. or 2. of this rule commencing operation on or after January 1, 1985—
- (I) Qualifying as a solid waste incineration unit; and
- (II) With an average annual fuel consumption of non-fossil fuel for the first three (3) calendar years of operation exceeding eighty percent (80%) (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three (3) consecutive calendar years after 1990 exceeding eighty percent (80%) (on a Btu basis).
- C. If a unit qualifies as a solid waste incineration unit and meets the requirements of subparagraph (1)(B)2.A. or B. of this rule

- for at least three (3) consecutive calendar years, but subsequently no longer meets all such requirements, the unit shall become a CAIR $\mathrm{NO_x}$ unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first three (3) consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of twenty percent (20%) or more.
- (C) Retired Unit Exemption. Unless otherwise noted in this section of the rule, all of the sections of 40 CFR 96.105 promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.

(2) Definitions.

- (A) Definitions for key words and phrases used in this rule may be found in section 40 CFR 96.102 promulgated as of October 19, 2007, and section 96.103 of 40 CFR 96 subpart AA promulgated as of April 28, 2006, are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
- (B) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

(A) Unless otherwise noted in this section of the rule, 40 CFR 96.106, 96.107, and 96.108 as well as all of the sections of 40 CFR 96 subparts BB, CC (excluding any reference to 40 CFR 96 subpart EE), DD, FF, GG, and II promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.

(B) NO_x Allowances.

- 1. Timing requirements for CAIR NO_x allowance allocations.
- A. By October 31, 2006, the permitting authority will submit to the administrator the CAIR NO_x allowance allocations, in a format prescribed by the administrator, for

the calendar years in 2009, 2010, 2011, 2012, 2013, and 2014 consistent with the allocations listed in Table I of this rule.

- B. By October 31, 2006, the permitting authority will submit to the administrator the CAIR NO_{x} allowance allocations, in a format prescribed by the administrator, for the calendar year beginning 2015 and extending through ten (10) calendar years consistent with the allocations listed in Table I of this rule.
- C. By October 31, 2015, and October 31 of every tenth year following, the permitting authority will submit to the administrator the CAIR NO_{x} allowance allocations, in a format prescribed by the administrator, for the calendar year ten (10) years in the future and extending through ten (10) calendar years consistent with the allocations listed in Table I of this rule.
 - 2. NO_x allowance allocations.
- A. The state trading program NO_x budget allocated by the director under subparagraphs (3)(B)2.B. and (3)(B)2.C. of this rule for a calendar year will equal fifty-nine thousand eight hundred seventy-one (59,871) tons for 2009–2014 and forty-nine thousand eight hundred ninety-two (49,892) tons for 2015 and beyond.
- B. The following $\mathrm{NO_x}$ budget units shall be allocated $\mathrm{NO_x}$ allowances for each calendar year in accordance with Table I of subparagraph (3)(B)2.B. of this rule.



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Table I

			Table I		
				NO _x Allocation	NO _x Allocation 2015
Facility ID	Facility Name	Unit ID	Portion Statewide Pool	2009–2014	and Beyond
2076	ASBURY	1	1.842%	1,097	914
2079	HAWTHORN STATION	5A	5.531%	3,294	2,743
2079	HAWTHORN STATION	6	0.053%	31	26
2079	HAWTHORN STATION	7	0.031%	18	15
2079	HAWTHORN STATION	8	0.027%	16	13
2079	HAWTHORN STATION	9	0.116%	69	58
2080	MONTROSE STATION	1	1.530%	911	759
2080	MONTROSE STATION	2	1.589%	947	788
2080	MONTROSE STATION	3	1.581%	942	784
2081	NORTHEAST #11		0.005%	3	2
2081	NORTHEAST #12		0.004%	2	2
2081	NORTHEAST #13		0.011%	7	6
2081	NORTHEAST #14		0.009%	5	5
2081	NORTHEAST #15		0.008%	4	4
2081	NORTHEAST #16		0.005%	3	2
2081	NORTHEAST #17		0.011%	6	5
2081	NORTHEAST #18		0.007%	4	3
2082	FAIRGROUNDS		0.004%	2	2
2092	RALPH GREEN	3	0.015%	9	8
2094	SIBLEY	1	0.514%	306	255
2094	SIBLEY	2	0.512%	305	254
2094	SIBLEY	3	3.319%	1,977	1,646
2096	AMEREN VIADUCT		0.001%	_	_
2098	LAKE ROAD	6	0.910%	542	452
2098	LAKE ROAD	5	0.009%	5	4
2102	HOWARD BEND		0.002%	1	1
2103	LABADIE	1	4.890%	2,913	2,425
2103	LABADIE	2	5.033%	2,998	2,496
2103	LABADIE	3	5.589%	3,329	2,772
2103	LABADIE	4	5.009%	2,984	2,484
2104	MERAMEC	1	1.225%	730	607
2104	MERAMEC	2	1.134%	676	562
2104	MERAMEC	3	1.966%	1,171	975
2104	MERAMEC	4	2.985%	1,778	1,480
2104	MERAMEC	GT1	0.000%	2	2
2104	MERAMEC	GT2	0.000%	3	2
2107	SIOUX	1	3.891%	2,318	1,930
2107	SIOUX	2	3.832%	2,282	1,900
2122	CHILLICOTHE		0.003%	2	2
2123	COLUMBIA	6	0.068%	41	34
2123	COLUMBIA	7	0.073%	44	36
2123	COLUMBIA	8	0.001%	1	_
2131	HIGGINSVILLE	•	0.006%	3	3
2132	BLUE VALLEY POWER	3	0.270%	161	134
2132	BLUE VALLEY POWER	GT1	0.000%		_
2161	JAMES RIVER	GT1	0.025%	15	12
2161	JAMES RIVER	GT2	0.015%	9	8
2161	JAMES RIVER	3	0.492%	293	244
2161	JAMES RIVER	4	0.604%	360	300
2161	JAMES RIVER	5	1.031%	614	511
2167	NEW MADRID POWER PLANT	1	4.611%	2,747	2,287
2167	NEW MADRID POWER PLANT	2	5.095%	3,035	2,527
2168	THOMAS HILL ENERGY CENTER		1.891%	1,126	938
2168	THOMAS HILL ENERGY CENTER		2.792%	1,663	1,385
2168	THOMAS HILL ENERGY CENTER		6.793%	4,046	3,369
2169	CHAMOIS POWER PLANT	2	0.530%	315	263
6065	IATAN STATION	1	6.699%	3,990	3,322
6074	GREENWOOD ENERGY CENTER	1	0.021%	12	10
6074	GREENWOOD ENERGY CENTER	2	0.020%	12	10



6074	GREENWOOD ENERGY CENTER	3	0.024%	14	12
6074	GREENWOOD ENERGY CENTER	4	0.025%	15	12
6155	RUSH ISLAND	1	4.838%	2,882	2,399
6155	RUSH ISLAND	2	4.613%	2,748	2,287
6195	SOUTHWEST	1	2.248%	1,339	1,115
6195	SOUTHWEST	CT1A	0.005%	3	2
6195	SOUTHWEST	CT1B	0.005%	3	2
6195	SOUTHWEST	CT2A	0.005%	3	2 2
6195	SOUTHWEST	CT2B	0.005%	3	2
6223	EMPIRE	3A	0.004%	2	2
6223	EMPIRE	3B	0.004%	2	2
6223	EMPIRE	4A	0.003%	2	2
6223	EMPIRE	4B	0.003%	2	2
6223	EMPIRE—ENERGY CENTER 1		0.036%	21	18
6223	EMPIRE—ENERGY CENTER 2		0.031%	19	16
6650	MEXICO		0.003%	2	2
6651	MOBERLY		0.002%	2	1
6652	MOREAU		0.003%	2	2
6768	SIKESTON	1	2.612%	1,556	1,295
7296	STATE LINE UNIT 1	1	0.131%	78	65
7296	STATE LINE UNIT 1	2-1	0.204%	122	101
7296	STATE LINE UNIT 1	2-2	0.256%	153	127
7604	ST. FRANCIS POWER PL	1	0.155%	92	77
7604	ST. FRANCIS POWER PL	2	0.117%	70	58
7749	ESSEX POWER PLANT	1	0.018%	11	9
7754	NODAWAY POWER PLANT	1	0.019%	11	9
7754	NODAWAY POWER PLANT	2	0.018%	11	9
7848	HOLDEN POWER PLANT	1	0.004%	2	2
7848	HOLDEN POWER PLANT	2	0.006%	4	3
7848	HOLDEN POWER PLANT	3	0.004%	2	2
7903	MCCARTNEY	MGS1A	0.002%	1	1
7903	MCCARTNEY	MGS1B	0.002%	1	1
7903	MCCARTNEY	MGS2A	0.002%	1	1
7903	MCCARTNEY	MGS2B	0.002%	1	1
7964	PENO CREEK ENERGY CTR	CT1A	0.003%	2	1
7964	PENO CREEK ENERGY CTR	CT1B	0.003%	2	1
7964	PENO CREEK ENERGY CTR	CT2A	0.003%	2	1
7964	PENO CREEK ENERGY CTR	CT2B	0.003%	2	1
7964 7064	PENO CREEK ENERGY CTR	CT3A	0.003%	2	1
7964	PENO CREEK ENERGY CTR	CT3B	0.003%	2	1
7964 7064	PENO CREEK ENERGY CTR	CT4A	0.003%	1	1
7964 55179	PENO CREEK ENERGY CTR	CT4B	0.002%	1	1
55178	MEP PLEASANT HILL	CT-1	0.166%	99	82
55178	MEP PLEASANT HILL	CT-2	0.153%	91	76
55234	AUDRAIN GENERATING	CT1	0.001%	1	1
55234 55234	AUDRAIN GENERATING	CT2	0.001%	1	_
55234 55234	AUDRAIN GENERATING	CT3	0.001%	1	_
55234 55234	AUDRAIN GENERATING	CT4	0.001%	1	_
55234 55234	AUDRAIN GENERATING	CT5	0.001%	1	1
55234 55234	AUDRAIN GENERATING	CT6	0.000%	_	_
55234 55234	AUDRAIN GENERATING AUDRAIN GENERATING	CT7 CT8	0.000%	_	_
55234 55447			0.001%	1	1
55447 55447	COLUMBIA ENERGY CTR	CT01 CT02	0.001%	1	1
55447 55447	COLUMBIA ENERGY CTR COLUMBIA ENERGY CTR	CT02 CT03	0.001 % 0.001 %	1 1	1
55447	COLUMBIA ENERGY CTR COLUMBIA ENERGY CTR	CT03	0.001%	1	_
JJ 44 /		C104	0.001 %	_	_
	Energy Efficiency/Renewable Energy set aside			300	300
	Total		100.000%	59,871	49,892
	iotai		100.000 /0	37,071	47,074



- C. Any unit subject to section (1) of this rule other than those listed in Table I of this subsection will not be allocated NO_x budget allowances under this rule.
 - D. Reserved.
- E. Any person seeking set-aside allowances for energy efficiency and renewable generation projects shall meet the requirements of subparagraph (3)(B)2.E. of this rule.
- (I) The purpose for establishing this set-aside is to allocate allowances to serve as incentives for saving or generating electricity through the implementation of energy efficiency and renewable generation projects as defined in this section.
- (a) Each energy efficiency and renewable generation set-aside shall contain the number of NO_x allowances as provided in Table I of this subsection.
- (b) Awards of allowances will be available only to eligible energy efficiency or renewable generation projects that—
- I. Commence operation after September 1, 2005;
- II. Reduce electricity use, generate electricity from renewable resources, or provide combined heat and power benefits during the twelve (12)-month energy efficiency/renewable energy project period of January 1, 2008, through December 31, 2008, or subsequent twelve (12)-month energy efficiency/renewable energy project periods; and
- III. In an application submitted by March 1 of each year, include adequate documentation of these energy savings, renewable energy generation, or combined heat and power benefits.
- (c) Projects will be awarded allowances for the control period following the twelve (12)-month energy efficiency/renewable energy project period during which the qualifying project activities took place. For example, sponsors of project activities that take place during the twelve (12)-month energy efficiency/renewable energy project period of January 1, 2008, through December 31, 2008, will receive allowances for the 2009 control period.
- (d) Eligible projects located in Missouri may qualify for awards from the set-aside for up to seven (7) consecutive control periods. Eligible projects located outside Missouri may qualify for awards for up to five (5) consecutive control periods.
- (e) Department actions on applications for awards from the set-aside. The department shall act upon applications as follows:
 - I. By May 31 of the control

- period for which NO_x allowances are requested, the department shall take the following actions:
- a. For each application, the department shall determine whether the project is eligible and the application is complete and shall notify the applicant of its determination; and
- b. For the eligible and complete applications, the department shall calculate the total number of allowances which the projects are qualified to receive, not to exceed the total number of allowances allocated to the set-aside as provided in Table I of this subsection, and shall award said allowances to eligible energy efficiency or renewable generation projects.
- II. If the number of allowances awarded is fewer than allowances allocated to the set-aside as provided in Table I of this subsection, the department shall transfer surplus allowances to the accounts of the electric utilities listed in Table I of this subsection on a pro rata basis in the same proportion as allocations to NO_x budget units set forth in Table I of this subsection.
- III. If the number of allowances claimed for award is more than allowances allocated to the set-aside as provided in Table I of this subsection, the department shall allocate awards to sponsors of eligible projects as follows:
- a. Up to the first one hundred fifty (150) allowances in the set-aside shall be awarded for eligible projects located in Missouri, as follows. Up to the first sixty (60) allowances shall be awarded for eligible energy efficiency projects in the order that the projects first achieved eligible status. The remaining allowances shall be awarded for eligible projects located in Missouri in the order the projects first achieved eligible status, regardless of the type of project; and
- b. The remaining allowances in the set-aside shall be awarded for eligible projects on a pro rata basis in proportion to total remaining claims for awards, regardless of project location.
- (II) Project eligibility. Allocations from the energy efficiency and renewable generation set-aside may be requested by any entity, including an electric utility listed in Table I of this subsection or its affiliate, that implements and demonstrates eligible projects as defined in this subparagraph.
- (a) Eligibility requirements. The department shall establish requirements for project eligibility and shall determine which projects are eligible to receive awards from the set-aside.
- (b) Only the following shall be eligible for awards from the set-aside:

- I. Energy efficiency projects resulting in reduced or more efficient electricity use through the voluntary installation, replacement, or modification of equipment, fixtures, or materials in a building or facility.
- a. Energy efficiency projects may be directed toward or located within buildings or facilities owned, leased, operated, or controlled by an electric utility listed in Table I of this subsection or its affiliate. Eligibility requirements for these projects shall be the same as for any other energy efficiency project.
- b. Energy efficiency projects may include demand-side programs that result in reduced or more efficient electricity
- II. Renewable generation projects, includes electric generation from wind, photovoltaic systems, biogas, and hydropower projects. Renewable generation projects do not include nuclear power projects. Eligible biogas projects include projects to generate electricity from methane gas captured from sanitary landfills, wastewater treatment plants, sewage treatment plants, or agricultural livestock waste treatment systems. Eligible hydropower projects are restricted to systems—
- a. That are certified by the Low Impact Hydro-power Institute;
- b. That employ a head of ten feet (10') or less; or
- c. Employing a head greater than ten feet (10') that make use of a dam that existed prior to the effective date of this rule;
- III. Renewable biomass generation projects include projects in which one (1) or more biomass fuels is fired separately or co-fired with one (1) or more fossil fuels to generate electricity. Biomass includes wood and wood waste, energy crops such as switchgrass, and agricultural wastes such as crop and animal waste. Electric generation from combustion of municipal solid waste is not included; and
- IV. Combined heat and power (CHP) projects that use integrated technologies, including cogeneration, which convert fuel to electric, thermal, and mechanical energy for on-site or local use. In the case of electricity generation, combined heat and power can include export of power to the local electric utility transmission grid. The thermal energy from combined heat and power systems can be created and used in the form of steam, hot or chilled water for process, space heating or cooling, or other applications. To be eligible, the combined heat and power installation must meet or exceed technology-specific efficiency thresholds that will be established by the department.

- (c) Additional eligibility requirements shall include the following:
- I. Project information must be submitted on forms provided by the department. After the effective date of this rule, any revision to the department-supplied forms will be presented to the regulated community for a forty-five (45)-day comment period;
- II. Only projects that are not required by federal government regulation and that are not and will not be used to generate compliance or permitting credits otherwise in the state implementation plan (SIP) are eligible to receive allowances from the set-aside;
- III. Only electricity generation or savings that are not the basis for an award of CAIR annual $\mathrm{NO_x}$ allowance from a set-aside in another state's CAIR annual $\mathrm{NO_x}$ rule can be the basis for a claim from the Missouri set-aside;
- IV. Only projects that equal at least one (1) ton of NO_x emissions, using conventional arithmetic rounding, are eligible to receive allowances from the set-aside. Multiple projects may be aggregated into a single allowance allocation request to equal one (1) or more tons of NO_x emissions;
- V. Only projects that commence operation after September 1, 2005, are eligible to receive allowances from the set-aside;
- VI. Sponsors must establish a compliance account or general account in EPA's NO_x Allowance Tracking System (NATS). The application for an award from the set-aside must be submitted to the department by the CAIR authorized account representative or alternate CAIR authorized account representative for the compliance account or general account; and
 - VII. Location of eligible pro-
- a. To be eligible, an energy efficiency project or combined heat and power project must be located within Missouri.

jects.

- b. To be eligible, a renewable generation project or biomass generation project may be located within or outside of Missouri and must meet the following criteria:
- (i) The number of allowances awarded to a renewable generation project or biomass generation project located within or outside of Missouri shall be calculated based on the amount of power the facility delivers to Missouri end-use customers. The sponsor must certify and demonstrate the amount of power from the renewable generation project or biomass generation project

that is delivered to Missouri end-use customers; and

- (ii) If the renewable generation project or biomass generation project is located outside of Missouri, the project must be sponsored by a Missouri electric generation and transmission cooperative, a Missouri electric distribution utility, or the affiliate of a Missouri electric distribution utility. For the purpose of this rule, "affiliate" shall be defined as in 4 CSR 240-20.010.
- Pre-application project Sponsors of new energy review. efficiency/renewable energy projects must submit a request for pre-application project review by March 31 of the year prior to the control period for which set-aside awards will be claimed. For example, a project sponsor intending to apply for an award of 2009 control period allowances must request a preapplication project review by March 31, 2008, and may request the review at any time prior to that date. Pre-application project reviews will cover eligibility requirements and proposed measurement and verification procedures. The request for pre-application project review must be submitted on forms provided by the department. After the effective date of this rule, any revision to the department-supplied forms will be presented to the regulated community for a forty-five (45)-day comment period;
- (e) Eligibility for any project may be claimed by only one (1) entity. The department shall determine procedures to be followed if multiple claims of eligibility for the same project are received.
- (III) Applications and calculations of awards. To qualify for an award of allowances from the set-aside an applicant must meet the following requirements:
- (a) The project must be eligible as provided in part (3)(B)2.E.(II) of this rule;
- (b) By March 1 following the twelve (12)-month energy efficiency/renewable energy project period during which the eligible project activities occurred, the department must receive a complete application that meets the following requirements:
- I. The application shall be prepared on forms provided by the department and must be submitted by the project's CAIR authorized account representative or alternate CAIR authorized account representative. After the effective date of this rule, any revision to the department-supplied forms will be presented to the regulated community for a forty-five (45)-day comment period;
- II. The applicant must demonstrate electricity savings or renewable genera-

- tion and calculate the NO_{x} allowance award requested using methods that adhere to measurement and verification standards approved by the department. The department shall have the right to require verification of data and calculations that are presented in an application as a condition for awarding allowances to the applicant. Verification may include site visits by agents of the department; and
- III. If the applicant intends to reapply in subsequent years, the application must indicate the stream of benefits that is expected in subsequent years;
- (c) The department shall determine methods for calculating awards of allowances based upon the following principles:
- I. Allowances awarded to enduse electrical energy efficiency projects shall be calculated as the number of MWh of electricity saved during a twelve (12)-month energy efficiency/renewable energy project period multiplied by an emissions factor of 1.5 pounds of NO_x per MWh appropriately converted and rounded to tons using conventional arithmetic rounding. The department shall provide a factor to adjust the calculation of electricity saved to account for transmission and distribution line losses;
- II. Allowances awarded to renewable generation projects from wind, photovoltaic systems, biogas, and hydropower projects shall be calculated as the number of MWh of electricity generated during a twelve (12)-month energy efficiency/renewable energy project period multiplied by an emissions factor of 1.5 pounds of NO_x per MWh appropriately converted and rounded to tons using conventional arithmetic rounding;
- III. Allowances awarded to renewable biomass generation projects shall be calculated based on net NO_{x} emission reductions, appropriately converted and rounded to tons using conventional arithmetic rounding where—
- a. Net $\mathrm{NO_x}$ emissions shall be calculated as the number of MWh of electricity generated during a twelve (12)-month energy efficiency/renewable energy project period multiplied by an emissions factor of 1.5 pounds of $\mathrm{NO_x}$ per MWh, minus the tons of $\mathrm{NO_x}$ emitted by the renewable generating project during the twelve (12)-month energy efficiency/renewable energy project period; and
- b. When biomass is co-fired with other fuels, its share of electric generation and NO_{x} emissions shall be calculated based on its share of the total heat content of all fuels used in the co-firing process; and



- IV. Allowances awarded to combined heat and power (CHP) projects shall be calculated based on the difference between actual NO_x emissions from the CHP system and the NO_x emissions that would be emitted by an equivalent business-as-usual (BAU) system. An equivalent BAU system consists of a conventional power plant that produces electricity plus a conventional industrial boiler that produces useful heat (heat used for space, water, or industrial process heat). The department shall provide efficiency and NO_x emission rates to be used in calculating NO_x emissions from the equivalent BAU system. In addition, to qualify for an award, a CHP system shall be required to achieve an efficiency threshold. The threshold shall be set by the department and the efficiency of the CHP system shall be calculated based on a method provided by the department; and
- (d) The sponsor of a project located in Missouri that receives an award from the set-aside may reapply for set-aside awards for up to an additional six (6) consecutive control periods by meeting the following requirements. The sponsor of a project located outside of Missouri that receives an award from the set-aside may reapply for set-aside awards for up to an additional four (4) consecutive control periods by meeting the following requirements:
- I. Reapplication must be received by March 1 following the last day of the twelve (12)-month energy efficiency/renewable energy project period during which the energy efficiency and renewable electric generation activities took place; and
- II. The reapplication must be prepared on forms provided by the department and must be submitted by the project's CAIR authorized account representative or alternate CAIR authorized account representative. After the effective date of this rule, any revision to the department-supplied forms will be presented to the regulated community for a forty-five (45)-day comment period;
 - 3. Compliance supplement pool.
- A. For any CAIR $\mathrm{NO_x}$ unit in the state that achieves $\mathrm{NO_x}$ emission reductions in 2007 and 2008 that are not necessary to comply with any state or federal emissions limitation applicable during such years, the CAIR designated representative of the unit may request early reduction credits, and allocation of CAIR $\mathrm{NO_x}$ allowances from the compliance supplement pool in accordance with the following:

- (I) The owners and operators of such CAIR NO_{x} unit shall monitor and report the NO_{x} emissions rate and the heat input of the unit in accordance with section (4) of this rule in each calendar year for which early reduction credit is requested;
- (II) The CAIR designated representative of such CAIR NO_x unit shall submit to the permitting authority by May 1, 2009, a request, in a format specified by the permitting authority, for allocation of an amount of CAIR NO_x allowances from the compliance supplement pool not exceeding the sum of the amounts (in tons) of the unit's NO_x emission reductions in 2007 and 2008 that are not necessary to comply with any state or federal emissions limitation applicable during such years, determined in accordance with section (4) of this rule; and
- (III) For units subject to the Acid Rain Program that do not have an applicable NO_x emission limit, the Acid Rain Program NO_x emission rate limit that would have applied had the unit been limited by Acid Rain Program NO_x requirements or state emission rate limit shall be utilized to determine the number of potential CAIR NO_x allowances those units may receive.
- B. For any CAIR $\mathrm{NO_x}$ unit in the state whose compliance with CAIR $\mathrm{NO_x}$ emissions limitation for the calendar year 2009 would create an undue risk to the reliability of electricity supply during such calendar year, the CAIR designated representative of the unit may request the allocation of CAIR $\mathrm{NO_x}$ allowances from the compliance supplement pool in accordance with the following:
- (I) The CAIR designated representative of such CAIR $\mathrm{NO_x}$ unit shall submit to the permitting authority by May 1, 2009, a request, in a format specified by the permitting authority, for allocation of an amount of CAIR $\mathrm{NO_x}$ allowances from the compliance supplement pool not exceeding the minimum amount of CAIR $\mathrm{NO_x}$ allowances necessary to remove such undue risk to the reliability of electricity supply; and
- (II) In the request under paragraph (3)(B)3. of this rule, the CAIR designated representative of such CAIR NO_x unit shall demonstrate that, in the absence of allocation to the unit of the amount of CAIR NO_x allowances requested, the unit's compliance with CAIR NO_x emissions limitation for the calendar year 2009 would create an undue risk to the reliability of electricity supply during such calendar year. This demonstration must include a showing that it would not be

- feasible for the owners and operators of the unit to:
- (a) Obtain a sufficient amount of electricity from other electricity generation facilities, during the installation of control technology at the unit for compliance with the CAIR NO_x emissions limitation, to prevent such undue risk; or
- (b) Obtain under subparagraphs (3)(B)3.A. and C. of this rule, or otherwise obtain, a sufficient amount of CAIR NO_x allowances to prevent such undue risk.
- C. The permitting authority will review each request under subparagraphs (3)(B)3.A. and B. of this rule submitted by May 1, 2009, and will allocate CAIR NO_x allowances for the calendar year 2009 to CAIR NO_x units in the state and covered by such request as follows:
- (I) Upon receipt of each such request, the permitting authority will make any necessary adjustments to the request to ensure that the amount of the CAIR NO_x allowances requested meets the requirements of subparagraph (3)(B)3.A. or B. of this rule;
- (II) If the total amount of CAIR NO_x allowances in all requests (as adjusted under part (3)(B)3.C.(I) of this rule) is not more than nine thousand forty-four (9,044), the permitting authority will allocate to each CAIR NO_x unit covered by such requests the amount of CAIR NO_x allowances requested (as adjusted under part (3)(B)3.C.(I) of this rule); and
- (III) If the total amount of CAIR NO_x allowances in all requests (as adjusted under part (3)(B)3.C.(I) of this rule) is more than nine thousand forty-four (9,044), the permitting authority will allocate CAIR NO_x allowances to each CAIR NO_x unit covered by such requests as follows:
- (a) The compliance supplement pool shall be divided into two (2) pools of three thousand fifteen (3,015) allowances and six thousand twenty-nine (6,029) allowances each;
- (b) Units located in Buchanan, Jackson, or Jasper County that combust at least one hundred thousand (100,000) passenger tire equivalents in each of 2007 and 2008 shall be eligible to request CAIR NO_x allowances from the smaller pool;
- (c) CAIR NO_x allowances from the smaller pool shall be allocated according to the following formula:

Unit's allocation = Unit's adjusted allocation \times (3,015/Total adjusted allocations for eligible units)

Where:

"Unit's allocation" is the number of CAIR NO_x allowances allocated to the unit from the state's compliance supplement pool.

"Unit's adjusted allocation" is the amount of CAIR NO_x allowances requested for the unit under subparagraphs (3)(B)3.A. and B. of this rule, as adjusted under part (3)(B)3.C.(I) of this rule.

"Total adjusted allocations for eligible units" is the sum of the amounts of allocations requested under subparagraphs (3)(B)3.A. and B. of this rule, as adjusted under paragraph (3)(B)1. of this rule by the units identified in subpart (3)(B)3.C.(III)(b) of this rule

(d) Units that receive CAIR NO_v

allowances from the smaller portion of the compliance supplement pool shall not be eligible to receive CAIR NO_x allowances from the remaining portion of the compliance supplement pool; and

(e) Any CAIR NO_x allowances not allocated under subpart (3)(C)3.C.(III)(c) shall be added to the pool of six thousand twenty-nine (6,029) allowances and allocated according to the following formula:

Unit's allocation = Unit's adjusted allocation \times ((6,029 + Remainder from first allocation)/Total adjusted allocations for eligible units)

Where

"Unit's allocation" is the number of CAIR NO_x allowances allocated to the unit from the state's compliance supplement pool.

"Unit's adjusted allocation" is the amount of CAIR NO_x allowances requested for the unit under subparagraphs (3)(B)3.A. and B. of this rule, as adjusted under part (3)(B)3.C.(I) of this rule.

"Remainder from first allocation" is the amount of CAIR NO_x allowances from the smaller pool not allocated under subparagraph (3)(C)3.C.

"Total adjusted allocations for eligible units" is the sum of the amounts of allocations requested for all units under subparagraphs (3)(B)3.A. and B. of this rule, as adjusted under part (3)(B)3.C.(I) of this rule by units that were not allocated CAIR NO_x allowances under subparagraph (3)(C)3.C. of this rule; and

4. By November 30, 2009, the permitting authority will determine, and submit to the administrator, the allocations under subparagraphs (3)(B)3.B. and (3)(B)3.C. of this rule; and

- 5. By January 1, 2010, the administrator will record the allocations under subparagraphs (3)(B)3.B. and (3)(B)3.C. of this rule.
- (4) Reporting and Record Keeping. Unless otherwise noted in this section of the rule, all of the sections of 40 CFR 96 subpart HH promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
- (5) Test Methods. (Not Applicable)

AUTHORITY: section 643.050, RSMo 2000.* Original rule filed Oct. 2, 2006, effective May 30, 2007. Amended: Filed June 25, 2009, effective Feb. 28, 2010.

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

10 CSR 10-6.364 Clean Air Interstate Rule Seasonal $\mathrm{NO_x}$ Trading Program

PURPOSE: This rule adopts the U.S. Environmental Protection Agency's (EPA) regional trading program for nitrogen oxides, which was developed to meet the requirements of the Clean Air Interstate Rule. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the U.S. Environmental Protection Agency's Clean Air Interstate Rule published on May 12, 2005.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Applicability.

- (A) Except as provided in subsection (1)(B) of this rule—
- 1. The following units in this state shall be Clean Air Interstate Rule (CAIR) nitrogen oxides (NO_x) Ozone Season units, and any source that includes one or more such units shall be a CAIR NO_x Ozone Season source, subject to the requirements of this rule: any

stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than twenty-five (25) megawatts electric (MWe) producing electricity for sale; and

- 2. If a stationary boiler or stationary combustion turbine that, under paragraph (1)(A)1. of this rule, is not a CAIR NO_x Ozone Season unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than twenty-five (25) MWe producing electricity for sale, the unit shall become a CAIR NO_x Ozone Season unit as provided in paragraph (1)(A)1. of this rule on the first date on which it both combusts fossil fuel and serves such generator; or
- 3. Units in Bollinger, Butler, Cape Girardeau, Carter, Clark, Crawford, Dent, Dunklin, Franklin, Gasconade, Iron, Jefferson, Lewis, Lincoln, Madison, Marion, Mississippi, Montgomery, New Madrid, Oregon, Pemiscot, Perry, Pike, Ralls, Reynolds, Ripley, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Scott, Shannon, Stoddard, Warren, Washington, and Wayne counties and the City of St. Louis which are not CAIR NO_x Ozone Season units under paragraphs (1)(A)1., (1)(A)2. and (1)(B) shall be Clean Air Interstate Rule (CAIR) nitrogen oxides (NO_x) Ozone Season units, and any source that includes one (1) or more such units shall be a CAIR NO_x Ozone Season source if-
- A. Electric generating units that serve a generator with a nameplate capacity greater than twenty-five megawatts (25 MW) and—
 - (I) For non-cogeneration units—
- (a) Commenced operation before January 1, 1997, and served a generator producing electricity for sale under a firm contract to the electric grid during 1995 or 1996; or
- (b) Commenced operation in 1997 or 1998 and served a generator producing electricity for sale under a firm contract to the electric grid during 1997 or 1998; or
- (c) Commenced operation on or after January 1, 1999, and served or serves at any time a generator producing electricity for sale; and
 - (II) For cogeneration units-
- (a) Commenced operation before January 1, 1997, and failed to qualify as an unaffected unit under 40 CFR 72.6(b)(4) for 1995 or 1996 under the Acid Rain Program; or
- (b) Commenced operation in 1997 or 1998 and failed to qualify as an unaffected unit under 40 CFR 72.6(b)(4) for 1997



or 1998 under the Acid Rain Program; or

- (c) Commenced operation on or after January 1, 1999, and failed or fails to qualify as an unaffected unit under 40 CFR 72.6(b)(4) for any year under the Acid Rain Program; and
- B. Non-electric generating boilers, combined cycle systems, and combustion turbines that have a maximum design heat input greater than two hundred fifty (250) million British thermal units per hour (mmBtu/hr) and—
 - (I) For non-cogeneration units—
- (a) Commenced operations before January 1, 1997, and did not serve a generator producing electricity for sale under a firm contract to the electric grid during 1995 or 1996; or
- (b) Commenced operations in 1997 or 1998 and did not serve a generator producing electricity for sale under a firm contract to the electric grid during 1997 or 1998; or
- (c) Commenced operation on or after January 1, 1999, and:
- I. At no time served or serves a generator producing electricity for sale; or
- II. At any time served or serves a generator with a nameplate capacity of twenty-five (25) MW or less producing electricity for sale, and with the potential to use no more than fifty percent (50%) of the potential electrical output capacity of the unit; and
 - (II) For cogeneration units—
- (a) Commenced operation before January 1, 1997, and qualified as an unaffected unit under 40 CFR 72.6(b)(4) for 1995 or 1996 under the Acid Rain Program; or
- (b) Commenced operation in 1997 or 1998 and qualified as an unaffected unit under 40 CFR 72.6(b)(4) for 1997 or 1998 under the Acid Rain Program; or
- (c) Commenced operation on or after January 1, 1999, and qualified or qualifies as an unaffected unit under 40 CFR 72.6(b)(4) for each year under the Acid Rain Program.
- (III) Exemptions. The director shall provide the administrator written notice of the issuance of any permit under section (3) of this rule and, upon request, a copy of the permit. Notwithstanding paragraph (1)(A)3. of this rule, a unit shall not be a CAIR NO_x Ozone Season unit if the unit has a federally enforceable permit that:
- (a) Restricts the unit to burning only natural gas or fuel oil;
- (b) Restricts the unit's operating hours to the number calculated by dividing twenty-five (25) tons of potential mass emissions by the unit's maximum potential hourly

NO_v mass emissions;

- (c) Requires that the unit's maximum potential NO_x mass emissions be calculated by multiplying the unit's maximum rated hourly heat input by the highest default NO_x emission rate applicable to the unit under 40 CFR 75.19(c), Table LM-2;
- (d) Requires that the owner or operator of the unit shall retain at the source that includes the unit, for five (5) years, records demonstrating that the operating hours restriction, the fuel use restriction, and the other requirements of the permit related to these restrictions were met; and
- (e) Requires that the owner or operator of the unit shall report the unit's hours of operation (treating any partial hour of operation as a whole hour of operation) during each control period to the director by November 1 of each year for which the unit is subject to the federally enforceable permit.
- (IV) A CAIR $\mathrm{NO_x}$ Ozone Season unit may not qualify for an exemption unless the emissions after the exemption do not exceed the lesser of twenty-five (25) tons or the amount of allocations allocated to them. The owner or operator of a CAIR $\mathrm{NO_x}$ Ozone Season unit that is allocated CAIR $\mathrm{NO_x}$ Ozone Season allowances under section (3) of this rule, which requests an exemption under part (1)(A)3.B.III. of this rule, will surrender to the administrator the CAIR $\mathrm{NO_x}$ Ozone Season allowances for the control period after qualifying and every year after for which the exemption remains in place.
- (V) Loss of exemption. If, for any control period, the unit does not comply with the fuel use restriction under subpart (1)(A)3.B.(III)(a) of this rule or the operating hours restriction subpart (1)(A)3.B.(III)(b) and subpart (1)(A)3.B.(III)(c) of this rule, or the fuel use or the operating hour restrictions are removed from the unit's federally enforceable permit or otherwise becomes no longer applicable, the unit shall be a NO, budget unit, subject to the requirements of this rule. Such unit shall be treated as commencing operation and, for a unit under paragraph (1)(A)3. of this rule, commencing commercial operation on September 30 of the control period for which the fuel use restriction or the operating hours restriction is no longer applicable or during which the unit does not comply with the fuel use restriction or the operating hours restriction.
- (B) The units in the state that meet the requirements set forth in subparagraph (1)(B)1.A., (1)(B)2.A., or (1)(B)2.B. of this rule shall not be CAIR NO_x Ozone Season units—

- 1. Cogenerator exemption.
- A. Any unit that is a CAIR Ozone Season NO_x unit under paragraph (1)(A)1. or 2. of this rule—
- (I) Qualifying as a cogeneration unit during the twelve (12)-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and
- (II) Not serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than twenty-five (25) MWe supplying in any calendar year more than one-third of the unit's potential electric output capacity or two hundred nineteen thousand (219,000) megawatt hours (MWh), whichever is greater, to any utility power distribution system for sale.
- B. If a unit qualifies as a cogeneration unit during the twelve (12)-month period starting on the date the unit first produces electricity and meets the requirements of subparagraph (1)(B)1.A. of this rule for at least one (1) calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR Ozone Season NO_x unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of part (1)(B)1.A.(I) of this rule.
 - 2. Solid waste incinerator exemption.
- A. Any unit that is a CAIR NO_x Ozone Season unit under paragraph (1)(A)1. or 2. of this rule commencing operation before January 1, 1985—
- (I) Qualifying as a solid waste incineration unit; and
- (II) With an average annual fuel consumption of non-fossil fuel for 1985–1987 exceeding eighty percent (80%) (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three (3) consecutive calendar years after 1990 exceeding eighty percent (80%) (on a Btu basis).
- B. Any unit that is a CAIR NO_x Ozone Season unit under paragraph (1)(A)1. or 2. of this rule commencing operation on or after January 1, 1985—
- (I) Qualifying as a solid waste incineration unit; and
- (II) With an average annual fuel consumption of non-fossil fuel for the first three (3) calendar years of operation exceeding eighty percent (80%) (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three (3) consecutive calendar years after 1990 exceeding eighty percent (80%) (on a Btu basis).

- C. If a unit qualifies as a solid waste incineration unit and meets the requirements of subparagraph (1)(B)2.A. or B. of this rule for at least three (3) consecutive calendar years, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO_x Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first three (3) consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of twenty percent (20%) or more.
- (C) Retired Unit Exemption. Unless otherwise noted in this section of the rule, all of the sections of 40 CFR 96.305 promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.

(2) Definitions.

- (A) Definitions for key words and phrases used in this rule may be found in section 40 CFR 96.302 promulgated as of October 19, 2007, and section 96.303 of 40 CFR 96 subpart AAAA promulgated as of April 28, 2006, are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
- (B) Definitions for key words and phrases used in paragraph (1)(A)3. of this rule may be found in sections 40 CFR 97.2 subpart A promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
- (C) Cogenerator—(for the purposes of paragraph (1)(A).3. of this rule) A cogeneration facility which:
- 1. For a unit that commenced construction on or prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than two hundred nineteen thousand (219,000) MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). If the purpose of construction is not known, the administrator will presume that actual opera-

- tion from 1985 through 1987 is consistent with such purpose. However, if in any three (3) calendar year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand (219,000) MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the Acid Rain Program; or
- 2. For units which commenced construction after November 15, 1990, supplies equal to or less than one-third its potential electrical output capacity or equal to or less than two hundred nineteen thousand (219,000) MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). However, if in any three (3) calendar year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand (219,000) MWehrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the Acid Rain Program.
- (D) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

- (A) Unless otherwise noted in this section, 40 CFR 96.306, 96.307, and 96.308 as well as all of the sections of 40 CFR 96 subparts BBBB, CCCC, DDDD, FFFF, GGGG, and IIII promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
 - (B) CAIR NO_x Ozone Season Allowances.
- 1. Timing requirements for CAIR NO_x Ozone Season Allowance allocations.
- A. By October 31, 2006, the permitting authority will submit to the administrator the CAIR NO_x Ozone Season Allowance allocations, in a format prescribed by the administrator, for the control periods in 2009, 2010, 2011, 2012, 2013, and 2014 consistent with the allocations established in Table I and Table II of this subsection.
- B. By October 31, 2006, the permitting authority will submit to the administrator the CAIR $\mathrm{NO_x}$ Ozone Season Allowance allocations, in a format prescribed by the administrator, for the control period beginning 2015

- and extending through ten (10) control periods consistent with the allocations established in Table I and Table II of this subsection.
- C. By October 31, 2015, and October 31 of every tenth year following, the permitting authority will submit to the administrator CAIR $\mathrm{NO_x}$ Ozone Season Allowance allocations, in a format prescribed by the administrator, for the control period ten (10) years in the future and extending through ten (10) control periods consistent with Table I and Table II of this subsection.
- 2. CAIR NO_x Ozone Season Allowance allocations.
- A. The state trading program NO_x budget allocated by the director under subparagraphs (3)(B)2.B. and (3)(B)2.C. of this rule for a control period will equal twenty-six thousand seven hundred thirty-seven (26,737) tons for 2009–2014 and twenty-two thousand two hundred ninety (22,290) tons for 2015 and beyond.
- B. The following CAIR NO_x ozone season units shall be allocated NO_x allowances for each control period in accordance with Table I of subparagraph (3)(B)2.B. of this rule.



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Table I

			Table I	NO All 4	NO All 4: 2015
Facility ID	Facility Name	Unit ID	Portion Statewide Pool	NO _x Allocation 2009–2014	NO _x Allocation 2015 and beyond
2076	ASBURY	1	1.85%	493	410
2079	HAWTHORN STATION	5A	5.51%	1,469	1,224
2079	HAWTHORN STATION	6	0.09%	25	21
2079	HAWTHORN STATION	7	0.05%	13	11
2079	HAWTHORN STATION	8	0.04%	11	9
2079	HAWTHORN STATION	9	0.23%	62	51
2080	MONTROSE STATION	1	1.53%	408	340
2080	MONTROSE STATION	2	1.55%	414	345
2080	MONTROSE STATION	3	1.63%	435	363
2081	NORTHEAST #11		0.01%	2	2
2081	NORTHEAST #12		0.01%	2	1
2081	NORTHEAST #13		0.02%	4	3
2081	NORTHEAST #14		0.01%	3	3 2 2
2081	NORTHEAST #15		0.01%	3	2
2081	NORTHEAST #16		0.01%	2	2
2081	NORTHEAST #17		0.01%	4	3 3
2081	NORTHEAST #18		0.01%	3	3
2082	FAIRGROUNDS		0.01%	2	2
2092	RALPH GREEN		0.03%	8	7
2094	SIBLEY	1	0.52%	138	115
2094	SIBLEY	2	0.50%	135	112
2094	SIBLEY	3	3.31%	884	737
2096	AMEREN VIADUCT		0.00%	_	_
2098	LAKE ROAD	6	0.86%	231	192
2098	LAKE ROAD (GAS TURBINE)	5	0.02%	5	4
2102	HOWARD BEND CT		0.00%	1	1
2103	LABADIE	1	4.57%	1,220	1,017
2103	LABADIE	2	4.84%	1,292	1,076
2103	LABADIE	3	5.19%	1,384	1,153
2103	LABADIE	4	4.81%	1,283	1,069
2104	MERAMEC	1	1.25%	333	278
2104	MERAMEC	2	1.14%	305	254
2104	MERAMEC	3	1.98%	529	441
2104	MERAMEC	4	2.89%	770	641
2104	MERAMEC	GT1		_	_
2107	SIOUX	1	3.68%	981	817
2107	SIOUX	2	3.68%	982	818
2122	CHILLICOTHE		0.01%	2	2
2123	COLUMBIA	6	0.09%	24	20
2123	COLUMBIA	7	0.10%	28	23
2123	COLUMBIA	8	0.00%	1	_
2131	HIGGINSVILLE	2	0.01%	3	3
2132	BLUE VALLEY POWER	3 CTT1	0.31%	84	70
2132	BLUE VALLEY POWER	GT1	0.00%	12	
2161	JAMES RIVER	GT1	0.05%	13	11
2161	JAMES RIVER	GT2	0.03%	9	7
2161	JAMES RIVER	3	0.48%	129	108
2161	JAMES RIVER	4	0.62%	164	137
2161	JAMES RIVER	5	1.07%	285	238
2167	NEW MADRID POWER PLA	1	4.76%	1,271	1,059
2167	NEW MADRID POWER PLA	2 MD1	4.94%	1,318	1,098
2168	THOMAS HILL ENERGY C	MB1	1.90%	506 720	422
2168	THOMAS HILL ENERGY C	MB2	2.73%	729 1 760	608
2168	THOMAS HILL ENERGY C	MB3	6.63%	1,769	1,474
2169	CHAMOIS POWER PLANT	2	0.52%	138	115
6065	IATAN STATION	1	7.04%	1,877	1,564
6074	GREENWOOD ENERGY CENT	1	0.04%	10	9
6074	GREENWOOD ENERGY CENT	2	0.04%	10	8
6074 6074	GREENWOOD ENERGY CENT	3	0.04%	12	10 9
6074 6155	GREENWOOD ENERGY CENT RUSH ISLAND	4 1	0.04 <i>%</i> 5.05 <i>%</i>	11 1,346	1,122
0133	RUSII ISLAND	1	5.05 /0	1,340	1,122



6155	RUSH ISLAND	2	4.58%	1,221	1,018
6195	SOUTHWEST	1	2.28%	609	507
6195	SOUTHWEST	CT1A	0.01%	3	2
6195	SOUTHWEST	CT1B	0.01%	3	2
6195	SOUTHWEST	CT2A	0.01%	2	2
6195	SOUTHWEST	CT2B	0.01%	2	
6223	EMPIRE	3A	0.01%	$\overline{2}$	2 2
6223	EMPIRE	3B	0.01%	$\frac{1}{2}$	$\frac{1}{2}$
6223	EMPIRE	4A	0.01%	$\overline{2}$	$\frac{1}{2}$
6223	EMPIRE	4B	0.01%	$\overline{2}$	$\frac{1}{2}$
6223	EMPIRE—ENERGY CENTER 1	.2	0.06%	16	13
6223	EMPIRE—ENERGY CENTER 2		0.04%	9	8
6650	MEXICO		0.00%	1	1
6651	MOBERLY		0.00%	1	1
6652	MOREAU		0.01%	2	1
6768	SIKESTON	1	2.62%	698	582
7296	STATE LINE UNIT 1	1	0.17%	46	38
7296	STATE LINE UNIT 1	2-1	0.32%	85	71
7296	STATE LINE UNIT 1	2-2	0.37%	98	82
7604	ST. FRANCIS POWER PL	1	0.21%	55	46
7604	ST. FRANCIS POWER PL	2	0.18%	49	41
7749	ESSEX POWER PLANT	1	0.03%	9	8
7754	NODAWAY POWER PLANT	1	0.04%	10	8
7754	NODAWAY POWER PLANT	2	0.03%	9	7
7848	HOLDEN POWER PLANT	1	0.01%	2	2
78 4 8	HOLDEN FOWER PLANT	2	0.01%	3	3
78 4 8	HOLDEN FOWER PLANT	3	0.01%	3	2
7903	MCCARTNEY	MGS1A	0.00%	1	1
7903	MCCARTNEY	MGS1A MGS1B	0.00%	1	1
7903	MCCARTNEY	MGS1B MGS2A	0.00%	1	1
7903	MCCARTNEY	MGS2A MGS2B	0.00%	1	1
7964	PENO CREEK ENERGY CTR	CT1A	0.01%	2	1
7964	PENO CREEK ENERGY CTR	CT1B	0.01%	1	1
7964 7964	PENO CREEK ENERGY CTR	CT2A	0.01%	2	1
7964	PENO CREEK ENERGY CTR	CT2B	0.01%	2	1
7964	PENO CREEK ENERGY CTR	CT3A	0.01%	1	1
7964 7964	PENO CREEK ENERGY CTR	CT3B	0.01%	1	1
7964 7964	PENO CREEK ENERGY CTR	CT4A	0.01%	1	1
7964 7964	PENO CREEK ENERGY CTR	CT4A CT4B	0.00%	1	1
55178	MEP PLEASANT HILL	CT-1	0.28%	75	63
55178	MEP PLEASANT HILL MEP PLEASANT HILL	CT-1	0.25%	67	56
55234	AUDRAIN GENERATING	CT-2 CT1	0.23 %	1	50
55234	AUDRAIN GENERATING AUDRAIN GENERATING	CT2	0.00%	1	
55234	AUDRAIN GENERATING AUDRAIN GENERATING	CT3	0.00%	_	_
55234	AUDRAIN GENERATING AUDRAIN GENERATING	CT4	0.00%	_	_
55234	AUDRAIN GENERATING AUDRAIN GENERATING	CT5	0.00%	_	_
55234		CT6	0.00%	_	_
	AUDRAIN GENERATING			_	_
55234 55234	AUDRAIN GENERATING AUDRAIN GENERATING	CT7 CT8	$0.00\% \\ 0.00\%$	-	_
	COLUMBIA ENERGY CTR	CT01		_ 1	
55447 55447	COLUMBIA ENERGY CTR COLUMBIA ENERGY CTR	CT01 CT02	0.00%	1	1
55447 55447			0.00%	-	_
55447 55447	COLUMBIA ENERGY CTR COLUMBIA ENERGY CTR	CT03 CT04	$0.00\% \\ 0.00\%$	-	_
55447		C104			22 221
	Total		100.00%	26,678	22,231

C. The following existing non-electric generating unit (EGU) boilers shall be allocated NO_{x} allowances for each control period

in accordance with Table II of subparagraph (3)(E)2.C of this rule.

Table II

Non-EGUs Boilers	Unit	NO _x Allocation per Unit Tons Per Ozone Season
Anheuser Busch	6	14
Trigen Ashley Street Station Boiler	5	9
Trigen Ashley Street Station Boiler	6	36



- D. Any unit subject to subsection (1)(B) of this rule, other than those listed in Tables I and II of this subsection, will not be allocated CAIR NO_x Ozone Season Allowances under this rule.
- (4) Reporting and Record Keeping. Unless otherwise noted in this section, all of the sections of 40 CFR 96 subpart HHHH promulaged as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.

(5) Test Methods. (Not Applicable)

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Oct. 2, 2006, effective May 30, 2007. Amended: Filed June 25, 2009, effective Feb. 28, 2010.

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

10 CSR 10-6.366 Clean Air Interstate Rule SO_2 Trading Program

PURPOSE: This rule adopts the U.S. Environmental Protection Agency's (EPA) regional trading program for sulfur dioxide, which was developed to meet the requirements of the Clean Air Interstate Rule. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the U.S. Environmental Protection Agency's Clean Air Interstate Rule published on May 12, 2005.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Applicability.

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- (A) Except as provided in subsection (1)(B) of this rule:
- 1. The following units in this state shall be Clean Air Interstate Rule (CAIR) sulfur dioxide (SO₂) units, and any source that includes one or more such units shall be a

- CAIR SO₂ source, subject to the requirements of this rule: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than twenty-five (25) megawatts electric (MWe) producing electricity for sale.
- 2. If a stationary boiler or stationary combustion turbine that, under paragraph (1)(A)1. of this rule, is not a CAIR SO₂ unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than twenty-five (25) MWe producing electricity for sale, the unit shall become a CAIR SO₂ unit as provided in paragraph (1)(A)1. of this rule on the first date on which it both combusts fossil fuel and serves such generator.
- (B) The units in the state that meet the requirements set forth in subparagraph (1)(B)1.A., (1)(B)2.A., or (1)(B)2.B. of this rule shall not be CAIR SO₂ units:

1. Cogenerator exemption.

- A. Any unit that is a CAIR SO_2 unit under paragraph (1)(A)1. or 2. of this rule—
- (I) Qualifying as a cogeneration unit during the twelve (12)-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and
- (II) Not serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than twenty-five (25) MWe supplying in any calendar year more than one-third of the unit's potential electric output capacity or two hundred nineteen thousand (219,000) megawatt hours (MWh), whichever is greater, to any utility power distribution system for sale.
- B. If a unit qualifies as a cogeneration unit during the twelve (12)-month period starting on the date the unit first produces electricity and meets the requirements of subparagraph (1)(B)1.A. of this rule for at least one (1) calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR SO₂ unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of part (1)(B)1.A.(II) of this rule.
 - 2. Solid waste incinerator exemption.

A. Any unit that is a CAIR SO_2 unit under paragraph (1)(A)1. or 2. of this rule

- commencing operation before January 1, 1985—
- (I) Qualifying as a solid waste incineration unit; and
- (II) With an average annual fuel consumption of non-fossil fuel for 1985–1987 exceeding eighty percent (80%) (on a British thermal unit (Btu) basis) and an average annual fuel consumption of non-fossil fuel for any three (3) consecutive calendar years after 1990 exceeding eighty percent (80%) (on a Btu basis).
- B. Any unit that is a CAIR SO_2 unit under paragraph (1)(A)1. or 2. of this rule commencing operation on or after January 1, 1985—
- (I) Qualifying as a solid waste incineration unit; and
- (II) With an average annual fuel consumption of non-fossil fuel for the first three (3) calendar years of operation exceeding eighty percent (80%) (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three (3) consecutive calendar years after 1990 exceeding eighty percent (80%) (on a Btu basis).
- C. If a unit qualifies as a solid waste incineration unit and meets the requirements of subparagraph (1)(B)2.A. or B. of this rule for at least three (3) consecutive calendar years, but subsequently no longer meets all such requirements, the unit shall become a CAIR SO₂ unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first three (3) consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of twenty percent (20%) or more.
- (C) Retired Unit Exemption. Unless otherwise noted in this section of the rule, all of the sections of 40 CFR 96.205 promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.

(2) Definitions.

(A) Definitions for key words and phrases used in this rule may be found in sections 40 CFR 96.202 promulgated as of October 19, 2007, and 96.203 of 40 CFR 96 subpart AAA promulgated as of April 28, 2006, are 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, D.C. 20408. This rule does not incorporate

any subsequent amendments or additions.

- (B) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.
- (3) General Provisions. Unless otherwise noted in this section, 40 CFR 96.206, 96.207, and 96.208 as well as all of the sections of 40 CFR 96 subparts BBB, CCC, DDD, FFF, GGG, and III promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
- (4) Reporting and Record Keeping. Unless otherwise noted in this section, all of the sections of 40 CFR 96 subpart HHH promulgated as of April 28, 2006 are 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, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
- (5) Test Methods. (Not Applicable)

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Oct. 2, 2006, effective May 30, 2007. Amended: Filed June 25, 2009, effective Feb. 28, 2010.

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

10 CSR 10-6.368 Control of Mercury Emissions From Electric Generating Units (Rescinded May 30, 2013)

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Oct. 2, 2006, effective May 30, 2007. Rescinded: Filed Aug. 20, 2012, effective May 30, 2013.

10 CSR 10-6.372 Cross-State Air Pollution Rule Annual $\mathrm{NO_x}$ Trading Allowance Allocations

PURPOSE: The purpose of this rule is to reallocate annual nitrogen oxides (NO_x) emission allowances for use with the U.S. Environmental Protection Agency's (EPA's) annual NO_x regional emission reduction program as established in the federal Cross-State Air Pollution Rule (CSAPR) for 2017 and

beyond. The federal CSAPR program will continue to be administered by EPA. The state rule only redistributes annual NO_x allowances. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the September 13, 2011, December 16, 2014, and March 24, 2015 affected industry meeting summaries indicating general agreement to reallocate unused NO_x allowances to municipalities that received zero (0) allowances.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Applicability. This rule applies to all Transport Rule (TR) nitrogen oxides (NO_x) Annual units located in the state of Missouri.

(2) Definitions.

- (A) Definitions for key words and phrases used in this rule may be found in 40 CFR 97.402 and 40 CFR 97.403 promulgated as of July 1, 2014, and *Federal Register* Notice 79 FR 71663 promulgated on December 3, 2014, are hereby incorporated by reference as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408.
- (B) Notification—Any action by the director to convey information to affected sources and interested parties. This includes, but is not limited to, public web postings with email alerts.
- (C) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.
- (3) General Provisions. This rule replaces 40 *Code of Federal Regulations* (CFR) 97.411(a), 40 CFR 97.411(b)(1) and 40 CFR 97.412(a) promulgated as of June 30, 2014, and *Federal Register* Notice 79 FR 71663 promulgated on December 3, 2014, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408.

(A) Existing Units.

1. Annual Submittal. The director must submit to the U.S. Environmental Protection Agency (EPA), in a format prescribed by the administrator, the TR NO_{x} Annual allowances

listed in Table I taking into account any modifications necessary in accordance with paragraph (3)(A)2. of this rule. This submittal must meet the following schedule:

- A. By June 1, 2016, the director will submit to EPA allowances for TR NO_x Annual units for the control periods in 2017 and 2018;
- B. By June 1, 2017, the director will submit to EPA allowances for TR NO_x Annual units for the control periods in 2019 and 2020:
- C. By June 1, 2018, the director will submit to EPA allowances for TR NO_x Annual units for the control periods in 2021 and 2022; and
- D. By June 1, 2019, and June 1 of each year thereafter, the director will submit to EPA allowances for TR NO_x Annual units for the control periods in the fourth year after the year in which the submission is made.
- 2. Non-Operating Units. If a unit in Table I of this rule does not operate during two (2) consecutive control periods after 2014, the submittal made under paragraph (3)(A)1. of this rule will show zero (0) TR Annual NO, allowances for such unit for the control period in the fifth year after these two (2) such years and in each year after that fifth year. All TR NO_x Annual allowances that would otherwise have been allocated to such unit will be allocated to the new unit set-aside for the state for the respective years involved. If this subsection is applicable, any resulting changes to the submittal under paragraph (3)(A)1. of this rule will be determined in accordance with the following:
- A. Every year, the director will review the operation of each unit listed in Table I and issue a notification that lists any unit in Table I that has not operated during two (2) consecutive control periods after 2014. Any notification made under this subparagraph will specify the first year in which allowances listed in Table I will be terminated for the applicable unit(s) under paragraph (3)(A)2. of this rule;
- B. For each notification required in subparagraph (3)(A)2.A. of this rule, the director will provide an opportunity for submission of objections to the units referenced in such notice that must be submitted by the deadline specified in such notification in order to be considered; and
- C. If there are objections, the director will review them and issue a notification responding to objections received along with any adjustments made to the list.



Table I

Source Name	Source ID	Unit ID	TR NO _x Annual unit allowances (tons) for 2017 and thereafter
Asbury	2076	1	884
Audrain Power Plant	55234	CT1	2
Audrain Power Plant	55234	CT2	2
Audrain Power Plant	55234	CT3	2
Audrain Power Plant	55234	CT4	2
Audrain Power Plant	55234	CT5	1
Audrain Power Plant	55234	CT6	1
Audrain Power Plant	55234	CT7	1
Audrain Power Plant	55234	CT8	1
Blue Valley	2132	3	126
Chamois Power Plant	2169	2	248
Chillicothe	2122	GT1A	2
Chillicothe	2122	GT1B	0
Chillicothe	2122	GT2A	0
Chillicothe	2122	GT2B	0
Columbia	2123	6	22
Columbia	2123	7	60
Columbia	2123	8	0
Columbia Energy Center (MO)	55447	CT01	1
Columbia Energy Center (MO)	55447	CT02	2
Columbia Energy Center (MO)	55447	CT03	1
Columbia Energy Center (MO)	55447	CT04	1
Dogwood Energy Facility	55178	CT-1	33
Dogwood Energy Facility	55178	CT-2	30
Empire District Elec Co Energy Ctr	6223	1	1
Empire District Elec Co Energy Ctr	6223	2	2
Empire District Elec Co Energy Ctr	6223	3A	11
Empire District Elec Co Energy Ctr	6223	3B	11
Empire District Elec Co Energy Ctr	6223	4A	12
Empire District Elec Co Energy Ctr	6223	4B	12
Essex Power Plant	7749	1	8
Fairgrounds	2082	CT01	0
Greenwood Energy Center	6074	1	6



Greenwood Energy Center	6074	2	4
Greenwood Energy Center	6074	3	6
Greenwood Energy Center	6074	4	8
Hawthorn	2079	5A	2,445
Hawthorn	2079	6	1
Hawthorn	2079	7	7
Hawthorn	2079	8	8
Hawthorn	2079	9	21
Higginsville Municipal Power Plant	2131	4A	2
Higginsville Municipal Power Plant	2131	4B	0
Holden Power Plant	7848	1	5
Holden Power Plant	7848	2	6
Holden Power Plant	7848	3	5
Howard Bend	2102	CT1A	0
Howard Bend	2102	CT1B	0
Iatan	6065	1	3,094
James River	2161	GT1	7
James River	2161	GT2	13
James River	2161	3	207
James River	2161	4	235
James River	2161	5	435
John Twitty Energy Center	6195	1	801
John Twitty Energy Center	6195	CT1A	1
John Twitty Energy Center	6195	CT1B	1
John Twitty Energy Center	6195	CT2A	1
John Twitty Energy Center	6195	CT2B	1
Labadie	2103	1	2,321
Labadie	2103	2	2,495
Labadie	2103	3	2,677
Labadie	2103	4	2,613
Lake Road	2098	6	414
Lake Road	2098	GT5	2
McCartney Generating Station	7903	MGS1A	10
McCartney Generating Station	7903	MGS1B	10
McCartney Generating Station	7903	MGS2A	10
McCartney Generating Station	7903	MGS2B	10
Meramec	2104	1	646
Meramec	2104	2	609
Meramec	2104	3	1,075
Meramec	2104	4	1,499
Meramec	2104	CT01	0
Meramec	2104	CT2A	0
Meramec	2104	CT2B	0
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Mexico	6650	CT01	0
Moberly	6651	CT01	0
Montrose	2080	1	725
Montrose	2080	2	710
Montrose	2080	3	746
Moreau	6652	CT01	0
New Madrid Power Plant	2167	1	2,276
New Madrid Power Plant	2167	2	2,172
Nodaway Power Plant	7754	1	4
Nodaway Power Plant	7754	2	5
Northeast Generating Station	2081	11	0
Northeast Generating Station	2081	12	0
Northeast Generating Station	2081	13	0
Northeast Generating Station	2081	14	0
Northeast Generating Station	2081	15	0
Northeast Generating Station	2081	16	0
Northeast Generating Station	2081	17	1
Northeast Generating Station	2081	18	1
Peno Creek Energy Center	7964	CT1A	11
Peno Creek Energy Center	7964	CT1B	10
Peno Creek Energy Center	7964	CT2A	10
Peno Creek Energy Center	7964	CT2B	9
Peno Creek Energy Center	7964	CT3A	11
Peno Creek Energy Center	7964	CT3B	11
Peno Creek Energy Center	7964	CT4A	10
Peno Creek Energy Center	7964	CT4B	10
Ralph Green Station	2092	3	1
Rush Island	6155	1	2,086
Rush Island	6155	2	2,106
Sibley	2094	1	222
Sibley	2094	2	219
Sibley	2094	3	1,400
Sikeston	6768	1	1,268
Sioux	2107	1	1,874
Sioux	2107	2	1,690
South Harper Peaking Facility	56151	1	15
South Harper Peaking Facility	56151	2	19
South Harper Peaking Facility	56151	3	23
St. Francis Power Plant	7604	1	31
St. Francis Power Plant	7604	2	29
State Line (MO)	7296	1	8
State Line (MO)	7296	2-1	57
State Line (MO)	7296	2-2	59



Thomas Hill Energy Center	2168	MB1	829
Thomas Hill Energy Center	2168	MB2	1,296
Thomas Hill Energy Center	2168	MB3	2,674
Viaduct	2096	CT01	0

Total 45,818

Note: Being included or excluded on the list of sources in Table I does not constitute a determination that such source is or is not a TR NO_x Annual unit. The determination of applicability for TR NO_x Annual units is in 40 CFR 97.404.



(B) New Units.

1. Annual Submittal. For the TR NO_{X} Annual control period in 2017 and each control period thereafter, the director must submit to EPA, in a format prescribed by the administrator, the TR NO_{X} Annual allowances as determined under this subsection by July 1 of the applicable control period.

2. New Unit Set-Asides.

A. Allowance Calculation. Every year, the director will calculate the TR NO_x Annual allowance allocation to each TR NO Annual unit in a state, in accordance with subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule, for the control period in the year of the applicable submittal deadline under paragraph (3)(B)1. of this rule. Once the calculations are complete, the director will contact all facilities that will receive allocations under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule for the control period in the year of the applicable submittal deadline under paragraph (3)(B)1. of this rule to confirm that the calculations were performed in accordance with this rule, and make adjustments to the calculations if necessary.

B. Excess Allowances. If the new unit set-aside for such control period has any TR NO_x Annual allowances remaining after the calculations performed under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule have been completed, then allowances will be calculated in accordance with subparagraph (3)(B)3.I. of this rule.

- C. Industry Requests for Excess Allowances. If a facility owner, operator, or designated representative wishes to receive allowances in accordance with subparagraph (3)(B)3.I. of this rule, for any control period, then by April 5 of the applicable control period, the facility owner, operator, or designated representative must submit information to the director confirming that a TR NO, Annual unit commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period. The submittal must also include the calculation of eligible allowances for use in subparagraph (3)(B)3.I. of this rule, for each TR NO_x Annual unit that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period.
- (I) The calculation of eligible allowances must be in accordance with part (3)(B)3.I.(III) of this rule in order for such units to be eligible to receive any allowances in accordance with subparagraph (3)(B)3.I. of this rule.
- (II) Each year, the director will review any submissions made in accordance

with this paragraph to confirm that units identified in the submissions are TR NO, Annual units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period. The director will also confirm that the submission includes the correct calculations for eligible allowances in accordance with part (3)(B)3.I.(III) of this rule. If, during the review, the director identifies any discrepancies with the identified units or the calculations in a submission made in accordance with this paragraph, the director may request additional information from the facility owner, operator, or designated representative that made the submission. If additional information is requested, the facility owner, operator, or designated representative must provide the requested information by the deadline specified in the information request; otherwise, units identified in such submission will not be eligible for allowances in accordance with subparagraph (3)(B)3.I. of this rule for the applicable control period.

- D. Public Notification. The director will determine the TR ${\rm NO_x}$ Annual allowance allocation to each TR ${\rm NO_x}$ Annual unit in accordance with subparagraphs (3)(B)3.I., (3)(B)3.J., and (3)(B)3.L. of this rule and 40 CFR 97.406(b)(2) and 40 CFR 97.430 through 40 CFR 97.435. By June 1 of each year, the director will issue a notification making available the results of all allowance determinations from the new unit set-aside for the control period in which the notification is made.
- (I) For each notification required in part (3)(B)2.D.(II) of this rule, the director will provide an opportunity for submission of objections to the calculations referenced in such notice.
- (II) If there are objections, the director will review them and provide notification stating the outcome.
- E. Allowance Changes. If any TR NO_x Annual allowances are added to the new unit set-aside after submittals as required in subparagraph (3)(B)2.C. of this rule, the director will issue additional notifications, as deemed appropriate, of the allocation of such TR NO_x Annual allowances in accordance with subparagraph (3)(B)3.J. of this rule.
- 3. New Unit Annual Allowance Allocation Methodology. For each control period in 2017 and thereafter and for the TR NO_x Annual units in Missouri, the director will allocate TR NO_x Annual allowances to the TR NO_x Annual units as follows:

 \hat{A} . Units Eligible to Receive Allowances. The TR NO_x Annual allowances will be allocated to the following TR NO_x

Annual units, except as provided in subparagraph (3)(B)3.J. of this rule:

- (I) TR NO_x Annual units that are not listed in Table I in paragraph (3)(A)2. of this rule;
- (II) TR NO_x Annual units whose allocation of an amount of TR NO_x Annual allowances for such control period listed in Table I in paragraph (3)(A)2. of this rule is covered by 40 CFR 97.411(c)(2) or (3);
- (III) TR NO_x Annual units that are listed in Table I in paragraph (3)(A)2. of this rule and the allocation to such unit(s) is terminated for the applicable control period pursuant to paragraph (3)(A)2. of this rule, and that operate during the control period immediately preceding such control period; or
- (IV) For purposes of subparagraph (3)(B)3.I. of this rule, TR NO_x Annual units under 40 CFR 97.411(c)(1)(ii) whose allocation of an amount of TR NO_x Annual allowances for such control period under paragraph (3)(B)2. of this rule is covered by 40 CFR 97.411(c)(2) or (3);
- B. Total Allowances Available. The director will establish a separate new unit setaside for the state for each such control period. Each such new unit set-aside will be allocated TR NO_{x} Annual allowances in an amount equal to the difference between the Missouri TR NO_{x} Annual trading budget for 2017 and thereafter, as set forth in 40 CFR 97.410(a), and the total number of allowances allocated in accordance with paragraph (3)(A)1. of this rule for such control period. The new unit set-aside will be allocated additional TR NO_{x} Annual allowances (if any) in accordance with paragraph (3)(A)2. of this rule and 40 CFR 97.411(c)(5);
- C. Eligible Control Periods. The director will determine, for each TR NO_x Annual unit described in subparagraph (3)(B)3.A. of this rule, an allocation of TR NO_x Annual allowances for the later of the following control periods and for each subsequent control period:
 - (I) The control period in 2017;
- (II) The first control period after the control period in which the TR ${\rm NO_x}$ Annual unit commences commercial operation;
- (III) For a unit described in part (3)(B)3.A.(II) of this rule, the first control period in which the TR NO_x Annual unit operates in the state after operating in another jurisdiction and for which the unit is not already allocated one (1) or more TR NO_x Annual allowances; and
- (IV) For a unit described in part (3)(B)3.A.(III) of this rule, the first control period after the control period in which the unit resumes operation, or the first control period in which the allocation for such unit listed in Table I in paragraph (3)(A)2. of this

rule is terminated pursuant to paragraph (3)(A)2. of this rule, whichever is later;

D. Allocations. The allocation to each TR NO_x Annual unit described in parts (3)(B)3.A.(I) through (3)(B)3.A.(III) of this rule and for each control period described in subparagraph (3)(B)3.C. of this rule will be an amount equal to the unit's total tons of NO_x emissions during the immediately preceding control period. The director will adjust the allocation amount in this subparagraph in accordance with subparagraphs (3)(B)3.E. through (3)(B)3.G. and (3)(B)3.L. of this rule;

E. Sum of Allowances. The director will calculate the sum of the TR NO_x Annual allowances determined for all such TR NO_x Annual units under subparagraph (3)(B)3.D. of this rule in the state for such control period;

F. Extra Allowance Allocation. If the amount of TR NO_x Annual allowances in the new unit set-aside for the state for such control period is greater than or equal to the sum under subparagraph (3)(B)3.E. of this rule, then the director will allocate the amount of TR NO_x Annual allowances determined for each such TR NO_x Annual unit under subparagraph (3)(B)3.D. of this rule;

G. Insufficient Allowance Allocation. If the amount of TR NO_x Annual allowances in the new unit set-aside for the state for such control period is less than the sum under subparagraph (3)(B)3.E. of this rule, then the director will allocate to each such TR NO_x Annual unit the amount of the TR NO_x Annual allowances determined under subparagraph (3)(B)3.D. of this rule for the unit, multiplied by the amount of TR NO_x Annual allowances in the new unit set-aside for such control period, divided by the sum under subparagraph (3)(B)3.E. of this rule, and rounded to the nearest allowance;

H. Confirmation of Allowances. The director will contact facilities as described in subparagraph (3)(B)2.A. of this rule to confirm the amount of TR NO_x Annual allowances allocated under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule for such control period to each TR NO_x Annual unit eligible for such allocation;

I. Allowance Calculation for Units That Recently Began Operation. If, after completion of the procedures under subparagraphs (3)(B)3.E. through (3)(B)3.H. of this rule for such control period, any unallocated TR NO_x Annual allowances remain in the new unit set-aside for the state for such control period, the director will allocate such TR NO_x Annual allowances as follows:

(I) For any submission made in accordance with subparagraph (3)(B)2.C. of this rule, the submitting facility owner, operator, or designated representative may include

the calculation of eligible allowances for such control period as specified in part (3)(B)3.I.(III) of this rule. If such submission is not made or fails to include the calculation of eligible allowances under this part by the April 5 deadline, or if the facility owner, operator, or designated representative fails to provide additional information requested in accordance with part (3)(B)2.C.(II) of this rule by the applicable deadline, then no allowances will be awarded to such unit in accordance with this subparagraph for such control period;

(II) The director will review submissions made in accordance with subparagraph (3)(B)2.C. of this rule, as specified in part (3)(B)2.C.(II) of this rule and may adjust the units identified in such submission if they are not eligible for allowances under this subparagraph, and the director may also adjust the calculation of eligible allowances included in such submission to ensure they are in accordance with part (3)(B)3.I.(III) of this rule;

(III) The calculation of eligible TR NO_x Annual allowances for a specific control period for TR NO_x Annual units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period must be as follows;

$$EA = \frac{(ER)(HR)(NP_{cap})(cP_{Tot})(cF)(24^{hours}/_{day})\left(1,000^{kW}/_{MW_e}\right)}{(2,000^{lb}/_{ton})(1,000,000^{BTU}/_{mmBTU})}$$

Where:

EA = eligible TR NO_x Annual Allowances

ER = the unit's permitted emission rate from the unit's construction permit approved under 10 CSR 10-6.060 (lb/mmBTU)

HR = the heat rate efficiency for the generator that the unit serves (BTU/KW-hr)

NP_{Cap} = nameplate capacity of the generator that the unit serves (MWe)

CP_{Tot} = number of days in the control period

CF = the unit's default capacity factor from Table II below

Table II - Default Capacity Factors for New Units

Unit Types	Annual SO ₂ & NO _x	Ozone Season NO _x
Omt Types	Programs	Program
Coal-Fired Steam Boiler	0.85	0.92
IGCC (Coal Gasification)	0.74	0.73
Oil-Fired Steam Boiler	0.30	0.39
Natural Gas-Fired Steam	0.44	0.47
Boiler	0.44	0.47
Simple Cycle Combustion	0.24	0.32
Turbine	0.24	0.32
Combined Cycle	0.66	0.71
Combustion Turbine	0.00	0.71

(IV) The director will determine, for each unit described in subparagraph (3)(B)3.A. of this rule that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period, the positive difference (if any) between the unit's emissions during the previous control period and the amount of eligible TR NO_x Annual allowances as calculated under part (3)(B)3.I.(III) of this rule;

(V) The director will determine the sum of the positive differences determined under part (3)(B)3.I.(IV) of this rule;

(VI) If the amount of unallocated TR NO_x Annual allowances remaining in the new unit set-aside for the state for such control period is greater than or equal to the sum determined under part (3)(B)3.I.(V) of this rule, then the director will allocate the amount of TR NO_x Annual allowances determined for each such TR NO_x Annual unit under part (3)(B)3.I.(IV) of this rule; and

(VII) If the amount of unallocated TR NO_x Annual allowances remaining in the new unit set-aside for the state for such control period is less than the sum under part (3)(B)3.I.(V) of this rule, then the director will allocate to each such TR NO_x Annual unit the amount of the TR NO_x Annual allowances determined under part (3)(B)3.I.(IV) of this rule for the unit, multiplied by the amount of unallocated TR NO_x Annual allowances remaining in the new unit set-aside for such control period, divided by the sum under part (3)(B)3.I.(V) of this rule, and rounded to the nearest allowance;

J. Distribution of Remaining Allocations. If, after completion of the procedures under subparagraphs (3)(B)3.I. and (3)(B)3.L. of this rule for such control period, any unallocated TR NO, Annual allowances remain in the new unit set-aside for the state for such control period, the director will allocate to each TR NO_x Annual unit that is in the state, is allocated an amount of TR NO_x Annual allowances listed in Table I in paragraph (3)(A)2. of this rule, and continues to be allocated TR NO_x Annual allowances for such control period in accordance with paragraph (3)(A)2. of this rule, an amount of TR NO Annual allowances equal to the following: the total amount of such remaining unallocated TR NO_x Annual allowances in such new unit



set-aside, multiplied by the unit's allocation listed in Table I in paragraph (3)(A)2. of this rule for such control period, divided by the remainder of the amount of tons in the applicable state NO_x Annual trading budget minus the amount of tons in such new unit set-aside for the state for such control period, and rounded to the nearest allowance;

- K. Public Notification. The director will issue notifications as described in subparagraphs (3)(B)2.D. and (3)(B)2.E. of this rule, of the amount of TR NO_x Annual allowances allocated under subparagraphs (3)(B)3.B. through (3)(B)3.G., (3)(B)3.I., (3)(B)3.J., and (3)(B)3.L. of this rule for such control period to each TR NO_x Annual unit eligible for such allocation; and
- L. Allocation Tabulations That Exceed or Are Less Than the New Unit Set-Aside.
- (I) Notwithstanding the requirements of subparagraphs (3)(B)3.B. through (3)(B)3.K. of this rule, if the calculations of allocations of a new unit set-aside for a control period in a given year under subparagraph (3)(B)3.G. of this rule, subparagraph (3)(B)3.F. and part (3)(B)3.I.(VII) of this rule, subparagraph (3)(B)3.F.,(3)(B)3.I.(VI), and subparagraph (3)(B)3.J. of this rule would otherwise result in total allocations of such new unit set-aside exceeding the total amount of such new unit set-aside, then the director will adjust the results of the calculations under subparagraph (3)(B)3.G., part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, as follows. The director will list the TR NOx Annual units in descending order based on the amount of such allocations under subparagraph (3)(B)3.G., part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under subparagraph (3)(B)3.G., part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, by one (1) TR NO_x Annual allowance (but not below zero (0)) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.
- (II) Notwithstanding the requirements of subparagraphs (3)(B)3.J. and (3)(B)3.K. of this rule, if the calculations of allocations of a new unit set-aside for a control period in a given year under subparagraph (3)(B)3.F., part (3)(B)3.I.(VI), and subparagraph (3)(B)3.J. of this rule would otherwise result in a total allocations of such new unit set-aside less than the total amount of such new unit set-aside, then the director

will adjust the results of the calculations under subparagraph (3)(B)3.J. of this rule, as follows. The director will list the TR NO, Annual units in descending order based on the amount of such units' allocations under subparagraph (3)(B)3.J. of this rule and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each allocation under subparagraph (3)(B)3.J. of this rule by one (1) TR NO Annual allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

- (4) Reporting and Record Keeping. The director shall maintain TR NO_x Annual unit allowance records submitted to EPA for each TR NO_x Annual control period for a minimum of five (5) years.
- (5) Test Methods. (Not Applicable).

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed May 15, 2015, effective Dec. 30, 2015.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.374 Cross-State Air Pollution Rule Ozone Season $\mathrm{NO_{x}}$ Trading Allowance Allocations

PURPOSE: The purpose of this rule is to reallocate ozone season nitrogen oxides (NO_x) emission allowances for use with the U.S. Environmental Protection Agency's (EPA's) ozone season NO_x regional emission reduction program as established in the federal Cross-State Air Pollution Rule (CSAPR) for 2017 and beyond. The federal CSAPR program will continue to be administered by EPA. The state rule only redistributes ozone season NO_x allowances. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the September 13, 2011, December 16, 2014, and March 24, 2015 affected industry meeting summaries indicating general agreement to reallocate unused NO_x allowances to municipalities that received zero (0) allowances.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here

- (1) Applicability. This rule applies to all Transport Rule (TR) nitrogen oxides (NO_x) Ozone Season units located in the state of Missouri.
- (2) Definitions.
- (A) Definitions for key words and phrases used in this rule may be found in 40 CFR 97.502 and 40 CFR 97.503 promulgated as of July 1, 2014, and *Federal Register* Notice 79 FR 71663 promulgated on December 3, 2014, are hereby incorporated by reference as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408.
- (B) Notification—Any action by the director to convey information to affected sources and interested parties. This includes, but is not limited to, public web postings with email alerts.
- (C) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.
- (3) General Provisions. This rule replaces 40 *Code of Federal Regulations* (CFR) 97.511(a), 40 CFR 97.511(b)(1) and 40 CFR 97.512(a) promulgated as of June 30, 2014, and *Federal Register* Notice 79 FR 71663 promulgated on December 3, 2014, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408.
 - (A) Existing Units.
- 1. Annual Submittal. The director must submit to the U.S. Environmental Protection Agency (EPA), in a format prescribed by the administrator, the TR NO_x Ozone Season allowances listed in Table I taking into account any modifications necessary in accordance with paragraph (3)(A)2. of this rule. This submittal must meet the following schedule:
- A. By June 1, 2016, the director will submit to EPA allowances for TR NO_x Ozone Season units for the control periods in 2017 and 2018:
- B. By June 1, 2017, the director will submit to EPA allowances for TR NO_x Ozone Season units for the control periods in 2019 and 2020.
- C. By June 1, 2018, the director will submit to EPA allowances for TR NO_x Ozone Season units for the control periods in 2021 and 2022; and
- D. By June 1, 2019, and June 1 of each year thereafter, the director will submit to EPA allowances for TR NO_x Ozone Season



units for the control periods in the fourth year after the year in which the submission is made.

- 2. Non-operating Units. If a unit in Table I of this rule does not operate during two (2) consecutive control periods after 2014, the submittal made under paragraph (3)(A)1. of this rule will show zero (0) TR Ozone Season NO_x allowances for such unit for the control period in the fifth year after these two (2) such years and in each year after that fifth year. All TR NO, Ozone Season allowances that would otherwise have been allocated to such unit will be allocated to the new unit set-aside for the state for the respective years involved. If this subsection is applicable, any resulting changes to the submittal under paragraph (3)(A)1. of this rule will be determined in accordance with the following:
- A. Every year, the director will review the operation of each unit listed in Table I and issue a notification that lists any unit in Table I that has not operated during two (2) consecutive control periods after 2014. Any notification made under this subparagraph will specify the first year in which allowances listed in Table I will be terminated for the applicable unit(s) under paragraph (3)(A)2. of this rule;
- B. For each notification required in subparagraph (3)(A)2.A. of this rule, the director will provide an opportunity for submission of objections to the units referenced in such notice that must be submitted by the deadline specified in such notification in order to be considered; and
- C. If there are objections, the director will review them and issue a notification responding to objections received along with any adjustments made to the list.



Table I

Source Name	Source ID	Unit ID	TR NO _x Ozone Season unit allowances (tons) for 2017 and thereafter	
Asbury	2076	1	394	
Audrain Power Plant	55234	CT1	1	
Audrain Power Plant	55234	CT2	1	
Audrain Power Plant	55234	CT3	1	
Audrain Power Plant	55234	CT4	1	
Audrain Power Plant	55234	CT5	1	
Audrain Power Plant	55234	CT6	1	
Audrain Power Plant	55234	CT7	1	
Audrain Power Plant	55234	CT8	1	
Blue Valley	2132	3	65	
Chamois Power Plant	2169	2	101	
Chillicothe	2122	GT1A	1	
Chillicothe	2122	GT1B	0	
Chillicothe	2122	GT2A	0	
Chillicothe	2122	GT2B	0	
Columbia	2123	6	18	
Columbia	2123	7	26	
Columbia	2123	8	0	
Columbia Energy Center (MO)	55447	CT01	1	
Columbia Energy Center (MO)	55447	CT02	1	
Columbia Energy Center (MO)	55447	CT03	1	
Columbia Energy Center (MO)	55447	CT04	0	
Dogwood Energy Facility	55178	CT-1	23	
Dogwood Energy Facility	55178	CT-2	18	
Empire District Elec Co Energy Ctr	6223	1	1	
Empire District Elec Co Energy Ctr	6223	2	1	
Empire District Elec Co Energy Ctr	6223	3A	6	
Empire District Elec Co Energy Ctr	6223	3B	6	
Empire District Elec Co Energy Ctr	6223	4A	6	
Empire District Elec Co Energy Ctr	6223	4B	6	
Essex Power Plant	7749	1	7	
Fairgrounds	2082	CT01	0	
Greenwood Energy Center	6074	1	2	
Greenwood Energy Center	6074	2	2	
Greenwood Energy Center	6074	3	3	



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Greenwood Energy Center	6074	4	1 002
Hawthorn	2079	5A	1,082
Hawthorn	2079	6	1
Hawthorn	2079	7	6
Hawthorn	2079	8	7
Hawthorn	2079	9	21
Higginsville Municipal Power Plant	2131	4A	1
Higginsville Municipal Power Plant	2131	4B	0
Holden Power Plant	7848	1	3
Holden Power Plant	7848	2	4
Holden Power Plant	7848	3	3
Howard Bend	2102	CT1A	0
Howard Bend	2102	CT1B	0
Iatan	6065	1	1,374
James River	2161	GT1	6
James River	2161	GT2	12
James River	2161	3	87
James River	2161	4	102
James River	2161	5	186
John Twitty Energy Center	6195	1	351
John Twitty Energy Center	6195	CT1A	1
John Twitty Energy Center	6195	CT1B	1
John Twitty Energy Center	6195	CT2A	1
John Twitty Energy Center	6195	CT2B	1
Labadie	2103	1	986
Labadie	2103	2	1,038
Labadie	2103	3	1,115
Labadie	2103	4	1,100
Lake Road	2098	6	178
Lake Road	2098	GT5	1
McCartney Generating Station	7903	MGS1A	9
McCartney Generating Station	7903	MGS1B	9
McCartney Generating Station	7903	MGS2A	8
McCartney Generating Station	7903	MGS2A MGS2B	8
Meramec	2104	1	255
Meramec	2104	2	250
		3	483
Meramec	2104	3 4	
Meramec	2104		632
Meramec	2104	CT01	0
Meramec	2104	CT2A	0
Meramec	2104	CT2B	0
Mexico	6650	CT01	0
Moberly	6651	CT01	0
Montrose	2080	1	311



Montrose	2080	2	295
Montrose	2080	3	307
Moreau	6652	CT01	0
New Madrid Power Plant	2167	1	989
New Madrid Power Plant	2167	2	994
Nodaway Power Plant	7754	1	4
Nodaway Power Plant	7754	2	5
Northeast Generating Station	2081	11	0
Northeast Generating Station	2081	12	0
Northeast Generating Station	2081	13	0
Northeast Generating Station	2081	14	0
Northeast Generating Station	2081	15	0
Northeast Generating Station	2081	16	0
Northeast Generating Station	2081	17	0
Northeast Generating Station	2081	18	0
Peno Creek Energy Center	7964	CT1A	8
Peno Creek Energy Center	7964	CT1B	7
Peno Creek Energy Center	7964	CT2A	7
Peno Creek Energy Center	7964	CT2B	6
Peno Creek Energy Center	7964	CT3A	7
Peno Creek Energy Center	7964	CT3B	8
Peno Creek Energy Center	7964	CT4A	8
Peno Creek Energy Center	7964	CT4B	8
Ralph Green Station	2092	3	1
Rush Island	6155	1	885
Rush Island	6155	2	916
Sibley	2094	1	91
Sibley	2094	2	94
Sibley	2094	3	611
Sikeston	6768	1	548
Sioux	2107	1	773
Sioux	2107	2	690
South Harper Peaking Facility	56151	1	12
South Harper Peaking Facility	56151	2	16
South Harper Peaking Facility	56151	3	20
St. Francis Power Plant	7604	1	19
St. Francis Power Plant	7604	2	18
State Line (MO)	7296	1	5
State Line (MO)	7296	2-1	28
State Line (MO)	7296	2-2	29
Thomas Hill Energy Center	2168	MB1	366
Thomas Hill Energy Center	2168	MB2	557
Thomas Hill Energy Center	2168	MB3	1,166
Viaduct	2096	CT01	0
Total			19,831

Note: Being included or excluded on the list of sources in Table I does not constitute a determination that such source is or is not a TR NO_x Ozone Season unit. The determination of applicability for TR NO_x Ozone Season units is in 40 CFR 97.504.

- (B) New Units.
- 1. Annual Submittal. For the TR NO_x Ozone Season control period in 2017 and each control period thereafter, the director must submit to EPA, in a format prescribed by the administrator, the TR NO_x Ozone Season allowances as determined under this subsection by July 1 of the applicable control period.
 - 2. New unit set-asides.
- A. Allowance Calculation. Every year, the director will calculate the TR NO, Ozone Season allowance allocation to each TR NO, Ozone Season unit in a state, in accordance with subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule, for the control period in the year of the applicable submittal deadline under paragraph (3)(B)1. of this rule. Once the calculations are complete, the director will contact all facilities that will receive allocations under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule for the control period in the year of the applicable submittal deadline under paragraph (3)(B)1. of this rule to confirm that the calculations were performed in accordance with this rule, and make adjustments to the calculations if necessary.
- B. Excess Allowances. If the new unit set-aside for such control period contains TR NO_x Ozone Season allowances remaining after the calculations performed under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule have been completed, then allowances will be calculated in accordance with subparagraph (3)(B)3.I. of this rule.
- C. Industry Requests for Excess Allowances. If a facility owner, operator, or designated representative wishes to receive allowances in accordance with subparagraph (3)(B)3.I. of this rule, for any control period, then by April 5 of the applicable control period, the facility owner, operator, or designated representative must submit information to the director confirming that a TR NO, Ozone Season unit commenced commercial operation during the period starting May 1 of the year before the year of such control period and ending March 31 of the year of such control period. The submittal must also include the calculation of eligible allowances for use in subparagraph (3)(B)3.I. of this rule, for each TR NO_x Ozone Season unit that commenced operation during the period starting May 1 of the year before the year of such control period and ending March 31 of the year of such control period.
- (I) The calculation of eligible allowances must be in accordance with part (3)(B)3.I.(III) of this rule in order for such units to be eligible to receive any allowances in accordance with subparagraph (3)(B)3.I. of this rule.

- (II) Each year, the director will review any submissions made in accordance with this paragraph to confirm that units identified in the submissions are TR NO, Ozone Season units that commenced commercial operation during the period starting May 1 of the year before the year of such control period and ending March 31 of the year of such control period. The director will also confirm that the submission includes the correct calculations for eligible allowances in accordance with part (3)(B)3.I.(III) of this rule. If, during the reviews, the director identifies any discrepancies with the identified units or the calculations in a submission made in accordance with the paragraph, the director may request additional information from the facility owner. operator, or designated representative that made the submission. If additional information is requested, the facility owner, operator, or designated representative must provide the requested information by the deadline specified in the information request; otherwise, units identified in such submission will not be eligible for allowances in accordance with subparagraph (3)(B)3.I. of this rule for the applicable control period.
- D. Public Notification. The director will determine the TR $\mathrm{NO_x}$ Ozone Season allowance allocation to each TR $\mathrm{NO_x}$ Ozone Season unit in accordance with subparagraphs (3)(B)3.I., (3)(B)3.J., and (3)(B)3.L. of this rule and 40 CFR 97.506(b)(2) and 40 CFR 97.530 through 40 CFR 97.535. By June 1 of each year, the director will issue a notification making available the results of all allowance determinations from the new unit set-aside for the control period in which the notification is made.
- (I) For each notification required in part (3)(B)2.D.(II) of this rule, the director will provide an opportunity for submission of objections to the calculations referenced in such notice.
- (II) If there are objections, the director will review them and provide notification stating the outcome.
- E. Allowance Changes. If any TR NO_x Ozone Season allowances are added to the new unit set-aside after submittals as required in subparagraph (3)(B)2.C. of this rule, the director will issue additional notifications, as deemed appropriate, of the allocation of such TR NO_x Ozone Season allowances in accordance with subparagraph (3)(B)3.J. of this rule.
- 3. New Unit Ozone Season Allowance Allocation Methodology. For each control period in 2017 and thereafter and for the TR NO_{x} Ozone Season units in Missouri, the director will allocate TR NO_{x} Ozone Season allowances to the TR NO_{x} Ozone Season units as follows:

- A. Units Eligible to Receive Allowances. The TR NO_x Ozone Season allowances will be allocated to the following TR NO_x Ozone Season units, except as provided in subparagraph (3)(B)3.J. of this rule:
- (I) TR NO_x Ozone Season units that are not listed in Table I in paragraph (3)(A)2. of this rule;
- (II) TR NO_x Ozone Season units whose allocation of an amount of TR NO_x Ozone Season allowances for such control period listed in Table I in paragraph (3)(A)2. of this rule is covered by 40 CFR 97.511(c)(2) or (3);
- (III) TR NO $_{\rm x}$ Ozone Season units that are listed in Table I in paragraph (3)(A)2. of this rule and the allocation to such unit(s) is terminated for the applicable control period pursuant to paragraph (3)(A)2. of this rule, and that operate during the control period immediately preceding such control period; or
- (IV) For purposes of subparagraph (3)(B)3.I. of this rule, TR NO_x Ozone Season units under 40 CFR 97.511(c)(1)(ii) whose allocation of an amount of TR NO_x Ozone Season allowances for such control period under subparagraph (3)(B)2. of this rule is covered by 40 CFR 97.511(c)(2) or (3);
- B. Total Allowances Available. The director will establish a separate new unit setaside for the state for each such control period. Each such new unit set-aside will be allocated TR NO_x Ozone Season allowances in an amount equal to the difference between the Missouri TR NO, Ozone Season trading budget for 2017 and thereafter, as set forth in 40 CFR 97.510(a), and the total number of allowances allocated in accordance with paragraph (3)(A)1. of this rule for such control period. The new unit set-aside will be allocated additional TR NO_x Ozone Season allowances (if any) in accordance with paragraph (3)(A)2. of this rule and 40 CFR 97.511(c)(5);
- C. Eligible Control Periods. The director will determine, for each TR NO_{x} Ozone Season unit described in subparagraph (3)(B)3.A. of this rule, an allocation of TR NO_{x} Ozone Season allowances for the later of the following control periods and for each subsequent control period:
 - (I) The control period in 2017;
- (II) The first control period after the control period in which the TR ${\rm NO_x}$ Ozone Season unit commences commercial operation;
- (III) For a unit described in part (3)(B)3.A.(II) of this rule, the first control period in which the TR NO_x Ozone Season unit operates in the state after operating in another jurisdiction and for which the unit is not already allocated one (1) or more TR NO_x Ozone Season allowances; and



- (IV) For a unit described in part (3)(B)3.A.(III) of this rule, the first control period after the control period in which the unit resumes operation, or the first control period in which the allocation for such unit listed in Table I in paragraph (3)(A)2. of this rule is terminated pursuant to paragraph (3)(A)2. of this rule, whichever is later;
- D. Allocations. The allocation to each TR NO_x Ozone Season unit described in parts (3)(B)3.A.(I) through (3)(B)3.A.(III) of this rule and for each control period described in subparagraph (3)(B)3.C. of this rule will be an amount equal to the unit's total tons of NO_x emissions during the immediately preceding control period. The director will adjust the allocation amount in this subparagraph in accordance with subparagraphs (3)(B)3.E. through (3)(B)3.G. and (3)(B)3.L. of this rule;
- E. Sum of Allowances. The director will calculate the sum of the TR NO_x Ozone Season allowances determined for all such TR NO_x Ozone Season units under subparagraph (3)(B)3.D. of this rule in the state for such control period;
- F. Extra Allowance Allocation. If the amount of TR NO_{x} Ozone Season allowances in the new unit set-aside for the state for such control period is greater than or equal to the sum under subparagraph (3)(B)3.E. of this rule, then the director will allocate the amount of TR NO_{x} Ozone Season allowances determined for each such TR NO_{x} Ozone Season unit under subparagraph (3)(B)3.D. of this rule;
- G. Insufficient Allowance Allocation. If the amount of TR NO_x Ozone Season allowances in the new unit set-aside for the state for such control period is less than the sum under subparagraph (3)(B)3.E. of this rule, then the director will allocate to each such TR NO_x Ozone Season unit the amount of the TR NO_x Ozone Season allowances determined under subparagraph (3)(B)3.D. of this rule for the unit, multiplied by the amount of TR NO_x Ozone Season allowances in the new unit set-aside for such control period, divided by the sum under subparagraph (3)(B)3.E. of this rule, and rounded to the nearest allowance;
- H. Confirmation of Allowances. The director will contact facilities, as described in subparagraph (3)(B)2.A. of this rule to confirm the amount of TR NO_x Ozone Season allowances allocated under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule for such control period to each TR NO_x Ozone Season unit eligible for such allocation;
- I. Allowance Calculation for Units That Recently Began Operation. If, after completion of the procedures under subparagraphs (3)(B)3.E. through (3)(B)3.H. of this

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rule for such control period, any unallocated TR NO_x Ozone Season allowances remain in the new unit set-aside for the state for such control period, the director will allocate such TR NO_x Ozone Season allowances as follows:

- (I) For any submission made in accordance with subparagraph (3)(B)2.C. of this rule, the submitting facility owner, operator, or designated representative may include the calculation of eligible allowances for such control period as specified in part (3)(B)3.I.(III) of this rule. If such submission is not made or fails to include the calculation of eligible allowances under this part by the April 5 deadline, or if the facility owner, operator, or designated representative fails to provide additional information requested in accordance with part (3)(B)2.C.(II) of this rule by the applicable deadline, then no allowances will be awarded to such unit in accordance with this subparagraph for such control period;
- (II) The director will review submissions made in accordance with subparagraph (3)(B)2.C. of this rule, as specified in part (3)(B)2.C.(II) of this rule and may adjust the units identified in such submission if they are not eligible for allowances under this subparagraph, and the director may also adjust the calculation of eligible allowances included in such submission to ensure they are in accordance with part (3)(B)3.I.(III) of this rule;
- (III) The calculation of eligible TR NO_x Ozone Season allowances for a specific control period for TR NO_x Ozone Season units that commenced commercial operation during the period starting May 1 of the year before the year of such control period and ending March 31 of the year of such control period must be as follows;

$$EA = \frac{(ER)(HR) \left(NP_{Cap}\right) (CP_{Tot}) (CF) (24^{hours}/_{day}) \left(1,000^{kW}/_{MW_e}\right)}{(2,000^{lb}/_{ton}) (1,000,000^{BTU}/_{mmBTU})}$$

Where:

EA = eligible TR NO_x Ozone Season Allowances

ER = the unit's permitted emission rate from the unit's construction permit approved under 10 CSR 10-6.060 (lb/mmBTU)

HR = the heat rate efficiency for the generator that the unit serves (BTU/kW-hr)

NP_{Cap} = nameplate capacity of the generator that the unit serves (MWe)

CP_{Tot} = number of days in the control period

CF = the unit's default capacity factor from Table II below

Table II - Default Capacity Factors for New Units

Unit Types	Annual SO ₂ & NO _x Programs	Ozone Season NO _x Program
Coal-Fired Steam Boiler	0.85	0.92
IGCC (Coal Gasification)	0.74	0.73
Oil-Fired Steam Boiler	0.30	0.39
Natural Gas-Fired Steam Boiler	0.44	0.47
Simple Cycle Combustion Turbine	0.24	0.32
Combined Cycle Combustion Turbine	0.66	0.71

- (IV) The director will determine, for each unit described in subparagraph (3)(B)3.A. of this rule that commenced commercial operation during the period starting May 1 of the year before the year of such control period and ending March 31 of the year of such control period, the positive difference (if any) between the unit's emissions during the previous control period and the amount of eligible TR NO_x Ozone Season allowances as calculated under part (3)(B)3.I.(III) of this rule;
- (V) The director will determine the sum of the positive differences determined under part (3)(B)3.I.(IV) of this rule;
- (VI) If the amount of unallocated TR NO_x Ozone Season allowances remaining in the new unit set-aside for the state for such control period is greater than or equal to the sum determined under part (3)(B)3.I.(V) of this rule, then the director will allocate the amount of TR NO_x Ozone Season allowances determined for each such TR NO_x Ozone Season unit under part (3)(B)3.I.(IV) of this rule; and
- (VII) If the amount of unallocated TR $\mathrm{NO_x}$ Ozone Season allowances remaining in the new unit set-aside for the state for such control period is less than the sum under part (3)(B)3.I.(V) of this rule, then the director will allocate to each such TR $\mathrm{NO_x}$ Ozone Season unit the amount of the TR $\mathrm{NO_x}$ Ozone Season allowances determined under part (3)(B)3.I.(IV) of this rule for the unit, multiplied by the amount of unallocated TR $\mathrm{NO_x}$ Ozone Season allowances remaining in the new unit set-aside for such control period, divided by the sum under part (3)(B)3.I.(V) of this rule, and rounded to the nearest allowance:
- J. Distribution of Remaining Allocations. If, after completion of the procedures under subparagraphs (3)(B)3.I. and (3)(B)3.L. of this rule for such control period, any unallocated TR NO_{x} Ozone Season allowances remain in the new unit set-aside for the state for such control period, the director will allocate to each TR NO_{x} Ozone Season unit that is in the state, is allocated an amount of TR NO_{x} Ozone Season allowances listed in Table I in paragraph (3)(A)2. of this rule, and continues to be allocated TR NO_{x} Ozone Season allowances for such control period in accordance with paragraph (3)(A)2. of this rule, an

amount of TR NO_x Ozone Season allowances equal to the following: the total amount of such remaining unallocated TR NO_x Ozone Season allowances in such new unit set-aside, multiplied by the unit's allocation listed in Table I in paragraph (3)(A)2. of this rule for such control period, divided by the remainder of the amount of tons in the applicable state NO_x Ozone Season trading budget minus the amount of tons in such new unit set-aside for the state for such control period, and rounded to the nearest allowance;

K. Public Notification. The director will issue notifications in subparagraphs (3)(B)2.D. and (3)(B)2.E. of this rule, of the amount of TR NO_x Ozone Season allowances allocated under subparagraphs (3)(B)3.B. through (3)(B)3.G., (3)(B)3.I., (3)(B)3.J., and (3)(B)3.L. of this rule for such control period to each TR NO_x Ozone Season unit eligible for such allocation; and

L. Allocation Tabulations That Exceed or Are Less Than the New Unit Set-Aside.

(I) Notwithstanding the requirements of subparagraphs (3)(B)3.B. through (3)(B)3.K. of this rule, if the calculations of allocations of a new unit set-aside for a control period in a given year under subparagraph (3)(B)3.G. of this rule, subparagraph (3)(B)3.F. and part (3)(B)3.I.(VII) of this rule, or subparagraph (3)(B)3.F., part (3)(B)3.I.(VI), and subparagraph (3)(B)3.J. of this rule would otherwise result in total allocations of such new unit set-aside exceeding the total amount of such new unit setaside, then the director will adjust the results of the calculations under subparagraph (3)(B)3.G., part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, as follows. The director will list the TR NO Ozone Season units in descending order based on the amount of such units' allocations under subparagraph (3)(B)3.G., part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under subparagraph (3)(B)3.G., part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, by one (1) TR NO, Ozone Season allowance (but not below zero (0)) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

(II) Notwithstanding the requirements of subparagraphs (3)(B)3.J. and (3)(B)3.K. of this rule, if the calculations of allocations of a new unit set-aside for a control period in a given year under subparagraph (3)(B)3.F., part (3)(B)3.I.(VI), and

subparagraph (3)(B)3.J. of this rule would otherwise result in a total allocations of such new unit set-aside less than the total amount of such new unit set-aside, then the director will adjust the results of the calculations under subparagraph (3)(B)3.J. of this rule, as follows. The director will list the TR NO. Ozone Season units in descending order based on the amount of such units' allocations under subparagraph (3)(B)3.J. of this rule and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's allocation under subparagraph (3)(B)3.J. of this rule by one (1) TR NO_x Ozone Season allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.

- (4) Reporting and Record Keeping. The director shall maintain TR NO_x Ozone Season unit allowance records submitted to EPA for each TR NO_x Ozone Season control period for a minimum of five (5) years.
- (5) Test Methods. (Not Applicable).

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed May 15, 2015, effective Dec. 30, 2015.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.376 Cross-State Air Pollution Rule Annual ${\rm SO}_2$ Trading Allowance Allocations

PURPOSE: The purpose of this rule is to reallocate annual sulfur dioxide (SO₂) emission allowances for use with the U.S. Environmental Protection Agency's (EPA's) annual SO₂ regional emission reduction program as established in the federal Cross-State Air Pollution Rule (CSAPR) for 2017 and beyond. The federal CSAPR program will continue to be administered by EPA. The state rule only redistributes annual SO2 allowances. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is a November 7, 2011 email with agreement between Empire District Electric Co. (Empire) and Kansas City Power and Light (KCP&L) and November 26, 2014 and March 24, 2015 meeting conference call notes.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Applicability. This rule shall apply to all Transport Rule (TR) sulfur dioxide (SO₂) Annual Group 1 units located in the state of Missouri.

(2) Definitions.

- (A) Definitions for key words and phrases used in this rule may be found in 40 CFR 97.602 and 40 CFR 97.603 promulgated as of July 1, 2014, and *Federal Register* Notice 79 FR 71663 promulgated on December 3, 2014, are hereby incorporated by reference as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408.
- (B) Notification—Any action by the director to convey information to affected sources and interested parties. This includes, but is not limited to, public web postings with email alerts.
- (C) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.
- (3) General Provisions. This rule replaces 40 *Code of Federal Regulations* (CFR) 97.611(a), 40 CFR 97.611(b)(1) and 40 CFR 97.612(a) promulgated as of June 30, 2014, and *Federal Register* Notice 79 FR 71663 promulgated on December 3, 2014, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408.

(A) Existing Units.

- 1. Annual Submittal. The director must submit to the U.S. Environmental Protection Agency (EPA), in a format prescribed by the administrator, the TR SO₂ Annual allowances listed in Table I taking into account any modifications necessary in accordance with paragraph (3)(A)2. of this rule. This submittal must meet the following schedule:
- A. By June 1, 2016, the director will submit to EPA allowances for TR SO₂ Annual units for the control periods in 2017 and 2018;
- B. By June 1, 2017, the director will submit to EPA allowances for TR SO₂ Annual units for the control periods in 2019 and 2020.
- C. By June 1, 2018, the director will submit to EPA allowances for TR SO₂ Annual units for the control periods in 2021 and 2022;



and

- D. By June 1, 2019, and June 1 of each year thereafter, the director will submit to EPA allowances for TR $\rm SO_2$ Annual units for the control periods in the fourth year after the year in which the submission is made.
- 2. Non-operating Units. If a unit in Table I of this rule does not operate during two (2) consecutive control periods after 2014, the submittal made under paragraph (3)(A)1. of this rule will show zero (0) TR Annual SO₂ allowances for such unit for the control period in the fifth year after these two (2) such years and in each year after that fifth year. All TR SO₂ Annual allowances that would otherwise have been allocated to such unit will be allocated to the new unit set-aside for the state for the respective years involved. If this subsection is applicable, any resulting changes to the submittal under paragraph (3)(A)1. of this rule will be determined in accordance with the following:
- A. Every year, the director will review the operation of each unit listed in Table I and issue a notification that lists any unit in Table I that has not operated during two (2) consecutive control periods after 2014. Any notification made under this subparagraph will specify the first year in which allowances listed in Table I will be terminated for the applicable unit(s) under paragraph (3)(A)2. of this rule;
- B. For each notification required in subparagraph (3)(A)2.A. of this rule, the director will provide an opportunity for submission of objections to the units referenced in such notice that must be submitted by the deadline specified in such notification in order to be considered; and
- C. If there are objections, the director will review them and issue a notification responding to objections received along with any adjustments made to the list.



Table I

			TR SO ₂ Group 1 unit
Source	Source	Unit	allowances (tons) for 2017
Name	ID	ID	and thereafter
A 1	2076	1	4 400
Asbury	2076	1	4,480
Audrain Power Plant	55234		0
Audrain Power Plant	55234	CT2	0
Audrain Power Plant	55234		0
Audrain Power Plant	55234		0
Audrain Power Plant	55234	CT5	0
Audrain Power Plant	55234	CT6	0
Audrain Power Plant	55234		0
Audrain Power Plant	55234		0
Blue Valley	2132	3	452
Chamois Power Plant	2169		893
Chillicothe	2122		0
Chillicothe	2122	GT1B	0
Chillicothe	2122	GT2A	1
Chillicothe	2122	GT2B	0
Columbia	2123	6	78
Columbia	2123	7	215
Columbia	2123	8	0
Columbia Energy Center (MO)	55447	CT01	0
Columbia Energy Center (MO)	55447	CT02	0
Columbia Energy Center (MO)	55447	CT03	0
Columbia Energy Center (MO)	55447	CT04	0
Dogwood Energy Facility	55178	CT-1	1
Dogwood Energy Facility	55178	CT-2	1
Empire District Elec Co Energy Ctr	6223	1	0
Empire District Elec Co Energy Ctr	6223	2	0
Empire District Elec Co Energy Ctr	6223	3A	1
Empire District Elec Co Energy Ctr	6223	3B	1
Empire District Elec Co Energy Ctr	6223	4A	1
Empire District Elec Co Energy Ctr	6223	4B	1
Essex Power Plant	7749	1	0
Fairgrounds	2082	CT01	1
Greenwood Energy Center	6074	1	1
Greenwood Energy Center	6074	2	0
Greenwood Energy Center	6074	3	0
Greenwood Energy Center	6074	4	1
Hawthorn	2079	5A	2,643
Hawthorn	2079	6	0
Hawthorn	2079	7	0
Hawthorn	2079	8	0



Hawthorn	2079	9	1
Higginsville Municipal Power Plant	2131	4A	0
Higginsville Municipal Power Plant	2131	4B	0
Holden Power Plant	7848	1	0
Holden Power Plant	7848	2	1
Holden Power Plant	7848	3	0
Howard Bend	2102	CT1A	1
Howard Bend	2102	CT1B	1
Iatan	6065	1	9,833
James River	2161	GT1	0
James River	2161	GT2	0
James River	2161	3	747
James River	2161	4	847
James River	2161	5	1,566
John Twitty Energy Center	6195	1	2,883
John Twitty Energy Center	6195	CT1A	0
John Twitty Energy Center	6195	CT1B	0
John Twitty Energy Center	6195	CT2A	0
John Twitty Energy Center	6195	CT2B	0
Labadie	2103	1	9,056
Labadie	2103	2	9,265
Labadie	2103	3	9,633
Labadie	2103	4	9,929
Lake Road	2098	6	1,490
Lake Road	2098	GT5	2
McCartney Generating Station	7903	MGS1A	0
McCartney Generating Station	7903	MGS1B	0
McCartney Generating Station	7903	MGS2A	0
McCartney Generating Station	7903	MGS2B	0
Meramec	2104	1	2,326
Meramec	2104	2	2,192
Meramec	2104	3	3,869
Meramec	2104	4	5,394
Meramec	2104	CT01	1
Meramec	2104	CT2A	0
Meramec	2104	CT2B	0
Mexico	6650	CT01	1
Moberly	6651	CT01	2
Montrose	2080	1	2,608
Montrose	2080	2	2,555
Montrose	2080	3	2,684
Moreau	6652	CT01	1
New Madrid Power Plant	2167	1	8,190
New Madrid Power Plant	2167	2	7,628
Nodaway Power Plant	7754	1	0
Nodaway Power Plant	7754	2	0
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Northeast Generating Station	2081	11	0
Northeast Generating Station	2081	12	0
Northeast Generating Station	2081	13	0
Northeast Generating Station	2081	14	0
Northeast Generating Station	2081	15	0
Northeast Generating Station	2081	16	0
Northeast Generating Station	2081	17	1
Northeast Generating Station	2081	18	0
Peno Creek Energy Center	7964	CT1A	0
Peno Creek Energy Center	7964	CT1B	0
Peno Creek Energy Center	7964	CT2A	0
Peno Creek Energy Center	7964	CT2B	0
Peno Creek Energy Center	7964	CT3A	0
Peno Creek Energy Center	7964	CT3B	0
Peno Creek Energy Center	7964	CT4A	0
Peno Creek Energy Center	7964	CT4B	0
Ralph Green Station	2092	3	0
Rush Island	6155	1	9,492
Rush Island	6155	2	8,700
Sibley	2094	1	799
Sibley	2094	2	788
Sibley	2094	3	5,037
Sikeston	6768	1	4,564
Sioux	2107	1	6,743
Sioux	2107	2	6,083
South Harper Peaking Facility	56151	1	0
South Harper Peaking Facility	56151	2	0
South Harper Peaking Facility	56151	3	0
St. Francis Power Plant	7604	1	1
St. Francis Power Plant	7604	2	1
State Line (MO)	7296	1	0
State Line (MO)	7296	2-1	2
State Line (MO)	7296	2-2	3
Thomas Hill Energy Center	2168	MB1	2,982
Thomas Hill Energy Center	2168	MB2	4,665
Thomas Hill Energy Center	2168	MB3	9,621
Viaduct	2096	CT01	0

Total 160,959

Note: Being included or excluded on the list of sources in Table I does not constitute a determination that such source is or is not a TR SO₂ Annual unit. The determination of applicability for TR SO₂ Annual units is in 40 CFR 97.604.



- (B) New Units.
- 1. Annual Submittal. For the TR ${\rm SO}_2$ Annual control period in 2017 and each control period thereafter, the director must submit to EPA, in a format prescribed by the administrator, the TR ${\rm SO}_2$ Annual allowances as determined under this subsection by July 1 of the applicable control period.

2. New unit set-asides.

- A. Allowance Calculation. Every year, the director will calculate the TR SO₂ Annual allowance allocation to each TR SO₂ Annual unit in a state, in accordance with subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule, for the control period in the year of the applicable submittal deadline under paragraph (3)(B)1. of this rule. Once the calculations are complete, the director will contact all facilities that will receive allocations under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule for the control period in the year of the applicable submittal deadline under paragraph (3)(B)1. of this rule to confirm that the calculations were performed in accordance with this rule, and make adjustments to the calculations if necessary.
- B. Excess Allowances. If the new unit set-aside for such control period has any TR SO₂ Annual allowances remaining after the calculations performed under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule have been completed, then allowances will be calculated in accordance with subparagraph (3)(B)3.I. of this rule.
- C. Industry Requests for Excess Allowances. If a facility owner, operator, or designated representative wishes to receive allowances in accordance with subparagraph (3)(B)3.I. of this rule, for any control period, then by April 5 of the applicable control period, the facility owner, operator, or designated representative must submit information to the director confirming that a TR SO₂ Annual unit commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period. The submittal must also include the calculation of eligible allowances for use in subparagraph (3)(B)3.I. of this rule, for each TR SO₂ Annual unit that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period.
- (I) The calculation of eligible allowances must be in accordance with part (3)(B)3.I.(III) of this rule in order for such units to be eligible to receive any allowances in accordance with subparagraph (3)(B)3.I. of this rule.
- (II) Each year, the director will review any submissions made in accordance

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- with this paragraph to confirm that units identified in the submissions are TR SO₂ Annual units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period. The director will also confirm that the submission includes the correct calculations for eligible allowances in accordance with part (3)(B)3.I.(III) of this rule. If, during the review, the director identifies any discrepancies with the identified units or the calculations in a submission made in accordance with this paragraph, the director may request additional information from the facility owner, operator, or designated representative that made the submission. If additional information is requested, the facility owner, operator, or designated representative must provide the requested information by the deadline specified in the information request; otherwise, units identified in such submission will not be eligible for allowances in accordance with subparagraph (3)(B)3.I. of this rule for the applicable control period.
- D. Public Notification. The director will determine the TR $\rm SO_2$ Annual allowance allocation to each TR $\rm SO_2$ Annual unit in accordance with subparagraphs (3)(B)3.I., (3)(B)3.J., and (3)(B)3.L. of this rule and 40 CFR 97.606(b)(2) and 40 CFR 97.630 through 40 CFR 97.635. By June 1 of each year, the director will issue a notification making available the results of all allowance determinations from the new unit set-aside for the control period in which the notification is made.
- (I) For each notification required in part (3)(B)2.D.(II) of this rule, the director will provide an opportunity for submission of objections to the calculations referenced in such notice.
- (II) If there are objections, the director will review them and provide notification stating the outcome.
- E. Allowance Changes. If any TR SO₂ Annual allowances are added to the new unit set-aside after submittals as required in subparagraph (3)(B)2.C. of this rule, the director will issue additional notifications, as deemed appropriate, of the allocation of such TR SO₂ Annual allowances in accordance with subparagraph (3)(B)3.J. of this rule.
- 3. New Unit Annual Allowance Allocation Methodology. For each control period in 2017 and thereafter and for the TR SO_2 Annual units in Missouri, the director will allocate TR SO_2 Annual allowances to the TR SO_2 Annual units as follows:
- A. Units Eligible to Receive Allowances. The TR SO₂ Annual allowances will be allocated to the following TR SO₂

- Annual units, except as provided in subparagraph (3)(B)3.J. of this rule:
- (I) TR SO_2 Annual units that are not listed in Table I in paragraph (3)(A)2. of this rule:
- (II) TR SO₂ Annual units whose allocation of an amount of TR SO₂ Annual allowances for such control period listed in Table I in paragraph (3)(A)2. of this rule is covered by 40 CFR 97.611(c)(2) or (3);
- (III) TR SO₂ Annual units that are listed in Table I in paragraph (3)(A)2. of this rule and the allocation to such unit(s) is terminated for the applicable control period pursuant to paragraph (3)(A)2. of this rule, and that operate during the control period immediately preceding such control period; or
- (IV) For purposes of subparagraph (3)(B)3.I. of this rule, TR SO₂ Annual units under 40 CFR 97.611(c)(1)(ii) whose allocation of an amount of TR SO₂ Annual allowances for such control period under paragraph (3)(B)2. of this rule is covered by 40 CFR 97.611(c)(2) or (3);
- B. Total Allowances Available. The director will establish a separate new unit setaside for the state for each such control period. Each such new unit set-aside will be allocated TR SO₂ Annual allowances in an amount equal to the difference between the Missouri TR SO₂ Annual trading budget for 2017 and thereafter, as set forth in 40 CFR 97.610(a), and the total number of allowances allocated in accordance with paragraph (3)(A)1. of this rule for such control period. The new unit set-aside will be allocated additional TR SO₂ Annual allowances (if any) in accordance with paragraph (3)(A)2. of this rule and 40 CFR 97.611(c)(5);
- C. Eligible Control Periods. The director will determine, for each TR SO₂ Annual unit described in subparagraph (3)(B)3.A. of this rule, an allocation of TR SO₂ Annual allowances for the later of the following control periods and for each subsequent control period:
 - (I) The control period in 2017;
- (II) The first control period after the control period in which the TR SO₂ Annual unit commences commercial operation;
- (III) For a unit described in part (3)(B)3.A.(II) of this rule, the first control period in which the TR SO_2 Annual unit operates in the state after operating in another jurisdiction and for which the unit is not already allocated one (1) or more TR SO_2 Annual allowances; and
- (IV) For a unit described in part (3)(B)3.A.(III) of this rule, the first control period after the control period in which the unit resumes operation, or the first control period in which the allocation for such unit listed in Table I in paragraph (3)(A)2. of this

rule is terminated pursuant to paragraph (3)(A)2. of this rule, whichever is later;

D. Allocations. The allocation to each TR SO₂ Annual unit described in parts (3)(B)3.Ã.(I) through (3)(B)3.A.(III) of this rule and for each control period described in subparagraph (3)(B)3.C. of this rule will be an amount equal to the unit's total tons of SO₂ emissions during the immediately preceding control period. The director will adjust the allocation amount in this subparagraph in accordance with subparagraphs (3)(B)3.E.through (3)(B)3.G.(3)(B)3.L. of this rule;

E. Sum of Allowances. The director will calculate the sum of the TR SO2 Annual allowances determined for all such TR SO2 Annual units under subparagraph (3)(B)3.D. of this rule in the state for such control peri-

F. Extra Allowance Allocation. If the amount of TR SO2 Annual allowances in the new unit set-aside for the state for such control period is greater than or equal to the sum under subparagraph (3)(B)3.E. of this rule, then the director will allocate the amount of TR SO₂ Annual allowances determined for each such TR SO₂ Annual unit under subparagraph (3)(B)3.D. of this rule;

G. Insufficient Allowance Allocation. If the amount of TR SO₂ Annual allowances in the new unit set-aside for the state for such control period is less than the sum under subparagraph (3)(B)3.E. of this rule, then the director will allocate to each such TR SO2 Annual unit the amount of the TR SO₂ Annual allowances determined under subparagraph (3)(B)3.D. of this rule for the unit, multiplied by the amount of TR SO₂ Annual allowances in the new unit set-aside for such control period, divided by the sum under subparagraph (3)(B)3.E. of this rule, and rounded to the nearest allowance;

H. Confirmation of Allowances. The director will contact facilities as described in subparagraph (3)(B)2.A. of this rule to confirm the amount of TR SO₂ Annual allowances allocated under subparagraphs (3)(B)3.B. through (3)(B)3.G. and (3)(B)3.L. of this rule for such control period to each TR SO₂ Annual unit eligible for such allocation:

I. Allowance Calculation for Units That Recently Began Operation. If, after completion of the procedures under subparagraphs (3)(B)3.E. through (3)(B)3.H. of this rule for such control period, any unallocated TR SO₂ Annual allowances remain in the new unit set-aside for the state for such control period, the director will allocate such TR SO₂ Annual allowances as follows:

(I) For any submission made in accordance with subparagraph (3)(B)2.C. of this rule, the submitting facility owner, operator, or designated representative may include the calculation of eligible allowances for such control period as specified in part (3)(B)3.I.(III) of this rule. If such submission is not made or fails to include the calculation of eligible allowances under this part by the April 5 deadline, or if the facility owner, operator, or designated representative fails to provide additional information requested in accordance with part (3)(B)2.C.(II) of this rule by the applicable deadline; then no allowances will be awarded to such unit in accordance with this subparagraph for such control period;

(II) The director will review submissions made in accordance with subparagraph (3)(B)2.C. of this rule, as specified in part (3)(B)2.C.(II) of this rule and may adjust the units identified in such submission if they are not eligible for allowances under this subparagraph, and the director may also adjust the calculation of eligible allowances included in such submission to ensure they are in accordance with part (3)(B)3.I.(III) of this

(III) The calculation of eligible TR SO₂ Annual allowances for a specific control period for TR SO₂ Annual units that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period must be as follows;

$$EA = \frac{(ER)(HR)(NP_{Cap})(CP_{Tot})(CF)(24^{hours}/_{day})(1.000^{kW}/_{MW_e})}{(2.000^{lb}/_{ton})(1.000.000^{BTU}/_{mmBTU})}$$

Where:

ER

CF

= eligible TR SO₂ Annual Allow-EA ances

= the unit's permitted emission rate from the unit's construction permit approved under 10 CSR 10-6.060 (lb/mmBTU)

= the heat rate efficiency for the HR generator that the unit

serves (BTU/kW-hr)

 $\mathrm{NP}_{\mathrm{Cap}}$ = nameplate capacity of the generator that the unit serves (MWe)

 CP_{Tot} = number of days in the control

period

= the unit's default capacity factor from Table II below

Table II - Default Capacity Factors for New Units

Unit Types	Annual SO ₂ & NO _x Programs	Ozone Season NO _x Program
Coal-Fired Steam Boiler	0.85	0.92
IGCC (Coal Gasification)	0.74	0.73
Oil-Fired Steam Boiler	0.30	0.39
Natural Gas-Fired Steam Boiler	0.44	0.47
Simple Cycle Combustion Turbine	0.24	0.32
Combined Cycle Combustion Turbine	0.66	0.71

(IV) The director will determine, for each unit described in subparagraph (3)(B)3.A. of this rule that commenced commercial operation during the period starting January 1 of the year before the year of such control period and ending March 31 of the year of such control period, the positive difference (if any) between the unit's emissions during the previous control period and the amount of eligible TR SO2 Annual allowances as calculated under part (3)(B)3.I.(III) of this rule;

(V) The director will determine the sum of the positive differences determined under part (3)(B)3.I.(IV) of this rule;

(VI) If the amount of unallocated TR SO₂ Annual allowances remaining in the new unit set-aside for the state for such control period is greater than or equal to the sum determined under part (3)(B)3.I.(V) of this rule, then the director will allocate the amount of TR SO2 Annual allowances determined for each such TR SO₂ Annual unit under part (3)(B)3.I.(IV) of this rule; and

(VII) If the amount of unallocated TR SO₂ Annual allowances remaining in the new unit set-aside for the state for such control period is less than the sum under part (3)(B)3.I.(V) of this rule, then the director will allocate to each such TR SO2 Annual unit the amount of the TR SO₂ Annual allowances determined under part (3)(B)3.I.(IV) of this rule for the unit, multiplied by the amount of unallocated TR SO₂ Annual allowances remaining in the new unit set-aside for such control period, divided by the sum under part (3)(B)3.I.(V) of this rule, and rounded to the nearest allowance;

J. Distribution of Remaining Allocations. If, after completion of the procedures under subparagraphs (3)(B)3.I. and (3)(B)3.L. of this rule for such control period, any unallocated TR SO₂ Annual allowances remain in the new unit set-aside for the state for such control period, the director will allocate to each TR SO₂ Annual unit that is in the state, is allocated an amount of TR SO₂ Annual allowances listed in Table I in paragraph (3)(A)2. of this rule, and continues to be allocated TR SO2 Annual allowances for such control period in accordance with paragraph (3)(A)2. of this rule, an amount of TR SO₂ Annual allowances equal to the following: the total amount of such remaining unallocated



TR SO₂ Annual allowances in such new unit set-aside, multiplied by the unit's allocation listed in Table I in paragraph (3)(A)2. of this rule for such control period, divided by the remainder of the amount of tons in the applicable state SO₂ Annual trading budget minus the amount of tons in such new unit set-aside for the state for such control period, and rounded to the nearest allowance;

- K. Public Notification. The director will issue notifications as described in subparagraphs (3)(B)2.D. and (3)(B)2.E. of this rule, of the amount of TR SO₂ Annual allowances allocated under subparagraphs (3)(B)3.B. through (3)(B)3.G., (3)(B)3.I., (3)(B)3.J., and (3)(B)3.L. of this rule for such control period to each TR SO₂ Annual unit eligible for such allocation; and
- L. Allocation Tabulations That Exceed or Are Less Than the New Unit Set-Aside.
- (I) Notwithstanding the requirements of subparagraphs (3)(B)3.B. through (3)(B)3.K. of this rule, if the calculations of allocations of a new unit set-aside for a control period in a given year under subparagraph (3)(B)3.G. of this rule, subparagraph (3)(B)3.F. and part (3)(B)3.I.(VII) of this rule, or subparagraph (3)(B)3.F., part (3)(B)3.I.(VI), and subparagraph (3)(B)3.J. of this rule would otherwise result in total allocations of such new unit set-aside exceeding the total amount of such new unit setaside, then the director will adjust the results of the calculations under subparagraph (3)(B)3.G., part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, as follows. The director will list the TR SO₂ Annual units in descending order based on the amount of such units' allocations under subparagraph (3)(B)3.G.,part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will reduce each unit's allocation under subparagraph (3)(B)3.G., part (3)(B)3.I.(VII), or subparagraph (3)(B)3.J. of this rule, as applicable, by one (1) TR SO₂ Annual allowance (but not below zero (0)) in the order in which the units are listed and will repeat this reduction process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit set-aside.
- (II) Notwithstanding the requirements of subparagraphs (3)(B)3.J. and (3)(B)3.K. of this rule, if the calculations of allocations of a new unit set-aside for a control period in a given year under subparagraph (3)(B)3.F., part (3)(B)3.I.(VI), and subparagraph (3)(B)3.J. of this rule would otherwise result in a total allocations of such new unit set-aside less than the total amount

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of such new unit set-aside, then the director will adjust the results of the calculations under subparagraph (3)(B)3.J. of this rule, as follows. The director will list the TR SO₂ Annual units in descending order based on the amount of such units' allocations under subparagraph (3)(B)3.J. of this rule and, in cases of equal allocation amounts, in alphabetical order of the relevant source's name and numerical order of the relevant unit's identification number, and will increase each unit's allocation under subparagraph (3)(B)3.J. of this rule by one (1) TR SO₂ Annual allowance in the order in which the units are listed and will repeat this increase process as necessary, until the total allocations of such new unit set-aside equal the total amount of such new unit setaside.

- (4) Reporting and Record Keeping. The director shall maintain TR SO₂ Annual unit allowance records submitted to EPA for each TR SO₂ Annual control period for a minimum of five (5) years.
- (5) Test Methods. (Not Applicable).

AUTHORITY section 643.050, RSMo Supp. 2013.* Original rule filed May 15, 2015, effective Dec. 30, 2015.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.380 Control of NO_x Emissions From Portland Cement Kilns

PURPOSE: This rule reduces emissions of oxides of nitrogen (NO_x) to ensure compliance with the federal NO_x control plan to reduce the transport of air pollutants. The rule establishes NO_x control equipment and NO_x emission levels for cement kilns. The evidence supporting the need for this proposed rulemaking per section 536.016, RSMo, is the U.S. Environmental Protection Agency NO_x State Implementation Plan (SIP) Call dated April 21, 2004.

- (1) Applicability. This rule applies to any cement kiln located in the counties of Bollinger, Butler, Cape Girardeau, Carter, Clark, Crawford, Dent, Dunklin, Franklin, Gasconade, Iron, Jefferson, Lewis, Lincoln, Madison, Marion, Mississippi, Montgomery, New Madrid, Oregon, Pemiscot, Perry, Pike, Ralls, Reynolds, Ripley, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Scott, Shannon, Stoddard, Warren, Washington and Wayne counties and the City of St. Louis that—
- (A) Is a long dry kiln with an actual process rate of at least twelve tons of clinker pro-

duced per hour (12 TPH);

- (B) Is a long wet kiln with an actual process rate of at least ten (10) TPH;
- (C) Is a preheater kiln with an actual process rate of at least sixteen (16) TPH; or
- (D) Is a precalciner or preheater/precalciner kiln with an actual process rate of at least twenty-two (22) TPH.
- (2) Definitions.
- (A) Clinker—The product of a Portland cement kiln from which finished cement is manufactured by milling and grinding.
- (B) Long-dry kiln—A kiln fourteen feet (14') or larger in diameter, four hundred feet (400') or greater in length, which employs no preheating of the feed and the inlet feed to the kiln is dry.
- (C) Long-wet kiln—A kiln fourteen feet (14') or larger in diameter, four hundred feet (400') or greater in length, which employs no preheating of the feed and the inlet feed to the kiln is a slurry.
- (D) Low-NO_x burners—A type of cement kiln burner (a device that functions as an injector of fuel and combustion air into kiln to produce a flame that burns as close as possible to the center line of the kiln) that has a series of channels or orifices that 1) allow for the adjustment of the volume, velocity, pressure, and/or direction of the air carrying the fuel, known as primary air, into the kiln, and 2) impart high momentum and turbulence to the fuel stream to facilitate mixing of the fuel and secondary air.
- (E) Mid-kiln firing—Secondary firing in kiln systems by injecting fuel at an intermediate point in the kiln system using a specially designed fuel injection mechanism for the purpose of decreasing NO_x emissions through—
- 1. The burning of part of the fuel at a lower temperature; and
- 2. The creation of reducing conditions at the point of initial combustion.
- (F) 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.
- (G) 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.
- (H) Preheater/precalciner kiln—A kiln where the feed to the kiln system is preheated in cyclone chambers and that utilizes a second burner to provide heat for calcination of material prior to the material entering the rotary kiln which forms clinker.

- (I) Preheater kiln—A kiln where the feed to the kiln system is preheated in cyclone chambers prior to the final fusion, which forms clinker.
- (J) Recoverable fuel—Fuels that have been permitted for use for energy recovery under 10 CSR 10-6.065.
- (K) Renewable fuel—Renewable energy resources that include but are not limited to solar (photovoltaic), wind, and biomass. Biomass includes but is not limited to: agricultural crops and crop waste, untreated wood and wood wastes, livestock waste, wastepaper, and organic municipal solid waste.
- (L) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

- (A) Beginning May 1, 2007 an owner or operator of any Portland cement kiln subject to this rule shall not operate the kiln during the period starting May 1 and ending September 30 of each year, unless the kiln installs and operates with one (1) of the following:
 - 1. Low-NO_x burners;
 - 2. Mid-kiln firing;
- 3. An alternative control technology that is approved by the staff director, and incorporated in the federally approved SIP, and is proven to achieve emission reductions of thirty percent (30%) or greater;
 - 4. An emission rate of:
- A. For long-wet kilns—6.8 pounds of NO_{x} per ton of clinker produced, averaged over the period from May 1 through September 30 of each year.
- B. For long-dry kilns—6.0 pounds of $\mathrm{NO_x}$ per ton of clinker produced, averaged over the period from May 1 through September 30 of each year.
- C. For preheater kilns—4.1 pounds of NO_x per ton of clinker produced, averaged over the period from May 1 through September 30 of each year.
- D. For preheater/precalciner kilns—2.7 pounds of NO_x per ton of clinker produced, averaged over the period from May 1 through September 30 of each year; or
- 5. The findings of a case-by-case study committed to and conducted by the owner or operator and approved by the staff director, and incorporated into the federally approved SIP, taking into account energy, environmental, and economic impacts and other costs to determine an emission limitation that is achievable for the installation through application of production processes or available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of NO_v.

- (B) To meet the requirements of paragraph (3)(A)3. or (3)(A)5. of this rule, the owner or operator may take into account as a portion of the required NO_x reductions, physical and quantifiable measures to increase energy efficiency, reduce energy demand, or increase use of renewable or recoverable fuels.
- (C) Excess Emissions During Start-Up, Shutdown, or Malfunction. If the owner or operator provides notice of excess emissions pursuant to state rule 10 CSR 10-6.050(3)(B), the director will determine whether the excess emissions are attributable to start-up, shutdown or malfunction conditions, pursuant to rule 10 CSR 10-6.050(3)(C). If the director determines that the excess emissions are attributable to such conditions, and if such excess emissions cause a kiln to exceed the applicable emission limits in this rule, the director will determine whether enforcement action is warranted, as provided in rule 10 CSR 10-6.050(3)(C). If the director determines that the excess emissions are attributable to a start-up, shutdown, or malfunction condition and does not warrant enforcement action, those emissions would not be included in the calculation of ozone season NO_x emissions.
- (4) Reporting and Record Keeping.
- (A) Reporting Requirements. The owner or operator of a kiln subject to this rule shall comply with the following requirements:
- 1. By May 1, 2007, the owner or operator shall submit to the staff director the identification number and type of each unit subject to this rule, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with this rule:
- 2. The owner or operator shall submit to the staff director by October 31 of each year, beginning in the year 2007, an annual report documenting for that unit:
- A. The emissions, in pounds of NO_x per ton of clinker produced from each affected Portland cement kiln during the period from May 1 through September 30;
- B. The results of any performance testing; and
- C. Cement kiln clinker production, in tons, from May 1 through September 30; and
- 3. If the owner or operator elects to comply with paragraph (3)(A)3. or (3)(A)5. of this rule, the owner or operator will supply, starting April 2008, the staff director with a report as specified in the compliance plan.
 - (B) Record Keeping Requirements.
- 1. Any owner or operator of a unit subject to this rule shall produce and maintain

- records, which shall include, but are not limited to the results of any initial performance test, the results of any subsequent performance tests, the date, time and duration of any start-up, shutdown or malfunction in the operation of any of the cement kilns or the emissions monitoring equipment, as applicable.
- 2. If an owner or operator elects to use subsection (3)(B) of this rule as part of the compliance plan, the owner or operator must retain records as agreed to in the approved compliance plan.
- 3. Daily cement kiln clinker production in tons per day.
 - 4. Any applicable monitoring data.
- 5. All records required to be produced or maintained shall be retained on-site for a minimum of five (5) years and made available upon request.
 - (C) Monitoring Requirements.
- 1. An owner or operator complying with paragraph (3)(A)1. or (3)(A)2. of this rule shall maintain and operate the device according to the manufacturer's specifications as approved by the permitting agency. The monitoring shall:
- A. Include parameters indicated in the manufacturer's specifications and recommendations for the low- NO_x burner or mid-kiln firing system as approved by the permitting agency; and
- B. Identify the specific operation conditions to be monitored and correlation between the operating conditions and ${
 m NO_x}$ emission rate.
- 2. An owner or operator complying with paragraph (3)(A)3., (3)(A)4., or (3)(A)5. of this rule shall complete an initial performance test by May 1, 2007 and subsequent performance tests, on an annual basis, consistent with the requirements of section (5) of this rule.
- 3. An owner or operator may comply with the requirements in paragraph (4)(C)1. through the use of an alternative compliance method approved by the staff director and incorporated in the federally approved SIP.
- 4. Any deviation from the operating conditions or specifications, which result in an increase in NO_x emissions, established in this paragraph constitute a violation of this rule, unless the owner or operator demonstrates to the satisfaction of the director that the deviation did not result in an increase in NO_x emissions.
- (5) Test Methods. NO_x emission level testing shall use one (1) of the following methods as specified by 40 CFR part 60 Appendix A—Reference Methods:



- (A) Method 7—Determination of Nitrogen Oxide Emissions from Stationary Sources;
- (B) Method 7A—Determination of Nitrogen Oxide Emissions from Stationary Sources—Ion Chromatographic Method;
- (C) Method 7C—Determination of Nitrogen Oxide Emissions from Stationary Sources—Alkaline-Permanganate/Colorimetric Method;
- (D) Method 7D—Determination of Nitrogen Oxide Emissions from Stationary Sources—Alkaline-Permanganate/Ion Chromatographic Method; or
- (E) Method 7E—Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure).

AUTHORITY: section 643.050, RSMo 2000.* Original rule filed Feb. 14, 2005, effective Oct. 30, 2005.

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

10 CSR 10-6.390 Control of NO_{x} Emissions From Large Stationary Internal Combustion Engines

PURPOSE: This rule reduces emissions of oxides of nitrogen (NO_x) to ensure compliance with the federal NO_x control plan to reduce the transport of air pollutants. This rule establishes emission levels for large stationary internal combustion engines. The evidence supporting the need for this rule, per section 536.016, RSMo, is the U.S. Environmental Protection Agency NO_x State Implementation Plan (SIP) Call dated April 21, 2004.

- (1) Applicability. This rule applies to any large stationary internal combustion engine located in the counties of Bollinger, Butler, Cape Girardeau, Carter, Clark, Crawford, Dent, Dunklin, Franklin, Gasconade, Iron, Jefferson, Lewis, Lincoln, Madison, Marion, Mississippi, Montgomery, New Madrid, Oregon, Pemiscot, Perry, Pike, Ralls, Reynolds, Ripley, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Scott, Shannon, Stoddard, Warren, Washington, and Wayne counties and the City of St. Louis greater than one thousand three hundred (1,300) horsepower that—
- (A) Emitted greater than one (1) ton per day of $\mathrm{NO_x}$ on average during the period from May 1 through September 30 of 1995, 1996, or 1997; or
- (B) Begins operation after September 30, 1997.
- (C) Any stationary internal combustion engine that meets the definition of emergency

standby engine in subsection (2)(C) of this rule is exempt from this rule.

- (D) Any compression ignited stationary internal combustion engine that begins operation after September 30, 1997, and emits twenty-five (25) tons or less of NO_x during the period from May 1 through September 30 is exempt from the requirements in subparagraphs (3)(B)3. and (3)(B)4. of this rule but subject to the record-keeping and reporting requirements in section (4) of this rule. This exemption will be based on the previous year NO_x emissions during the period from May 1 through September 30. If the exemption limit is exceeded, for any reason, the engine will be required to meet the applicable limits in subsection (3)(B) of this rule each year thereafter.
- (2) Definitions. Definitions of certain terms used in this rule may be found in 10 CSR 10-6.020.
- (3) General Provisions.
- (A) An owner or operator of a large stationary internal combustion engine meeting the applicability of subsection (1)(A) of this rule shall calculate the allowable NO_x emission rate for each applicable engine using:

ER = $(NO_{x \text{ act}}/UR) \times 1.102 \times 10^{-6} \times 0.1$ where,

- ER = the allowable emission rate for each engine in grams per horsepower-hour;
- NO_{x act} = the highest actual NO_x emissions, reported in tons per control period, for the period from May 1 through September 30 for one of the years 1995, 1996, or 1997 based on the best available emission information for each engine; and
- UR = the utilization rate in horsepower-hours during the same period as $NO_{x \text{ act}}$
- (B) An owner or operator of a large stationary internal combustion engine meeting the applicability of subsection (1)(B) of this rule shall not operate an engine to exceed the permitted emission rate or the following emission rate, whichever is more stringent:
- 1. For rich-burn SI engines 3.0 grams per horsepower-hour;
- 2. For lean-burn SI engines 3.0 grams per horsepower-hour;
- 3. For diesel engines 2.3 grams per horsepower-hour; or
- 4. For dual fuel engines 1.5 grams per horsepower-hour;
- (C) An owner or operator of a large stationary internal combustion engine may

choose to establish a facility-wide $\mathrm{NO_x}$ emissions cap in lieu of compliance with subsection (3)(A) of this rule. If the owner or operator elects to comply with the requirements of subsection (3)(A), the owner or operator shall submit a commitment in writing no later than May 1, 2005, to the director stating the intent to comply with that subsection. If the owner or operator commits to comply with this subsection rather than subsection (3)(A) of this rule, the owner or operator shall submit the following to the director:

- 1. The facility-wide NO_x emissions from the year of data that would be used in subsection (3)(A) of this rule on a unit-by-unit basis:
- 2. The number of tons of NO_x emission reductions that would be required in subsection (3)(A) of this rule on a unit-by-unit basis;
- 3. A detailed inventory of all engines being used to comply with the NO_x emission cap including the:
- A. Uncontrolled emission rate of all engines at the facility;
- B. Controlled emission rate for all engines being controlled under the NO_x emissions cap;
- C. Capacity of each engine at the facility; and
- D. Utilization rate of each engine at the facility; and
- 4. The controlled NO_x emissions from the facility during the control period, May 1 through September 30.
- (D) To meet the requirements of subsection (3)(A) or (3)(B) of this rule, the owner or operator may take into account as a portion of the required NO_x reductions, physical and quantifiable measures to increase energy efficiency, reduce energy demand, or increase use of renewable fuels.
 - (E) Monitoring Requirements.
- 1. Any owner or operator meeting the applicability of section (1) of this rule shall not operate such equipment unless it is equipped with one (1) of the following:
- A. A continuous emissions monitoring system (CEMS), which meets the applicable requirements of 40 CFR 60, subpart A, Appendix B, and complies with the quality assurance procedures specified in 40 CFR 60, Appendix F. The CEMS shall be used to demonstrate compliance with the applicable emission limit; or
- B. A calculational and record keeping procedure based upon actual NO_x emissions testing and correlations with operating parameters. The installation, implementation, and use of such an alternate calculational and record keeping procedure must be approved

by the director and EPA and incorporated into the SIP in writing prior to implementation.

- 2. The CEMS or approved alternate monitoring procedure shall be operated and maintained in accordance with an on-site CEMS or alternate monitoring plan approved by the director.
- (F) Excess Emissions During Start-Up, Shutdown, or Malfunction. If the owner or operator provides notice of excess emissions pursuant to state rule 10 CSR 10-6.050(3)(B), the director will determine whether the excess emissions are attributable to start-up, shutdown, or malfunction conditions, pursuant to rule 10 CSR 10-6.050(3)(C). If the director determines that the excess emissions are attributable to such conditions, and if such excess emissions cause an engine to exceed the applicable emission limits in this rule, the director will determine whether enforcement action is warranted, as provided in rule 10 CSR 10-6.050(3)(C). If the director determines that the excess emissions are attributable to a start-up, shutdown, or malfunction condition and does not warrant enforcement action, those emissions would not be included in the calculation of ozone season NO_x emissions.

(4) Reporting and Record Keeping.

- (A) Reporting Requirements. The owner or operator subject to this rule or to the exemption in subsection (1)(D) of this rule shall comply with the following requirements:
- 1. The owner or operator shall submit to the director the identification number and type of each unit subject to this rule or to the exemption in subsection (1)(D) of this rule, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with this rule before May 1, 2007.
- 2. The owner or operator shall submit an annual report documenting for each controlled unit or each unit subject to subsection (1)(D) of this rule the total NO_x emissions from May 1 through September 30 of each year to the director by November 1 of that year, beginning in 2007; and
- 3. The owner or operator of a unit subject to this rule or to the exemption in subsection (1)(D) of this rule and operating a CEMS shall submit an excess emissions monitoring systems performance report, in accordance with the requirements of 40 CFR 60.7(c) and 60.13.
- (B) Record-Keeping Requirements. Any owner or operator of a unit subject to this rule or to the exemption in subsection (1)(D) of this rule shall maintain all records necessary to demonstrate compliance with this rule

for a period of five (5) years at the plant at which the subject unit is located. The records shall be made available to the director upon request. The owner or operator shall maintain records of the following information for each day of the control period the unit is operated:

- 1. The identification number of each unit and the name and address of the plant where the unit is located for each unit subject to the requirements of this rule or to the exemption in subsection (1)(D) of this rule;
 - 2. The calendar date of record;
- 3. The number of hours the unit is operated during each day including start-ups, shutdowns, malfunctions, and the type and duration of maintenance and repair;
- 4. The date and results of each emissions inspection;
- 5. A summary of any emissions corrective maintenance taken;
- 6. The results of all compliance tests; and
 - 7. If a unit is equipped with a CEMS—
- A. The identification of time periods during which NO_x standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances; and
- B. The identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

(5) Test Methods. (Not Applicable)

AUTHORITY: section 643.050, RSMo Supp. 2012.* Original rule filed Feb. 14, 2005, effective Oct. 30, 2005. Amended: Filed Aug. 27, 2009, effective May 30, 2010. Amended: Filed March 13, 2013, effective Oct. 30, 2013.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes

PURPOSE: This regulation restricts the emission of filterable particulate matter in the source gas of an operation or activity except where 10 CSR 10-6.405 and/or 10 CSR 10-6.070 would be applied.

(1) Applicability.

(A) This regulation applies to any operation, process, or activity that emits particulate matter.

- (B) The provisions of this rule shall not apply to the following:
 - 1. Cotton gins;
- 2. The grinding, crushing, and classifying operations at a rock quarry;
- 3. The receiving and shipping of whole grain from or into a railroad or truck transportation source at a grain elevator;
- 4. Smoke generating devices, as defined in subsection (2)(D) of this rule, when a required permit or a written determination that a permit is not required has been issued or written;
- 5. Batch-type charcoal kilns required to comply with 10 CSR 10-6.330;
- 6. The burning of fuel for indirect heating;
 - 7. Fugitive emissions;
- 8. Emission sources that are exempt from construction permitting under 10 CSR 10-6.061;
- 9. Emission sources that are permitted by rule under 10 CSR 10-6.062;
 - 10. The burning of refuse;
- 11. The processing of salvageable material by burning;
- 12. Emission units that at maximum design capacity have a potential to emit less than one-half (0.5) pounds per hour of particulate matter:
- 13. The grinding, crushing, and conveying operations at a power plant;
- 14. 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;
- 15. 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; and
- 16. Emission units that at maximum hourly design rate (MHDR) have an uncontrolled potential to emit less than the allowable emissions as calculated in paragraphs (3)(A)1. and (3)(A)2. of this rule.
- (C) In the event that other rules in Title 10 *Code of State Regulations* are also applicable to particulate matter emission units, the more stringent requirement shall apply.
- (2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.
- (3) General Provisions.



- (A) Emission Limitations. All applicable sources, except grey iron jobbing cupolas and corn wet milling drying processes, shall meet the following requirements:
- 1. Except as provided for in paragraph (3)(A)2. and subsection (1)(B) of this rule, 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

2. The limitations established by paragraph (3)(A)1. of this rule shall not require the reduction of particulate matter concentration, based on the source gas volume, below the concentration specified in paragraph (3)(A)2., Table I of this rule for that volume; provided that, for the purposes of this section, the person responsible for the emission may elect to substitute a volume determined according to the provisions of paragraph (3)(A)3. of this rule; 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 I

Table 1		
Source Gas		
Volume (at Standard	Concentration	
Cubic Foot	Grain Per	
Per Minute)	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 0.021 800,000 1,000,000 or more 0.020; or
- 3. 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 (3)(A)2. of this rule, 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
- 4. Notwithstanding the provisions of paragraphs (3)(A)1. and (3)(A)2. of this rule, 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.
- (B) Grey iron jobbing cupolas shall meet the following requirements:
- 1. 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
- 2. 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.
- (4) 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.

- (5) Test Methods. The following hierarchy of emission measurement approaches shall be used to determine compliance with section (3) of this rule. 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—
- (A) Continuous Emission Monitoring System (CEMS);
- (B) Stack tests as specified in 10 CSR 10-6.030(5)(A) or (5)(B), as determined by the director:
- (C) Compliance Assurance Monitoring(CAM) plan found in the facility's operatingpermit; or
- (D) Other methods, as described in permits issued under 10 CSR 10-6.060 or 10 CSR 10-6.065 or as approved by the director. These may include approved engineering calculations or other U.S. Environmental Protection Agency documentation.

AUTHORITY: section 643.050, RSMo Supp. 2012.* Original rule filed Jan. 14, 2000, effective Aug. 30, 2000. Amended: Filed Dec. 22, 2000, effective Sept. 30, 2001. Amended: Filed Sept. 9, 2008, effective May 30, 2009. Amended: Filed July 1, 2010, effective Feb. 28, 2011. Amended: Filed Sept. 16, 2011, effective May 30, 2012. Amended: Filed March 13, 2013, effective Oct. 30, 2013.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.

10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating

PURPOSE: This rule restricts the emission of particulate matter from fuel burning equipment used for indirect heating except where 10 CSR 10-6.070 would be applied. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is a necessity evidence memorandum dated March 5, 2008.

(1) Applicability.

(A) This rule applies throughout the state with additional conditions applicable to the metropolitan areas of Kansas City, Springfield, and St. Louis as found in sections (2) and (3) of this rule.

(B) This rule 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.

- (C) An emission unit that is subject to 10 CSR 10-6.070 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 twotenths 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 10 CSR 10-6.405.
- (D) The heat input from emission units in subsection (1)(C) of this rule must be included in the calculation of Q, the installation's total heat input as defined in subsections (3)(D) and (3)(E) of this rule.
- (E) An installation is exempt from this rule 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.

(2) Definitions.

(A) Existing—Any source which was in being, installed, or under construction on the date provided in the following table:

Area of State	Contruction date began on or before
Kansas City Metropolitan Area	February 15, 1979*
St. Louis Metropolitan Area	February 15, 1979*
Springfield-Greene County Area	September 24, 1971
Outstate Area	February 24, 1971

*Exception: If any source 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.

- (B) New—Any source which is not an existing source, as defined in subsection (2)(A) of this rule.
- (C) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

- (A) The heat content of solid fuels shall be determined as specified in 10 CSR 10-6.040(2). The heat content of liquid hydrocarbon fuels shall be determined as specified in 10 CSR 10-6.040(3).
- (B) For purposes of this rule, 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.
- (C) Indirect heating sources requiring permits under 10 CSR 10-6.060 that in turn may require particular air pollution control measures to meet more stringent emission rate limitations than in this rule shall meet the requirements of the permits issued under 10 CSR 10-6.060 Construction Permits Required.
- (D) 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:

Area of State	Heat Input (mmBtu/hour)	Rate Limits for Existing Sources (pounds/mmBtu)
	<10	0.60
Kansas City & St. Louis Metropolitan	\geq 10 and \leq 5,000	E=1.09Q ^{-0.259}
	>5,000	0.12
Springfield-Greene	≤10	0.60
County &	>10 and <10,000	E=0.90Q ^{-0.174}
Outstate Missouri	≥10,000	0.18

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 (1)(C) of this rule).
- (E) 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:

Area of State	Heat Input (mmBtu/hour)	Rate Limits for New Sources (pounds/mmBtu)
	<10	0.40
Kansas City & St. Louis Metropolitan	\geq 10 and \leq 1,000	E=0.80Q ^{-0.301}
or. Louis Meropolium	>1,000	0.10
Springfield-Greene	≤10	0.60
County &	>10 and <2,000	E=1.31Q ^{-0.338}
Outstate Missouri	≥2,000	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 (1)(C) of this rule).
 - (F) Alternate Method of Compliance.
- 1. 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 (3)(D) or (3)(E) of this rule. The WAER for the indirect heating sources to be averaged shall be calculated by the following formula:

$$\begin{aligned} \text{WAER} &= \frac{\sum\limits_{i=1}^{n} (\text{Ea}_i \times Q_i)}{\sum\limits_{i=1}^{n} Q_i} \end{aligned}$$

Where:

WAER = 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.
- 2. Installations demonstrating compliance with this rule in accordance with the requirements of subsection (3)(F) of this rule shall do so by making written application to the director. The application shall include the calculations performed in paragraph (3)(F)1. of this rule and all necessary information relative to making this demonstration.
- 3. Subsection (3)(F) of this rule only shall apply if the WAER determined by paragraph (3)(F)2. of this rule for indirect heating sources does not exceed the maximum allowable particulate E determined for that source from subsection (3)(D) or (3)(E) of this rule 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.
- (4) 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:
- (A) 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 rule;
 - (B) The calendar date of the record;
- (C) The emission rate in pounds per mmBtu for each unit on an annual basis for those units complying with the limit in subsections (3)(D) and (3)(E) of this rule; and
- (D) The emission rate in pounds per mmBtu for each facility on an annual basis for those units complying with subsection (3)(F) of this rule.
- (5) Test Methods. The following hierarchy of methods shall be used to determine compliance with subsections (3)(D) and (3)(E) of this rule:
- (A) Continuous Emission Monitoring System (CEMS);
- (B) Stack tests, as specified in 10 CSR 10-6.030(5)(A) or (5)(B);
 - (C) Other EPA documents;
- (D) Compliance Assurance Monitoring (CAM) Plans as found in a facility operating permit may be used to provide a reasonable assurance of compliance with subsections (3)(D) and (3)(E) of this rule;
 - (E) Sound engineering calculations;

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

AUTHORITY: section 643.050, RSMo 2000.* Original rule filed Feb. 25, 2011, effective Oct. 30, 2011.

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

10 CSR 10-6.410 Emissions Banking and Trading

PURPOSE: This rule provides a mechanism for companies to acquire offsets for economic development in accordance with section 643.220, RSMo. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is section 643.220, RSMo.

(1) Applicability.

- (A) The generation of emission reduction credits (ERCs) in conjunction with this rule is available to installations that meet the following requirements:
- 1. Emit more than ten (10) tons per year for a criteria pollutant or its precursors as reported on their Emissions Inventory Questionnaire:
- 2. Have an operating permit as specified in 10 CSR 10-6.065 Operating Permits; and
- 3. Are located within any of the following areas:
- A. An area that has been designated as a nonattainment area for a criteria pollutant;
- B. A maintenance area for a criteria pollutant in which emissions offsets are required for new sources or modifications by the state implementation plan (SIP); or
- C. A United States Environmental Protection Agency (U.S. EPA) approved attainment or maintenance demonstration or New Source Review (NSR) preconstruction permit modeling domain, unless it is a violation of federal law.
- (B) The buying, selling, or trading of ERCs in conjunction with this rule is available to all persons.
- (C) The use of ERCs in conjunction with this rule is limited to the following:
 - 1. Emissions offsets to satisfy New

Source Review permitting requirements; or

2. For sources needing emission decreases from existing sources in their area of impact to mitigate air quality impacts from new sources or modifications under prevention of significant deterioration (PSD) requirements.

(2) Definitions.

- (A) Activity level—The amount of activity at a source measured in terms of production, use, raw materials input, vehicle miles traveled, or other similar units that have a direct correlation with the economic output of the source and is not affected by changes in the emissions rate (i.e., mass per unit of activity).
- (B) Definitions of certain terms specified in this rule, other than those defined in this section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

- (A) General Rules for Generation and Use.
- 1. To become an account holder, a person must complete an account application, as specified in subsection (4)(A) of this rule, and be assigned a unique account identification number by the Missouri Department of Natural Resources' Air Pollution Control Program.
- Each account holder must designate an authorized account representative and an alternate authorized account representative on the account application.
- 3. Except as provided under paragraph (3)(B)2. of this rule, any source may generate an ERC by reducing emissions, in the amount determined under paragraph (3)(B)1. ERC generators must ensure that ERCs are real, properly quantified, permanent, and surplus.
- 4. There shall be no resulting adverse impact on air quality.
- 5. The director of the Missouri Department of Natural Resources' Air Pollution Control Program may not approve use of offsets where that use would interfere with the nonattainment control strategy contained in the Missouri State Implementation Plan.
- 6. Governmental approvals. No ERC can be transferred without prior notification of intent to transfer to the director of the Missouri Department of Natural Resources' Air Pollution Control Program. No ERC can be retired without prior notification of intent to use. ERCs that are used for NSR offsets shall have prior director approval.
- 7. Market participation. Any account holder may transfer, buy, sell, trade, or otherwise convey ERCs to another account holder in any manner in accordance with this rule.
 - 8. Limited authorization to emit. An

ERC created under this rule is a limited authorization to emit a criteria pollutant or its precursor in accordance with the provisions of this rule. An ERC does not constitute a property right. Nothing in this rule shall be construed to limit the authority of the Missouri Air Conservation Commission to terminate or limit such authorization.

- 9. Serial numbers. Each ERC will be assigned a unique identification number.
 - 10. Shutdowns.
- A. ERCs may be generated when a unit is shutdown or retired if the new replacement equipment is directly replacing the retired unit and the permit is applied for within one (1) year of the shutdown or retirement of the existing unit.
- B. ERCs may be generated for entire installation shutdowns if the installation is located in an area where offsets are required by the state implementation plan and if the installation is defined as a major source for the pollutant or a precursor of the pollutant for which the area is classified. These ERCs shall be reduced by twenty-five percent (25%) and rounded to the nearest ton at the time of deposit into the generator's account.
- C. In nonattainment areas lacking an approved attainment plan, banking of ERCs from shutdowns is subject to the provisions of 40 CFR 51.165(a)(3)(ii)(C), which is incorporated by reference.
 - 11. Environmental contribution.
- A. On December 31 of each year, the banked ERCs that were deposited in previous calendar years shall be reduced by three percent (3%).
- B. The department shall deduct three percent (3%) of these ERCs from each account holders' banked ERCs. The remaining account balances shall be rounded down to the nearest ERC.
- C. If the account holder wishes for specific serial numbered ERCs to be deducted for environmental contribution, a letter specifying the serial numbers must be received by the director of the Missouri Department of Natural Resources' Air Pollution Control Program by December 1 of each year.
- D. On December 31 of each year, ERCs that have been reserved by an approved Notice of Intent to Use shall not be subject to the three percent (3%) environmental contribution
- E. In the event that ERCs are not taxed on December 31 due to being reserved and the ERCs are subsequently reinstated, a three percent (3%) environmental contribution shall be deducted at that time for each year that the ERCs were reserved and would have been subject to the environmental con-

tribution.

- 12. ERCs shall be used on a first-in, first-out basis, unless specific serial numbers are included in the Notice of Intent to Use, Notice of Withdrawal, Notice of Intent to Transfer, or at the time of environmental contribution as specified in subparagraph (3)(A)11.C. of this rule. If serial numbers are not specified, the oldest ERCs in an account shall be reserved and/or retired first.
- 13. The trading or use of ERCs in a modeling domain may be based on modeling performed on a concentration basis.
 - (B) ERC Generation.
 - 1. Computation of ERCs.
- A. The number of ERCs shall be the difference between—
- (I) The amount of actual emissions that would have been emitted during the generation period based on actual activity levels during that period and normal source operation; and
- (II) The amount of actual emissions during the generation period based on actual activity levels during that period.
- B. Protocols. The amount of ERCs must be calculated using quantification protocols that meet the requirements of paragraph (3)(B)7. of this rule.
- 2. Limitations on generation. An ERC shall not be created by emissions reductions of activities or source categories identified in this subsection:
- A. Permanent shutdowns or curtailments, unless it meets the requirements of paragraph (3)(A)10. of this rule;
- B. Modification or discontinuation of any activity that is otherwise in violation of any federal, state, or local requirements;
- C. Emission reductions required to comply with any state, federal, or local action including but not limited to:
- (I) State, federal, or local consent agreements;
- (II) Any provision of a state implementation plan; or
- (III) Requirements for attainment of a National Ambient Air Quality Standard;
- D. Emission reductions of hazardous air pollutants from application of a standard promulgated under section 112 of the Clean Air Act;
- E. Reductions credited or used under any other emissions trading program;
- F. Emission reductions occurring at a source which received an alternate emission limit to meet a state reasonably available control technology (RACT) requirement, except to the extent that the emissions are reduced below the level that would have been required had the alternate emission limit not been issued; or

- G. Emission reductions previously used in determining net emission increases or used to create alternate emission limits.
- 3. Notice and Certification of Generation.
- A. The owner or operator of a generator source shall provide a Notice and Certification of Generation to the Missouri Department of Natural Resources no later than ninety (90) days after the ERC generation activity was completed.
- B. Required information. The Notice and Certification of Generation shall include the information specified in subsection (4)(B) of this rule.
- C. The department shall review the Notice of Generation and notify the authorized account representative of approval or denial of the Notice of Generation within thirty (30) days of receipt of the notice.
- D. The Notice and Certification of Generation shall be accompanied by an operating permit modification application.
- E. Certification under penalty of law. Any Notice and Certification of Generation submitted pursuant to this subsection shall contain certification under penalty of law by a responsible official of the generator source of truth, accuracy, and completeness. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
 - 4. ERC use.
- A. Time of acquisition. ERCs may not be used until they are acquired by the user source
- B. Sufficiency. The user source must hold sufficient ERCs to cover its offset obligation.
- C. Offset calculation. The amount of ERCs needed to offset emissions shall be the anticipated actual emissions multiplied by the offset ratio.
 - D. Notice of Intent to Use ERCs.
- (I) ERCs may be used only if the authorized account representative of the user source submits to the staff director of the Missouri Department of Natural Resources' Air Pollution Control Program a Notice of Intent to Use.
- (II) Required information. The Notice of Intent to Use ERCs shall include the information specified in subsection (4)(C) of this rule.
- (III) The department shall review the Notice of Intent to Use and notify the facility of approval or denial within thirty (30) days of receipt of the notice.
- (IV) The Missouri Department of Natural Resources' Air Pollution Control Program shall reserve the specified ERCs



when the permit application is deemed complete by the Initial Review Unit.

- (V) Upon issuance of the construction permit, the appropriate number of reserved ERCs shall be permanently retired.
 - E. Notice of Withdrawal.
- (I) An account holder may at any time withdraw ERCs from the program.
- (II) Required information. The Notice of Withdrawal shall include the information specified in subsection (4)(D) of this rule.
- (III) The department shall review the Notice of Withdrawal and notify the facility of approval or denial within thirty (30) days. Upon approval, the specified ERCs shall be removed from the facility's account.
 - F. Notice of Transfer.
- (I) Account holders seeking an account transfer must submit a Notice of Transfer.
- (II) Required information. The Notice of Transfer shall include the information specified in subsection (4)(E) of this rule.
- (III) The department shall review the Notice of Transfer and notify the facilities of approval or denial within thirty (30) days. Upon approval, the specified ERCs shall be transferred to the specified account.
- 5. Use limitations. ERCs may not be used—
- A. Before acquisition by the user of the ERCs;
- B. For netting or to avoid the applicability of NSR requirements;
- C. For NSR offsets unless the requirements of paragraph (3)(B)8. of this rule are met:
- D. To meet Clean Air Act requirements for new source performance standards (NSPS) under section 111; lowest achievable emission rate (LAER) standards; best available control technology (BACT) standards; hazardous air pollutant (HAP) standards under section 112; reasonably available control technology (RACT);
- E. To meet the requirements for one (1) class of criteria pollutants or precursor by using ERCs generated in a different class of pollutants or precursors (e.g., NO_x reductions may not be exchanged for volatile organic compound (VOC) increases, or viceversa); or
- F. To meet requirements contained in Title IV of the Federal Clean Air Act.
 - 6. Geographic scope of trading.
- A. ERCs may be used in a nonattainment or maintenance area only if generated in the same nonattainment or maintenance area.
- B. ERCs generated inside a modeling domain may be used in the same modeling

- domain. Trading of ERCs within a modeling domain is subject to the limitations of subparagraph (3)(B)6.A. of this rule.
 - C. Interstate trading. (Reserved)
- 7. Protocol development and approval. To quantify the amount of ERCs generated and the amount needed for compliance, all sources shall use the following hierarchy as a guide to determine the most desirable emission data to report to the department. If data is not available for an emission estimation method or an emission estimation method is impractical for a source, then the subsequent emission estimation method shall be used in its place:
- A. Continuous Emission Monitoring System (CEMS) as specified in 10 CSR 10-6.110;
- B. Stack tests as specified in 10 CSR 10-6.110;
 - C. Material/mass balance;
- D. AP-42 (Environmental Protection Agency (EPA) Compilation of Air Pollution Emission Factors) or FIRE (Factor Information and Retrieval System);
- E. Other U.S. EPA documents as specified in 10 CSR 10-6.110;
 - F. Sound engineering calculations; or
- G. Facilities shall obtain department approval of emission estimation methods other than those listed in subparagraphs (3)(B)7.A.-F. of this rule before using any such method to estimate emissions in the submission of data.
- 8. ERC use for NSR. All ERCs used to meet NSR offset requirements shall comply with the requirements of state rule 10 CSR 10-6.060 Construction Permits Required.
 - 9. Compliance burden.
- A. The ERC user source is responsible for assuring that the generation and use of ERCs comply with this rule.
- B. The ERC user source (not the enforcing authority) bears the burden of proving that ERCs used are valid and sufficient and that the ERC use meets all applicable requirements of this rule. The ERC user source is responsible for compliance with its underlying obligations. In the event of enforcement against the user source for noncompliance, it shall not be a defense for the purpose of determining civil liability that the user source relied in good faith upon the generator source's representations.
- C. In the event of an invalid ERC, the generator source shall receive a Notice of Violation and the ERC user must find additional ERCs to comply with offset requirements.
- 10. Sources that emit less than ten (10) tons per year. (Reserved)

- (C) Offsets. Offsets referred to in 10 CSR 10-6.060 subsection (7)(B) are subject to the following conditions:
- 1. Except for previously banked emission reduction credits, no offset credit may be taken for emission reductions occurring prior to the base year used to project attainment of the pollutant standard in the state implementation plan; and
- 2. No offset credit may be taken for emission reductions previously used in determining net emission increases or used to create alternate emission limits.
- (D) Banking. Banking credit for emission reductions to use as offsets, at some future time, shall be allowed under the following circumstances:
- 1. The person requesting banking is the owner or operator of:
- A. A new or modified installation who obtains a permit by applying offsets which exceed the requirements of 10 CSR 10-6.060; or
- B. An existing installation in an area where offsets are required by the state implementation plan and that voluntarily reduces emissions of the pollutant or a precursor of the pollutant for which the area is classified after the base year used in the state implementation plan;
- 2. For source operations in the nonattainment areas for which reasonably available control technology (RACT) would be required, but as yet has not been defined, actual emission levels shall be reduced to represent post-RACT levels. The control technology assumed for these calculations shall be mutually agreed upon by the applicant and the director of the Missouri Department of Natural Resources' Air Pollution Control Program. Only emission reductions beyond the post-RACT emissions levels will be creditable.
- 3. Credit for emission reductions beyond those that were required by RACT or paragraph (3)(D)2. of this rule at a shutdown installation and that are in excess of those needed to offset a replacement installation can be banked;
- 4. It shall be a violation of this rule for any person to operate a source operation from which banked credit for emission reductions was obtained so as to emit the pollutant at levels greater than identified in the offset calculation referred to in subparagraph (3)(B)4.C. of this rule, unless the person who banked credit for the reductions, or their transferee, first files a notice with the director of the Missouri Department of Natural Resources' Air Pollution Control Program stating that credit for the reductions or a part of the credit is being withdrawn from the

bank, and credit has not previously been withdrawn; and

- 5. The amount of banked emission reduction credits shall be discounted without compensation to the holder in the applicable source category when new rules requiring emission reductions are adopted by the commission. The amount of discounting of banked emission reduction credits shall be calculated on the same basis as the reductions required for existing sources which are subject to the new rule. A portion of banked credits, equivalent to the anticipated required reductions may be temporarily frozen by the director of the Missouri Department of Natural Resources' Air Pollution Control Program in anticipation of a new rule being adopted by the commission. This paragraph, however, shall not apply to emission reductions, discounted at the time of banking in accordance with paragraph (3)(D)2. of this rule, unless the new rule provides for the replacement of RACT with BACT or another more stringent level of control.
- (4) Reporting and Record Keeping.
- (A) The Account Application shall include the following information, submitted on a form supplied by the Missouri Department of Natural Resources:
- 1. The name and address of account holder:
- Authorized account representative and alternate authorized account representative; and
- 3. County plant identification number (if applicable).
- (B) The Notice and Certification of Generation shall include the following information, submitted on a form supplied by the Missouri Department of Natural Resources:
 - 1. Account identification number;
- Date generating activity was completed:
- 3. A brief description of the generation activity;
 - 4. The amount of ERCs generated;
 - 5. Affected emission units;
- 6. The protocols that were used to calculate and document the ERCs;
- 7. Information on all the generator source's applicable emission rates;
- 8. A statement that the reductions were calculated in accordance with paragraph (3)(B)1. of this rule;
- 9. A statement that the ERCs were not generated in whole or in part from actions prohibited pursuant to paragraph (3)(B)2. of this rule:
- 10. For each source subject to reporting toxic chemical releases for the Community Right-to-Know provisions under 40 CFR part

- 372, the estimated amount of hazardous air pollutants, as defined below, emitted to the air as the result of the generation of the ERC.
- A. A pollutant shall be reported under this paragraph, only if it is listed both in 40 CFR 372.65 and section 112(b) of the Clean Air Act, and a chemical which the source is reporting or expects to report under 40 CFR part 372 for the calendar year in which the ERC was generated.
- B. The requirements in 40 CFR 373.30(b) shall be followed for the notice.
- C. The exemptions listed in 40 CFR 372.38 for determining the amount of release to be reported under 40 CFR 372.30 shall also be exemptions for determining the amount emitted under this subsection.
 - D. The notice shall include:
- (I) The name and Chemical Abstracts Service (CAS) number (if applicable) of the chemical reported;
- (II) If the chemical identity is claimed trade secret under 40 CFR 372, a generic name for the chemical as reported under 40 CFR 372.85(b)(11);
- (III) A mixture component identity if the chemical identity is not known; and
- (IV) An estimate of total air emissions, in pounds, for the relevant time period of ERC generation. Releases of less than one thousand (1,000) pounds may be indicated in ranges.
- 11. Signature of authorized account representative and the signature of an official responsible for the truth, accuracy, and completeness of the notice.
- (C) The Notice of Intent to Use ERCs shall include the following information submitted on a form supplied by the Missouri Department of Natural Resources:
 - 1. The name of the facility;
- 2. The emissions unit and the applicable pollutant;
 - 3. Account identification number;
- 4. The date(s) on which the ERCs were acquired;
- 5. The amount of ERCs used and the associated serial numbers;
- 6. The applicable state and federal requirements that the ERCs were used to comply with;
- 7. The emissions quantification protocols that were used to calculate the amount of ERCs required to demonstrate compliance and documentation for the compliance calculation under paragraph (3)(B)7. of this rule;
- 8. A statement that due diligence was made to verify that the ERCs were not previously used and not generated as a result of actions prohibited under this regulation or other provisions of law;

- A statement that the ERCs were not used in a manner prohibited under this regulation or other provisions of law;
- 10. For each source subject to reporting toxic chemical releases for the Community Right-to-Know provisions under 40 CFR part 372, the estimated amount of hazardous air pollutants emitted to the air as the result of the use of the ERC to meet otherwise applicable requirements. The estimated amount shall include emissions increases and any emission reductions used for ERCs instead of non-ERC compliance with otherwise applicable requirements. The same procedures shall be followed as the similar requirement under the Notice and Certification of Generation;
- 11. Signature of authorized account representative and the signature of an official responsible for the truth, accuracy, and completeness of the notice.
- (D) The Notice of Withdrawal shall include the following information submitted on a form supplied by the Missouri Department of Natural Resources:
 - 1. The name of the facility;
- 2. The emissions unit and the applicable pollutant;
 - 3. Account identification number;
- 4. The serial numbers of the ERCs to be withdrawn;
 - 5. The reason for the withdrawal;
- 6. A copy of the Notice and Certification of Generation submitted by the generator source to the state; and
- 7. Signature of authorized account representative and the signature of an official responsible for the truth, accuracy, and completeness of the notice.
- (E) The Notice of Transfer shall include the following information submitted on a form supplied by the Missouri Department of Natural Resources:
- 1. The name of the account holder that is trading the ERCs;
- 2. The name of the account holder that is receiving the ERCs;
 - 3. Account identification number;
- 4. The amount of ERCs to be transferred and the associated serial numbers and applicable pollutants;
- 5. A statement that due diligence was made to verify that the ERCs were not previously used and not generated as a result of actions prohibited under this regulation or other provisions of law; and
- Signature of authorized account representatives from both accounts signifying that both account holders agree to the requested transfer.
- (F) The generator source shall document the protocol and specific data by which an

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ERC is quantified. Generator sources shall transfer all such documentation to any transferee at the time that ownership of an ERC is transferred. The user source shall document the protocol and specific data by which the amount of ERCs needed for compliance was determined. The user source shall maintain all relevant documentation for a minimum of five (5) years after an ERC is used for compliance. Records shall be kept with at least the same frequency as required for the underlying requirement.

(5) Test Methods. (Not Applicable)

AUTHORITY: sections 643.050 and 643.220, RSMo Supp. 2011.* Original rule filed Aug. 2, 2002, effective April 30, 2003. Amended: Filed May 17, 2004, effective Dec. 30, 2004. Amended: Filed Oct. 15, 2008, effective July 30, 2009. Amended: Filed Jan. 31, 2012, effective Sept. 30, 2012.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011 and 643.220, RSMo 2001, amended 2002.