

**Clean Air Act Section 110(l) Demonstration for the Replacement of
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds with new rule
10 CSR 10-6.261 Control of Sulfur Dioxide Emissions**

I. Purpose

This document demonstrates that the replacement of existing rule 10 CSR 10 - 6.260 *Restriction of Emission of Sulfur Compounds* with new rule 10 CSR 10-6.261 *Control of Sulfur Dioxide* in Missouri's federally approved SIP complies with the anti-backsliding provisions of Clean Air Act Section 110(l).

Obsolete requirements found in 10 CSR 10-6.260 have been eliminated, and requirements that cannot be replaced with equivalent or more stringent requirements have been carried forward into the new rule, 10 CSR 10-6.261. The Air Program rescinded 10 CSR 10-6.260 from the Code of State Regulations (CSR) effective November 30, 2015. While the requirements carried forward from 10 CSR 10-6.260 are not necessarily protective of any National Ambient Air Quality Standard (NAAQS), these requirements are necessary backstops to maintain the existing level of SO₂ emissions control equivalent to 10 CSR 10-6.260.

The purpose of this document is to 1) specify which 10 CSR 10-6.260 provisions are being eliminated and which ones are being carried forward "as is" into 10 CSR 10-6.261 and 2) address the department's obligation under Clean Air Act (CAA) Section 110(l) by demonstrating that 10 CSR 10-6.260 provisions being eliminated will not have an adverse impact on air quality.

II. Background

Missouri had no prior history of SO₂ nonattainment areas under any SO₂ NAAQS prior to the 1-hour SO₂ NAAQS that EPA promulgated in 2010. 10 CSR 10-6.260 consolidated earlier air regulations and had limits that had been in place prior to any SO₂ NAAQS, some of which are incorporated into Missouri's State Implementation Plan (SIP). 10 CSR 10-6.260 contained requirements for limiting emissions of sulfur compounds, including SO₂, sulfur trioxide, and sulfuric acid; however, the sulfur trioxide and sulfuric acid limits have never been part of Missouri's federally approved SIP. The rule has limits and conditions with origins dating back to the 1960s, prior to the federal CAA, and some of its provisions are outdated.

III. Demonstration

The following is a list of requirements currently found in 10 CSR 10-6.260 that are: A) not being moved into 10 CSR 10-6.261 because they are no longer necessary or applicable, including obsolete provisions and those for which equivalent or more stringent SO₂ requirements have been identified, or B)

retained in the new rule because they cannot be replaced with an equivalent or more restrictive requirement. These provisions are not necessarily protective of any SO₂ NAAQS but ensure the existing level of SO₂ control equivalence to 10 CSR 10-6.261 for sources subject to these requirements.

A) Requirements not being moved into 10 CSR 10-6.261 because they are no longer necessary or applicable, including obsolete provisions and those for which equivalent or more stringent SO₂ requirements have been identified.

- 1) Removal of sulfuric acid/sulfur trioxide, and SO₂ concentration limits. Paragraph (3)(A)1. of 10 CSR 10-6.260 set concentration limits of 70 mg/m³ of sulfuric acid and sulfur trioxide and 2,000 ppmv of SO₂ for existing sources. Paragraph (3)(A)2. set concentration limits of 35 mg/m³ of sulfuric acid and sulfur trioxide and 500 ppmv of SO₂ for new sources. All of these concentration limits were designed to control emissions from sulfuric acid production plants as part of Missouri's 111(d) State plan for this source category, which is codified at 40 CFR 62.6353. These limits were never approved into Missouri's SIP. The only source in Missouri that was subject to this 111(d) plan was W.R. Grace & Co. Joplin. This source stopped operating in 2004. A review of Missouri's inventory shows no existing sources in this 111(d) source category. Therefore, the Air Program has submitted a negative declaration letter for the 111(d) guidelines for sulfuric acid production plants.

In addition to removing these limits in light of the negative declaration for this source category, the Air Program is also updating the applicability language in the rule for additional clarity. The only applicable SIP requirements of 6.260 and state enforceable rule requirements of the previous version of 6.261 that applied to SO₂ sources that were not indirect heating sources with heat input capacity greater than 350,000 Btu/hour were these requirements stemming from the 111(d) requirements that were only written to cover sulfuric acid production plants, and were never part of Missouri's approved SIP. Although the applicability language of the current rule includes broad language that says it applies to all SO₂ emission sources, the lack of any requirements for SO₂ sources that do not fit the criteria listed in one of the various subsections of Section (3), makes that previous applicability language very confusing. Therefore, this rule amendment makes clear in the applicability section, which sources are regulated by the rule and which sources are not.

Title V permits that simply list 10 CSR 10-6.260 and 10 CSR 10-6.261 as being an applicable regulation since the source has sulfur emissions may, as a result, have set concentration limits for these compounds or liquid fuel sulfur content limits from subsection (3)(C) of 10 CSR 10-6.261. However, any reference to these limits in Title V permits is unnecessary, and never part of any SIP approved language or any demonstration developed to ensure compliance with any historic or current SO₂

NAAQS. Further, any new sources in this source category would be subject to New Source Performance Standards (NSPS requirements), which would be far more restrictive than the limits and requirements included in this rule. Therefore, CAA Section 110(l) is not applicable to the removal of the limits in 10 CSR 10-6.260 paragraphs (3)(A)1. and (3)(A)2.

- 2) Removal or a change in the limit for sources that no longer operate or are covered by another enforceable mechanism. The following is a list of named sources found in 10 CSR 10-6.260 that are not being carried over to the new rule. Below each source is an explanation of why the source was removed in 10 CSR 6.261 and how the removal of the source from the rule complies with CAA section 110(1).

i. Aquila (St. Joseph Light & Power) – Lake Road Plant

Table 1 of 10 CSR 10-6.260 included SO₂ emission limits for Boilers 1, 2, 3, 4, 5, and 6 and for Combustion Turbines 5, 6, and 7 at the Lake Road facility. These limits were all carried forward into a SIP-approved Consent Agreement for the Lake Road facility, which negates the need to keep the limits in the rule. In addition, the Air Program submitted to EPA an amendment to that SIP approved Consent Agreement that includes fuel sulfur content limits that are stricter than the limits in 10 CSR 10-6.260 for all units except Boiler 5, which remained the same as the limit in 10 CSR 10-6.260. For these reasons, the removal of the limits in 10 CSR 10-6.260 at the Lake Road facility will not result in any relaxation of the requirements at that facility, thus satisfying CAA Section 110(l). See Appendix A for the latest SIP approved Consent Agreement for Lake Road. APCP-2015-118 Amendment #2 was signed on October 18, 2021, and EPA promulgated a partial approval on July 3, 2023. The table below provides a comparison of the emission limits found in 10 CSR 10-6.260 for this facility and the corresponding worst case emission rates based on the fuel requirements in the latest SIP approved Consent Agreement.

Facility	Averaging Time	10 CSR 10-6.260 Emission Rate per Unit (Pounds Sulfur Dioxide per Million Btus	APCP-2015-118 Amendment #2 New Worst Case Potential Emission Rate (lbs. Sulfur Dioxide per Million BTUs)
Aquila - Lake Road Plant*	24 Hours	(Boilers 1, 2, and 4) 0.0524 (Boiler 3) 0.0006 (Boiler 5) 1.3490 (Boiler 6)** (Combustion Turbines 5, 6, and 7) 0.0511	(Boiler 1, 2, and 4) 0.00152 (Boiler 3) Retired (Boiler 5) 1.349 (Boiler 6) 0.00152 (Combustion Turbines 5, 6, and 7) 0.00152

*Facility is subject to State Enforceable Agreement

**Boiler 6 at the Lake Road Plant is limited to a 24 hour daily block average of 1,400 pounds of SO₂/hour

ii. Doe Run Company, Lead Smelter and Refinery - Glover, Missouri

Table 2 of 10 CSR 10-6.260 included SO₂ emission limits for the sinter machine stack and the blast furnace stack at the Glover facility. The Glover facility ceased secondary lead smelting operations in 2003. These smelters removed the lead from batteries which resulted in high amounts of sulfur oxidizing into SO₂ in the furnace. In 2020, the Air Program entered into Consent Agreement #APCP-2020-002 with the Glover facility, which among other requirements ensures that no lead process activities will occur at the facility going forward. The only SO₂ emissions coming from the facility in 2003, the last year before cessation of smelting operations, were from units 1, 4, and 27 which are the emission release points associated with the blast furnace and sinter plan. Both of these activities are lead process activities that are now permanently banned through the SIP-approved Consent Agreement. Therefore, SO₂ emission are also inherently prevented from these operations. As such, the removal of the emission limits from the rule will not result in any relaxation of the requirements at that facility, thus satisfying CAA Section 110(l). This 2020 consent agreement was submitted to EPA for SIP approval, and EPA finalized its approval of the agreement into the SIP on April 27, 2022.¹ The consent agreement included in that SIP revision is included with this demonstration as Appendix B.

iii. Doe Run Company, Smelter – Herculaneum, Missouri

Table 2 of 10 CSR 10-6.260 included facility-wide SO₂ emission limits for the Herculaneum facility. Herculaneum ceased all primary lead smelting operations in December 2013 as required in the federal multi-media consent decree. With the permanent cessation of these activities at Herculaneum, the removal of the emission limits from the rule will not result in any relaxation of the requirements at that facility, thus satisfying CAA Section 110(l). The federal multi-media consent decree is included with this demonstration as Appendix C.

iv. Aquila – Sibley Plant

Table 1 of 10 CSR 10-6.260 included an SO₂ emission rate limit of 9 lbs. SO₂/mmBtu, which applied to all units at the Sibley Plant. The facility ceased all operations in June 2018 as stated in the operating permit termination letter the air program sent to the facility in March of 2019. In the letter it states that the program was notified that the installation retired the coal-fired electric generating units at the end of December 2018. As a result, the potential emissions are below the major source thresholds, so the installation is no longer required to obtain an operating

¹ See 87 FR 24807, April 27, 2022

permit. In addition, in January of 2019, the facility submitted retired unit exemption forms to EPA for all three units at the facility. Appendix D provides a copy of the operating permit termination letter as well as the retired unit exemption forms.

v. Trigen-Grand Ave. Plant (Now known as Vicinity Energy)

Table 1 of 10 CSR 10-6.260 included a 3-hour limit of 7.1 lbs. SO₂/MMBtu that applied to each unit at the facility. In 2016, this facility converted from coal to natural gas as their compliance method for the Boiler MACT requirements. Construction Permit # CP 122016-009 requires Vicinity to burn natural gas exclusively in Boilers 1A, 6, and 8. Further, Permit Condition 006 of their 2018 Operating Permit #OP 2018-006A requires them to burn natural gas exclusively in Boilers 1A, 6, 7, and 8. In 2021, Vicinity and the air program entered into a Consent Agreement (AOC No. APCP-2021-007), as part of the Maintenance Plan for the Jackson County SO₂ Nonattainment Area for the 2010 SO₂ Standard. This agreement made the fuel switch away from coal part of Missouri SIP. EPA approved the maintenance plan, and the agreement, as a SIP revision on January 31, 2022.² With this enhancement to Missouri's federally approved SIP, the removal of the historic limit in 10 CSR 10-6.260 will not result in any backsliding, thus satisfying CAA Section 110(l). Appendix E includes the 2021 Consent Agreement that was recently approved into Missouri's SIP.

vi. Independence Power and Light—Blue Valley Station

Table 1 of 10 CSR 10-6.260 included a 3-hour limit of 7.1 lbs. SO₂/MMBtu that applied to each unit at the Blue Valley Station. As their compliance strategy for the Utility MATS, Blue Valley ceased coal combustion in Boiler Unit 3 by April of 2015. They submitted a construction permit application in 2014 to cease coal at Unit 3, end the operation of the electrostatic precipitator on Unit 3, and replace a fuel oil storage tank. On January 15, 2015, the air program sent Blue Valley a letter stating that no construction permit was required for the changes. The letter included explanations of some of the remaining requirements, and recommended the facility dismantle or disable the coal-handling equipment at the facility. The letter also directed the facility to incorporate the coal cessation project into their operating permit renewal application that was upcoming in 2015, and the facility did so.

Then in 2020, the facility permanently retired Units 1, 2, and 3. Then in 2021, since the remaining units were below major source thresholds for all pollutants, the facility requested to terminate its Part 70 operating permit.

² See 87 FR 4812, January 31, 2022.

On June 26, 2023, the Air Pollution Control Program issued a letter to the facility terminating its Part 70 Operating Permit because no operating permit is required due to EP01, EP03, EP04, EP05, EP10, EP11, EP12, and EP105 ceasing operation. The installation's potential to emit (PTE) SO_x is currently 1.57 tons per year.

With the permanent retirement of all the significant SO₂ sources at the facility, and the remaining PTE for the remaining units, the SO₂ limit in Table 1 of 10 CSR 10-6.260 is no longer necessary. Therefore its removal from the rule is allowed per CAA Section 110(l). Appendix F includes the termination letter for the facility's Part 70 Operating permit, which provides the list of units that have permanently retired and the PTE of the remaining emission units.

vii. AECI Chamois

10 CSR 10-6.260 included a limit of 6.7 lbs. SO₂/MMBtu. This is no longer necessary, since the facility has been out of business since 2015, and all boilers subject to the rule have been permanently removed. Appendix G includes the retired unit exemption form for Boiler 2 at the facility.

viii. City Utilities Boilers 1-5

10 CSR 10-6.260 included limits of 1.5 lbs. SO₂/MMBtu for Boilers 1-4 and 2.0 lbs SO₂.MMBtu for Boiler 5. However, City Utilities has retired all five of these boilers from service. Therefore, the limits no longer need to be retained in the rule. Appendix H includes the title page of the facility's P70 Operating Permit. The installation description clearly states that all five of these boilers have been retired.

ix. Empire District Electric Asbury

10 CSR 10-6.260 included a limit of 12 lbs. SO₂/MMBtu for the applicable boiler at this facility. This boiler has been retired since March of 2020. Therefore, this limit no longer needs to be retained in the rule. Appendix I includes the permanent retirement letter setting the retirement date as March 1, 2020.

x. KCPL Montrose

10 CSR 10-6.260 included a limit of 3.9 lbs. SO₂/MMBtu for the three boilers at this facility. Boiler 1 retired in 2016, and Boilers 2 and 3 were retired in 2019. Therefore, this limit no longer needs to be retained in the rule. Appendix J includes the P70 Operating Permit termination letter. In this letter, the facility states the two coal-fired boilers will no longer be in operation. An additional letter in Appendix J states boiler 1 will cease coal and oil use after 4/15/2016.

xi. Ameren Missouri Sioux Energy Center

10 CSR 10-6.260 included a limit of 4.8 lbs. SO₂/MMBtu that applied individually to the two boilers at the facility. In 2021, the Department entered into a new Consent Agreement with the facility as part of a SIP strengthening exercise. This

Consent Agreement is included in Appendix K. EPA approved this agreement into Missouri's SIP on November 16, 2022.³ The limit in this SIP-approved Consent Agreement is 7,342 lbs. SO₂ per hour based on the combined emissions from the two boilers at the facility. The form of the limit is a 24-hour block average, which is the same as the form of the limit in 10 CSR 10-6.260.

Since the two limits are of different forms and one applies to each boiler individually, and the other is based on the combined emissions from both, additional information is needed to compare the stringency of the two limits. The two boilers at the facility are twin units. Each are cyclone fired boilers with heat input design ratings of 4,920 MMBtu/hr. If we multiply the limit from 10 CSR 10-6.260 by the design-rate heat input for both units combined, we can calculate a facility wide maximum allowable emission rate of 47,232 lbs. SO₂/hour.

$$4.8 \text{ lbs. SO}_2/\text{MMBtu} * 4,920 \text{ MMBtu/hr} * 2 \text{ boilers} = 47,232 \text{ lbs. SO}_2/\text{hour}$$

The new limit in the Consent Agreement for the combined emissions from both boilers is 7,342 lbs. SO₂/hour, which represents a nearly 85 percent reduction in the allowable emissions from the facility. However, since the Consent Agreement limit applies to the combined emissions from both units and the 10 CSR 10-6.260 limit applies to each unit individually, additional analysis is needed.

Even if assuming only one boiler is operating, then if the unit is operating at full design rate heat input capacity, the facility-wide limit in the Consent Agreement would equate to limit of 1.49 lbs. SO₂/MMBtu.

$$7,342 \text{ lbs SO}_2 \text{ per hour} / 4,920 \text{ MMBtu per hour} = 1.49 \text{ lbs. SO}_2 \text{ per MMBtu.}$$

This is still a 67 percent reduction in the allowable rate, even if the full facility-wide limit is utilized by a single unit. Even if a single unit were operating at a lower-heat input than its capacity, the facility-wide limit would still represent a more stringent control requirement down to an actual heat input of 1,530 MMBtu/hr, which would mean that a single unit was operating at 31 percent capacity, and at the same time utilizing the full facility-wide limit, and the facility-wide limit would still be as protective as the limit in 10 CSR 10-6.260.

In addition, it is noted that the Ameren Sioux facility has always complied with the Utility MATS acid gas requirements through the use of the SO₂ surrogate, which limits the SO₂ emission rate to 0.2 lbs/MMBtu, which adds even further assurance that the removal of the 4.8 lbs/MMBtu limit from the SIP will not cause any backsliding and thus complies with Clean Air Act Section 110(l).

³ See 87 FR 68634, promulgated November 16, 2022

- 3) Compliance, monitoring, reporting, and recordkeeping requirements. 10 CSR 10-6.260 has monitoring, reporting, recordkeeping, and compliance scattered among various subsections of the rule. The new rule 10 CSR 10-6.261, simplifies the requirements for Continuous Emission Monitoring (CEM), reporting, recordkeeping, and expands the list of test methods. The new rule also simplifies the requirements in all these areas by placing them into appropriate areas in the rule.

Compliance

Compliance with 10 CSR 10-6.260 is determined in three (3) ways: by source testing, by providing the director such data as they may reasonably require, or by other methods approved by the director in advance. Source testing to determine compliance with SO₂ emission limits is directed to 10 CSR 10-6.030(6) *Sampling Methods for Air Pollution Sources*. Section (6) of 10 CSR 10-6.030 incorporates by reference 40 CFR part 60, Appendix A Test Methods, Method 6-*Determination of Sulfur Dioxide Emissions from Stationary Sources*.

In 10 CSR 10-6.261, the compliance test methods are expanded to include additional methods beyond Method 6. The additional test methods allow sources to more accurately determine their SO₂ emissions, especially the inclusion of Methods 6A, 6B, and 6C. The following are the test methods found in the new rule.

Method 1:	Sample and velocity traverses for stationary sources;
Method 2:	Determination of stack gas velocity and volumetric flow rate (Type S Pitot tube);
Method 3:	Gas analysis for the determination of dry molecular weight;
Method 4:	Determination of moisture content in stack gases;
Method 6:	Determination of Sulfur Dioxide Emissions from Stationary Sources;
Method 6A:	Determination of Sulfur Dioxide, Moisture, and Carbon Dioxide from Fuel Combustion Sources;
Method 6B:	Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions from Fossil Fuel Combustion Sources;
Method 6C:	Determination of Sulfur Dioxide Emissions from Stationary Sources
	(Instrumental Analyzer Procedure); and/or
Method 8:	Determination of sulfuric acid mist and sulfur dioxide emissions from stationary sources

In 10 CSR 10-6.260 the director may request sources to furnish data to determine whether compliance is met. This requirement is carried forward into 10 CSR 10-6.261.

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10 CSR 10-6.261 clarifies that the director and U.S. Environmental Protection Agency must approve any alternative test method and the method must be incorporated in the SIP.

10 CSR 10-6.261 allows the use of fuel delivery records to demonstrate compliance with the rule. The compliance requirements are equivalent to or stricter than those found in 10 CSR 10-6.260.

Monitoring

In 10 CSR 10-6.261, all CEMS shall follow all the requirements in 40 CFR 75 and/or 40 CFR 60, Appendices B and F. The only exception to this is that CEMS for lead smelters and refiners is copied verbatim from 10 CSR 10-6.260 into the new rule. The language located at 10 CSR 10-6.260 part (3)(C) 3.A.(III) relating to the requirement for indirect sources in the St. Louis area to furnish the director with appropriate data to determine if compliance is being met may appear to have been removed in the new rule. However, this clause is covered in 10 CSR 10-6.261 at subsection (4)(G) which states: *Owners or operators of sources subject to this rule must furnish the director all data necessary to determine compliance status.* Therefore all the monitoring requirements in 10 CSR 10-6.261 are equivalent to or stricter than those found in 10 CSR 10-6.260.

Reporting

10 CSR 10-6.260 outlines the reporting requirements in section (4). As described in the rule text, only sources subject to subparagraph (3)(B)3.A. and paragraph (3)(C)3. are required to submit written reports of excess emissions. The sources covered are indirect heating sources located in Franklin, Jefferson, St. Louis, St. Charles Counties, or City of St. Louis for installations with a capacity of two thousand (2,000) or more MMBtu per hour and the lead smelters. They are only required to report those excess emissions on a quarterly basis. No other sources are required to report, even if they do have excess emissions.

In 10 CSR 10-6.261 all sources subject to the rule are required to report any excess emissions other than startup, shutdown, and malfunction (SSM) emissions already required to be reported under 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions*. Excess emissions not covered under 10 CSR 10-6.050 are to be reported within thirty (30) days following the end of the quarter. This reporting requirement is stricter than that found in 10 CSR 10-6.260.

It is noted that the language in 10 CSR 10-6.260 subparagraph (4)(A)1.B., and paragraphs (4)(A)2., and (4)(A)3. were deleted in the new rule. These were requirements related to reporting SSM events for lead smelters and refiners with regard to compliance with the requirements in subsection 3(A) of 10 CSR 10-6.260. However, as explained above subsection was never approved as part of the SIP, and

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was only intended to apply to sulfuric acid manufacturing plants as part of a Section 111(d) plan. The new rule makes this clarification that those sulfur trioxide, sulfuric acid, and SO₂ concentration limits do not apply to lead smelters. As such, the language regarding SSM reporting requirements relating to these requirements is unnecessary. Therefore, the removal of this language is not anti-backsliding and is rather administrative and clarifying in nature.

Recordkeeping

10 CSR 10-6.260 does not require any source to keep records to document changes in a source's operating procedures, performance test results, monitoring results, etc.

In 10 CSR 10-6.261, sources are required in section (4) to keep appropriate records on source activities. This includes maintaining records on: modifications to the sources operating procedures to prevent or minimize excess emissions; records of performance tests, CEM information, and fuel sampling tests; and monitoring data, calibration checks and adjustments and maintenance to systems. In addition, records are to be maintained on fuel supplier certification information to certify the fuel sulfur content on deliveries. These recordkeeping requirements are stricter than those found in 10 CSR 10-6.260.

B) Requirements retained in the new rule because they cannot be replaced with an equivalent or more restrictive requirement. These provisions are not necessarily protective of any SO₂ NAAQS but ensure the existing level of SO₂ control equivalence to 10 CSR 106.261 for sources subject to these requirements.

- 1) Exemption for small sources. 10 CSR 10-6.260 exempts indirect heating sources with a total rated capacity less than or equal to three hundred fifty thousand (350,000) Btus per hour actual heat input. This is the same for 10 CSR 10-6.261 so the exemptions are equivalent and CAA Section 110(l) is satisfied.
- 2) Exemption for source units subject to an applicable SO₂ emission limit under 10 CSR 10-6.070 *New Source Performance Regulations*. 10 CSR 10-6.260 exempts from the rule, in paragraph (1)(A)1., emission sources subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070 *New Source Performance Regulations*. This exemption is being retained in 10 CSR 10-6.261, but modified to require that the 10 CSR 10-6.070 requirement be more restrictive to qualify for this exemption. 10 CSR 10-6.261 adds clarification that the exemption is only applicable on a unit by unit basis and does not exempt the entire source. This exemption in 10 CSR 10-6.261 is equivalent to or stricter than 10 CSR 10-6.260 because sources are subject to the more restrictive SO₂ or sulfur-in-fuel limit.
- 3) Exemption for sources using natural gas and liquefied petroleum gas (LPG) from emission limits. 10 CSR 10-6.260 exempts combustion equipment in paragraph (1)(A)2. that uses exclusively pipeline grade natural gas as defined in 40 CFR 72.2 or LPG as defined by ASTM, or any combination of these fuels. This exemption is retained in 10

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CSR 10-6.261 for emission sources with units fueled exclusively with natural gas or LPG. The updated rule language requires facilities to maintain documentation of all fuels combusted in the unit(s) along with documentation showing that all fuels combusted in the unit meet the definition of one of these exempted fuels. Therefore, 10 CSR 10-6.261 is equivalent or stricter regarding this retained fuel exemption.

4) St. Louis and Outstate 2.3 lbs/MMBtu and 8.0 lbs/MMBtu SO₂ emission limits. 10 CSR 10-6.260 sets SO₂ emission limits for indirect heating sources at 2.3 lbs/MMBtu and 8.0 lbs/MMBtu in subparagraph (3)(B)2.A., part (3)(B)3.A.(I), and part (3)(B)3.B.(II), for the St. Louis area and outstate area, respectively. These limits have origins dating back to the 1960s, prior to the federal CAA. These emission limits need to be retained since they are part of the SIP and provide an upper limit on SO₂ emissions. In addition, an equivalent or more stringent federal or state standard to replace these limits could not be identified. The new rule retains the use of those SO₂ emission limits.

5) Two percent (2%) and four percent (4%) sulfur coal and fuel oil limits. 10 CSR 10-6.260 has a two percent (2%) and four percent (4%) sulfur limit in part (3)(B)3.B.(I) for indirect heating sources located in Franklin, Jefferson, St. Louis, St. Charles Counties, or City of St. Louis with a capacity of less than two thousand (2,000) MMBtu per hour. These limits are retained in 10 CSR 10-6.261 since an equivalent or more stringent federal or state standard to replace these limits could not be identified. This requirement in 10 CSR 10-6.261 is equivalent to 10 CSR 10-6.260.

6) Named sources retained in 10 CSR 10-6.261. 10 CSR 10-6.260 has named sources with specific SO₂ emission limits found in (3)(B)2.B., (3)(B)3.A.(II), and (3)(C)1. With the exception of the units at James River, all these limits are retained in 10 CSR 10-6.261 thus maintaining the existing level of SO₂ emissions control included in the SIP. The natural gas requirement for James River is more stringent than the old numeric limits in 6.260. These sources are listed in the table below.

Source	6.260 Limit (pounds SO ₂ per Million Btus)	6.261 Limit (pounds SO ₂ per Million Btus) ^a	Average Time
New Madrid Power Plant – Marston	10.0	10.0	3 hours
Thomas Hill Energy Center Power Division – Thomas Hill	8.0	8.0	3 hours
University of Missouri (MU) – Columbia Power Plant	8.0	8.0	3 hours
Doe Run Company – Buick Resource Recycling Facility	8,650 pounds of SO ₂ /hr	8,650 pounds of SO ₂ /hr	1-hour test repeated 3 times
Ameren Missouri – Labadie Energy Center ^b	4.8	4.8	Daily average, 00.01 to 24:00
Evergy Inc. – Hawthorn Generating Station ^c	0.12	0.12 excluding periods of startup, shutdown ^d	30-day rolling average

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- ^a Applies to indirect heating units only and applies to such units individually.
- ^b Applies to Boilers 1, 2, 3, and 4 only and individually. There is no change from 10 CSR 10-6.260 to 10 CSR 10-6.261
- ^c Applies to Boiler 5A only.
- ^d Natural gas shall be used for startup of Hawthorn Boiler 5A. During startup, once the unit converts to firing coal, the dry scrubber shall be started appropriately to comply with relevant standard applicable during normal operation. During shutdown, the dry scrubber shall be operated after cessation of coal being fed in the unit for as long as possible thereafter considering operational and safety concerns.

7) Kansas City Power & Light – Hawthorn Plant

Table 1 of 10 CSR 10-6.260 included a 30-day rolling emission rate limit of 0.12 lbs. SO₂/MMBtu. The footnote to Table 1 in 10 CSR 10-6.260 states: *The SO₂ emission rate comes from the Prevention of Significant Deterioration permit for Unit 5A and is implemented in accordance with the terms of the permit.* The permit that the rule refers to is Construction Permit Number 888 issued by the Kansas City Health Department in August of 1999 and amended in 2001 after the reconstruction of the Unit 5 Boiler.

The new rule text in Table 1 of 10 CSR 10-6.261 includes the same limit of 0.12 lbs. SO₂/mmBtu, and removes the reference to the permit, since the permit is not part of Missouri's SIP. The language in the table excludes periods of startup and shut down with respect to the numerical limit; however these events are already excluded in the compliance determination for this limit in the permit (and therefore also in 10 CSR 10-6.260), so there is no backsliding by including this language in the rule. Further, the new footnote “^d” in Table 1 of 10 CSR 10-6.261 complies with EPA's SSM policy as the rule includes work practice standards for start-up and shutdown periods that are designed to minimize SO₂ emissions during these periods of time, thus meeting the definition of a continuous emission limit.

IV. Conclusion

This document demonstrates that 10 CSR 10-6.261, maintains existing rule requirements from 10 CSR 10-6.260 that are not being replaced with equivalent or more restrictive requirements. It also justifies removing 10 CSR 10-6.260 rule requirements that are no longer deemed necessary or applicable (e.g. facility shutdowns, requirements superseded by more stringent requirements, etc.). The obsolete provisions from 10 CSR 10-6.260 that are not being carried forward to 10 CSR 10-6.261 can be removed from the Missouri SIP with no adverse impact on air quality, thus satisfying CAA Section 110(l).

Appendices

Appendix A - Aquila (St. Joseph Light & Power) – Lake Road Documentation

Appendix B - Doe Run Company, Lead Smelter and Refinery - Glover, Missouri Documentation

Appendix C - Doe Run Company, Smelter – Herculaneum, Missouri Documentation

Appendix D - Aquila – Sibley Plant Documentation

Appendix E - Trigen-Grand Ave. Plant Documentation

Appendix F - Independence Power and Light—Blue Valley Station Documentation

Appendix G - AECI Chamois Documentation

Appendix H - City Utilities of Springfield - James River Documentation

Appendix I - Empire District Electric – Asbury Documentation

Appendix J - KCPL Montrose Documentation

Appendix K - Ameren Sioux Energy Center Documentation