

**COMMENTS AND RESPONSES ON**

**PROPOSED RULE**

**10 CSR 10-6.261**

**CONTROL OF SULFUR DIOXIDE EMISSIONS**

**AND**

**RECOMMENDATION FOR ADOPTION**

On June 25, 2015, the Missouri Air Conservation Commission held a public hearing concerning the proposed rule 10 CSR 10-6.261 Control of Sulfur Dioxide Emissions. The following is a summary of comments received and the Missouri Department of Natural Resources' Air Pollution Control Program corresponding responses. Any changes to the proposed rule are identified in the responses to the comments.

The Missouri Department of Natural Resources' Air Pollution Control Program recommends the commission adopt the rule action as revised.

*NOTE 1 - Legend for rule actions to be voted on is as follows:*

- \* *Shaded Text - Rule sections or subsections unchanged from Public Hearing. This text is only for reference.*
- \* *Unshaded Text - Rule sections or subsections that are changed from the proposed text presented at the Public Hearing, as a result of comments received during the public comment period.*

*NOTE 2 - All unshaded text below this line will be printed in the Missouri Register.*

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**Title 10—DEPARTMENT OF  
NATURAL RESOURCES**

**Division 10—Air Conservation Commission**

**Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air  
Pollution Control Regulations for the Entire State of Missouri**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Air Conservation Commission under section 643.050, RSMo Supp. 2013, the commission adopts a rule as follows:

10 CSR 10-6.261 is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on May 15, 2015 (40 MoReg 621-626). Those sections with changes are reprinted here. This proposed rule becomes effective thirty (30) days after publication in the *Code of State Regulations*.

**SUMMARY OF COMMENTS:** The department's Air Pollution Control Program received eight (8) comments from the following seven (7) sources: Kansas City Power & Light Company (KCP&L), The Boeing Company, Washington University School of Law Interdisciplinary Environmental Clinic on behalf of Sierra Club (Washington University), the U.S. Environmental Protection Agency (EPA), Ameren Missouri, Sierra Club, and private citizens.

**COMMENT #1:** EPA provided comments on the variability analysis performed to support the 30-day rolling average limit for KCP&L's Hawthorn 5 unit. EPA also provided comments requesting more specificity on the contingency measures for the associated Jackson County SO<sub>2</sub> nonattainment area plan.

**RESPONSE:** Though the 30-day rolling average emission rate limit for KCP&L Hawthorn is listed in Table I of 10 CSR 10-6.261, the variability analysis performed to support the limit is part of the associated Jackson County SO<sub>2</sub> nonattainment area plan. The Air Program followed EPA guidance when developing the 30-day rolling average limits and the contingency measure requirements. These issues are discussed in more detail in the response to comments for the Jackson County SO<sub>2</sub> nonattainment area plan. No changes to the rule were made as a result of this comment.

**COMMENT # 2:** Washington University, the Sierra Club and several citizens commented that the proposed plan does not adequately protect public health in the nonattainment area and that the proposed plan's control strategy should be implemented more quickly than January 1, 2017. In addition, the Sierra Club provided letters from 78 citizens calling upon the DNR to create a plan that ensures protection of public health and not to wait until 2017 to see results.

**RESPONSE:** The Air Program strives to protect health in the development of all state plans, including the Jackson County SO<sub>2</sub> nonattainment area plan. EPA established January 1, 2017 as the date when emission controls, and associated emission reductions, must be fully operational in order to protect public health while allowing affected facilities reasonable time to make needed equipment and operational changes to comply. As detailed in the plan, the control strategy includes a 95% reduction in allowable SO<sub>2</sub> emissions from Veolia Energy. Because Veolia Energy is also subject to the existing source requirements of the federal Industrial, Commercial and Institutional Boiler MACT [40 CFR 63 Subpart 5D], the 95% reduction (combined with reductions in air toxics) is expected to occur by the Boiler MACT compliance date of January 31, 2016. Realization of emission reductions in January 2016 from the largest SO<sub>2</sub> source located within the bounds of the Jackson County SO<sub>2</sub> nonattainment area will protect air quality and public health throughout the entire area – particularly within and near the nonattainment area. No changes to the rule were made as a result of these comments.

**COMMENT #3:** Washington University commented that the emission limits for Ameren Missouri Energy Center sources listed in Table I are not adequate to demonstrate attainment throughout the Jefferson County nonattainment area and that they should be substantially reduced before the rule is adopted. This comment was previously provided during the 60-day

comment period on the draft rule text and Regulatory Impact Report as well as during the comment period on the Jefferson County SO<sub>2</sub> Nonattainment Area Plan. Washington University incorporated by reference the previous two sets of comments in their comment letter submitted on this proposed new rule, which was presented at the June 25, 2015 public hearing.

RESPONSE: The Air Program previously considered and responded to Washington University's comments submitted during the rule development phase of 10 CSR 10-6.261 and the public comment period for the Jefferson County SO<sub>2</sub> nonattainment area plan. The Table I SO<sub>2</sub> emission limits for the Ameren Missouri Energy Center sources are the same as those included in the 2015 Consent Agreement as part of the Jefferson County plan, which was adopted by the Air Conservation Commission on May 28, 2015 and submitted to EPA the following day. The SO<sub>2</sub> emission limits at the Ameren power plants are intended to support the continued attainment of the 1-hour SO<sub>2</sub> standard at the violating Mott Street monitor in Jefferson County. These limits, along with the other measures specified in the Jefferson County Plan, are intended to ensure attainment throughout the Jefferson County nonattainment area. No changes to the rule were made as a result of this comment.

COMMENT #4: Ameren Missouri provided comments that supported the rule. Ameren believes the proposed new SO<sub>2</sub> rule and state implementation plan will ensure that the ambient air quality standards are being met.

RESPONSE: The Air Program appreciates Ameren Missouri's comments in support of the proposed rule and state plan. No changes to the rule were made as a result of this comment.

COMMENT #5: Ameren Missouri acknowledged that the Jefferson County SO<sub>2</sub> nonattainment area plan has already been submitted to EPA for review and approval on May 29, 2015, but provided additional discussion on various aspects of that plan, as well as on the Regulatory Impact Report for 10 CSR 10-6.261.

RESPONSE: The Air Program has already considered and responded to Ameren's previous sets of comments submitted during the rule development phase of 10 CSR 10-6.261 and the public comment period for the Jefferson County SO<sub>2</sub> nonattainment area plan. No changes to the rule were made as a result of this comment.

COMMENT #6: As listed in Table I of the proposed SO<sub>2</sub> rule 10 CSR 10-6.261, Ameren commented that the Air Program should clarify that the Table I emission limits for the three Ameren Missouri Energy Centers (specifically Labadie, Meramec and Rush Island) are not necessary to achieve or demonstrate compliance with the 1-hour SO<sub>2</sub> standard; rather, the emission limits for these three Ameren Energy Centers are merely safeguards to ensure that attainment is maintained in Jefferson County.

RESPONSE: The requirements of Table I, including SO<sub>2</sub> emission limits, are necessary to address federal Clean Air Act requirements associated with the 1-hour SO<sub>2</sub> standard. The emission limits for the three Ameren Energy Centers in Table I are the same limits required by a 2015 Consent Agreement between Ameren Missouri and the department. Paragraph 6 of the 2015 Consent Agreement states that the parties agree that the Consent Agreement, which includes the emissions limits in Table I, "will be submitted to EPA as part of a State Implementation Plan revision... to demonstrate attainment and maintenance of the 2010 SO<sub>2</sub> NAAQS." No changes to the rule were made as a result of this comment.

COMMENT #7: KCP&L requested that the formatting in Table I, columns 3 and 4 be corrected to match the rows for clarity. KCP&L provided an example of the reformatted table.

RESPONSE AND EXPLANATION OF CHANGE: As a result of this comment, Table I, columns 3 and 4, was reformatted to align the emission limit and averaging time with the corresponding source unit.

COMMENT #8: The Boeing Company commented that the exceptions in the Applicability section appear to place an affirmative duty on owners and operators to notify the department that the exception criterion is met. The natural gas/propane and small heating unit exceptions encompass a great many emission units in Missouri, many of which are located in residential and commercial buildings which are below the thresholds for even a Basic operating permit. Boeing provided a suggested revision to section (1) to prevent such a reading and avoid widespread noncompliance with this provision.

RESPONSE AND EXPLANATION OF CHANGE: As a result of this comment, section (1) was amended to state that, upon request of the director, sources claiming the exception must provide information to confirm the exception criterion is met.

### **10 CSR 10-6.261 Control of Sulfur Dioxide Emissions**

(1) Applicability. This rule applies to any source that emits sulfur dioxide (SO<sub>2</sub>). 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 SO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> emissions as specified.

**Table I – Sources with SO<sub>2</sub> emission limits necessary to address the one (1)-hour SO<sub>2</sub> National Ambient Air Quality Standard\***

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

\*Any Table I source/unit fueled by coal, diesel, or fuel oil shall require an SO<sub>2</sub> 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 SO<sub>2</sub> CEMS for such units beginning with the completion date of the fuel change to natural gas.

**Table II – Sources subject to SO<sub>2</sub> emission limits in place prior to 2010**

Source	Source ID	Emission Limit per Source (Pounds SO <sub>2</sub> 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 <sub>2</sub> /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<sub>2</sub> 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 SO<sub>2</sub> 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 three-tenths pounds (2.3 lbs.) of SO<sub>2</sub> 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<sub>2</sub> 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, SO<sub>2</sub> Continuous Emission Monitoring System (CEMS) data.
    - A. SO<sub>2</sub> 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. SO<sub>2</sub> 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;
  2. For sources listed in Table II of this rule already subject to a SO<sub>2</sub> CEMS requirement, SO<sub>2</sub> CEMS data; and
  3. For sources subject to subsection (3)(B) or (3)(C) of this rule not required to use SO<sub>2</sub> CEMS for compliance and for sources listed in Table II of this rule not required to use SO<sub>2</sub> CEMS for compliance—

- A. Fuel delivery records;
- B. Fuel sampling and analysis;
- C. Performance tests;
- D. Continuous emission monitoring; or
- 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 SO<sub>2</sub> excess emissions;
  - E. Type of activity;
  - F. Estimate of the magnitude of the SO<sub>2</sub> excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude;
  - G. Measures taken to mitigate the extent and duration of the SO<sub>2</sub> excess emissions; and
  - H. Measures taken to remedy the situation which caused the SO<sub>2</sub> excess emissions and the measures taken or planned to prevent the recurrence of these situations;
2. 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 SO<sub>2</sub> emissions;
3. Maintain a record of data, calculations, results, records, and reports from any SO<sub>2</sub> emissions performance test, SO<sub>2</sub> continuous emission monitoring, fuel deliveries, and/or fuel sampling tests; and
4. Maintain a record of any applicable SO<sub>2</sub> 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 SO<sub>2</sub> CEMS for compliance must also—

1. If SO<sub>2</sub> CEMS is already used to satisfy other requirements (other than only to demonstrate compliance with this rule), continue to follow all correlating SO<sub>2</sub> CEMS requirements; or
2. If SO<sub>2</sub> CEMS is used only to demonstrate compliance with this rule, the SO<sub>2</sub> 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 sub-bituminous 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 SO<sub>2</sub> 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<sub>2</sub> 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;
    - 6. 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 a SO<sub>2</sub> 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 SO<sub>2</sub> CEMS as follows:
  - 1. The SO<sub>2</sub> 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 SO<sub>2</sub> continuous emission monitors as adopted by reference in 10 CSR 10-6.070.
  - 2. The span of SO<sub>2</sub> continuous emission monitors must be set at an SO<sub>2</sub> 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 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.

**COMMENTS AND RESPONSES ON  
PROPOSED RESCISSION OF  
10 CSR 10-6.260  
RESTRICTION OF EMISSION OF SULFUR COMPOUNDS  
AND  
RECOMMENDATION FOR RESCISSION**

On June 25, 2015, the Missouri Air Conservation Commission held a public hearing concerning the proposed rescission of rule 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds. The following is a summary of comments received and the Missouri Department of Natural Resources' Air Pollution Control Program corresponding responses. Any changes to the proposed rescission are identified in the responses to the comments.

The Missouri Department of Natural Resources' Air Pollution Control Program recommends the commission rescind this rule as proposed.

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*NOTE 2 - All unshaded text below this line will be printed in the Missouri Register.*

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**Title 10—DEPARTMENT OF  
NATURAL RESOURCES**

**Division 10—Air Conservation Commission**

**Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air  
Pollution Control Regulations for the Entire State of Missouri**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Air Conservation Commission under section 643.050, RSMo Supp. 2013, the commission rescinds a rule as follows:

**10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds is rescinded.**

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on May 15, 2015 (40 MoReg 621). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

**SUMMARY OF COMMENTS:** No written or verbal comments were received concerning this proposed rule rescission.

**RECOMMENDATION FOR ADOPTION**

**PROPOSED REVISION TO**

**MISSOURI STATE IMPLEMENTATION PLAN –  
NONATTAINMENT AREA PLAN FOR THE 2010 1-HOUR SULFUR DIOXIDE  
NATIONAL AMBIENT AIR QUALITY STANDARD –  
JACKSON COUNTY SULFUR DIOXIDE NONATTAINMENT AREA**

On June 25, 2015, the Missouri Air Conservation Commission held a public hearing for a revision to the Missouri State Implementation Plan (SIP) entitled – Nonattainment Area Plan for the 2010 1-Hour Sulfur Dioxide National Ambient Air Quality Standard – Jackson County Sulfur Dioxide Nonattainment Area. A summary of comments received and the Air Program’s corresponding responses is included on the following page. Revisions were made to the proposed plan as a result of comments received.

The revised plan has not been reprinted in the briefing document due to its volume. The entire revised plan is available for review at the Missouri Department of Natural Resources’ Air Pollution Control Program, 1659 East Elm Street, Jefferson City, Missouri, 65101, (573)751-4817. It is also available online at <http://dnr.mo.gov/env/apcp/stateplanrevisions.htm>.

The Air Program recommends the commission adopt the plan as revised. If the commission adopts this plan, the department intends to submit it to the U.S. Environmental Protection Agency for inclusion in the Missouri State Implementation Plan.

**COMMENTS AND RESPONSES ON  
PROPOSED REVISION TO  
MISSOURI STATE IMPLEMENTATION PLAN –  
Nonattainment Area Plan for the  
2010 1-Hour Sulfur Dioxide National Ambient Air Quality Standard -  
Jackson County Sulfur Dioxide Nonattainment Area**

The public comment period for the proposed revision to the Missouri State Implementation Plan (SIP) for the *Nonattainment Area Plan for the 2010 1-Hour Sulfur Dioxide National Ambient Air Quality Standard - Jackson County Sulfur Dioxide Nonattainment Area* opened on May 22, 2015 and closed on July 2, 2015. Revisions to the proposed plan were made as a result of comments.

The following is a summary of comments received and the Missouri Department of Natural Resources' Air Pollution Control Program's (Air Program's) corresponding responses.

**SUMMARY OF COMMENTS:** During the public comment period for the proposed plan, the Air Program received oral comments from the following sources: Ameren Missouri, the Missouri Chapter of the Sierra Club, and one citizen. All three oral commenters testified during the public hearing before the Missouri Air Conservation Commission (MACC) on June 25, 2015. Written comments were also received on July 2, 2015 from Ameren Missouri, the U.S. Environmental Protection Agency (EPA), and Washington University School of Law Interdisciplinary Environmental Clinic on behalf of Sierra Club (Washington University). In addition, the Sierra Club submitted letters from 78 citizens on June 25, 2015.

**COMMENT #1:** EPA commented that the draft Jackson County sulfur dioxide (SO<sub>2</sub>) nonattainment area plan does not provide sufficient specificity regarding what the state will do if the area fails to attain the 1-hour SO<sub>2</sub> standard by the attainment date or achieve reasonable and further progress to attainment. EPA recommends that the plan be revised to identify the specific steps the state will take, including a time frame for action if the standard is violated or reasonable further progress is not achieved.

**RESPONSE AND EXPLANATION OF CHANGE:** As mentioned in the Jackson County SO<sub>2</sub> nonattainment area plan, the Air Program relied on EPA 1-hour SO<sub>2</sub> nonattainment SIP guidance (April 23, 2014) and notes that much of Section 8.1 (Contingency Measures) mirrors EPA guidance. As the guidance states, SO<sub>2</sub> presents special considerations unique to directly-emitted pollutants. The Jackson County SO<sub>2</sub> nonattainment area plan modeling and attainment analyses are based on allowable emissions for all modeled sources. This is a conservative assumption likely to assure attainment without triggering contingency measures.

In addition, the Air Program notes that further plan evaluation (including dispersion modeling and attainment analyses targeting the same, as well as additional, large SO<sub>2</sub> sources near the current Jackson County SO<sub>2</sub> nonattainment area) will be required per the March 2015 federal Consent

Decree and the pending federal Data Requirements Rulemaking. Additional nonattainment area plan revision requirements, permitting requirements, and monitoring requirements will further assure future compliance with the 1-hour SO<sub>2</sub> standard.

New discussion of contingency measures to provide the requested specificity, including a table of contingency triggers and steps, has been added to the Jackson County SO<sub>2</sub> nonattainment area plan as a result of this comment.

COMMENT #2: EPA commented that using a variability analysis of less than 99% in establishing the 30-day rolling average for KCPL – Hawthorn 5 provides the facility a higher emission allowance than contemplated by the methodology which is designed to ensure that the 30-day rolling average is commensurate with the 1-hour emissions that modeled NAAQS compliant ambient air concentrations. EPA recommends the department should follow the approach EPA outlined in guidance for establishing longer than 1-hour averaging periods.

RESPONSE: The approach in the proposed Jackson County SO<sub>2</sub> nonattainment area plan lies within the bounds of EPA guidance. The April 23, 2014 EPA guidance allows for flexibility in establishing longer than 1-hour averaging periods – without a binding requirement to complete variability analyses using only the 99th percentile for establishing 30-day rolling averages. KCPL provided information on their operations documenting the need for a 30-day rolling average. The Air Program reviewed and approved the variable operational data and rationale for the KCPL – Hawthorn 5 variability analysis based on this flexibility discussed in EPA guidance. As an example, EPA guidance states that 1-hour emission limits for SO<sub>2</sub> nonattainment area plans do not always require a level at or below the critical emission value. Specifically, the EPA guidance states, “An hour where emissions are above the critical value does not mean that a NAAQS exceedance is occurring in that hour.” This and related discussion per cited EPA guidance allows flexibility to accommodate emissions variability as documented and reviewed for KCPL – Hawthorn 5.

Also, the Air Program will likely be required to evaluate KCPL – Hawthorn (and additional sources) in future rounds of SO<sub>2</sub> area designations as part of the pending federal Data Requirements Rule. To assess air quality impacts, additional evaluations and modeling analyses will include overlapping modeling domains for large and interactive modeled sources in the Kansas City area and beyond. No changes to the plan were made as a result of this comment.

COMMENT #3: Washington University, the Sierra Club, and several citizens commented that the proposed plan does not adequately protect public health in the nonattainment area and that the proposed plan’s control strategy should be implemented more quickly than January 1, 2017. In addition, the Sierra Club provided 78 citizen letters calling upon the DNR to create a plan that ensures protection of public health and not to wait until 2017 to see results.

RESPONSE: The Air Program strives to protect health in the development of all state plans, including the Jackson County SO<sub>2</sub> nonattainment area plan. EPA established January 1, 2017 as the date when emission controls, and associated emission reductions, must be fully operational in order to protect public health while allowing affected facilities reasonable time to make needed equipment and operational changes to comply. As detailed in the plan, the control strategy

includes a 95 percent reduction in allowable SO<sub>2</sub> emissions from Veolia Energy. Because Veolia Energy is also subject to the existing source requirements of the federal Industrial, Commercial and Institutional Boiler MACT [40 CFR 63 Subpart 5D], the 95 percent reduction (combined with reductions in air toxics) is expected to occur by the Boiler MACT compliance date of January 31, 2016. Realization of emission reductions in January 2016 from the largest SO<sub>2</sub> source located within the bounds of the Jackson County SO<sub>2</sub> nonattainment area will protect air quality and public health throughout the entire area – particularly within and near the nonattainment area. No changes to the plan were made as a result of these comments.

COMMENT #4: Washington University commented that the emission limits for Ameren Missouri Energy Center sources listed in Table I are not adequate to demonstrate attainment throughout the Jefferson County nonattainment area and that they should be substantially reduced before the rule is adopted. This comment was previously provided during the 60-day comment period on the draft rule text and Regulatory Impact Report as well as during the comment period on the Jefferson County SO<sub>2</sub> nonattainment area plan. Washington University incorporated by reference the previous two sets of comments in their comment letter submitted on the associated proposed new state SO<sub>2</sub> rule, which was presented at the same June 25, 2015 public hearing as the draft Jackson County SO<sub>2</sub> nonattainment area plan.

RESPONSE: The Air Program previously considered and responded to Washington University's comments submitted during the rule development phase of 10 CSR 10-6.261 and the public comment period for the Jefferson County SO<sub>2</sub> nonattainment area plan. The Table 1 SO<sub>2</sub> emission limits for the Ameren Missouri Energy Center sources are the same as those included in the 2015 Consent Agreement as part of the Jefferson County plan, which was adopted by the Air Conservation Commission on May 28, 2015 and submitted to EPA the following day. The SO<sub>2</sub> emission limits at the Ameren power plants are intended to support the continued attainment of the 1-hour SO<sub>2</sub> standard at the violating Mott Street monitor in Jefferson County. These limits, along with the other measures specified in the Jefferson County Plan, are intended to ensure attainment throughout the Jefferson County SO<sub>2</sub> nonattainment area. No changes to the Jackson County SO<sub>2</sub> nonattainment area plan were made as a result of this comment.

COMMENT #5: Ameren Missouri acknowledged that the Jefferson County SO<sub>2</sub> nonattainment area plan has already been submitted to EPA for review and approval on May 29, 2015, but provided additional discussion on various aspects of that plan, as well as on the Regulatory Impact Report for 10 CSR 10-6.261.

RESPONSE: The Air Program has already considered and responded to Ameren's previous sets of comments submitted during the rule development phase of 10 CSR 10-6.261 and the public comment period for the Jefferson County SO<sub>2</sub> nonattainment area plan. No changes to the Jackson County SO<sub>2</sub> nonattainment area plan were made as a result of this comment.