



**COMMENTS AND RESPONSES ON
PROPOSED AMENDMENT**

10 CSR 10-6.040

REFERENCE METHODS

AND

RECOMMENDATION FOR ADOPTION

On June 27, 2013, the Missouri Air Conservation Commission held a public hearing concerning the proposed amendment to 10 CSR 10-6.040 Reference Methods. 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 amendment 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.

**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. 2012, the commission amends a rule as follows:

10 CSR 10-6.040 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on May 1, 2013 (38 MoReg 689-690). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The Missouri Department of Natural Resources' Air Pollution Control Program received two (2) comments from one (1) source: the U.S. Environmental Protection Agency (EPA).

COMMENT #1: EPA suggested that references to photochemical oxidants be removed and the term ozone be used in these cases.

RESPONSE AND EXPLANATION OF CHANGE: As a result of this comment, rule text in subsection (4)(D) has been changed to refer only to ozone for clarification.

COMMENT #2: EPA noted that titles of some of the methods listed in the rule do not exactly match the EPA titles for the same methods and suggested that the method titles be amended to match.

RESPONSE AND EXPLANATION OF CHANGE: As a result of this comment, method titles in subsections (4)(B), (4)(C), (4)(H), and (4)(M) have been changed for consistency with EPA method titles.

10 CSR 10-6.040 Reference Methods

- (1) The percent sulfur in solid fuels shall be determined as specified by American Society of Testing and Materials (ASTM) D4239 - 12 *Standard Test Method for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion*, as approved and published February 1, 2012. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.
- (2) The heat content or higher heating value (HHV) of solid fuels shall be determined by use of the Adiabatic Bomb Calorimeter as specified by ASTM D5865 - 12 *Standard Test Method for Gross Calorific Value of Coal and Coke*, as approved and published December 1, 2012. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.
- (3) The heat content or HHV of liquid hydrocarbons shall be determined as specified by ASTM D240 - 09 *Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter*, as approved and published July 1, 2009. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.

- (4) The methods for determining the concentrations of the following air contaminants in the ambient air shall be as specified in 40 CFR 50, Appendices A–R or equivalent methods as specified in 40 CFR 53. The provisions of 40 CFR 50, Appendices A–R and 40 CFR 53, promulgated as of July 1, 2012, and *Federal Register* Notice 77 FR 55832-55834, promulgated September 11, 2012, 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) The concentration of sulfur dioxide shall be determined as specified in 40 CFR 50, Appendix A—*Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method)* or an equivalent method as approved by 40 CFR 53.
- (B) The concentration of total suspended particulate shall be determined as specified in 40 CFR 50, Appendix B—*Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method)*.
- (C) The concentration of carbon monoxide in the ambient air shall be determined as specified in 40 CFR 50, Appendix C—*Measurement Principle and Calibration Procedure for the Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Photometry)* or equivalent methods as approved by 40 CFR 53.
- (D) The concentration of ozone in the ambient air shall be determined as specified in 40 CFR 50, Appendix D—*Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere* or equivalent methods as approved by 40 CFR 53.
- (E) *Reserved;*
- (F) The concentration of nitrogen dioxide in the ambient air shall be determined as specified in 40 CFR 50, Appendix F—*Measurement Principle and Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas Phase Chemiluminescence)* or equivalent methods as approved by 40 CFR 53.
- (G) The concentration of lead in the ambient air shall be determined as specified in 40 CFR 50, Appendix G—*Reference Method for the Determination of Lead in Suspended Particulate Matter Collected From Ambient Air* or in 40 CFR 50, Appendix Q—*Reference Method for the Determination of Lead in Particulate Matter as PM₁₀ Collected From Ambient Air* or equivalent methods as approved by 40 CFR 53.
- (H) Compliance with the one (1) hour ozone standard shall be determined as specified in 40 CFR 50, Appendix H—*Interpretation of the 1-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone*.
- (I) Compliance with the eight (8) hour ozone standards shall be determined as specified in 40 CFR 50, Appendix I—*Interpretation of the 8-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone*.
- (J) The concentration of particulate matter 10 micron (PM₁₀) in the ambient air shall be determined as specified in 40 CFR 50, Appendix J—*Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere*, or an equivalent method as approved in 40 CFR 53.

- (K) Compliance with particulate matter 10 PM_{10} standards shall be determined as specified in 40 CFR 50, Appendix K—*Interpretation of the National Ambient Air Quality Standards for Particulate Matter*.
 - (L) The concentration of particulate matter 2.5 micron ($PM_{2.5}$) in the ambient air shall be determined as specified in 40 CFR 50, Appendix L—*Reference Method for the Determination of Fine Particulate Matter as $PM_{2.5}$ in the Atmosphere*, or an equivalent method as approved in 40 CFR 53.
 - (M) Compliance with particulate matter 2.5 ($PM_{2.5}$) standards shall be determined as specified in 40 CFR 50, Appendix N—*Interpretation of the National Ambient Air Quality Standards for $PM_{2.5}$* .
 - (N) Compliance with the eight (8)-hour ozone standards shall be determined as specified in 40 CFR 50, Appendix P—*Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone*.
 - (O) Compliance with the lead standards shall be determined as specified in 40 CFR 50, Appendix R—*Interpretation of the National Ambient Air Quality Standards for Lead*.
- (5) The concentration of hydrogen sulfide (H_2S) in the ambient air shall be determined by scrubbing all sulfur dioxide (SO_2) present in the sample and then converting each molecule of H_2S to SO_2 with a thermal converter so that the resulting SO_2 is detected by an analyzer as specified in 40 CFR 50, Appendix A—*Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method)* or an equivalent method approved by 40 CFR 53, in which case the calibration gas used must be National Institute of Standards and Technology traceable H_2S gas.
- (6) The concentration of sulfuric acid mist in the ambient air shall be determined as specified in the *Compendium Method IO-4-2, Determination of Reactive Acidic and Basic Gases and Strong Acidity of Fine-Particles (<2.5 μm)*, Center for Environmental Research Information, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, OH 45268, EPA/625/R-96/010a.
- (A) The concentration of total sulfur shall be determined as specified in section (4) of this rule by sampling for sulfur dioxide without removing other sulfur compound interferences.
 - (B) The concentration of sulfur dioxide shall be determined as specified by section (4) of this rule.
 - (C) The concentration of hydrogen sulfide shall be determined as specified by section (5) of this rule.
- (7) The percent sulfur in liquid hydrocarbons shall be determined as specified by ASTM D2622 - 10 *Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry*, as approved and published February 15, 2010. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.

- (8) The amount of solvent present in earth filters and distillation wastes shall be determined as specified by ASTM D322 - 97(2012) *Standard Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Distillation*, as approved and published November 1, 2012. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.

**COMMENTS AND RESPONSES
AND
RECOMMENDATION FOR ADOPTION**

**PROPOSED REVISION TO
THE MISSOURI STATE IMPLEMENTATION PLAN**

**MODIFICATION TO THE ATTAINMENT DEMONSTRATION
FOR THE 2008 LEAD NAAQS –
BUICK / VIBURNUM TREND LEAD NONATTAINMENT AREA**

On June 27, 2013 the Missouri Air Conservation Commission held a public hearing concerning the proposed revision to the State Implementation Plan (SIP) for the Buick/Viburnum Trend Nonattainment Area under the 2008 Lead National Ambient Air Quality Standard (NAAQS) in regards to a modification of stack provisions to the corresponding 2013 Consent Judgment. The purpose of this SIP action is to remove the requirement for a new stack that is not yet constructed at the secondary smelter operated by Buick Resource Recycling Facility, LLC. Reevaluation of the design demonstrates that this new stack is no longer necessary since the building enclosure baghouse exhaust stream will now be routed to the main stack and the main stack shall continue to meet the required emission limitation. This modification will result in no increase in, or impact on, emissions and will realize reduced capital costs since construction of the new stack is no longer required. Therefore, Missouri Department of Natural Resources' Air Pollution Control Program (program) considers this modification to be administrative in nature and thus does not require additional modeling. No written or verbal comments were received during the public comment period concerning this proposed revision.

The document has not been reprinted in the briefing document as no changes were made from the proposal. The entire document 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 program recommends the commission adopt the plan action as proposed. If the commission adopts this plan revision, it will be the program's intention to submit this revision to the U.S. Environmental Protection Agency for inclusion in the Missouri State Implementation Plan.

SUMMARY OF COMMENTS: No written or verbal comments were received concerning this proposed SIP revision.