



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

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SEP - 4 2014

Mr. Karl Brooks
Regional Administrator
U.S. EPA, Region VII
11201 Renner Boulevard
Lenexa, KS 66219

Dear Mr. Brooks:

The Missouri Department of Natural Resources' Air Pollution Control Program (Air Program) hereby submits the following Missouri State Implementation Plan (SIP) revision for your approval:

Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard (NAAQS)

Through this SIP submittal, the Air Program is requesting that EPA approve Missouri's SIP as meeting the marginal area plan submission requirements of Clean Air Act Section 182 (a) for the St. Louis nonattainment area under the 2008 Ozone 8-hour NAAQS including a complete 2011 inventory of ozone-precursor emissions.

The Missouri Air Conservation Commission adopted this plan at the August 28, 2014 commission meeting. A public hearing for the proposed plan was held on May 29, 2014 and comments were accepted from April 28 through June 5, 2014. During the public comment period for the proposed plan, the Air Program received comments from three commenters: two private citizens and the Sierra Club. A summary of the comments received and our responses are attached.

In order to comply with Attachment A of the "Regional Consistency for the Administrative Requirements of State Implementation Plan Submittals and the Use of 'Letter Notices'" memo dated April 6, 2011, a searchable pdf version of this document will be emailed to the EPA Regional Office. Within three business days, this complete submittal package will be posted on our website at <http://dnr.mo.gov/env/apcp/stateplans.htm>.

Also, due to their size, paper copies of the appendices to the plan are not included in this package. The disk(s) included with this package include an electronic copy of the plan and appendices.

Mr. Karl Brooks
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Thank you for your attention to this matter. If you have any questions regarding this submittal, please contact Ms. Wendy Vit with the Missouri Department of Natural Resources' Air Pollution Control Program at P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Original signed by Kyra L. Moore

Kyra L. Moore
Director

KLM:jwc

Enclosures:

Copy of plan (paper copies of the appendices are not included)
Copy of commission signature page certifying Missouri Air Conservation Commission adoption
Copy of public hearing notices
Copy of public hearing transcript introductory statement
Copy of recommendation for adoption
Copy of the summary of comments and responses
CD with electronic copy of the plan and appendices

c: Missouri Air Conservation Commission
File# 2008-O3-3-STL Marginal

**Marginal Area Plan for the Missouri Portion of the
St. Louis Nonattainment Area for the
2008 8-Hour Ground Level Ozone
National Ambient Air Quality Standard**

**Prepared for the
Missouri Air Conservation Commission
Adoption: August 28, 2014**



**Missouri Department of Natural Resources
Division of Environmental Quality
Air Pollution Control Program
Jefferson City, Missouri**

Project: 2008-O3-3-STL Marginal

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1. Introduction

1.1 Purpose

The purpose of this document is to fulfill the requirements of Section 182(a) of the Clean Air Act (CAA) for the Missouri portion of the St. Louis Marginal Ozone Nonattainment Area under the 2008 8-hour ground level ozone National Ambient Air Quality Standard (NAAQS). Section 182(a) of the CAA specifically addresses the State Implementation Plan (SIP) submissions and requirements for ozone nonattainment areas classified as Marginal. One of the main elements of Marginal Plans is CAA Section 182(a)(1) requiring the State to submit a comprehensive, accurate, current inventory of actual emissions from all sources within two years after designation. This is the only Section 182(a) element that the State has not already addressed in other plan submissions. Nonetheless, this document will address how the State has satisfied all the Marginal area plan elements for the St. Louis ozone nonattainment area.

The CAA Section 182(a) elements for marginal ozone nonattainment areas are outlined briefly below:

1. Comprehensive Current Emissions Inventory
2. Corrections to the State Implementation Plan (SIP)
 - a. Pre- Clean Air Act Amendments of 1990 Reasonable Available Control Technology (RACT)
 - b. Savings Clause For Vehicle Inspection and Maintenance
 - c. New Source Review (NSR) Permit Program
3. Commitment to Periodic Inventory Updates
4. Requirement for NSR Offsets

1.2 Background

On March 27, 2008, the U.S. Environmental Protection Agency (EPA) released a revised 8-hour ozone standard [73 FR 16436]. This revision lowers the ozone standard to 0.075 ppm (or 75 ppb). With a revised NAAQS, the CAA requires states to review air quality monitoring data and submit ozone boundary designation recommendations. In March 2009, Missouri submitted its original boundary recommendation for the 2008 ozone NAAQS to EPA, based on the ozone air quality monitoring data for the three years of 2005–2007. Then in December 2011, Missouri updated the boundary recommendations based on air quality data for the three years of 2008–2010. More information on Missouri’s boundary designation recommendations may be found at: <http://dnr.mo.gov/env/apcp/naaqsboundarydesignations.htm>.

On May 21, 2012, EPA finalized the area designations. The St. Louis area was designated nonattainment area and classified as marginal for the 2008 ozone standard [77 FR 30088]. The boundaries of the Missouri portion of the nonattainment area remained the same as for the 1997 ozone standard but its classification changed from moderate. Marginal nonattainment areas have until December 31, 2015 to attain the 2008 Ozone NAAQS [40 CFR 51.1103].

Since the St. Louis Ozone Area is a bi-state nonattainment area, Illinois went through a similar designation process for its portion – the Metro-East side of the St. Louis area. For the Illinois portion under the 2008 ozone NAAQS, Jersey County is no longer designated as nonattainment as it was for the 1997 ozone standard. For more information on EPA’s final state designations, see - <http://www.epa.gov/glo/designations/2008standards/state.htm>.

The following is a list of the eight counties contained in the St. Louis **Missouri**-Illinois 2008 8-hour Ozone Marginal Nonattainment Area:

- **St. Louis County, MO**
- **St. Louis City, MO**
- **St Charles, MO**
- **Jefferson County, MO**
- **Franklin County, MO**
- Madison County, IL
- St. Clair County, IL
- Monroe County, IL

Although not a requirement for this Marginal Area plan submission under CAA Section 182(a), Transportation Conformity applies one year after the effective date of nonattainment designations for the 2008 ozone NAAQS, i.e., July 20, 2013. As a result, on January 30, 2013, East-West Gateway Council of Governments, the designated Metropolitan Planning Organization for the greater St. Louis area, approved a Transportation Conformity Determination addressing the 2008 NAAQS. In addition, an Early Progress Plan establishing Motor Vehicle Emission Budgets (MVEBs) for Transportation Conformity purposes under the 2008 ozone standard has been developed by the Air Program in a previous SIP submission. This Early Progress Plan was adopted by the Missouri Air Conservation Commission on March 28, 2013. The Air program submitted the plan to EPA on August 16, 2013 and EPA deemed the new budgets adequate on March 5, 2014 [79 FR 12504]. More information on the Early Progress Plan may be found at: <http://www.dnr.mo.gov/env/apcp/docs/complete-epp-submittal-8-16-13.pdf>.

More information on the history and background of the St. Louis ozone nonattainment area, as well as the effects of ozone, may be found in Missouri’s previous ozone plan submittals at <http://www.dnr.mo.gov/env/apcp/sips.htm#ozone>.

2. Marginal Area Plan Requirements

As stated above, this plan submittal satisfies Missouri's obligations for the St. Louis Marginal nonattainment area under the 2008 ozone NAAQS. CAA Section 182(a) lists the required elements for ozone marginal area plan submissions. Within this chapter of the plan, each section below corresponds to a CAA Section 182(a) element and provides an explanation of how the State of Missouri fulfills each element.

2.1 Emissions Inventory: Section 182(a)(1)

Section 182(a)(1) of the CAA states that —

Within 2 years....the State shall submit a comprehensive, accurate, current inventory of the actual emissions from all sources, as described in Section 172(c)(3), in accordance with guidance provided by the Administrator.

In coordination with EPA staff, the Air Program has developed a complete ozone season day emission inventory for the year 2011 of the actual emissions of the pollutants that contribute to ozone formation in the St. Louis nonattainment area: volatile organic compounds (VOC), oxides of nitrogen (NO_x), and carbon monoxide (CO). The year 2011 corresponds to the most recent triennial statewide emissions inventory conducted for the National Emissions Inventory (NEI) pursuant to the federal Air Emissions Reporting Requirements (AERR) rule [73 FR 76539; December 17, 2008]. This inventory conforms to EPA's latest guidance: *Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations* [November 2005].

The 2011 ozone season day emissions inventory for the St. Louis nonattainment area is presented in Appendix A, which includes emissions from stationary point and area sources, onroad mobile, nonroad, event (i.e. wildfire), and biogenic sources within the five Missouri counties of the bi-state area. Appendix A also outlines the methodology and calculations used to convert the annual emission rates from the 2011 NEI into ozone season daily emission rates. The ozone season daily emissions in Appendix A apply to emissions occurring during a typical weekday of the high ozone season, which is June through August.

Appendix B provides the documentation for Missouri's most recent NEI submittal which accounts for all Criteria and Hazardous Air Pollutants in the entire state during 2011.

Table 1 displays the 2011 anthropogenic emissions inventory summary for the Missouri portion of the 2008 St. Louis ozone nonattainment area in tons per ozone season day. The anthropogenic source categories include point, area, on-road mobile, and non-road sources. Additional details regarding the development the 2011 ozone season day anthropogenic emissions inventory for the Missouri portion of the nonattainment area can be found in Appendices A-2 through A-7.

Table 2 displays the 2011 emissions inventory summary for the biogenic and wildfire (event) source categories in the Missouri portion of the 2008 St. Louis ozone nonattainment area in tons per ozone season day. Event emissions include wild fire emissions, prescribed burning and

agricultural burning; however, when annual emissions from these three event source categories are temporally allocated to ozone season day emissions, only wild fire emissions are projected to occur during the high ozone season. Additional details regarding the development the 2011 ozone season day biogenic and wildfire emissions inventory for the Missouri portion of the nonattainment area can be found in Appendix A-6.

Table 1 2011 Anthropogenic Emissions Inventory Summary for the Missouri Portion of the Nonattainment Area (tons/ozone season day)

County Name	Source Category	VOC	NO _x	CO
Franklin County	Point Sources	2.52	27.75	7.55
Jefferson County		1.63	16.66	7.23
St. Charles County		3.34	25.04	2.82
St. Louis County		3.5	16.74	17.68
St. Louis City		3.59	4.49	7.36
Totals *		14.58	90.69	42.65
Franklin County	Area Sources	3.36	0.49	3.03
Jefferson County		7.48	0.62	8.14
St. Charles County		11.21	0.68	1.35
St. Louis County		38.68	2.65	4.72
St. Louis City		12.04	1.16	1.76
Totals *		72.77	5.6	19.01
Franklin County	Onroad Mobile Sources	2.40	7.83	21.18
Jefferson County		4.24	12.45	34.91
St. Charles County		6.73	21.04	56.63
St. Louis County		20.17	66.34	176.34
St. Louis City		4.46	16.55	42.14
Totals *		38.00	124.20	331.20
Franklin County	Nonroad Sources	3.31	5.72	18.55
Jefferson County		3.12	3.33	28.68
St. Charles County		6.23	8.34	62.81
St. Louis County		22.99	23.85	315.24
St. Louis City		3.38	6.31	48.14
Totals *		39.03	47.55	473.42
Grand Total *		164.38	268.04	866.28

* Note: Figures may not total exactly due to rounding.

Table 2 2011 Wildfire and Biogenic Emissions Inventory Summary for the Missouri Portion of the Nonattainment Area (tons/ozone season day)

County Name	Source Category	VOC	NO _x	CO
Franklin County	Wild Fires (Event)	0.09	0.00	0.40
Jefferson County		0.07	0.00	0.28
St. Charles County		0.00	0.00	0.01
St. Louis County		0.00	0.00	0.01
St. Louis City		0.00	0.00	0.00
Totals *		0.16	0.01	0.69
Franklin County	Biogenic Sources	126.84	1.09	11.58
Jefferson County		104.17	0.51	9.29
St. Charles County		65.94	1.05	7.09
St. Louis County		60.84	0.68	5.55
St. Louis City		10.93	0.13	1.03
Totals *		368.71	3.47	34.55

* Note: Figures may not total exactly due to rounding.

2.2 Corrections to the State Implementation Plan: Section 182(a)(2)

The second element of a Marginal Area plan is found in CAA Section 182(a)(2) which requires the State to submit a revision to the SIP for certain “corrections” to Reasonably Available Control Technology (RACT), Vehicle Inspection and Maintenance (I/M), and New Source Review (NSR) Permit programs. These three provisions are addressed in the corresponding three subsections below.

2.2.A Reasonably Available Control Technology

Section 182(a)(2)(A) refers to the first round of ozone area designations/classifications after the promulgation of the amendments to the Clean Air Act in 1990 and gives the State six months after these initial classifications to revise SIPs with corrections to the pre-1990 CAA RACT levels pursuant to EPA-issued guidance. Since the 2008 ozone NAAQS is a revision to the standard that existed in 1990 and outside the timeframe mentioned, this requirement is no longer applicable to this Marginal Area plan. Nevertheless, RACT evaluations are continuous and ongoing for the St. Louis ozone nonattainment area. Missouri has previously addressed RACT requirements in the St. Louis nonattainment area in developing attainment plans for the 1-hour ozone standard. For the 1997 8-hour ozone standard, the Air Program developed a RACT demonstration as an element to the moderate ozone nonattainment area SIP revision. Per the federal implementation rule for the 1997 ozone standard, the RACT demonstration was to be submitted as a separate element prior to the submittal of the attainment demonstration and other elements of the SIP revision. The RACT plan was adopted on December 7, 2006 and submitted to the EPA on January 5, 2007.

Shortly thereafter, EPA issued some new Control Techniques Guidelines (CTGs) for VOC sources to be used as ‘presumptive’ RACT. Since these new CTGs were not considered in the 2006 RACT demonstration, and in an effort to ensure that RACT levels for the St. Louis nonattainment area are current, the Air Program developed an update to the 2006 RACT demonstration. This RACT plan also supports the attainment redesignation request for the

Missouri portion of the St. Louis area under the 1997 ozone standard. This updated RACT demonstration showed how RACT for VOCs has been appropriately upgraded since the last RACT submittal. This updated VOC RACT document was adopted by the MACC on April 28, 2011 and submitted to EPA on May 25, 2011. EPA approved this RACT plan into the SIP on January 6, 2014 [79 FR 580].

For a more detailed discussion of RACT issues, please refer to the updated RACT demonstration adopted April 28, 2011, which can be found at <http://dnr.mo.gov/env/apcp/sips.htm#ozone>

2.2.B Savings Clause for Vehicle Inspection and Maintenance

The savings or “anti-backsliding” clause of Section 182(a)(2)(B) requires states to maintain any ozone nonattainment area’s existing vehicle I/M program at an equivalent-or-better level after that area is classified as Marginal.

The State of Missouri has operated a vehicle emissions inspection and maintenance program in the St. Louis area for over 30 years. State rule, 10 CSR 10-5.381 *On-Board Diagnostics Motor Vehicle Emissions Inspection*, implements the current program called Gateway Vehicle Inspection Program (GVIP). This program has accounted for significant reductions of NO_x and VOC emissions from the mobile sector in the St. Louis nonattainment area. Missouri is committed to maintaining an equally stringent I/M program into the future. The Air Program intends to submit any changes to the current I/M program as revisions to the Missouri SIP. In satisfaction of the I/M savings clause, the Air Program asserts that if any changes to the I/M program could potentially alleviate mobile source emission controls in the St. Louis area, then the SIP revision shall contain an “anti-backsliding” demonstration under Section 110(l) of the Clean Air Act.

2.2.C New Source Review Permit Programs

Per CAA Section 182(a)(2)(C) a Marginal Area plan submission shall include —

provisions to require permits, in accordance with sections 172(c)(5) and 173, for the construction and operation of each new or modified major stationary source (with respect to ozone) to be located in the area.

In accordance with the Clean Air Act, Missouri has a long-standing and fully implemented New Source Review (NSR) permitting program for new major sources and significant modifications of existing sources enabled by State rule 10 CSR 10-6.060 *Construction Permits Required*.

Such a permit program in any attainment area is referred to as a Prevention of Significant Deterioration (PSD) permitting program and is governed by Section (8) of 10 CSR 10-6.060. Missouri’s PSD program is addressed in Missouri’s CAA Section 110 Infrastructure Requirements Plan for the 2008 ozone NAAQS. For more information on that plan, see <http://www.dnr.mo.gov/env/apcp/docs/epa-submittal-2008-ozone-infra-sip.pdf>.

In compliance with Section 182(a)(2)(C), Missouri’s NSR permitting program also regulates the construction of new and modified major stationary sources in nonattainment areas, such as the

St. Louis ozone nonattainment area, via Section (7) of 10 CSR 10-6.060. Missouri has been delegated full authority to implement its NSR program by the EPA.

Three distinct features of the Nonattainment NSR program, on new major sources or significant modification of existing major sources, are —

1. the implementation of Lowest Achievable Emission Rate (LAER),
2. alternate site analysis, and
3. emission offset reductions (offsets).

2.3 *Periodic Inventory: Section 182(a)(3)*

The third element of a Marginal Area plan is found in CAA Section 182(a)(3). This section requires that the State submit a periodic emissions inventory similar to that required in 2.1 of this document at least as often as every three years until the area is redesignated to attainment [(182(a)(3)(A)]. Furthermore, the State shall require certain sources of NO_x and VOCs to report their actual emissions of these ozone precursors every year in an emissions statement for the purpose of developing current, comprehensive and accurate emission inventories [(182(a)(3)(B)].

The State of Missouri is committed to providing future emissions inventory updates at least every three years to enable tracking of ozone-precursor emissions levels in the St. Louis nonattainment area. State Regulation 10 CSR 10-6.110 *Reporting Emission Data, Emission Fees, and Process Information* requires permitted sources to file an annual report on air pollutant emissions to include emissions data, process information, and annual emissions fees. These sources report their emissions on a form called an Emissions Inventory Questionnaire (EIQ) developed by the Air Program pursuant to 10 CSR 10-6.110. EIQs may be filed electronically and emissions data are tracked through Missouri's Emissions Inventory System (MOEIS). For applicable NO_x and VOC sources in the St. Louis nonattainment area, the EIQs include an ozone-specific worksheet.

The methods for calculating and reporting their emissions are detailed in each installation's applicable permit. The data collected in MOEIS from the EIQs form the basis of the point source emissions inventory that is compiled on an annual basis. In addition, in compliance with the federal Air Emission Reporting Rule, the Air program develops a comprehensive emissions inventory of point, area, and mobile sources every three years, covering both annual and ozone season day emissions. The Air Program submits this emissions data to EPA for inclusion in the publicly-available NEI and uses the data for tracking progress towards attaining and maintaining the NAAQS, developing control and maintenance strategies, identifying sources and general emission levels, and determining compliance with emissions regulations as well as other EPA requirements. The Air Program also makes data, including NO_x and VOC emissions data, available to the public upon request.

2.4 *General Offset Requirement: Section 182(a)(4)*

The fourth and final Marginal Area plan provision of CAA Section 182(a) is the General Offset Requirement. For the purposes of the Nonattainment NSR permitting program for new and modified major stationary sources, the State must establish, in its Marginal Area plan

submission, the emission offset ratio of total VOC emission reductions to total increased VOC emissions to be at least 1.1 to 1.

As mentioned above in 2.2.C, Missouri has a well-established NSR or major source construction permit program. One of the unique features of NSR for nonattainment areas is the requirement for emission offset reductions. This is codified at 10 CSR 10-6.060(7)(B)1.:

By the time the source is to commence operation, sufficient emissions offsets shall be obtained as required to ensure reasonable further progress toward attainment of the applicable national ambient air quality standard and consistent with the requirements of Section 173(a)(1)(A) of the Clean Air Act and paragraphs 40 CFR 51.165(a)(3) and (9);

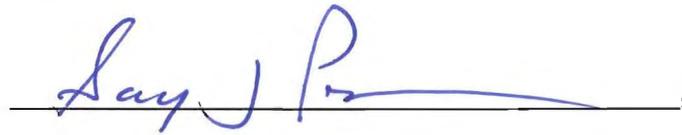
The corresponding offset ratio for each ozone area classification (i.e. 1.1:1 for Marginal) is found in federal code at 40 CFR 51.165(a)(3)(9) per the citation above. Thus Missouri has satisfied the CAA Section 182(a)(4) requirement for Marginal Area Plan submissions in establishing a Marginal Area emission offset reduction ratio of 1.1:1 in its NSR program by SIP-approved rule consistent with the corresponding federal code.

3. Conclusion

Through this plan submission, Missouri asserts that it has satisfied all of its Marginal Area Plan submission obligations for the Missouri-portion of the St. Louis bi-state nonattainment area pursuant to federal Clean Air Act Section 182(a) under the 2008 ozone 8-hour National Ambient Air Quality Standard. Attached with this document is a complete, comprehensive, accurate and current inventory of ozone-precursor emissions for the St. Louis nonattainment area. Moreover, this plan administratively addresses three other elements of a Marginal Area Plan submission under CAA Section 182(a). The Air Program requests that EPA approve this plan submission for inclusion into the Missouri State Implementation Plan.

The Missouri Air Conservation Commission **ADOPTS** the following action on this 28th day of August, 2014:

Missouri State Implementation Plan Revision – Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard

 _____, Chairman

 _____, Vice Chairman

 _____, Member

 _____, Member

_____, Member

_____, Member

_____, Member

Jay Nixon, Governor
Sara Parker Pauley, Director

Air Pollution Control Program



State Plan Actions

[On Public Notice](#) | [Proposed for Adoption](#)

On Public Notice

Missouri State Implementation Plan Revision - Regional Haze Plan 5-Year Progress Report

The federal Clean Air Act establishes requirements for the protection of visibility in Class I areas, consisting of national parks and wilderness areas. States are required to submit state implementation plans (SIPs) that demonstrate reasonable progress toward meeting the national goal of a return to natural visibility conditions in Class I areas by 2064. There are two Class I areas in Missouri: Hercules Glades Wilderness Area and Mingo National Wildlife Refuge. Missouri's regional haze SIP, which was submitted to the U.S. Environmental Protection Agency in August 2009, established visibility goals for the year 2018 for each of the state's Class I areas in order to make reasonable progress toward the 2064 goal. The purpose of this report is to assess progress made toward the 2018 visibility goals in Hercules Glades and Mingo in the five years since Missouri's regional haze SIP was submitted to EPA. This 5-year progress report demonstrates that both of Missouri's Class I areas are expected to meet their 2018 visibility goals based on control strategies currently in place, which largely consist of sulfur dioxide and nitrogen oxides emission reduction measures for utilities, industrial boilers, and other sources.

[Regional Haze Plan 5-Year Progress Report](#)
[Appendices](#)

[Submit Comments Now](#)

A public hearing is scheduled for this plan action on May 29, 2014. Comments about this plan action will be accepted through the close of business on June 5, 2014.

Missouri State Implementation Plan Revision - Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard

The purpose of this State Implementation Plan (SIP) revision is to address the emissions inventory and other marginal ozone nonattainment area requirements pursuant to Clean Air Act Section 182(a) for the Missouri portion of the St. Louis nonattainment area under the 2008 8-hour ozone national ambient air quality standard (NAAQS). The Missouri portion of

the St. Louis nonattainment area includes the City of St. Louis and the Counties of St. Louis, St. Charles, Franklin, and Jefferson, which were designated as a marginal nonattainment area under the 2008 8-hour ozone NAAQS on May 21, 2012.

[Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard](#)

[Appendix A](#)

[Appendix B](#)

[Appendix B-1](#)

[Appendix B-2](#)

[Appendix B-3](#)

[Appendix B-4](#)

[Appendix B-5](#)

[Appendix B-6](#)

[Appendix B-7](#)

[Submit Comments Now](#)

A public hearing is scheduled for this plan action on May 29, 2014. Comments about this plan action will be accepted through the close of business on June 5, 2014.

Proposed for Adoption

None at this time.

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Bechtel, Cheri

From: Missouri DNR <MODNR@public.govdelivery.com>
Sent: Friday, April 25, 2014 2:54 PM
To: Bungart, Renee; Archer, Larry; Lovejoy, Victoria; Moore, Kyra; Vit, Wendy; Bechtel, Cheri; Crawford, Betsy; Terlizzi, Gena
Subject: Courtesy Copy: Missouri DNR Air Public Notices Update - Missouri Air Conservation Commission Public Hearing, May 29, 2014

This is a courtesy copy of an email bulletin sent by Cheri Bechtel.

This bulletin was sent to the following groups of people:

Subscribers of Air Public Notices (579 recipients)



Having trouble viewing this email? [View it as a Web page.](#)



MISSOURI AIR CONSERVATION COMMISSION
WILL HOLD PUBLIC HEARING

JEFFERSON CITY, MO -- The Missouri Air Conservation Commission will hold a public hearing on Thursday, May 29, 2014 beginning at 9 a.m. at the St. Louis Regional Office, 7545 S. Lindbergh, Suite 220, DESE Conference Room, St. Louis, Missouri. The commission will hear testimony related to the following proposed action(s):

- * 10 CSR 10-5.220 (amendment) Control of Petroleum Liquid Storage, Loading and Transfer

This proposed amendment will remove the requirements for Stage II vapor recovery controls at gasoline dispensing facilities (GDFs) in the St. Louis area. Stage II systems control emissions of volatile organic compounds during vehicle refueling and have been an ozone-reduction measure in the St. Louis area since the late 1980s. In May 2012, the U.S. Environmental Protection Agency (EPA) determined that Onboard Refueling Vapor Recovery (ORVR) technology is in widespread use throughout the motor vehicle fleet for purposes of controlling motor vehicle refueling emissions. ORVR is an improved method of controlling the vapor displaced during refueling that is built into newer motor vehicles. ORVR makes Stage II controls obsolete, and EPA's widespread use determination allows the removal of Stage II controls if Clean Air Act anti-backsliding requirements are met to ensure air quality is not adversely impacted. EPA has already given verbal concurrence on our technical analysis showing removal of Stage II controls as proposed in this rulemaking will not adversely affect St. Louis air quality. The rulemaking will also address the following items:

- Certification and testing procedures for the remaining Stage I systems will use the California Air Resources Board (CARB) vapor recovery program instead of the Missouri Performance and Test Procedures (MOPETP). Stage I systems capture displaced vapors when fuel storage

tanks at GDFs are loaded from delivery vessels.

- The prohibition of aboveground storage tanks (ASTs) at GDFs will be codified. The rule never allowed ASTs because MOPETP never certified ASTs. Elimination of MOPETP requires adding language to the rule to clarify that ASTs will continue to be prohibited.
- Permitting provisions will be revised to address the decommissioning of Stage II systems and clarify the permitting requirements and fees for Stage I systems. The permitting fees will remain \$100 per permit but the frequency with which permits are issued will change.

* Missouri State Implementation Plan Revision – Regional Haze Plan 5-Year Progress Report

The federal Clean Air Act establishes requirements for the protection of visibility in Class I areas, consisting of national parks and wilderness areas. States are required to submit state implementation plans (SIPs) that demonstrate reasonable progress toward meeting the national goal of a return to natural visibility conditions in Class I areas by 2064. There are two Class I areas in Missouri: Hercules Glades Wilderness Area and Mingo National Wildlife Refuge. Missouri's regional haze SIP, which was submitted to the U.S. Environmental Protection Agency in August 2009, established visibility goals for the year 2018 for each of the state's Class I areas in order to make reasonable progress toward the 2064 goal. The purpose of this report is to assess progress made toward the 2018 visibility goals in Hercules Glades and Mingo in the five years since Missouri's regional haze SIP was submitted to EPA. This 5-year progress report demonstrates that both of Missouri's Class I areas are expected to meet their 2018 visibility goals based on control strategies currently in place, which largely consist of sulfur dioxide and nitrogen oxides emission reduction measures for utilities, industrial boilers, and other sources.

* Missouri State Implementation Plan Revision – Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard

The purpose of this State Implementation Plan (SIP) revision is to address the emissions inventory and other marginal ozone nonattainment area requirements pursuant to Clean Air Act Section 182(a) for the Missouri portion of the St. Louis nonattainment area under the 2008 8-hour ozone national ambient air quality standard (NAAQS). The Missouri portion of the St. Louis nonattainment area includes the City of St. Louis and the Counties of St. Louis, St. Charles, Franklin, and Jefferson, which were designated as a marginal nonattainment area under the 2008 8-hour ozone NAAQS on May 21, 2012.

* 10 CSR 10-6.040 (amendment) Reference Methods

This proposed amendment will update the incorporation by reference date to include the latest Federal Register notices for ambient air monitoring methods. Two of these notices promulgated existing methods as new equivalency methods for measuring lead, nitrogen dioxide, particulate matter less than 2.5 microns, particulate matter less than 10 microns, and particulate matter between 10 and 2.5 microns in diameter. In addition, EPA finalized a new Federal Reference Method for measuring lead in total suspended particulate matter and, at the same time, designated it as a new Federal Equivalency Method.

If the Commission adopts the action(s), it will be the Department's intention to submit the action(s) to the U.S. Environmental Protection Agency to be included in Missouri's State Implementation Plan unless otherwise noted above.

Documents for the above item(s) will be available for review at the Missouri Department of Natural

Resources, Air Pollution Control Program, 1659 Elm Street, Jefferson City, (573) 751-4817 and in the Public Notices section of the program web site <http://dnr.mo.gov/env/apcp/public-notices.htm>. This information will be available at least 30 days prior to the public hearing date.

The Department will accept written or email comments for the record until 5 p.m. on June 5, 2014. Please send written comments to Chief, Air Quality Planning Section, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176. Email comments may be submitted via the program web site noted above. All written and email comments and public hearing testimony will be equally considered.

Citizens wishing to speak at the public hearing should notify the secretary to the Missouri Air Conservation Commission, Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102-0176, or telephone (573) 526-3420. The Department requests persons intending to give verbal presentations also provide a written copy of their testimony to the commission secretary at the time of the public hearing.

Persons with disabilities requiring special services or accommodations to attend the meeting can make arrangements by calling the Program directly at (573) 751-4817, the Division of Environmental Quality's toll free number at (800) 361-4827, or by writing two weeks in advance of the meeting to: Missouri Department of Natural Resources, Air Conservation Commission Secretary, P.O. Box 176, Jefferson City, MO 65102. Hearing impaired persons may contact the program through Relay Missouri, (800) 735-2966.

You are subscribed to the Air Public Notices topic for Missouri DNR. This information has recently been updated, and is now available at the link below. Thank you for your interest in the Air Public Notices.



Missouri Department of Natural Resources

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1 MISSOURI AIR CONSERVATION COMMISSION MEETING

2 St. Louis Regional Office

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12 PUBLIC HEARING

13 TAKEN ON BEHALF OF

14 THE MISSOURI DEPARTMENT OF NATURAL RESOURCES

15 MAY 29, 2014

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22 (Starting time of the hearing: 9:01 a.m.)

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25

1 IT IS HEREBY STIPULATED AND AGREED that
2 this hearing may be taken in shorthand by
3 Rebecca Brewer, RPR, CRR, CSR, Certified
4 Court Reporter, and Notary Public, and
5 afterwards transcribed into typewriting;

6 * * * * *

7 MR. PENDERGRASS: The hearing will come to
8 order. Let the record show the following
9 commissioners are present: Jack Baker, Mark
10 Garnett, Gary Pendergrass, and David Zimmermann.
11 The Air Conservation Commission of the State of
12 Missouri has called this public hearing pursuant to
13 Section 643.070, Revised Statutes of Missouri, EPA
14 Promulgated Rule 40 CFR 51.102 for the purpose of
15 hearing testimony related to: 10 CSR 10-5.220,
16 amendment, Control of Petroleum Liquid Storage,
17 Loading and Transfer; Missouri State Implementation
18 Plan Revision, Regional Haze Plan, 5-year Progress
19 Report; Missouri State Implementation Plan
20 Revision, Marginal Area Plan for the Missouri
21 Portion of the St. Louis Non-Attainment area for
22 the 2008 8-hour Ground Level Ozone National Ambient
23 Air Quality Standard; and 10 CSR 10-6.040,
24 amendment, Reference Methods.

25 The hearing record will close at 5

1 much everywhere, even though you're pretty
2 isolated? That's actually 30 miles from me, the
3 reason I keep asking.

4 MR. PENDERGRASS: Any other questions for
5 Emily? Thank you, Emily. Very nice presentation.

6 Next we have Missouri State
7 Implementation Plan Revision, Marginal Area Plan for
8 the Missouri Portion of the St. Louis Non-Attainment
9 Area for the 2008, 8-hour ground level ozone
10 national ambient air quality standard. Joe
11 Winklemann?

12 * * * * *

13 JOE WINKELMANN,

14 Of lawful age, produced and sworn, deposes
15 and says:

16 MR. WINKELMANN: Chairman, members of the
17 commission, my name is Joe Winklemann. I am
18 employed as an environmental engineer with the
19 Missouri Department of Natural Resources Air
20 Pollution Control Program at 1659 East Elm Street,
21 Jefferson City, Missouri. I am here today to
22 present testimony on the proposed Missouri State
23 Implementation Plan Revision, entitled Marginal
24 Area Plan for the Missouri Portion of the St. Louis
25 Non-Attainment area for the 2008 8-hour Ground

1 Level Ozone National Ambient Air Quality Standard.
2 Or NAAQS. The proposed plan, minus the appendices,
3 is printed in the briefing documents starting on
4 Page 99.

5 On May 21, 2012, the U.S.
6 Environmental Protection Agency designated the St.
7 Louis area as non-attainment for the 2008 ozone
8 NAAQS of 75 parts per billion. The Missouri portion
9 of the Non-Attainment area, which includes the City
10 of St. Louis and the counties of St. Louis,
11 St. Charles, Franklin, and Jefferson, remained the
12 same as for the 1997 ozone standard, but its
13 classification was changed from moderate to
14 marginal. Marginal non-attainment areas have until
15 the end of 2015 to attain the 2008 ozone NAAQS.

16 The purpose of this SIP revision is
17 to fulfill the Federal Clean Air Act, Section
18 182(a), requirements for the Missouri portion of the
19 St. Louis marginal non-attainment area under the
20 2008, 8-hour ozone NAAQS. Section 182(a) of the
21 Clean Air Act specifically addresses the SIP
22 submission provisions for ozone non-attainment areas
23 classified as marginal.

24 Pursuant to the Section 182(a)(1)
25 one, the main element of this marginal plan is a

RECOMMENDATION FOR ADOPTION

PROPOSED REVISION TO

MISSOURI STATE IMPLEMENTATION PLAN –

MARGINAL AREA PLAN FOR THE MISSOURI PORTION OF THE

ST. LOUIS NONATTAINMENT AREA FOR THE

2008 8-HOUR GROUND LEVEL OZONE

NATIONAL AMBIENT AIR QUALITY STANDARD

On May 29, 2014, the Missouri Air Conservation Commission held a public hearing concerning a revision to the Missouri State Implementation Plan (SIP) – Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard. A summary of comments received and the Air Program’s corresponding responses is included on the following page. No revisions were made to the proposed plan as a result of comments received.

The proposed plan has not been reprinted in the briefing document due to its volume. The entire proposed 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 proposed. If the commission adopts this plan, it will be the department’s intention 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 –

**MARGINAL AREA PLAN FOR THE MISSOURI PORTION OF THE ST. LOUIS
NONATTAINMENT AREA FOR THE 2008 8-HOUR GROUND LEVEL OZONE
NATIONAL AMBIENT AIR QUALITY STANDARD**

The public comment period for the proposed revision to the Missouri State Implementation Plan (SIP) for the *Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard* (NAAQS) opened on April 28, 2014 and closed on June 5, 2014. No 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 comments from Dr. Bret Gustafson (individual), Dr. John Kissel (individual), and Andy Knott (Sierra Club). All three commenters testified during the public hearing before the Missouri Air Conservation Commission (MACC) on May 29, 2014. Two of the commenters supplied written copies of their testimonies in addition to their verbal testimonies.

COMMENT #1: All three commenters referenced the health effects of high ozone concentrations. The comments cited concerns over public health and the number of asthma cases in the St. Louis area and compared these figures with the rest of the State and country.

RESPONSE: As outreach and education are key elements of the Department's mission, the Air Program encourages public participation and appreciates the commenters' concerns about air quality and public health issues in the St. Louis area. The Air Program acknowledges the effects of ozone on certain health and respiratory conditions, and it is the Air Program's mission to protect air quality in the state to ensure the safety of public health.

No changes to the plan were made as a result of this comment.

COMMENT #2: All three commenters suggested that the Air Program should take a proactive approach to addressing ozone in the nonattainment area by requiring controls for ozone precursors, particularly oxides of nitrogen (NO_x), on large stationary sources such as power plants. A couple of the commenters recognized the reductions in mobile emissions, but urged the Air Program to focus their efforts on controlling stationary sources especially power plants. Sierra Club specifically urged the Air Program to prioritize additional controls on stationary sources to include Selective Catalytic Reduction (SCR) as a Reasonably Available Control Technology (RACT).

RESPONSE: The purpose of this plan is to fulfill the State's obligations pursuant to federal Clean Air Act (CAA) Section 182(a) for the St. Louis Marginal ozone nonattainment area. The U.S. Environmental Protection Agency (EPA) establishes the thresholds for each ozone nonattainment area classification based on how close the area is to attaining the standard; marginal areas are the closest to attaining the standard. The primary requirement of a Marginal Area Plan is a comprehensive, complete and accurate inventory of ozone precursor emissions for the area. The CAA requirements for Marginal areas do not include an attainment demonstration or a review of control strategies because there is the expectation that the continued emission reductions from the control strategy already in place will result in attainment within three years after designation. This three-year timeframe is designed to allow the controls that have been implemented, or are being phased in, to fully take effect.

There has been a downward trend in ozone air quality concentration values for the St. Louis area in recent years. For the 2014 ozone season, the first monitored exceedance of the 2008 NAAQS occurred on August 4,. This is the latest the St. Louis area has gone without an exceedance of the prevailing standard since these types of records have been kept starting in 1992. Though the Air Program expects the area to be in compliance by the December 31, 2015 attainment date based on continued emission reductions from the current control strategy, if this does not occur, the area can be reclassified to moderate. A moderate classification would obligate the Air Program to submit an attainment demonstration including an update to the area's control strategy and RACT determination. The Emissions Inventory of this plan expedites the development of any potentially necessary attainment demonstration and RACT SIP revision in the future by establishing an appropriate emissions accounting and baseline. In addition, EPA is expected to propose a new potentially stricter ozone standard by the end of 2014, to be finalized by the end of 2015, which could result in a moderate or higher nonattainment classification for the St. Louis area. Whether St. Louis becomes a moderate nonattainment area under the 2008 ozone NAAQS or a new, more stringent ozone NAAQS, the Air Program would be required to evaluate additional control strategies for stationary sources, including SCR and other controls as possible RACT measures.

Ozone season NO_x emissions from power plants within the Missouri side of the St. Louis nonattainment area declined by 248 tons from 2012 to 2013, while NO_x emissions from on-road mobile sources in the area declined by approximately 265 tons during the same period. It is true that power plant NO_x emissions comprise the vast majority of NO_x emissions from point sources (i.e., large stationary sources), but point sources only comprise 28 percent (%) of the total NO_x emissions for the St. Louis area. Since the mobile source sector contributes more than half of the area's entire NO_x emissions, it is appropriate to rely heavily on emission reductions from this source category to achieve the area's ozone air quality goals. Federal motor vehicle engine standards are responsible for much of the reductions in the mobile source category by requiring emission reductions at the engine/vehicle manufacturer level. Because of the continued tightening of federal motor vehicle emission standards, each time an older car is retired and replaced by a newer car (referred to as 'fleet turnover'), further emission reductions are achieved. Moreover, motor vehicle emission standards are expected to continue to drop, accounting for additional new reductions, as a result of the recently promulgated federal Tier 3 standards to be implemented starting in the 2017 model year.

One commenter stated that NO_x emissions over the past seven years, especially at Ameren Plants,

are virtually stable. Since the Emissions Inventory presented in this plan is from the year 2011, it is unclear to which seven-year period the commenter is referring. The Air Program's data shows that NO_x emissions from power plants in the area have steadily decreased. For the most recent seven-year period from 2007 to 2013, there was a nearly 13% reduction in NO_x emissions from the four Ameren power plants in the St. Louis nonattainment area. Since emissions typically have year-to-year fluctuations (peaks and valleys on a graph), the best way to analyze emission reductions is to look at the overall trend over an extended period. Table 1 below lists the total ozone season NO_x emissions for each year from 1995 to 2013 from the coal-fired boilers at the following four Ameren facilities: Meramec, Labadie, Sioux, and Rush Island. (The only four power plants on the Missouri side of the St. Louis nonattainment area).

Table 1: St. Louis Area Power Plants Total Ozone Season NO_x Emissions (May - September)	
Year	NO_x (tons/ozone season)
1995*	26,511
1996	22,121
1997	23,543
1998	24,103
1999	22,275
2000	20,949
2001	15,949
2002	15,233
2003	15,289
2004	13,020
2005	12,967
2006	11,556
2007	9,825
2008	10,233
2009	9,971
2010	10,806
2011	11,329
2012	8,800
2013	8,565

[Source: EPA's Clean Air Market Division (CAMD)]

[* 1995 is the first year CAMD provides this data on an annual basis]

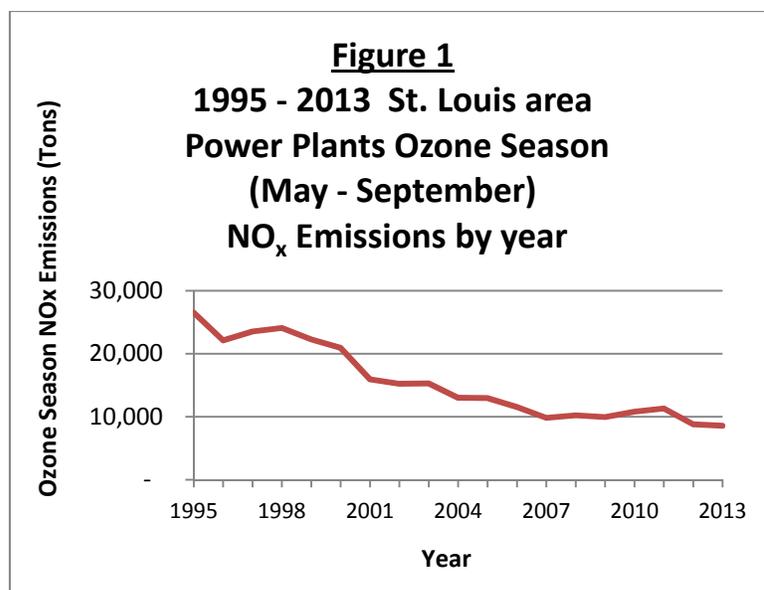


Figure 1 (above) plots these emissions and demonstrates a continuing downward trend of NO_x emissions from power plants in the St. Louis area. From 1995 to 2013 there has been a 68% decrease in emissions while the period from 2003 to 2013 shows a 44% decrease. We fully expect the downward trend in NO_x emissions from power plants to continue based on multiple recent and forthcoming federal regulations expected to impose additional controls on power plants over the next several years. Such rules include the Implementation of the 2010 Sulfur Dioxide (SO₂) NAAQS, the Utility Mercury and Air Toxics Standard (MATS), CAIR Phase II or the Cross-State Air Pollution Rule (CSAPR), and proposed Carbon Dioxide (CO₂) emission standards under CAA Section 111(d). Of these four rules, the only rule that directly controls ozone season NO_x is CAIR Phase II or the CSAPR (when it is reinstated). The other three rules control emissions of other pollutants from power plants, but are all likely to result in NO_x reductions as a co-benefit.

One commenter cites the St. Louis Area's Early Progress Plan (EPP) for the 2008 NAAQS that was adopted by this Commission on March 28, 2013, noting the plan assumes NO_x emissions from power plants will remain steady in the near future. The Air Program made this conservative assumption about power plant emissions in order to add a margin of safety to the EPP's projection showing that total ozone precursor emissions for the St. Louis region will continue declining in the future.

In summary, this plan meets all CAA Section 182(a) plan submission requirements for the St. Louis marginal nonattainment area for the 2008 ozone NAAQS. Multiple regulations currently in place and phasing in over the next several years are expected to continue significantly reducing emissions from power plants and other sources in the area, bringing the St. Louis area into attainment of the 2008 ozone NAAQS by the end of 2015. As future regulatory measures are finalized or become necessary, the Air Program will evaluate all options, including the ones suggested by the commenters, in future plans for the area.

No changes to the proposed plan were made as a result of this comment.

COMMENT #3: Sierra Club commented that St. Louis will likely be bumped up to a moderate nonattainment classification. Also, EPA has proposed a more stringent ozone standard, which St. Louis is at risk of being out of compliance. In addition to the serious health consequences, being nonattainment brings other ramifications such as stricter new source permitting that have economic development impacts. The Sierra Club urges the Department to get out ahead of the issue by taking measures to address the core causes.

RESPONSE: As stated above in the response to comment #2, the marginal nonattainment classification and associated plan obligations assume that the continued emission reductions from the control strategy currently in place has a very good chance of demonstrating compliance with the 2008 ozone NAAQS by the end of 2015. The St. Louis area has been experiencing a downward trend in ozone air quality concentrations and we expect this trend to continue. At such time as the St. Louis area is reclassified to a moderate nonattainment under the 2008 standard or a new standard is promulgated and the area is designated nonattainment, the Air Program will fulfill the State's plan submission obligations pursuant to the CAA, which will include an attainment demonstration and adjustments to the area's control strategies as needed.

Nevertheless, the Air Program is not waiting until a new standard is released, or for the area's potential reclassification, to get out ahead by starting the plan development process early: the Air Program is currently reviewing EPA's 2018 emissions inventory projections and modeling input files in an preemptive effort to develop a modeling construct to support any additional planning requirements in the event these scenarios occur. Similarly, even though the federal 2008 Ozone NAAQS implementation rule has not been finalized yet, the Air Program has, through this plan, developed the base-year emissions inventory for the area, which is the first step in the process of developing an attainment demonstration and evaluating additional control measures if required in the future.

Additionally, the Air Program is getting ahead of the situation by working on the implementation of proposed, pending and potential new federal rules affecting power plants prior to these rules even being finalized. As noted previously, these federal regulations include the implementation of the 2010 SO₂ NAAQS, MATS, CAIR Phase II or CSAPR, and proposed CO₂ emission standards under CAA Section 111(d) (known as the "Clean Power Plan"). As an example, the Air program is taking a proactive approach regarding EPA's proposed Clean Power Plan affecting CO₂ emissions from existing power plants. This rule was proposed in the Federal Register on June 18, 2014, and the Air Program conducted an initial informational meeting for stakeholders on July 14, 2014. The Air Program will continue its outreach and coordination effort for EPA's Clean Power Plan to allow for meaningful stakeholder input into the state's plan development process. Though not all of these federal regulations directly target power plant NO_x emissions, they are likely to result in NO_x emissions reductions as a co-benefit, thus furthering the goal to control ozone concentrations in the St. Louis area.

No changes to the plan were made as a result of this comment.