Missouri State Implementation Plan Revision

Infrastructure Elements for the 2012 Annual $PM_{2.5}$ Standard

Prepared for the
Missouri Air Conservation Commission

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Project # 2012 PM-2-Annual Infra

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List of Acronyms and Abbreviations

Air Program	Air Pollution Control Program
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CFR	Code of Federal Regulations
CSAPR	Cross-State Air Pollution Rule
CSR	Code of State Regulations
department	Missouri Department of Natural Resources
Director	Director of the department, unless otherwise specified
EPA	U.S. Environmental Protection Agency
ESP	Environmental Services Program
MACC	Missouri Air Conservation Commission
MACC rules	Missouri Regulations in Title 10, Division 10 of the CSR
Missouri Air Law	Missouri Air Conservation Law
NAAQS	National Ambient Air Quality Standard
NO_x	Oxides of Nitrogen
NSR	New Source Review
PM	Particulate matter
$PM_{2.5}$	Fine Particulate Matter (diameter equal to or less than 2.5 microns)
PSD	Prevention of Significant Deterioration
RSMo	Revised Statutes of Missouri
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
VOC	Volatile Organic Compounds

EXECUTIVE SUMMARY

The purpose of this plan is to address Clean Air Act (CAA) Sections 110(a)(1) and 110(a)(2) for the 2012 annual fine particulate matter ($PM_{2.5}$) National Ambient Air Quality Standard (NAAQS). These sections of the CAA direct states to develop a state implementation plan (SIP), commonly referred to as an "infrastructure SIP", that provides for the implementation, maintenance, and enforcement of the NAAQS. Section 110(a)(1) requires that each state submit a plan that meets the applicable requirements of any new or revised NAAQS within 3 years after promulgation of the new or revised NAAQS, and Section 110(a)(2) includes the specific elements that must be addressed. In 2012, the $PM_{2.5}$ NAAQS was revised to 12 g/m^3 on an annual basis. The deadline to submit the corresponding infrastructure SIP for this standard is December 12, 2015.

With this plan, Missouri is demonstrating it has adequate resources and authority to implement the 2012 Annual $PM_{2.5}$ NAAQS for all areas of the state, through state laws and regulations. This SIP revision is administrative in nature and does not establish new requirements for this revised NAAQS.

This plan is based on guidance released in a September 13, 2003 EPA memo entitled "Guidance on infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)." The required Section 110 Infrastructure Elements addressed in this plan include:

- Emission Limitations and Other Control Measures
- Ambient Air Quality Monitoring/Data System
- Programs for Enforcement of Control Measures and for Construction or Modification of Stationary Sources
- Interstate Pollution Transport
- Adequate Resources and Authority, Conflict of Interest, and Oversight of Local Governments and Regional Agencies
- Stationary Source Monitoring and Reporting
- Emergency Episodes
- SIP Revisions
- Plan Revisions for Nonattainment Areas
- Consultation with Government Officials, Public Notification, and Prevention of Significant Deterioration (PSD) and Visibility Protection
- Air Quality Modeling and Submission of Modeling Data
- Permitting Fees
- Consultation and Participation by Affected Local Entities

This document also proffers two statutes for inclusion into Missouri's SIP: Section 105.483(5) RSMo 2014, and Section 105.485 RSMo 2014. These statutes address the state infrastructure requirements relating to conflicts of interest found in Section 128 of the CAA. Once approved into the Missouri SIP, these statutes will be relied on for the 2012 annual $PM_{2.5}$ NAAQS and future NAAQS infrastructure plans.

1. Introduction & Background

The purpose of this document is to address the requirements of Section 110(a)(1) and Section 110(a)(2) of the CAA. Section 110 of the CAA requires that each state submit to the EPA a SIP revision for the implementation, maintenance, and enforcement of each new or revised NAAQS. The intent of the CAA in requiring this plan submittal pursuant to Section 110(a)(1), is to obligate the state to demonstrate that it has the ability, authority, and resources to implement the infrastructure elements listed in Section 110(a)(2) for each criteria pollutant. This document is the State of Missouri's infrastructure plan for the 2012 annual $PM_{2.5}$ NAAQS.

1.1 2012 Annual $PM_{2.5}$ NAAQS

On December 14, 2012, EPA promulgated a revised NAAQS for $PM_{2.5}$. The previous standards for $PM_{2.5}$ were promulgated in 1997 and 2006 and included an annual standard and a 24-hour standard. The annual standard, which was set in 1997, was 15 micrograms per cubic meter ($\mu g/m^3$), and the 24-hour standard, which was set in 2006, is 35 $\mu g/m^3$. The revised NAAQS finalized in December 2012 retained the 24-hour standard, but lowered the annual standard from 15 $\mu g/m^3$ to 12 $\mu g/m^3$.

For more information, please visit the Missouri Department of Natural Resources' $PM_{2.5}$ webpage: http://dnr.mo.gov/env/apcp/fine_particulate.htm

1.2 State Area Designations

Following a revision to a NAAQS, the CAA allows states one year to recommend boundary designations for their states to be considered by EPA when establishing the final boundary designations. Per the CAA, areas should be designated nonattainment if ambient air quality monitoring data shows a violation of the NAAQS as well as areas that contribute to nearby violations of the NAAQS. Areas are designated unclassifiable where there is insufficient information to determine if a violation is occurring or whether a nearby area is contributing to a violation. All other areas should be designated attainment. On December 5th, 2013, Missouri submitted its recommendations to the EPA based on 2010-2012 ambient air quality monitoring data. Based on this data all ambient $PM_{2.5}$ monitors that are comparable to the annual $PM_{2.5}$ NAAQS were in compliance with the 2012 standard, and the state recommended a designation of attainment/unclassifiable for every county in the state under this NAAQS.

On January 15, 2015, the final boundary designations under the 2012 annual $PM_{2.5}$ NAAQS were published in the Federal Register (80 FR 2206). In Missouri, the City of St. Louis and the Counties of Franklin, Jefferson, St. Charles, and St. Louis were designated unclassifiable and all other areas in Missouri were designated attainment/unclassifiable. No areas of the state were designated nonattainment for the 2012 annual $PM_{2.5}$ NAAQS.

Due to data completeness issues for the Illinois $PM_{2.5}$ ambient air quality monitors (discovered by EPA during a technical systems audit), EPA was unable to determine if a violation occurred at the Metro-East Illinois monitors within Madison and St. Clair counties. Consequently, it is not clear if the St. Louis metro area's Missouri Counties were contributing to a violation of the standard on the Illinois side. This inability to determine if a contribution exists is the reason that the St. Louis area Missouri counties were designated "unclassifiable" rather than

"unclassifiable/attainment".

More information on the 2012 annual $PM_{2.5}$ NAAQS boundary designation process in Missouri may be found at:
http://dnr.mo.gov/env/apcp/docs/complete-2012-pm25-bndry-rec-submittal-12-10-13.pdf

1.3 Plan Summary

Section 110(a)(1) of the CAA requires that states submit an infrastructure plan such as this within three years of the promulgation of the revised criteria pollutant standard. This infrastructure plan follows the requirements of Section 110 of the CAA as well as the EPA's September 2013 memorandum titled *Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)* (hereinafter referred to as the 2013 guidance memo).

This document is administrative in nature and demonstrates that Missouri has the ability and authority to implement each of the required infrastructure elements pursuant to Section 110 of the CAA as outlined below for the 2012 annual $PM_{2.5}$ NAAQS via the referencing of specific corresponding applicable state statutes, regulations, programs or resources.

2. INFRASTRUCTURE REQUIREMENTS

This section of the plan provides an explanation of how the State of Missouri fulfills each applicable Section 110(a)(1) and (2) infrastructure element requirement of the CAA.

2.1 Plan Submittal and Timing Requirements: Section 110(a)(1)

Section 110(a)(1) of the CAA requires that states submit to EPA plans to implement, maintain and enforce each of the NAAQS promulgated by EPA within three years after promulgation of a new or revised standard.

This document is the State of Missouri's plan to implement, maintain and enforce the revised 2012 annual $PM_{2.5}$ NAAQS.

2.2 Infrastructure Elements: Section 110(a)(2)

Section 110(a)(2) of the CAA states that each SIP submittal shall be adopted by the state after a reasonable notice and public hearing.

In accordance with this provision, prior to submittal to the EPA, this plan is scheduled for a public hearing before the Missouri Air Conservation Commission (MACC) on August 27, 2015. The plan was posted online for public review and comment by July 27, 2015 at the following web address: http://www.dnr.mo.gov/env/apcp/stateplanrevisions.htm. The public comment period is open through September 3, 2015, which is seven (7) days after the public hearing.

A. Emission Limits & Other Control Measures: Sec. 110(a)(2)(A)

Section 110(a)(2)(A) of the CAA requires SIPs to include enforceable emission limits and other control measures, means or techniques, schedules for compliance and other related matters as needed to implement, maintain and enforce each NAAQS. The 2013 guidance memo specifies that states should identify existing SIP provisions or new SIP provisions that limit emissions of the applicable criteria pollutant and it precursors.

The State of Missouri's statutes and regulations, via the Missouri Air Conservation Law

(Missouri Air Law) and MACC Rules, authorize the department to regulate air quality and implement air quality control regulations. Chapter 643 of the Revised Statutes of Missouri

(RSMo) is dedicated to Missouri Air Law. These statutes authorize the establishment of necessary regulations to execute these laws. Timetables for compliance are also found in these regulations as appropriate. The MACC rules are codified in Title 10, Division 10 of the Missouri Code of State Regulations (CSR).

The Missouri Air Conservation Law is available for viewing at:
http://www.moga.mo.gov/statutes/chapters/chap643.htm

The Missouri Air Conservation Commission rules are available for viewing at:
http://www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp

Section 643.030 RSMo authorizes the "Air Conservation Commission of the State of Missouri", also known as the MACC, to control air pollution, which is defined in Section 643.020 RSMo to include air contaminants, which cause or contribute to injury to public health or welfare.

Section 643.050 RSMo authorizes the MACC to classify and identify air contaminants. Furthermore, Section 643.050 of the Missouri Air Law authorizes the MACC to regulate the use of air contaminant sources and to establish emissions limitations for air contaminant sources.

In the MACC rules, *10 CSR 10-1.010 General Organization* reiterates the MACC's responsibility to establish air quality control regions as well as adopt, promulgate, amend and rescind rules. This rule also tasks department staff with carrying out the policies of the MACC:

> *The director of the DNR, the staff director of the Air Pollution Control Program and the program staff enforce the rules and implement the policy of the Air Conservation Commission.*

Missouri has codified the 2012 annual $PM_{2.5}$ NAAQS via regulation. The State has also defined the term National Ambient Air Quality Standard for use in permitting and other regulations, and the definition encompasses the 2012 annual $PM_{2.5}$ NAAQS. The Missouri CSR also codifies federally approved sampling methods to measure $PM_{2.5}$ and its precursors from emissions sources in the state and federally approved methods for measuring the concentration of $PM_{2.5}$ in the ambient air. These four rules are listed below:

- *10 CSR 10-6.010 Ambient Air Quality Standards:* This rule is a compilation of standards for ambient air quality throughout Missouri and includes the 2012 annual $PM_{2.5}$ NAAQS.

- *10 CSR 10-6.020 Definitions and Common Reference Tables* is used to define terms, such as 'NAAQS', 'criteria pollutants or standards', and '$PM_{2.5}$' to classify pollutants and implement and enforce standards.

- *10 CSR 10-6.030 Sampling Methods for Air Pollution Sources* establishes the appropriate sampling methods for emissions in stack gases for numerous air pollutants including, among others, direct $PM_{2.5}$ and the following $PM_{2.5}$ precursors: sulfur dioxide (SO_2), oxides of nitrogen (NO_X), and volatile organic compounds (VOC).

- *10 CSR 10-6.040 Reference Methods:* Subsections (4)(L) and (4)(M) of this rule incorporate by reference the appropriate respective federal reference method for measuring the concentration of fine particulate matter ($PM_{2.5}$) in the ambient air and determining compliance with the NAAQS.

Title 10, Division 10 Chapter 6 of the Missouri CSR includes numerous rules that control emissions of direct $PM_{2.5}$ and its precursors at emission sources throughout the entire state and have been approved into Missouri's SIP or submitted to EPA for SIP approval. Below is a list of MACC rules that apply to the entire state and control direct $PM_{2.5}$ and/or $PM_{2.5}$ precursors at sources within the state.

- *10 CSR 10-6.045 Open Burning Requirements* establishes restrictions on open burning

that apply throughout the entire state, thus controlling emissions of direct $PM_{2.5}$ and $PM_{2.5}$ precursors that result from open burning activities.

- *10 CSR 10-6.060 Construction Permits Required* provides construction permit requirements for new emission sources and existing sources that make modifications.

- *10 CSR 10-6.065 Operating Permits* establishes the applicable requirements to be included in each permitted source's operating permit for all pollutants emitted by the source.

- *10 CSR 10-6.110 Reporting Emission Data, Emission Fees, and Process Information* establishes emission reporting requirements for sources operating in the state along with applicable fees for pollutants emitted by sources operating in the state.

- *10 CSR 10-6.120 Restriction of Emissions of Lead From Specific Lead Smelter-Refinery Installations* establishes emissions limits for lead at multiple sources in the state. Because lead is typically emitted as a particle, controlling emissions of lead also reduces emissions of direct $PM_{2.5}$.

- *10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential* establishes federal breakpoint values for the air quality index for several air pollutants including ozone. This rule requires that the air quality index be reported to the public in large Metropolitan Statistical Areas on a daily basis and establishes procedures and emissions reductions objectives for episodes when the air quality index reaches certain breakpoint levels.

- *10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin* limits the fugitive particulate matter (PM) emissions from all sources in the state.

- *10 CSR 10-6.180 Measurement of Emissions of Air Contaminants* gives the Air Program director the authority to require emission tests from sources of emissions and also to perform emission tests at any emission source in the state.

- *10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants* establishes maximum opacity limits for sources in the state.

- *10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds* establishes SO_2 emission limits for numerous large SO_2 sources in the state. It is noted that this rule is currently in the process of being rescinded and replaced, but all limits in this rule will be either transferred to or strengthened in the replacement rule.

- *10 CSR 10-6.280 Compliance Monitoring Usage* includes the approved monitoring methods for determining whether sources are complying with their emission limits.

- *10 CSR 10-6.330 Restriction of Emissions from Batch-Type Charcoal Kilns* establishes

emissions limits for opacity, PM, and VOC from these types of sources that operate in the state.

- *10 CSR 10-6.380 Control of NO_x Emissions From Portland Cement Kilns* provides NO_x emissions limits for these types of sources that operate in the state.

- *10 CSR 10-6.390 Control of NO_x Emissions From Large Stationary Internal Combustion Engines* provides NO_x emissions limits for these types of sources that operate in the state.

- *10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes* establishes PM emission limits for numerous sources that operate within the state.

- *10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating* establishes PM emission limits for sources in the state that burn fuel to produce steam, hot water, or hot air or other indirect heating of liquids, gases, or solids.

In addition to the rules listed above, the State of Missouri has numerous SIP approved rules to control $PM_{2.5}$ and $PM_{2.5}$ precursor emissions at sources located in the Kansas City area (Platte, Clay and Jackson Counties) and the St. Louis area (Franklin, Jefferson, St. Charles, St. Louis Counties, and the City of St. Louis). Below is a list of MACC rules that apply to the Kansas City and St. Louis areas that control direct $PM_{2.5}$ and $PM_{2.5}$ precursors from emission sources.

- *10 CSR 10-2.205 Control of Emissions From Aerospace Manufacture and Rework Facilities* establishes VOC controls and work practices for these sources in the Kansas City area.

- *10 CSR 10-2.210 Control of Emissions From Solvent Metal Cleaning* establishes VOC controls and work practices for sources in the Kansas City area that use metal cleaning solvents.

- *10 CSR 10-2.215 Control of Emissions from Solvent Cleanup Operations* establishes VOC controls and work practices from sources in the Kansas City area that use cleaning solvents.

- *10 CSR 10-2.220 Liquefied Cutback Asphalt Paving Restricted* is a rule that restricts the application of liquefied cutback asphalt in the Kansas City area during the warm half of the year as a VOC control measure.

- *10 CSR 10-2.230 Control of Emissions From Industrial Surface Coating Operations* establishes VOC limits for industrial surface coating operations in the Kansas City area.

- *10 CSR 10-2.260 Control of Petroleum Liquid Storage, Loading and Transfer* applies throughout the Kansas City area and requires Stage I vapor recovery at gas stations, and also establishes other work practice standards for storage, loading, and transfer of

petroleum liquids that control VOC emissions.

- *10 CSR 10-2.290 Control of Emissions From Rotogravure and Flexographic Printing Facilities* establishes VOC control requirements for these types of printing facilities located in the Kansas City area.

- *10 CSR 10-2.300 Control of Emissions From the Manufacturing of Paints, Varnishes, Enamels, and Other Allied Surface Coating Products* establishes VOC control requirements for these types of sources in the Kansas City area.

- *10 CSR 10-2.310 Control of Emissions From the Application of Automotive Underbody Deadeners* limits the VOC content of automotive underbody deadeners at emission sources in the Kansas City area.

- *10 CSR 10-2.320 Control of Emissions From Pesticides and Herbicides* establishes VOC control requirements for manufacturers of pesticides and herbicides that are located in the Kansas City area.

- *10 CSR 10-2.330 Control of Gasoline Reid Vapor Pressure* controls VOC emissions by establishing Reid Vapor Pressure Requirements for gasoline sold in the Kansas City area.

- *10 CSR 10-2.340 Control of Emissions From Lithographic Printing Installations* establishes VOC control requirements for these types of printing facilities located in the Kansas City area.

- *10 CSR 10-2.360 Control of Emissions From Bakery Ovens* establishes VOC control requirements for commercial bakery ovens located in the Kansas City area.

- *10 CSR 10-2.385 Control of Heavy Duty Diesel Idling Emissions* establishes restrictions for the idling of heavy-duty diesel vehicles in the Kansas City area.

- *10 CSR 10-5.040 Control of Emissions From Hand-Fired Equipment* establishes work practice standards for the use of hand-fired fuel-burning equipment at commercial facilities located in the St. Louis area.

- *10 CSR 10-5.130 Certain Coals to be Washed* establishes that all coals used in the St. Louis area that contain more that 2% sulfur or 12% ash must be washed to ensure that the ash content of the coal is no more than 12%.

- *10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer* applies throughout the St. Louis area and requires Stage I vapor recovery at gas stations, and also establishes other work practice standards for storage, loading, and transfer of petroleum liquids that control VOC emissions.

- *10 CSR 10-5.295 Control of Emissions From Aerospace Manufacture and Rework Facilities* establishes VOC controls and work practices for these sources in the St. Louis

area.

- *10 CSR 10-5.300 Control of Emissions From Solvent Metal Cleaning* establishes VOC controls and work practices for sources in the St. Louis area that use metal cleaning solvents.

- *10 CSR 10-5.310 Liquefied Cutback Asphalt Paving Restricted* is a rule that restricts the application of liquefied cutback asphalt in the St. Louis area during the warm half of the year as a VOC control measure.

- *10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations* establishes VOC limits for industrial surface coating operations in the St. Louis area.

- *10 CSR 10-5.340 Control of Emissions From Rotogravure and Flexographic Printing Facilities* establishes VOC control requirements for these types of printing facilities located in the St. Louis area.

- *10 CSR 10-5.350 Control of Emissions From Manufacture of Synthesized Pharmaceutical Products* establishes VOC control requirements for pharmaceutical manufacturing facilities in the St. Louis area.

- *10 CSR 10-5.360 Control of Emissions From Polyethylene Bag Sealing Operations* establishes VOC control requirements for polyethylene bag sealing operating in the St. Louis area.

- *10 CSR 10-5.370 Control of Emissions From the Application of Deadeners and Adhesives* limits the VOC content of automotive underbody deadeners and adhesives used at emission sources in the St. Louis area.

- *10 CSR 10-5.381 On-Board Diagnostics Motor Vehicle Emissions Inspection* requires passenger vehicles registered in the St. Louis area to pass an emission inspection every two years to ensure the proper function of emission controls on the vehicles.

- *10 CSR 10-5.385 Control of Heavy Duty Diesel Idling Emissions* establishes restrictions for the idling of heavy-duty diesel vehicles in the St. Louis area.

- *10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Enamels, and Other Allied Surface Coating Products* establishes VOC control requirements for these types of sources in the St. Louis area.

- *10 CSR 10-5.410 Control of Emissions From Manufacture of Polystyrene Resin* establishes VOC control requirements from emission sources in the St. Louis area that manufacture polystyrene resin.

- *10 CSR 10-5.420 Control of Equipment Leaks From Synthetic Organic Chemical and Polymer Manufacturing Plants* establishes requirements to control leaks of VOC

emission from synthetic organic chemical and polymer manufacturing equipment located in the St. Louis area.

- *10 CSR 10-5.440 Control of Emissions From Bakery Ovens* establishes VOC control requirements for commercial bakery ovens located in the St. Louis area.

- *10 CSR 10-5.442 Control of Emissions From Lithographic and Letterpress Printing Operations* establishes VOC control requirements for these types of printing facilities located in the St. Louis area.

- *10 CSR 10-5.450 Control of VOC Emissions from Traffic Coatings* establishes limits for the VOC content of traffic coatings used in the St. Louis area.

- *10 CSR 10-5.451 Control of Emissions from Aluminum Foil Rolling* establishes work practice standard, material requirements, and control equipment specifications to control VOC emissions from aluminum foil rolling mills in the St. Louis area.

- *10 CSR 10-5.455 Control of Emissions from Industrial Solvent Cleaning Operations* establishes VOC controls and work practices from sources in the St. Louis area that use cleaning solvents.

- *10 CSR 10-5.490 Municipal Solid Waste Landfills* requires these types of landfills in the St. Louis area to monitor their non-methane organic compound emissions and install controls if emissions exceed a certain threshold.

- *10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage* limits the VOC emissions from vessels in the St. Louis area that store volatile organic liquids.

- *10 CSR 10-5.510 Control of Emissions of Nitrogen Oxides* establishes reasonably available control technology requirements for major sources of NO_x located in the St. Louis area.

- *10 CSR 10-5.520 Control of Volatile Organic Compound Emissions From Existing Major Sources* establishes reasonably available control technology requirements for existing major sources of VOC in the St. Louis area that are not otherwise covered by a different VOC regulation applicable to the St. Louis area.

- *10 CSR 10-5.530 Control of Volatile Organic Compound Emissions From Wood furniture Manufacturing Operations* limits the VOC emissions from manufacturers of wood furniture in the St. Louis area.

- *10 CSR 10-5.540 Control of Emissions From Batch Process Operations* establishes VOC control requirements for batch process operations located in the St. Louis area.

- *10 CSR 10-5.550 Control of Volatile Organic Compound Emissions From Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical*

Manufacturing Industry establishes VOC control requirements for reactor processes and distillation processes in the St. Louis area.

- *10 CSR 10-5.570 Control of Sulfur Emissions From Stationary Boilers* limits SO_2 emissions from industrial boilers in the St. Louis area.

Infrastructure plans are not intended to identify nonattainment emission controls. Additionally, no areas in the state have been designated nonattainment for the 2012 annual $PM_{2.5}$ NAAQS. Should any areas in Missouri be designated nonattainment for the 2012 annual $PM_{2.5}$ NAAQS in the future, the emissions limitations and other control measures to bring such areas back into attainment of the 2012 annual $PM_{2.5}$ NAAQS would be developed under a separate SIP submittal with its own submittal schedule and process.

B. Ambient Air Quality Monitoring/Data Systems: Section 110(a)(2)(B)

Section 110(a)(2)(B) of the CAA requires SIPs to include provisions to provide for establishment and operation of ambient air quality monitors, collection and analysis of ambient air quality data, and making these data available to EPA upon request. The 2013 guidance memo specifies that states should identify existing SIP provisions or new SIP provisions that provide the air agency with the authority and responsibility to perform the following actions:

- Monitor air quality for the relevant NAAQS pollutant(s) at appropriate locations in accordance with the EPA's ambient air quality monitoring network requirements.

- Submit data to the EPA's Air Quality System (AQS) in a timely manner in accordance with 40 CFR part 58.

- Provide to the EPA Regional Office information regarding air quality monitoring activities, including a description of how the air agency has complied with monitoring requirements, and an explanation of any proposed changes to the network. Submission of annual monitoring network plans consistent with the EPA's ambient air monitoring regulations is one way of providing this information.

- Obtain the EPA’s approval of any planned changes to monitoring sites or to the network plan, consistent with applicable requirements in 40 CFR 58.14.

The Missouri Department of Natural Resources operates an extensive network of ambient air monitors to comply with the Clean Air Act and its amendments. The Ambient Air Quality Monitoring Network for the State of Missouri consists of State and Local Air Monitoring Stations (SLAMS), Special Purpose Monitoring Stations (SPMS), and National Core (NCore) monitoring stations consistent with requirements in federal regulation 40 CFR 58.10. Missouri’s SIP approved rule, 10 CSR 10-6.040 Reference methods, incorporates by reference EPA’s approved ambient monitoring methods for determining the concentration of $PM_{2.5}$ in the ambient air, and these methods are followed by the Air Program when operating the states ambient air quality monitoring network.

Within the state Air Conservation Law, Section 643.050 RSMo provides the general authority

necessary for Missouri to fulfill the requirements of Section 110(a)(2)(B) of the CAA. This is itemized further within the Code of State Regulations: For the purposes of air quality monitoring data collection and submittal, Subsection (3)(B)1. of *10 CSR 10-1.010 General Organization* restates the MACC's statutory authority to develop facts and require the submission of relevant information. Additionally, Subsection (3)(B)4. of this rule outlines the roles, duties and obligations of the Air Pollution Control Program. Responsibilities relevant to air quality monitoring outlined in this rule include –

- Coordinate with the Environmental Services Program (ESP) and local air pollution control agencies when applicable on establishing and maintaining ambient air monitoring sites and collecting ambient air data.
- Develop and implement the annual Monitoring Network Plan and coordinate Ambient Air Monitoring Network Reviews.
- Review and approve permit applicant ambient air quality monitoring Quality Assurance Project Plans.
- Conduct and provide emissions and air quality analysis.
- Update and maintain the air quality monitoring, emissions, and other databases.

As authorized, the Missouri Department of Natural Resource's Air Pollution Control Program (Air Program) maintains an Air Quality Monitoring Unit which was created to fulfill the requirements of Section 110(a)(2)(B) of the CAA. EPA regulations require states to prepare and submit an annual monitoring network plan containing a periodic network assessment review. In accordance with this rule, found at 40 CFR 58 Part B, the Air Quality Monitoring Unit developed the 2015 annual monitoring network plan that fulfills Missouri's monitoring requirements for air pollutants, including $PM_{2.5}$. This plan was developed in June of 2015. Per the Air Program's 2015 annual monitoring network plan, the state operates 15 air quality monitoring sites statewide tasked with collecting data on $PM_{2.5}$ in the ambient air. Missouri's 2015 air quality monitoring network plan is available at:

http://dnr.mo.gov/env/apcp/docs/2015-monitoring-network-plan.pdf. Also, visit EPA Region 7's Air Quality Monitoring Network plan site for more information or to review Missouri's previous approved network plans: http://www.epa.gov/region07/air/quality/quality.htm.

In addition to the required submittal of the annual monitoring network plan, 40 CFR 58 also requires a formal monitoring network assessment to be performed and submitted to EPA every five (5) years. The Air Program last performed and submitted to EPA a formal monitoring network assessment in 2010 as required by 40 CFR 58 Part D. The next monitoring network assessment for the State of Missouri is expected to be performed and submitted in 2015.

The Air Program is committed to maintaining an adequate air monitoring network and will meet any changes in the monitoring requirements related to the 2012 annual $PM_{2.5}$ NAAQS. One change in monitoring requirements brought about by the revision of the annual $PM_{2.5}$ NAAQS is the requirement for near-road ambient $PM_{2.5}$ monitoring in large metropolitan areas. The Air Program currently operates two (2) near-road ambient $PM_{2.5}$ monitors, one (1) in the St. Louis area (Forest Park monitor) and one (1) in the Kansas City area (Blue Ridge I-70 monitor).

In the past, the Air Program and other groups have also used special purpose monitors to

determine the various species that comprise $PM_{2.5}$ concentrations in the St. Louis area in an effort to better understand the composition of $PM_{2.5}$ in the area and the impact of regional vs. local sources that contribute to $PM_{2.5}$ concentrations in the area. Two of these past special purpose monitoring plans are listed below. They are also posted online at the following address: http://dnr.mo.gov/env/apcp/fine_particulate.htm

St. Louis City Quality Assurance Project Plan For SLAMS/NAMS/SPMS/PM $PM_{2.5}$ Ambient Air Quality Monitoring

St. Louis City Quality Assurance Project Plan For $PM_{2.5}$ Speciation

For more information on Air Quality Monitoring from the Department's Environmental Service Program, please visit: http://dnr.mo.gov/env/esp/aqm/esp-aqa.htm

A summary and analysis of the state's current Fine Particulate Matter Air Quality data may be found at: http://dnr.mo.gov/env/apcp/docs/pm2.5monitordata.pdf

C. Enforcement & Construction Permit Programs: Sec. 110(a)(2)(C)

Section 110(a)(2)(C) of the CAA requires states to include a program or mechanism for (1) enforcement of all SIP measures, (2) the regulation of construction of new or modified stationary sources to meet Prevention of Significant Deterioration (PSD) and nonattainment New Source Review (NSR) requirements, and (3) minor new source permitting programs.

i. Enforcement Program

The 2013 guidance memo specifies that states should identify existing SIP provisions or new SIP provisions that provide for enforcement of those emission limits and control measures that the air agency has identified in its submission for purposes of satisfying CAA 110(a)(2)A.

The Air Program staffs and implements a vigorous Compliance/Enforcement Section. Additionally, the department's Division of Environmental Quality maintains considerable staff resources at its five (5) regional and seven satellite offices to coordinate complaints and inspections. [http://dnr.mo.gov/regions/docs/ro-map-color.pdf]

The Missouri statutes provide authority for the department to enforce the requirements of the Missouri Air Law, and any MACC rules, permits or final compliance orders issued under the provisions of that law. For example, Section 643.080 RSMo authorizes the department to issue compliance orders for violations of the Missouri Air Law, MACC rules promulgated thereunder (which includes rules comprising the Missouri SIP), and conditions of permits (which includes permits under SIP-approved permitting programs).

Section 643.085 RSMo authorizes the department to assess administrative penalties for violations of the statute, MACC rules, permit conditions or administrative orders. Section 643.151 RSMo authorizes the MACC to initiate civil actions for these violations, and to seek penalties and/or injunctive relief to prevent any further violation. Section 643.191 RSMo provides for criminal penalties for knowingly violating requirements of the applicable statutes, MACC rules or permit conditions, in addition to other acts described in that section.

In the MACC rules, *10 CSR 10-1.010 General Organization* reinforces this authority. This rule authorizes the MACC to conduct investigations, make orders and determinations, and refer alleged violations to the attorney general. Similarly, this rule also empowers the director to investigate complaints, issue abatement orders, recommend legal action be taken by the attorney general and enforce provisions of the Missouri Air Law. This rule also establishes the Air Program's Compliance/Enforcement Section and clearly delineates its duties in fulfillment of Section 110(a)(2)(C) of the CAA.

Other MACC rules that have been approved into Missouri's SIP that provide for the enforcement of state air regulations include the following:

- *10 CSR 10-6.030 Sampling Methods for Air Pollution Sources* establishes the appropriate sampling methods for emissions in stack gases for $PM_{2.5}$ and $PM_{2.5}$ precursors.

- *10 CSR 10-6.060 Construction Permits Required* provides construction permit requirements for new emission sources and existing sources that make modifications.

- *10 CSR 10-6.065 Operating Permits* establishes the applicable requirements to be included in each permitted source's operating permit for all pollutants emitted by the source.

- *10 CSR 10-6.110 Reporting Emission Data, Emission Fees, and Process Information* establishes emission reporting requirements for sources operating in the state along with applicable fees for pollutants emitted by sources operating in the state.

- *10 CSR 10-6.180 Measurement of Emissions of Air Contaminants* gives the Air Program director the authority to require emission tests from sources of emissions and also to perform emission tests at any emission source in the state.

- *10 CSR 10-6.280 Compliance Monitoring Usage* includes the approved monitoring methods for determining whether sources are complying with their emission limits.

ii. Prevention of Significant Deterioration Program

The 2013 guidance memo specifies that states should identify existing SIP provisions or new SIP provisions that demonstrate that one or more air agencies has the authority to implement a comprehensive PSD permit program under CAA title I part C, for all PSD-subject sources located in areas that are designated attainment or unclassifiable for one or more NAAQS.

To prevent significant deterioration of air quality, the construction of PSD-subject air pollution sources without the appropriate permit is unlawful by statute. To this end, Section 643.075 RSMo authorizes the department to operate a construction permit program and establishes the corresponding functions of that program including fee collecting provisions.

These duties are furthered outlined by Paragraph (2)(D)5 of *10 CSR 10-1.010 General Provisions* which establishes the Air Program's Permit Section.

Missouri has adopted all necessary provisions to provide for the protection of the 2012 annual

$PM_{2.5}$ NAAQS using the Prevention of Significant Deterioration Program (PSD) under state rule *10 CSR 10-6.060 Construction Permits Required*. Missouri has a long-standing and fully implemented New Source Review (NSR) permitting program for new major sources and significant modifications of existing sources. This NSR or Construction Permit program in any attainment area is referred to as a PSD permitting program and is governed by Section (8) of 10 CSR 10-6.060. One of the major components of the PSD program is the implementation of Best Available Control Technology (BACT) on new major sources or significant modification of existing major sources. Missouri has been delegated full authority to implement the PSD program by the EPA for all NSR regulated pollutants including $PM_{2.5}$.

Missouri's NSR permitting program also addresses major sources and modifications in nonattainment areas pursuant to Section (7) of 10 CSR 10-6.060. However, this element need not be addressed in this infrastructure plan. As stated previously, no areas in Missouri have designated nonattainment for the 2012 annual $PM_{2.5}$ NAAQS. Should any area be designated nonattainment for the 2012 annual $PM_{2.5}$ NAAQS in the future, the nonattainment area plan elements for those areas would be submitted in their own separate plans and would be addressed appropriately there.

iii. Minor New Source Review

The 2013 guidance memo specifies that states should identify existing SIP provisions or new SIP provisions that govern the minor source pre-construction program that regulates emissions of the relevant NAAQS.

Missouri has a minor permit program to review smaller sources (See 10 CSR 10-6.060(6)) to make sure, among other things, that such new and modified sources will not interfere with the 2012 annual $PM_{2.5}$ NAAQS attainment or maintenance. Sources with the potential to emit above the *de minimis* level are required to conduct an ambient air impact analysis to show that they are not adversely impacting the NAAQS. The *de minimis* level for $PM_{2.5}$ is 10 tons per year. (See the definition of *de minimis* in the definitions rule at 10 CSR10 6.020(2)(D)5. and Table 1 of 6.020(3)(A)). In accordance with Section (5) of 10 CSR 10-6.060, the department may also require impact analyses for sources lower than *de minimis* levels that may be likely to adversely affect air quality.

Therefore, Missouri has satisfied the requirements of Section 110(a)(2)(C) of the CAA for the 2012 annual $PM_{2.5}$ NAAQS through its Enforcement and approved Construction Permit programs enabled by state rule *10 CSR 10-6.060 Construction Permits Required*.

D. Interstate Pollution Transport: Section 110(a)(2)(D)

Section 110(a)(2)(D)(i) of the CAA requires SIPs to include provisions prohibiting any source or other type of emissions activity in one state from contributing significantly to nonattainment in, or interfering with maintenance by, another state with respect to the NAAQS, or from interfering with measures required in another state to prevent significant deterioration of air quality or to protect visibility. Similarly, Section 110(a)(2)(D)(ii) of the CAA requires that the SIP ensure compliance with the applicable requirements of Sections 126 and 115, relating to interstate and international pollution abatement.

i. Section 110(a)(2)(D)(i)(I)

Section 110(a)(2)(D)(i)(I) of the CAA, commonly referred to as the Good Neighbor Provision, requires SIPs to include provisions prohibiting emissions that result in long-range, interstate pollution transport that contributes significantly to nonattainment in, or interferes with maintenance by, a downwind state with respect to the NAAQS. Long-range transport of $PM_{2.5}$ is typically associated with emissions of SO_2 and NO_X in an upwind state that contribute to elevated levels of sulfates and nitrates, which are species of $PM_{2.5}$, in downwind states.

In EPA's *Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standard for Particulate Matter* [EPA-HQ-OAR-2007-0492-10094], the 2020 base-case modeling indicated that all but seven (7) counties in the country were projected to attain the 2012 annual $PM_{2.5}$ NAAQS by 2020 without any additional local controls. These seven (7) counties are all in California and are not downwind of Missouri. Therefore it is reasonable to assume that Missouri sources are not significantly contributing to nonattainment because all states downwind of Missouri are expected to attain the standard. Nevertheless, EPA has promulgated several federal rules that are projected to reduce Missouri's impact on downwind states by reducing emissions of $PM_{2.5}$ and $PM_{2.5}$ precursors at significant emission sources in Missouri. These rules include, among others, the Utility Mercury and Air Toxics Standards (77 FR 9304, February 16, 2012), the Tier III Motor Vehicle Rule (79 FR 43414, April 28, 2014), Corporate Average Fuel Economy Standards for Light Duty Vehicles (77 FR 62624, October 15, 2012), and Greenhouse Gas Emission Standards for Heavy Duty Vehicles (76 FR 57106, September 15, 2011).

Three other significant federal rules including the Major Source Boiler Maximum Achievable Control Technology (MACT) regulations (78 FR 7138, January 31, 2013), the Area Source Boiler MACT regulations (78 FR 7488, February 1, 2013), and the Tier III Motor Vehicle Rule (79 FR 43414, April 28, 2014) were not considered in EPA's modeling analysis for the 2020 base case modeling scenario. Therefore, because there are subject applicable sources in Missouri, these three federal rules only add to the margin of safety for attaining the 2012 annual $PM_{2.5}$ NAAQS without the need for additional controls. Because all areas in states downwind of Missouri are expected to attain the NAAQS and Missouri emissions are decreasing, $PM_{2.5}$ contribution from Missouri was not considered further. Missouri has satisfied its obligation under Section 110(a)(2)(D)(i)(I) of the CAA for the 2012 annual $PM_{2.5}$ NAAQS.

In addition, Missouri currently participates in three federal emissions trading programs under the Cross-State Air Pollution Rule. Two of these trading programs are designed to control Missouri's contribution to $PM_{2.5}$ nonattainment and maintenance areas in downwind states. These two programs include the Transport Rule NO_X Annual Trading Program and the Transport Rule SO_2 Group 1 Trading Program, which control emissions of NO_X and SO_2 from affected EGUs in the state.

ii. Section 110(a)(2)(D)(i)(II)

The 2013 guidance memo specifies that states should identify existing SIP provisions or new SIP provisions that prevent emissions of any regulated pollutant from interfering with any other air agency's comprehensive PSD permitting program, in addition to the 2012 annual $PM_{2.5}$ NAAQS. The 2013 guidance memo also specifies that states must have approved SIP provisions to adequately address any contribution from sources in that state to impacts on visibility program requirements in other states.

Missouri provides assurance that the SIP includes provisions to satisfy all of the elements under Section 110(a)(2)(D)(i)(II) of the CAA. To address the PSD element of interstate transport (Section 110(a)(2)(D)(i)(II) of the CAA), as previously stated, Missouri maintains a fully implemented NSR/PSD program for new major sources and major modifications in all areas of the state for the 2012 annual $PM_{2.5}$ NAAQS (see part 2.2.C.ii. of this document).

The Missouri SIP also includes provisions to protect visibility in Class I areas in downwind states, and in Missouri, as required under 110(a)(2)(D)(i)(II). On June 26, 2012, EPA published final approval of the State of Missouri Regional Haze Plan, which was submitted in August 2009, with supplemental information provided in February 2012 (77 FR 38007, June 26, 2012). All associated Regional Haze Plan documents are available in the regulatory docket under the following docket identification number: EPA–R07–OAR–2012–0153. EPA determined the plan submitted by Missouri satisfies the requirements of the CAA for states to prevent any future, and remedy any existing, anthropogenic impairment of visibility in mandatory Class I areas caused by emissions of air pollutants located over a wide geographical area. The State of Missouri developed a five-year progress report for the state's Regional Haze Plan, which was submitted to EPA in August of 2014. The State of Missouri intends to submit a full SIP revision for the Regional Haze Plan by July 31, 2018, with additional revisions every ten years thereafter. More information regarding Missouri's Regional Haze Plan can be found on the following website: http://www.dnr.mo.gov/env/apcp/sips.htm

In addition, as stated previously, affected electric generating units in Missouri participate in federal trading programs established under the CSAPR. Two of these trading programs are designed to control Missouri's contribution to $PM_{2.5}$ nonattainment and maintenance areas in downwind states. These two programs include the Transport Rule NO_X Annual Trading Program and the Transport Rule SO_2 Group 1 Trading Program. On June 7, 2012, EPA promulgated a final rule determining that the trading programs in the Transport Rule, also known as the CSAPR, achieve greater reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas than source-specific Best Available Retrofit Technology (BART) in those states covered by the Transport Rule (77 FR 33642).

iii. Section 110(a)(2)(D)(ii)

The 2013 guidance memo specifies emission sources in a state cannot contribute to air pollution in amounts that endanger public health or welfare in a foreign country per Section 115 of the CAA. The guidance memo also specifies that each state's SIP must include provisions that require all PSD-subject sources to notify neighboring air agencies of potential impacts from the source per Section 126 of the CAA.

Section 115 of the CAA grants EPA the authority to make a finding that a state contributes to air pollution problems in foreign countries. Missouri, located in the center of the country, is not near enough to any international borders to have a significant impact to any other country from $PM_{2.5}$ air pollution. Furthermore, there are no final findings under section 115 of the CAA against Missouri with respect to the 2012 annual $PM_{2.5}$ NAAQS, thus the element of Section 110(a)(2)(D)(ii) of the CAA pertaining to Section 115 of the CAA regarding international transport under the 2012 annual $PM_{2.5}$ NAAQS does not apply.

Section 643.050.3(7) RSMo authorizes the MACC to be Missouri's representative in all matters

pertaining to interstate air pollution abatement. Consistent with 110(a)(2)(D)(ii) of the CAA pertaining to requirements under Section 126 of the CAA, MACC rules require that affected states receive notice prior to the commencement of any construction or modification of a source.

Section (6) of *10 CSR 10–6.060 Construction Permits Required* provides that the review of all PSD permit applications follow the procedures of 10 CSR 10–6.060(12)(A), Appendix A. This rule also requires that the permitting authority notify affected states once a draft permit is made available for public comment.

E. Adequate Resources and Authority, Conflict of Interest, and Oversight of Local Governments and Agencies: Section 110(a)(2)(E)

Section 110(a)(2)(E) of the CAA requires that SIPs provide for the following: (1) necessary assurances that the state (and other entities within the state responsible for implementing the SIP) have adequate personnel, funding, and authority under state or local law to implement the SIP, and that there are no legal impediments to such implementation; (2) state compliance with the requirements relating to state boards, pursuant to Section 128 of the CAA; and (3) necessary assurances that the state has authority over the implementation of any plan provision even if it relies on local governments or other entities to carry out a portion of the plan.

i. Personnel

The 2013 guidance memo specifies that the SIP should provide necessary assurances that the air agency has adequate personnel and funding to implement the 2012 annual $PM_{2.5}$ NAAQS. The infrastructure SIP should identify the organizations that will participate in developing, implementing, and enforcing the EPA-approved SIP provisions relating to the 2012 annual $PM_{2.5}$ NAAQS. Available resources to these participating organizations should also be identified in the SIP and the SIP should provide assurance that the resources are adequate to support the required actions of the organizations relating to the 2012 annual $PM_{2.5}$ NAAQS.

The Air Program has adequate personnel to carry out the required SIPs. As discussed above in paragraph 2.2.A. of this document, Missouri Air Law empowers the MACC to control air pollution and promulgate appropriate regulations. MACC rules assign the department and the Air Program the task of carrying out the MACC's policy. *10 CSR 10-1.010 General Organization* outlines the organization and administrative aspects of the Air Program. The Air Program personnel who develop and implement SIPs consist primarily of environmental specialists and environmental engineers. The Air Program is divided into Sections, all of which perform specialized tasks in the day-to-day operations necessary to carry out the Missouri Air Law and implement Missouri's SIPs. The duties and responsibilities of four (4) of these Sections are outlined below:

10 CSR 10-1.010 establishes the Air Quality Analysis Section of the Air Program to –

- Develop and quality assure the emissions inventory for EPA National Emissions Inventory submittal and program use
- Provide analysis of emissions and ambient air quality
- Update and maintain the air quality monitoring and emissions databases
- Coordinate with the department's ESP for the establishment, operation and maintenance

of air monitoring sites
- Develop and implement the Air Monitoring Network Plan and coordinate Ambient air Monitoring Network reviews

The Air Program's Air Quality Monitoring personnel are described in paragraph 2.2.B. of this document. Additional support for monitoring and air quality assurance data comes from the department's ESP.

Additionally, 10 CSR 10-1.010 establishes the Air Program's Planning Section to, among other things –

- Develop and propose rules, amendments and rescissions to be adopted by the MACC
- Meet all public participation requirements of state and federal laws involving rulemaking actions and SIP revisions
- Provide SIP coordination and maintenance, and prepare SIP revisions
- Conduct air quality modeling to support rule and SIP actions

As addressed above in part 2.2.C.i. of this document, 10 CSR 10-1.010 describes the Compliance/Enforcement Section's duties. Some of these duties include –

- Perform or oversee source compliance testing
- Track and determine compliance of air pollution sources
- Resolve violations through out-of-court settlements with the assistance of the Attorney General's Office

The Permit Section was introduced in part 2.2.C.ii. of this document. According to 10 CSR 10-1.010, some of this section's additional responsibilities include –

- Receive, evaluate, and make recommendations to the Air Program director to approve, approve with conditions, or deny applications for construction permits
- Process operating permit applications, amendments, and modifications in a timely manner according to the rules and requirements
- Maintaining the Missouri CAA Title V Program to ensure continued authorization of the program in Missouri

The Air Program receives funding from several mechanisms that support the implementation of the SIP. Section 643.079 RSMo requires the MACC to establish an annual air pollution emission fee to fund the reasonable cost of administering the Missouri Air Law. This statute provides for the deposit of fees into appropriate subaccounts for implementing the corresponding various programs. For example, there is a subaccount for the Title V operating permit program used for Title V activities and a subaccount for non-Title V activities. There are no significant changes to these funding streams anticipated for the foreseeable future.

Also, the basic federal support grant is made under authority of Section 105 of the CAA. Funds provided under this authority (with required state matching funds), do not fully support all the activities necessary to maintain primacy for the delegated programs. Other grants (e.g. Section

103 of the CAA) and other state sources (e.g. matching funds from General Revenue and Air

Fees) are used to support the core functions. As a result, grant work plans contain only those activities that are paid for with the federal funding and corresponding state matching funds.

ii. State Boards

Section 110(a)(2)(E) of the CAA also provides that the state must meet the requirements of Section 128 of the CAA, relating to representation on state boards and conflicts of interest by members of such boards.

In August 2012, the State of Missouri submitted a Section 128 SIP revision to EPA. EPA finalized approval of this SIP submission on June 21, 2013 (78 FR 37457). This SIP revision implements all of the requirements of Section 128 of the CAA and is applicable for all pollutants, thus satisfying this element of the infrastructure SIP for the 2012 annual $PM_{2.5}$ NAAQS. Missouri's Section 128 SIP can be found online at the following website: http://www.dnr.mo.gov/env/apcp/docs/sect-128-epa-submittal1.pdf.

The following discussion shows how Missouri generally meets the requirements of Section 128 of the CAA.

Section 128 requires that a SIP implementing body which approves permits or enforcement orders under the CAA must have at least a majority of members who represent the public interest. It also requires that any potential conflict of interest by members of such board or body be adequately disclosed. In their June 21, 2013 action regarding the State's Section 128 SIP revision, EPA approved the following rules and statutes into the Missouri SIP.

- Missouri Air Law Section 643.040.2 RSMo, which states that –

  All members shall be representative of the general public and shall have an interest in and knowledge of air conservation and the effects and controls of air contaminants.

and

  The commission shall establish rules of procedure which specify when members shall exempt themselves from participating in and voting on issues before the commission due to potential conflict of interest.

- *10 CSR 10-1.020 Commission Voting and Meeting Procedures* Sections (1) and (2).

  This rule requires that prior to discussion and/or vote on any rule/variance, appeal or order; all members of the MACC shall disclose any potential conflict of interest as defined under Sections 105.450-105.482 RSMo. This rule also states that if members have a conflict of interest they shall be excluded from voting on the matter unless they fully inform the MACC of the interest and the MACC determines that the interest is not so substantial as to be deemed likely to affect the integrity of the services that the state expects of MACC members.

and

- Sections 105.450, 105.452, 105.454, 105.462, 105.463, 105.466, and 105.472 RSMo.

  These Sections of RSMo define and outline prohibited acts by elected and appointed public officials and employees. Chapter 105 RSMo is applied to the MACC, as well as the director of the department. The following is a link to Chapter 105 RSMo: http://www.moga.mo.gov/STATUTES/C105.HTM

In addition to Sections of RSMo included above, which prohibit elected and appointed public officials and employees from engaging in activities where a conflict of interest exists. Section 105.483(5) RSMo 2014 requires the director, each assistant deputy director, the general counsel, and the chief purchasing officer of each department, division and agency of state government to file a financial interest statement, thus requiring the disclosure of all potential conflicts of interest. Section 105.485 RSMo 2014 specifies the information to be included in such financial interest statements. As such, Section 105.483(5) RSMo 2014 and Section 105.485 RSMo are hereby offered for inclusion into Missouri's SIP in order to strengthen Missouri's SIP under Section 128 of the Clean Air Act. The inclusion of Section 105.483(5) RSMo 2014 and Section 105.485 RSMo 2014 in Missouri's SIP shall apply to all current and future NAAQS.

iii. Authority

Chapter 643 RSMo provides the authority necessary to carry out the SIP requirements. Missouri has asserted that it has the authority to implement the SIP for the 2012 annual $PM_{2.5}$ NAAQS in paragraph 2.2.A. of this document. See that paragraph for more details.

F. Stationary Source Monitoring and Reporting: Section 110(a)(2)(F)

Section 110(a)(2)(F) of the CAA requires states to establish a system to (1) monitor emissions from stationary sources, (2) submit periodic emission reports on the nature and amounts of emissions from such sources, and (3) correlate the source reports with emission limitations or standards established under the CAA and make reports available for public inspection.

i. Monitoring Systems

The 2013 guidance memo states that the SIP should provide for a program of periodic testing and inspection of stationary sources, to provide for the identification of allowable test methods, and to exclude any provision that would prevent the use of credible evidence of noncompliance.

This requirement is fulfilled through the Missouri Air Law and by requirements within the MACC rules. For example, Section 643.050.1(3)(a) RSMo authorizes the state–

> *To require persons engaged in operations which result in air pollution to monitor or test emissions and to file reports containing information relating to rate, period of emission and composition of effluent.*

As discussed in paragraph 2.2.A. of this document, *10 CSR 10-6.030 Sampling Methods* incorporates various EPA reference methods for testing source emissions, including emissions of $PM_{2.5}$, SO_2, NO_X, VOCs, as well as others.

In addition, *10 CSR 10-6.180 Measurement of Emissions of Air Contaminants* gives the Air Program director the authority to require emission tests from sources of emissions and also to

perform emission tests at any emission source in the state. Another MACC rule, *10 CSR 10-6.280 Compliance Monitoring Usage*, includes the approved monitoring methods for determining whether sources are complying with their emission limits and establishes that such methods may presumptively be used as creditable evidence that a violation at a source has occurred.

ii. Periodic Reporting Requirements

The 2013 guidance memo specifies that the infrastructure SIP should include air agency requirements that provide for the periodic reporting of emissions and emissions-related data by sources to the air agency.

The authority to meet this requirement is fulfilled through the Missouri Air Law and by requirements within the MACC rules. Section 643.050 (3) (a) grants the MACC the authority–

> *To require persons engaged in operations which result in air pollution to monitor or test emissions and file reports containing information relating to rate, period of emission and composition.*

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.

Missouri's approved Title V permitting program also provides assurance that Missouri meets the periodic reporting requirements of CAA Section 110(a)(2)(F). MACC rule *10 CSR 10-6.065 Operating Permits* specifies that all emission monitoring and reporting requirements be included in the operating permits for all Title V sources in the state thus making such requirements enforceable through the SIP and satisfying this infrastructure SIP element.

iii. Correlation of Reports and Public Availability

The 2013 guidance states that the infrastructure SIP should reference and describe existing air agency requirements that provide for correlation of emission reports with applicable emission limitations or standards and the public availability of emission reports by sources.

The Air Program submits the emissions data from sources in the state to the EPA's publicly available National Emissions Inventory database 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 $PM_{2.5}$ and $PM_{2.5}$ precursor emissions data, available to the public upon request.

Lastly, to satisfy the public reporting requirements of this element, *10 CSR 10-6.210 Confidential Information* specifically excludes emissions data from confidential treatment. Under that rule, emissions data includes monitoring results from required monitors. Therefore, information regarding monitoring results from required monitors must be reported by sources under MACC rules.

G. Emergency Powers: Section 110(a)(2)(G)

Section 110(a)(2)(G) of the CAA requires states to provide for authority to address activities causing imminent and substantial endangerment to public health or welfare or the environment including contingency plans to implement the emergency provisions in their SIPs. The 2013 guidance memo says that states should identify applicable statutes and SIP provisions that provide the air agency with authority to restrain sources from causing or contributing to such air pollution emergencies.

The state's ability and authority to enact emergency provisions consistent with element 110(a)(2)(G) of the CAA is once again found in both Missouri Air Law and the MACC rules. At the core of the statutory authority is Section 643.090 RSMo, which authorizes the MACC or the director to declare an emergency where the ambient air, due to meteorological conditions and a buildup of air contaminants, may present an "emergency risk" to public health, safety or welfare. The MACC or director may, with the written approval of the governor, by order prohibit, restrict or condition all sources of air contaminants contributing to the emergency condition, during such periods of time necessary to alleviate or lessen the effects of the emergency condition. The statute also enables the MACC to promulgate implementing regulations. Even in the absence of an emergency condition, Section 643.090 RSMo allows the director or the MACC to issue "cease and desist" orders to specific persons engaging in activities which involve a discharge of air contaminants, or a risk of air contamination, that presents a danger to public health or public welfare or the environment.

In fulfillment of this element and by using this statutory authority, the MACC has adopted appropriate corresponding emergency regulations, to include some of the following:

- *10 CSR 10-1.010 General Organization* enlists the MACC to develop, and the director to enact, air pollution emergency alert procedures.
- For many pollutants, including $PM_{2.5}$, Missouri's federally approved rule *10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential* establishes action levels and contingency measures for several criteria pollutants. This rule specifies the conditions that establish an air pollution alert, watch or emergency and the associated procedures and emissions reduction objectives for dealing with each.

H. Future SIP Revision Authority: Section 110(a)(2)(H)

Section 110(a)(2)(H) of the CAA requires states to have the authority to revise their SIPs in response to changes in the NAAQS, availability of improved methods for attaining the NAAQS, or in response to an EPA finding that the SIP is substantially inadequate to attain the NAAQS. The 2013 guidance memo specifies that the infrastructure SIP should identify provisions that give the air agency authority to revise their SIP from time to time under such circumstances.

In addition to its general enabling authority, as discussed in paragraph 2.2.A. of this document, Section 643.050 RSMo also authorizes the MACC to–

> *Prepare a general comprehensive plan for the prevention, abatement and control of air pollution.*

Section 643.055 RSMo further authorizes the MACC to promulgate rules, and establish standards and guidelines, to ensure that the state complies with the provisions of the CAA. Moreover, this provision specifically addresses the necessity of a SIP to be developed to bring a nonattainment area into compliance and to maintain compliance when needed to have an EPA-approved plan.

This is codified in the MACC rules by *10 CSR 10-1.010 General Organization* which enables the MACC to promulgate and revise rules as necessary. This rule restates the director's responsibility to submit revisions of the SIP to the EPA for approval.

Lastly, as mentioned previously in part 2.2.E.i. of this document, the Air Program's Planning Section was created specifically to develop and coordinate SIP revisions in satisfaction of Section 110(a)(2)(H) of the CAA.

I. Nonattainment Area Plans: Section 110(a)(2)(I)

Section 110(a)(2)(I) of the CAA requires that in the case of a plan or plan revision, states must meet applicable requirements of Part D of the CAA, relating to SIP requirements for designated nonattainment areas. The 2013 guidance memo specifies that EPA does not expect infrastructure SIP submissions to address this element.

As stated in paragraph 2.2.A of this document, infrastructure plans are not intended to identify nonattainment area emission controls. In addition, no areas in Missouri have been designated nonattainment under the 2012 annual $PM_{2.5}$ NAAQS. Should any areas in Missouri be designated nonattainment for the 2012 annual $PM_{2.5}$ NAAQS in the future, the emissions limitations and other control measures needed to bring areas designated nonattainment back into attainment of the 2012 annual $PM_{2.5}$ NAAQS would be developed under a separate SIP submittal with its own schedule and process.

Pursuant to Part D of the CAA, nonattainment SIPs are due on a different schedule than infrastructure SIPs. Therefore, this infrastructure plan does not address Section 110(a)(2)(I) of the CAA as this element is not applicable for this type of SIP. SIP submittals containing control measures developed specifically for attaining and maintaining the relevant NAAQS are submitted at the time the nonattainment area planning elements are due (typically 18 months following the designation of nonattainment areas for $PM_{2.5}$).

J. Consultation with Government Officials, Public Notification, and PSD and Visibility Protection: Section 110(a)(2)(J)

Section 110(a)(2)(J) of the CAA requires SIPs to meet the applicable requirements of the following CAA provisions: (1) Section 121, relating to interagency consultation regarding certain CAA requirements; (2) Section 127, relating to public notification of NAAQS exceedances and related issues; and (3) Title I Part C of the CAA, relating to PSD of air quality and visibility protection. For the reasons stated below, Missouri has addressed the applicable requirements of CAA Section 110(a)(2)(J) for the 2012 annual $PM_{2.5}$ NAAQS:

i. Consultation with Identified Officials on Certain Actions

The 2013 guidance memo specifies that the infrastructure SIP submission should to show that there is an established process for consultation with general-purpose local governments, designated organizations of elected officials of local governments, and any federal land manager having authority over federal land to which the plan applies, consistent with CAA section 121, which lists the specific types of actions for which such consultation is required.

For the purpose of implementing air pollution control responsibilities, Section 643.050.3(6) RSMo requires the MACC, to–

> *Advise, consult, and cooperate with other agencies of the state, political subdivisions, industries, other states and the federal government, and with interested persons or groups.*

Missouri also has appropriate interagency consultation regulations in the NSR permit program. For example, Subsection (12)(B) of 10 CSR 10-6.060 requires that when a permit is made available for public comment, the permitting authority must provide notice to local air pollution control agencies, the chief executive of the city and county where the installation or modification would be located, any comprehensive regional land use planning agency, any state air program permitting authority, and any Federal Land Manager whose lands may be affected by emissions from the installation or modification.

ii. Public Notification

Section 127 of the CAA requires public notification during periods of NAAQS exceedance(s). The 2013 guidance memo states that the infrastructure SIP submission should to show that the air agency does the following: regularly notifies the public of instances or areas in which the new or revised primary NAAQS was exceeded; advises the public of the health hazards associated with such exceedances; and enhances public awareness of measures that can prevent such exceedances and of ways in which the public can participate in regulatory and other efforts to improve air quality.

As discussed in paragraph 2.2.G. of this document in regards to emergency authority, MACC rules are established requiring the development and implementation of air pollution emergency alert procedures including provisions for public notification of elevated levels of various air pollutants, and suggestions for measures that can be taken by the public to reduce emissions.

As previously stated, Section 643.050.3(6) RSMo requires the MACC to coordinate and consult with all interested parties or groups.

In fulfillment of this sub-element, and as already addressed in greater detail in paragraph 2.2.B.

(Ambient Air Quality Monitoring) of this document, the department has processes in place to report all air quality monitoring data, not just exceedances.

iii. Prevention of Significant Deterioration

The 2013 guidance memo states that the approvability of an air agency's PSD program is essential to the approvability of an infrastructure SIP submission with respect to CAA section

110(a)(2)(J).

In part 2.2.C.ii., of this document, the department has noted how the Missouri SIP meets the PSD requirements by establishing a state rule which incorporates by reference the applicable federal code relating to PSD permitting.

iv. Visibility Protection

The 2013 guidance memo states that the EPA believes that there are no new visibility protection requirements under part C that result from a revised NAAQS. Therefore, there are no newly applicable visibility protection obligations pursuant to Element J after the promulgation of a new or revised NAAQS. Air agencies do not need to address the visibility component of Element J in an infrastructure SIP submission.

With respect to the visibility component of Section 110(a)(2)(J) of the CAA, the visibility element has already been addressed in paragraph 2.2.D. of this document. In addition, since Missouri must meet Title I Part C of the CAA requirements separately and independently from this plan and because the visibility requirements (in contrast to the PSD element) of Title I Part C are not directly related to the promulgation of, or revision to, a NAAQS, the visibility element is considered to be outside the scope of infrastructure SIP actions required pursuant to Section 110(a) of the CAA.

In other words, because of the specific independent SIP requirements contained in Sections 169A and 169B of the CAA (Title I Part C), the visibility protection requirements are not "applicable requirements" within the meaning of CAA Section 110(a)(2)(J) and Missouri's infrastructure SIP is not required to be revised with respect to visibility protection merely due to promulgation of a revised $PM_{2.5}$ NAAQS.

K. Air Quality Modeling: Section 110(a)(2)(K)

Section 110(a)(2)(K) of the CAA requires SIPs to provide for the performance of air quality modeling as the EPA Administrator may prescribe for the purpose of predicting the ambient air quality impacts for any NAAQS and to provide for the submission of modeling related data to EPA upon request. The 2013 guidance memo specifies that states should identify the statutory or regulatory provisions that provide the air agency or official with the authority to perform the following actions along with a narrative explanation of how the provisions meet the requirements of this element: (1) conduct air quality modeling to predict the effect on ambient air quality of any emissions of any air pollutant for which a NAAQS has been promulgated, and (2) provide such modeling data to the EPA Administrator upon request.

The infrastructure to perform air quality modeling is found in the Missouri Air Law. Section 643.050 RSMo provides the authority to secure necessary scientific and technical services as well as to conduct studies, investigations, and research.

As stated throughout this document, *10 CSR 10-1.010 General Organization* details the various duties of Air Program staff. This rule establishes air quality modeling functions for the Air Program. The department employs air quality modeling staff in both the Planning and Permits Sections of the Air Program. Routine modeling staff duties include performing air quality modeling and related activities, such as collecting, quality assuring, and analyzing model input

data specific to impacted facilities – including but not limited to emissions data, meteorology, topography, geographic coordinates data, etc., and coordinating such efforts with the EPA.

Thus, as authorized, the Air Program utilizes air quality modeling staff, including several staff in the Planning Section's SIP Unit, to fulfill the requirements of Section 110(a)(2)(K) of the CAA for the 2012 annual $PM_{2.5}$ NAAQS.

L. Permitting Fees: Section 110(a)(2)(L)

Section 110(a)(2)(L) of the CAA includes a SIP requirement for the owner or operator of each major stationary source to pay the permitting authority a fee(s) per the EPA Administrator's approval of a fee program under Title V of the CAA. The 2013 guidance memo specifies that the infrastructure SIP should provide citations to the regulations providing for collection of permitting fees under the state's EPA-approved Title V permit program.

The department's fee-collecting authority is found at Section 643.079 RSMo. In addition, the Air Program has a fully EPA-approved Title V operating permit program as authorized by Section 643.078 RSMo. The approved fee program for major stationary sources in Missouri includes permit application fees as codified in *10 CSR 10-6.065 Operating Permits*, and annual Emissions Inventory Questionnaire fees pursuant to *10 CSR 10-6.110 Reporting Emission Data, Emission Fees, and Process Information*. In addition to the fees directly related to implementation and enforcement of Missouri's Title V program, additional construction permit fees are assessed and collected per state rule *10 CSR 10-6.060 Construction Permits Required*, which is discussed in detail in part 2.2.C.ii. of this document.

Appropriate subaccounts for the Title V program are discussed in part 2.2.E.iii. of this document. Therefore, Missouri has satisfied the requirements of Section 110(a)(2)(L) of the CAA for the 2012 annual $PM_{2.5}$ NAAQS through its approved Title V program and collection of fees authorized by the applicable state statutes and MACC rules.

M. Consultation and Participation by Affected Local Entities: Section 110(a)(2)(M)

Section 110(a)(2)(M) of the CAA requires SIPs to provide for consultation and participation by local political subdivisions affected by the plan. The 2013 guidance memo states that as part of an infrastructure SIP submission, an air agency may simply identify its policies or procedures that allow and promote such consultation.

As noted in part 2.2.J.i. of this document regarding interagency consultation, Section 643.050 RSMo requires the MACC to consult and coordinate with political subdivisions. Also pursuant to this statute, some of the other relevant powers and duties of the MACC include –

- Conduct public hearings as required by Sections 643.010 to 643.190 RSMo
- Coordinate with any board, department or other agency of any political subdivision or state or the federal government to secure necessary scientific, technical, administrative and operation services; provide assistance to political subdivisions

Furthermore, state rule *10 CSR 10-1.010 General Organization* directs the Air Program's Planning Section to–

> *Meet[s] all public participation requirements of state and federal laws involving rulemaking and SIP revisions.*

In addition to public hearings required by Missouri statutes and rules for certain activities including rulemakings, permits and variances, the MACC regularly conducts public hearings for all SIP elements submitted to EPA. Additionally, Air Program staff, under the direction of the MACC, routinely conducts public outreach meetings and coordination efforts with political subdivisions, industries and interested persons or groups.

As an example of coordination activities with local entities, the Air Program consults with and participates in Air Quality Forum meetings with major source industries, Small Business Compliance Advisory Committee meetings, and in meetings with Metropolitan Planning Organizations throughout the state.

In summary, Missouri has satisfied the requirements of Section 110(a)(2)(M) of the CAA for the 2012 annual $PM_{2.5}$ NAAQS through the public hearing, outreach and coordination efforts outlined in state statutes and regulations as executed by the MACC and the department.

3. CONCLUSION

The State of Missouri acknowledges and fulfills its responsibilities related to Section 110(a) of the CAA. Through this plan, the State of Missouri hereby certifies that it has the authority and resources to implement, maintain and enforce the 2012 annual $PM_{2.5}$ NAAQS. Furthermore, this plan demonstrates the state has addressed and fulfilled all the applicable requirements of Sections 110(a)(1) and (2) of the CAA in regard to this revised NAAQS. Also, as explained in paragraph 2.2.E of this document, the Air Program is offering Section 105.483(5) RSMo 2014 for inclusion into Missouri's SIP to address requirements under Section 128 of the CAA.