State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF THE COMMISSIONER
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CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

October 17, 2014

The Honorable Judith A. Enck
Regional Administrator
United States Environmental Protection Agency – Region 2
290 Broadway- 26th Floor
New York, New York 10007-1866

Dear Regional Administrator Enck:

Enclosed please find for your approval a revision to the New Jersey State Implementation Plan (SIP) demonstrating New Jersey's ability and authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and visibility requirements of Section 110 of the federal Clean Air Act. This SIP revision covers the infrastructure requirements for all pollutants that have an established NAAQS and the federal visibility and regional haze requirements.

A public hearing was offered to be held on this SIP revision but no request to hold the hearing was received from the public. Written comments on this SIP revision were received during the public comment period and these comments are addressed in Appendix K. If you have any questions regarding this proposal, please contact Sharon Davis, Section Chief, Bureau of Air Quality Planning, at (609) 292-6722.

Sincerely yours,

Bob Martin
Commissioner

Enclosure: SIP Document

c: Richard Ruvo, USEPA
Jane Herndon, Assistant Commissioner (cover only)
William O'Sullivan, Director (e-mail)

The State of New Jersey
Department of Environmental Protection

State Implementation Plan (SIP) Revision

Sections 110(a)(1) and 110 (a)(2) for the

Lead
Sulfur Dioxide
Nitrogen Dioxide
Ozone
PM2.5 and PM10
Carbon Monoxide

National Ambient Air Quality Standards

and Regional Haze

September 2014

Acknowledgements

The New Jersey Department of Environmental Protection (Department) acknowledges the efforts and assistance of the agencies and individuals whose contributions were instrumental in the preparation of this Certification. In particular, the Department wishes to acknowledge the individuals within the United States Environmental Protection Agency (USEPA), Region 2 for their assistance on this matter.

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Acronyms and Abbreviations

AELs	Alternative Emission Limits
AQRV	Air Quality Related Value
AQS	Air Quality System
BART	Best Available Retrofit Technology
CO	Carbon Monoxide
CAIR	Clean Air Interstate Rule
CDD	Clean Data Determination
C.F.R.	Code of Federal Regulations
EGUs	Electric Generating Units
Fed. Reg.	Federal Register
FLM	Federal Land Manager
FSELs	Facility-Specific Emission Limits
HEDD	High Electric Demand Day
I/M	Inspection and Maintenance
IMPROVE	Interagency Monitoring of Protected Visual Environments
km	kilometer
lb/mmBTU	Pounds per million British Thermal Units
LADCO	Lake Michigan Area Directors Consortium
$\mu g/m^3$	Micrograms per cubic meter
MANE-VU	Mid-Atlantic/Northeast-Visibility Union
MARAMA	Mid-Atlantic Regional Air Management Association
NAAQS	National Ambient Air Quality Standards
NESCAUM	Northeast States for Coordinated Air Use Management
N.J.A.C.	New Jersey Administrative Code
N.J.R.	New Jersey Register
N.J.S.A.	New Jersey Statutes Annotated
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
NSR	New Source Review
NNSR	Non-attainment New Source Review
O_3	Ozone
OBD	On-board Diagnostics
OTC	Ozone Transport Commission
Pb	Lead
PM	Particulate Matter
PM10	Coarse Particulate Matter
PM2.5	Fine Particulate Matter
ppb	Parts per billion
ppm	Parts per million
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RAVI	Reasonably Attributable Visibility Impairment
SHL	Significant Harm Level
SIL	Significant Increment Level

SIP	State Implementation Plan
SOTA	State of the Art
SMC	Significant Monitoring Concentration
SO_2	Sulfur Dioxide
SO_x	Oxides of Sulfur
TPY	Tons per year
TSP	Total Suspended Particulate
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds

Executive Summary

The Clean Air Act requires each state to address the infrastructure, transport, and regional haze requirements of Section 110 when the USEPA revises or establishes a National Ambient Air Quality Standard (NAAQS). The State of New Jersey proposes to revise the State Implementation Plan (SIP) to address these requirements. This SIP revision also addresses Clean Air Act "infrastructure" requirements for regional haze and visibility.

This type of SIP revision is otherwise known as a "Section 110 SIP" or an "infrastructure SIP." The infrastructure requirements are listed in Table ES-1:

Table ES-1: Clean Air Act Citations and General Requirements

Clean Air Act Section	Requirement
110(a)(2)(A)	Enforceable Emission Limitations and Other Control Measures
110(a)(2)(B)	Air Quality Monitoring, Compilation, Data Analysis, and Reporting
110(a)(2)(C)	Enforcement and Stationary Source Permitting
110(a)(2)(D)	Interstate Transport of Air Pollution, International Pollution Abatement and Protection of Visibility (Regional Haze)
110(a)(2)(E)	Resources, Conflict of Interest, and Emergency Backstop
110(a)(2)(F)	Stationary Source Emissions Monitoring and Reporting
110(a)(2)(G)	Emergency Powers and Contingency Plans
110(a)(2)(H)	State Implementation Plan Revision For Revised Air Quality Standards or New Attainment Methods
110(a)(2)(I)	State Implementation Plan for Non-attainment Areas
110(a)(2)(J)	Consultation, Public Notification, and Prevention of Significant Deterioration
110(a)(2)(K)	Air Quality Modeling and Reporting
110(a)(2)(L)	Major Stationary Source Permitting Fees
110(a)(2)(M)	Consultation with Local Entities

Rather than revising the SIP at this time to only address those pollutants for which the USEPA has recently revised a NAAQS, the State, in consultation with USEPA Region 2, has chosen to submit this multi-pollutant infrastructure SIP revision to cover all pollutants for which an infrastructure SIP is required. It is expected this will simplify and facilitate New Jersey's future submittals of infrastructure SIP revisions, as the State will only need to certify, where applicable, that no changes to its authority have occurred since the last submittal of an infrastructure SIP. This would save New Jersey the time and effort of making a full SIP revision, and would also save the USEPA resources through reduced review time.

The USEPA recently took action on the NAAQS for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone, particulate matter (PM2.5 and PM10) and sulfur dioxide (SO_2). All of these NAAQS revisions (except carbon monoxide where no changes to the NAAQS occurred) trigger the Clean Air Act's infrastructure SIP revision requirements for the State.

In this infrastructure SIP revision, the State demonstrates that it has met the Clean Air Act infrastructure requirements for all NAAQS and for visibility protection. This SIP revision also addresses the infrastructure requirements for interstate transport or the "good neighbor" provisions and the regional haze aspects of the Clean Air Act. New Jersey commits to reevaluate the interstate transport aspects of the SIP when the USEPA issues regulations that the USEPA is currently developing.

1. Introduction

The Clean Air Act requires the USEPA to periodically establish and revise health standards for air pollutants, known as National Ambient Air Quality Standards, or NAAQS. When the USEPA establishes or revises any NAAQS, the Clean Air Act requires a state to submit to the USEPA a SIP revision indicating that the state has the authority (or infrastructure) to implement, maintain, and enforce an air quality management program that provides for attainment and maintenance of the specific NAAQS. These revisions are due within three years of issuance of the standard by the USEPA. These elements comprise what is commonly referred to as an "infrastructure SIP," although this term also includes the Clean Air Act requirements that a state address its obligation to address interstate transport of pollutants and visibility protection for other states (regional haze).

The infrastructure SIP requirements are set forth at CAA Section 110(a). CAA Section 110(a)(1) directs each state to provide reasonable notice and a public hearing before submitting an infrastructure SIP to the USEPA. CAA Section 110(a)(2) specifies the substantive elements that SIP submissions need to address for USEPA approval, and includes requirements for the following:

- emissions limits and control measures;
- ambient air quality monitoring;
- enforcement of Clean Air Act permitting programs;
- adequate personnel and funding;
- adequate authorities;
- stationary source monitoring;
- consultations with government officials;
- public notifications;
- PSD and visibility protection;
- modeling/data;
- permitting fees; and
- participation by affected local entities.

Table 1: New Jersey's Attainment Status for All Criteria Pollutants

Pollutant	Primary Standards			Monitoring Data Status	Designation/SIP Status
	Level / New Requirements	Date	Averaging Time		
CO	9 ppm	1971	8-hour	Attaining	Attainment
	35 ppm	1971	1-hour		
	New monitors	2011	Not applicable	In Progress	No new Requirements
Lead	1.5 µg/m^3	1978	Quarterly Average	Attaining	Attainment
	0.15 µg/m^3	2008	Rolling 3-Month Average	Attaining	Unclassifiable-Attainment
NO_2	53 ppb	1971	Annual	Attaining	Attainment
	100 ppb and New monitors	2010	1-hour	Likely to Attain	Unclassifiable-Attainment
PM10	150 µg/m^3	1987	24-hour	Attaining	Attainment
PM2.5	15.0 µg/m^3	1997	Annual	Attaining	Attainment
	35 µg/m^3	2006	24-hour	Attaining	Attainment
	12 µg/m^3	2012	Annual	Attaining	Not yet designated
Ozone	0.12 ppm	1979	1-hour	Attaining	Standard revoked/Clean Data Determination
	0.08 ppm	1997	8-hour	Attaining	Non-attainment / Clean Data Determination
	0.075 ppm	2008	8-hour	Not Attaining	Non-attainment
SO_2	0.03 ppm	1971	Annual	Attaining except for area surrounding Warren County, NJ	Attainment except for southern portion of Warren County
	0.14 ppm	1971	24-hour		
	75 ppb	2010	1-hour		State designation recommendations, June 23, 2011 – Not attaining for municipalities in four counties and unclassifiable for the rest of the State
Regional Haze	Visibility	1990/ 1999	NA	Likely to meet 2018 goal	July 2009, July 2014 Progress Report due

The State of New Jersey proposes to revise its SIP to demonstrate New Jersey's authority to implement, maintain, and enforce the Clean Air Act NAAQS requirements for lead (Pb), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), fine and coarse particulate (PM2.5 and PM10), carbon monoxide (CO) and ozone (O_3) and the Clean Air Act visibility (Regional Haze) requirements.

In this SIP revision, the State addresses the requirements of 42 U.S.C. §7410(a)(2)(D) (CAA Section 110(a)(2)(D)) regarding the interstate transport of air pollution for all criteria pollutants except sulfur dioxide. The State intends to provide the USEPA additional information in the future concerning the Clean Air Act interstate transport of air pollution requirements for the sulfur dioxide NAAQS (CAA Section 110(a)(2)(D)), once the USEPA has issued guidance for satisfying these requirements.

Recent USEPA NAAQS Actions:

Carbon Monoxide (CO): On August 31, 2011, the USEPA issued a final rule retaining the existing standards for CO of 9 ppm as an 8-hour standard and 35-ppm as a 1-hour standard.

Lead (Pb): On October 15, 2008, the USEPA revised the Pb NAAQS, effective January 12, 2009. This revision increased the stringency of the standard from 1.5 micrograms per cubic meter ($\mu g/m^3$) to 0.15 $\mu g/m^3$.

Nitrogen Dioxide (NO_2): On February 9, 2010, the USEPA revised the 1-hour primary standard for NO_2 of 100 ppb and an annual primary and secondary standard of 53 ppb.

Ozone: On March 27, 2008, the USEPA revised the 8-hour primary standard for ozone of 75 ppb.

PM2.5 and PM10: On October 17, 2006, the USEPA revised the primary and secondary 24-hour PM2.5 standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$. It also retained the annual PM2.5 standard of 15 $\mu g/m^3$ and a primary and secondary 24-hour PM10 standard of 150 $\mu g/m^3$. The USEPA finalized changes to the annual PM2.5 NAAQS on January 15, 2013 (78 Fed. Reg. 3086, January 15, 2013), revising the annual PM2.5 standard by lowering the level to 12.0 $\mu g/m^3$, but retaining the 24-hour standard at a level of 35 $\mu g/m^3$ and generally retaining the current suite of secondary standards. This SIP revision also applies to any changes of the annual PM2.5 NAAQS, as it also satisfies the Clean Air Act requirements for these latest revisions to the annual PM2.5 NAAQS.

Sulfur Dioxide (SO_2): On June 22, 2010, the USEPA revised the 1-hour primary standard of 75 ppb for SO_2 and the secondary 3-hour standard of 0.5 ppm.

Use of USEPA Guidance Throughout This Infrastructure SIP

The USEPA issued guidance for the infrastructure requirements specific to the 0.15 µg/m^3 lead NAAQS in addition to the guidance set forth in the preamble to the proposed and final rules for the revised NAAQS.[1,2,3] The Department used the following guidance from USEPA, as appropriate, in preparing this document : "Guidance on State Implementation Plan (SIP) Elements Under the Clean Air Act Sections 110(a)(1) and 110(a)(2)," USEPA, Stephen D. Page, Director, Office of Air Quality Planning and Standards, September 13, 2013. The Department has provided hyperlinks to all USEPA guidance materials referred to within this SIP at Appendix G and has posted copies on its website at http://www.state.nj.us/dep/baqp/sip/siprevs.htm.

2. Infrastructure Elements Currently Included in New Jersey's SIP

On February 25, 2008, New Jersey submitted infrastructure SIP revisions to the USEPA for the 1997 85 ppb ozone NAAQS and the 1997 15 µg/m^3 annual PM2.5 NAAQS. On January 15, 2010, New Jersey submitted Infrastructure SIP revisions to the USEPA for the 2006 35 µg/m^3 24-hour PM2.5 NAAQS. On June 14, 2013, the USEPA published final approval for most elements of these infrastructure SIP revisions.[4]

When the USEPA revised the 24-hour PM2.5 NAAQS, its implementation guidance[5] allowed a state, as an alternative to a full SIP revision to address a revised NAAQS to simply certify that it was in continued compliance with the CAA Section 110(a)(1) and (2) requirements already addressed in the SIP it was revising. The State had recently addressed these requirements for the annual PM2.5 NAAQS. Accordingly, on January 15, 2010, New Jersey submitted a certification document and a SIP submittal to the USEPA for the 1997 8-hour ozone and PM2.5 NAAQS, including a response to the USEPA's 2008 findings for the annual PM2.5 NAAQS.

In its June 14, 2013 final rule, the USEPA disapproved the State's Infrastructure SIP for the following Clean Air Act requirements: CAA Sections 110(a)(2)(C) (for the Prevention of Significant Deterioration (PSD) portion only), (D)(i)(II), (D)(ii) and (J). The USEPA conditionally approved New Jersey's Infrastructure SIP for the following 110(a)(2) elements and sub-elements:

- conflict of interest (CAA Section 110(a)(2)(E)(ii);

[1] USEPA Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, to Regional Air Directors, "Guidance on State Implementation Plan (SIP) Elements Required Under Sections 110(a)(1) and (2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS)," October 14, 2011. (Hereinafter 2011 Lead NAAQS SIP Guidance Document.)
Available at http://www.epa.gov/airquality/lead/pdfs/20111014infrastructure.pdf
[2] 73 Fed. Reg. 29184 at 29269-29270 (May 20, 2008)
[3] 73 Fed. Reg. 66964 at 67034-67035 (November 12, 2008)
[4] 78 Fed. Reg. 35764 (June 14, 2013)
[5] USEPA Memorandum from William T. Harnett, Director, Office of Air Quality Planning and Standards, to Regional Air Directors, "Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 2006 24-Hour Fine Particle (PM2.5) National Ambient Air Quality Standards (NAAQS)," September 25, 2009.

- delegations (CAA Section 110(a)(2)(E)(iii); and
- emergency powers (for the 1997 8-hour ozone element) (CAA Section 110(a)(2)(G).

New Jersey committed, by letter dated May 2, 2013, to correct the deficiencies and submit them to the USEPA by June, 2014. This SIP revision addresses these findings.

3. Statement of New Jersey's General Authority

The New Jersey Air Pollution Control Act (APCA) (N.J.S.A. 26:2C-1 et seq.) authorizes the State to implement, maintain, and enforce air quality management programs that provide for attainment and maintenance of the NAAQS. Through this SIP revision, the State is demonstrating compliance with the infrastructure requirements under 42 U.S.C. § 7410(a)(1) and (2) (CAA Section 110(a)(1) and (2)) for all NAAQS, including the primary and secondary NAAQS for lead, nitrogen dioxide, carbon monoxide, ozone, sulfur dioxide, and PM2.5 and PM10.[6,7]

4. Specific Authority of the State of New Jersey

The State's 2008 infrastructure SIP revision reflects the specific regulatory authorities to address the 1997 8-hour ozone standard (85 ppb) and the 1997 annual PM2.5 standard (15 µg/m3).[8] The State's 2010 Certification reflects the State's specific authority to address the 2006 daily PM2.5 standard (35 µg/m^3).[9] There has been no change to the statutory authorities for air quality management in New Jersey since the 2010 certification for particulates or for the other pollutants with an established NAAQS. The specific New Jersey authorities set forth in Table 2 apply to all air pollutants that have an established NAAQS, not just those for ozone and particulates, as reflected in the 2008 Infrastructure SIP revision and the 2010 Certification.

[6] 2011 Lead NAAQS SIP Guidance Document.
[7] 73 Fed. Reg. 67034 at 67034 and 67035 (November 12, 2008).
[8] NJDEP. State Implementation Plan Revision for Meeting the Infrastructure Requirements of the Clean Air Act. New Jersey Department of Environmental Protection, February 28, 2008.
[9] NJDEP. Certification for Meeting the Infrastructure Requirements of the Clean Air Act. New Jersey Department of Environmental Protection, January 2010.

Table 2: Infrastructure Elements Required under the Federal Clean Air Act (42 U.S.C. § 7410(a)(2) (CAA Section 110(a)(2)) and New Jersey Statutes and Regulations[10,11]

CAA §110(a)(2) Element	Summary of Element	New Jersey Authority
110(a)(2)(A)	Enforceable Emission Limitations and Other Control Measures	N.J.S.A. 26:2C-8, 9, 18 and 19 N.J.A.C. 7:27
110(a)(2)(B)	Air Quality Monitoring, Compilation, Data Analysis, and Reporting	N.J.S.A. 26:2C-9.a.
110(a)(2)(C)	Enforcement and Stationary Source Permitting	N.J.S.A. 13:1D-9 N.J.S.A. 26:2C-8 and 19 N.J.S.A. 26:2C-9.b (specifically 9.b(4), 9.b(5) and 9.b(8)) and 9.1 N.J.A.C. 7:27 and 7:27A N.J.A.C. 7:27-8 and 22
110(a)(2)(D)	Interstate Transport of Air Pollution and International Pollution Abatement	N.J.A.C. 7:27 N.J.A.C. 7:27-22.11(k) and 22.24 N.J.S.A. 26:2C-8 and specifically 8.11 N.J.S.A. 26:2C-9 and 9.b(6)
110(a)(2)(E)	Resources, Conflict of Interest, and Emergency Backstop	N.J.S.A. 26:2C-3.2 and 8 N.J.S.A. 13:1D-9 N.J.S.A. 52:13D-14 and 16 N.J.S.A. 26:2C-22 N.J.S.A. 26:3A2-21 et seq. N.J.A.C. 7:1H-1 et seq.
110(a)(2)(F)	Stationary Source Emissions Monitoring and Reporting	N.J.S.A. 26:2C-9.b(3) and (4) and 9.2 N.J.A.C. 7:27-8, 11.3(e), 21, and 22.18
110(a)(2)(G)	Emergency Powers and Contingency Plans	N.J.S.A. 26:2C-26 et seq. N.J.A.C. 7:27-12
110(a)(2)(H)	State Implementation Plan Revision For Revised Air Quality Standards or New Attainment Methods	N.J.S.A. 13:1D-9
110(a)(2)(I)	State Implementation Plan for Non-attainment Areas	N.J.S.A. 13:1D-9
110(a)(2)(J)	Consultation, Public Notification, and Prevention of Significant Deterioration	N.J.S.A. 26:2C-8, 9, and 19 N.J.S.A. 52:14B-1 et seq. N.J.A.C. 7:27-8.10 and 22.11
110(a)(2)(K)	Air Quality Modeling and Reporting	N.J.S.A. 26:2C-9.2(b) N.J.A.C. 7:27-8.5 and 22.8
110(a)(2)(L)	Major Stationary Source Permitting Fees	N.J.A.C. 7:27-22.31 N.J.S.A. 26:2C-9.b(7), 9.5 and 9.6
110(a)(2)(M)	Consultation with Local Entities	N.J.S.A. 26:2C-8 N.J.S.A. 52:14B-1 et seq.

[10] Official copies of the Department's rules (codified in the New Jersey Administrative Code (N.J.A.C.)) are accessible online through the New Jersey Office of Administrative Law (NJOAL) Lexis-Nexis Access at http://www.lexisnexis.com/hottopics/njcode/

[11] The New Jersey Statutes Annotated (N.J.S.A.) are accessible online at http://lis.njleg.state.nj.us/

5. Description of infrastructure elements of the Clean Air Act under 42 U.S.C. §7410(a)(2) (CAA, Section 110(a)(2)) and how New Jersey meets these requirements

The Clean Air Act requires a state to address, in its SIPs, specific elements of its programs to implement, maintain, and enforce NAAQS and Regional Haze. This SIP revision addresses the elements under 42 U.S.C. § 7410(a)(2) (CAA Section 110(a)(2)) and summarized in Table 2, while specifically discussing the transport requirements under CAA Section 110(a)(2)(D) in Section 6. For completeness purposes, this SIP is intended as documentation and certification that New Jersey has met the infrastructure requirements under CAA Section 110(a)(2) for all pollutants that have an established NAAQS. New Jersey certifies compliance with these elements through its existing SIPs, and as described in this SIP revision. Table 3 contains the specific description of how New Jersey complies with each element of the Section 110 infrastructure requirements of the Clean Air Act and provides more detail to address USEPA's previously identified concerns, as noted in Section 2 of this SIP. A hyperlink to the official copy of the Air Pollution Control Act (N.J.S.A 26:2C-1 et seq.) is found in Appendix A of this SIP and a list of the State's regulations adopted under the Air Pollution Control Act and made part of the New Jersey SIP is contained in Appendix B.

Table 3: New Jersey's Statutory and Regulatory Provisions Pertaining to the Infrastructure SIP Requirements for All Pollutants Having an Established NAAQS and Regional Haze

The exact wording of the Clean Air Act, Section 110(a)(2) is included in italics within the second column of this table. A hyperlink to the official copy of the APCA (N.J.S.A 26:2C-1 et seq.) is found in Appendix A of this SIP and a list of the State's regulations adopted and made part of the New Jersey SIP is contained in Appendix B. (Free official copies of the Department's rules are available from the Lexis Nexis website at http://www.lexisnexis.com/njoal/). Unofficial copies are available from the Department's website at http://www.nj.gov/dep/aqm/rules.html.)

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(A)	*Include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this Act.*	New Jersey has the authority under the APCA at N.J.S.A. 26:2C-8, 9, 18, and 19 and has established enforceable emission limitations for all criteria air pollutants in its rules at N.J.A.C. 7:27. New Jersey also administers a NSR program that results in enforceable emission limitations contained within permits to construct, and certificates to operate sources of criteria and toxic air pollutants. The USEPA SIP-approved rules are identified in 40 C.F.R. 52.1570 and 52.1604.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(B)	*Provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, compile, and analyze data on ambient air quality, and upon request, make such data available to the Administrator;*	New Jersey's authority at N.J.S.A 26:2C-9a addresses the requirement to conduct ambient air quality monitoring. Ambient air monitoring is required by the APCA at N.J.S.A. 26:2C-9.a. and by the Clean Air Act. New Jersey has an extensive air quality monitoring network to collect air quality data and to compile, analyze, and report the data to the USEPA. The Department's website contains up-to-date information about air quality monitoring, including a description of the network and information about the monitoring of all criteria air pollutants, including status, daily values, and reports to the public. See http://www.nj.gov/dep/airmon/index.html with links to all elements of the air monitoring program. New Jersey will continue to operate its monitoring network in accordance with all applicable sections of 40 C.F.R. Part 58, subject to a joint annual review process by both the State and the USEPA and the analyze all data obtained from the monitoring network in accordance with applicable regulations and guidance. New Jersey certifies compliance with this element.
§110(a)(2)(C)	*Include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national*	New Jersey's authority at N.J.S.A. 26:2C-9b and 9.1 and N.J.S.A. 13:1D-9 allows for the creation of enforcement and permitting programs that meet the federal Clean Air Act requirements. New Jersey's enforcement of all control measures, including the air permitting program for regulating stationary sources, is governed by the APCA at N.J.S.A. 26:2C-19. New Jersey's enforcement and permitting programs operate under rules designated in N.J.A.C. 7:27 and N.J.A.C. 7:27A. New Jersey's air pollution control program at N.J.A.C. 7:27-8.12 (minor sources) and N.J.A.C. 7:27-22.35 (major sources) requires State of the Art (SOTA) review for installation of advances in the art of air pollution controls if there is an emission increase for an emission unit that has the potential to emit five or more tpy. The definition of SOTA is similar to BACT. The 5 tpy trigger requires BACT-like control on substantially more equipment than required at 40 C.F.R. 51.165. Under New Jersey's minor NSR program, any newly constructed,

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
	ambient air quality standards are achieved, including a permit program as required in parts C and D;	reconstructed or modified equipment and control apparatus with a potential to emit five tons or more of a criteria air contaminant is subject to the SOTA review. Appendix B of this SIP lists all New Jersey regulations adopted pursuant to the Air Pollution Control Act and included in New Jersey's SIP to meet or maintain one or more NAAQS. The attainment status, as shown in Table 1 of this SIP, determines if the federal PSD or Non-attainment Area New Source Review rules applies to the area.[12] The PSD program applies when a major source, that is located in an area designated as attainment or unclassifiable for any criteria pollutant, is constructed, or undergoes a major modification[13]. New Jersey accepted delegation of the administration of the PSD program from the USEPA on February 22, 1983 and the provisions of 40 CFR 52.21(b) through (w), related to Prevention of Significant Deterioration, were incorporated into New Jersey's SIP at 40 C.F.R. 52.1603(b). New Jersey's regulations at N.J.A.C 7:27-8.5, 18, and 22.8 meet the federal requirements for preventing a violation of the NAAQS in areas already attaining the NAAQS.

[12] The USEPA designated all of New Jersey as "unclassifiable/attainment" for the lead NAAQS on November 8, 2011, for nitrogen dioxide effective February 29, 2012, and for carbon monoxide in 1971. On August 13, 2013, the EPA redesignated to attainment the 13 New Jersey counties that had been designated nonattainment for PM2.5 so that all of New Jersey is now classified in attainment for PM2.5. Since New Jersey does not have any designated nonattainment areas for lead, carbon monoxide, coarse particulate matter (PM10), and nitrogen dioxide, New Jersey implements the federal PSD program and has a minor NSR program in place. Letter dated June 14, 2011 from USEPA Region II Administrator Judith A. Enck to NJ Governor Chris Christie and 76 Fed. Reg. 72113 (November 22, 2011) and 77 Fed. Reg. 9532 (February 17, 2012).

[13] In addition, the PSD program applies to non-criteria pollutants subject to regulation under the federal Clean Air Act, except those pollutants regulated under Section 112 and pollutants subject to regulation only under Section 211(o). (73 Fed. Reg. 67040 (November 12, 2008))

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(D)	*Contain adequate provisions-(i) prohibiting, consistent with the provisions of this title, any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will –* *(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such national primary or secondary ambient air quality standard, or* *(II) interfere with measures required to be included in the applicable implementation plan for any other*	To address interstate transport of air pollutants, New Jersey coordinates with nearby states on regional control measures as part of regional planning organizations, including the Ozone Transport Commission (OTC), Northeast States for Coordinated Air Use Management (NESCAUM), Mid-Atlantic/Northeast-Visibility Union (MANE-VU), and Mid-Atlantic Regional Air Management Association (MARAMA). The State is taking the necessary actions to meet its transport obligation and address the largest contributors to air quality, including mobile and stationary sources. New Jersey has the cleanest emission standards for automobiles allowed by law when a person purchases a new vehicle; Vehicle Inspection and Maintenance (I/M) programs for gasoline and diesel vehicles; the nation's third largest public transportation provider of bus, rail and light rail transit that links to major points in New Jersey, New York and Philadelphia; and a program to retrofit particle filters on diesel engines operated by or for public entities. New Jersey's Department of Transportation works to mitigate traffic congestion by implementing traffic signal coordination projects, establishing park-and-rides locations throughout the State, and implementing incident management projects to improve traffic mobility. The federal Clean Air Act limits New Jersey's ability to control emissions from the mobile source sector. New Jersey requires all fossil-fuel Electric Generating Units (EGU's) to meet multi-pollutant performance standards, including daily oxides of nitrogen (NO_x) performance limits for gas and oil fired high electric demand day (HEDD) units. Clean diesel engines used for peaking or demand side management are allowed, but uncontrolled use in non-emergency situations is not allowed. New Jersey's regulation of electric generators minimizes transport of their emissions to other States. These multi-pollutant performance standards are equal to, or more effective than, the Clean Air Interstate Rule and Mercury and Air Toxics Standards (MATS) for coal-fired EGUs. New

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
	state under part C of this subchapter to prevent significant deterioration of air quality to protect visibility.	Jersey's Reasonable Available Control Technology (RACT) rules were updated with more stringent VOC and NO_x performance standards for 14 source categories in 2009. New Jersey has also addressed area source and point source emissions of ozone precursors through the implementation of OTC measures, including Consumer Products, Paints/Stains/Varnishes (AIM) Coatings and other OTC model rules. Discussion of the interstate transport of pollutants into and out of New Jersey is found in Section 6. A list of the measures taken to control intrastate and interstate transport of pollutants is attached to this SIP in Appendix H.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(D)	*Contain adequate provisions – (ii) insuring compliance with the applicable requirements of* ***Sections 126 and 115*** *(relating to interstate and international pollution abatement);*	The provisions for these two Clean Air Act sections are addressed separately below and pertain to all pollutants. **<u>Section 126 of the Clean Air Act</u>** CAA §126(a) states that each SIP must require all major sources (new or modified) to provide written notice to all surrounding states regarding the source's impact on air pollution levels at least 60 days prior to commencement of construction. The sources subject to this requirement are those major sources subject to Part C of the Clean Air Act and those that contribute to pollution levels in areas above the NAAQS. In accordance with N.J.A.C. 7:27-22.11(k), New Jersey sends communications to all nearby states (Maryland, Pennsylvania, Delaware, New York, and Connecticut) regarding all Title V operating permit actions, which includes PSD permits and NSR permits for new or modified major sources. **<u>Section 115 of the Clean Air Act</u>** CAA §115 requires a state to revise its SIP if pollutants emitted from the state endanger public health or welfare in a foreign country. New Jersey does not border any foreign country and emissions from New Jersey do not endanger public health or welfare in any foreign country.
§110(a)(2)(E)	*Provide (i) necessary assurances that the state (or, except*	States are required to provide assurances that: (i) adequate personnel, funding, and legal authority will be available to carry out the SIP; (ii) a majority of its state board members represent the public interest and do not derive a significant portion of their

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
	where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the state or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under state (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provisions of federal or state law from carrying out such implementation plan or portion thereof.)	income from entities that are subject to permits, and that conflicts of interest of members be adequately disclosed; and (iii) the State has responsibility for ensuring adequate implementation of plan provisions to be carried out by local districts. The APCA at N.J.S.A. 26:2C-8 provides the authority to carry out the SIP. N.J.S.A. 13:1D-9 contains the authority for the Department to prepare, administer and supervise Statewide, regional and local programs of conservation and environmental protection and provides guidance on dedicating personnel and funds for the State to carry out its responsibilities of environmental protection. The State relies on the federal grant allocated under CAA §§103 and 105 for carrying out the SIP responsibilities, as well as an annual State appropriation.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
	(ii) Provide requirements that the state comply with the requirements respecting state boards under section 128, (Note: Section 128(1)concerns certain requirements for the composition of any board or body that approves permits or enforcement orders under the Clean Air Act and does not pertain to the State of New Jersey, while Section 128(2) requires that "each applicable implementation plan shall contain requirements that – … (2) any potential conflicts of interest by members of such board or body or head of an executive agency with similar powers be adequately disclosed."), and	(ii) The Department is the only entity that approves permits and enforcement orders in New Jersey. There is no board or body that carries out these duties. New Jersey has established the Clean Air Council as required by the APCA at N.J.S.A. 26:2C-3.2. This Council is comprised of representatives from government, industry, and the public advocate groups. The Council makes recommendations to the Department's Commissioner on air pollution issues and does not approve permits or enforcement orders or have rulemaking authority to regulate air pollution. New Jersey's Conflicts of Interest Law at N.J.S.A. 52:13D-14 and 52:13D-16 prohibits state employees from accepting gifts or other items of value from any regulated entity and from presenting the appearance of a conflict of interest to the public. The Department has adopted a Code of Ethics policy pursuant to the Uniform Ethics Code established by the State Ethics Commission. The Uniform Ethics Code is available at the website of the State Ethics Commission at http://nj.gov/ethics/docs/ethics/uniformcode.pdf. The State Ethics Commission has issued guidelines to the Code of Ethics, available on line at http://www.nj.gov/ethics/statutes/guide/. Consistent with the Uniform Ethics Code, the Department has established procedures for reporting any work conducted by a state employee outside of the Department.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
	(iii) Provide necessary assurances that, where the state has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the state has responsibility for ensuring adequate implementation of such plan provision;	(iii) All 21 counties in New Jersey are under contract and/or grant with the Department delegating them authority to enforce various regulations under the County Environmental Health Act (CEHA) (N.J.S.A. 26:3A2-21 et seq.). CEHA allows the delegated counties to act as the Department's representatives during investigations, including issuing enforcement actions, assessing and collecting penalties, and settling cases. The APCA at N.J.S.A. 26:2C-22 includes provisions for the relation of local ordinances or regulations to State law. New Jersey certifies compliance with this element. A hyperlink to official and unofficial copies of CEHA is included as Appendix E. The State has developed and provides funding to several county and municipal governments under CEHA to inspect certain minor sources and enforce the air pollution control laws of the State. The organizational structure, titles and responsibilities of each local or county department having a CEHA agreement with the Department may differ from agency to agency. A current list of the county CEHA agencies having agreements with the Department to inspect certain sources can be found at http://www.nj.gov/dep/enforcement/county.html. (See Appendix D for an example of a typical annual Memorandum of Understanding developed between the State and a local entity.) The Department confirms that, where New Jersey has relied on a local or regional government, agency, or instrumentality for the implementation or enforcement of any plan provision, the State retains the responsibility for ensuring adequate implementation of such plan provision.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(F)	*Require, as may be prescribed by the Administrator: (i) The installation, maintenance, and replacement of equipment, and the implementation of other necessary steps by owners or operators of stationary sources to monitor emissions from such sources.* *(ii)Periodic reports on the nature and amounts of emissions-related data from such source.* *(iii) Correlation of such reports by the state agency with any emission limitations or standards established pursuant to this chapter, which reports shall be available at reasonable times for public inspection.*	Major and minor sources are required to monitor and report emissions. For major sources, N.J.A.C. 7:27-22.18 requires source emissions testing and monitoring as part of and reflecting the requirements of a source's Title V permit. N.J.A.C. 7:27-21 requires the reporting of emissions from Title V sources that monitor their emissions. Emissions monitoring, recordkeeping, and reporting, including the reporting of emissions in excess of the permitted levels at a facility, is required by N.J.A.C. 7:27-22.19. For minor sources, N.J.A.C. 7:27-8 contains requirements for emissions testing as a condition of getting a permit to construct and a certificate to operate emission sources in New Jersey, specifically N.J.A.C. 7:27-8.2(f)2 and (f)4, 8.4(f), 8.7(f), and 8.13(d). The reporting of emissions or testing results is required by N.J.A.C. 7:27-8.4(g), 8.13(d), and 8.15, and N.J.A.C. 7:27-11.3(e) includes reporting and stack testing requirements specific to incinerators to ascertain compliance with the air pollution control permits. N.J.A.C. 7:27-21 requires the submission of annual emission statements from major facilities. From these statements, the Department develops reports of emissions of all criteria pollutants and submits them to the USEPA pursuant to the federal Air Emission Reporting Requirements (AERR) Rule for uploading to the USEPA's National Emission Inventory (NEI).

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(G)	*Provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority (Note: Section 303 gives emergency powers to the USEPA Administrator to bring suit to stop the emission of air pollution causing or contributing to an imminent or substantial endangerment to public health or welfare or the environment.)*	New Jersey has comparable authority provided to the Governor in New Jersey's Air Pollution Emergency Control Act (N.J.S.A. 26:2C-26 et seq.), which is implemented through New Jersey's rules at N.J.A.C. 7:27-12. Should ambient air levels of any air pollutant reach unhealthful levels, N.J.A.C. 7:27-12 gives New Jersey the authority to declare an air pollution warning, alert, or emergency and issue orders suspending air pollutant emissions until the threat to public health has been resolved (N.J.A.C. 7:27-12.3). The levels used by New Jersey to declare an alert, warning, emergency, or significant harm can be found in Appendix I of this SIP. The actions to be taken to reduce emissions during an air pollution alert, warning, emergency or significant harm levels are prescribed in Subchapter 12 at N.J.A.C. 7:27-12.4 and N.J.A.C. 7:27-12.5. New Jersey notifies the public of monitored levels of air pollutants using a system based on the National Air Quality Index (AQI). These notifications are made available through various news media sources including the internet. New Jersey will use this type of notification system should it become necessary to declare an air pollution alert, warning, or emergency. New Jersey's emergency episode plans/contingency plans are contained in New Jersey's rules at N.J.A.C. 7:27-12, which are consistent with the USEPA's regulations at 40 C.F.R. Part 51, Subpart H. A copy of the rules is provided as Appendix C of this submittal. In addition, based on the USEPA's historical precedent for the other pollutant classification schemes[14] and ambient air monitoring data recorded for the past several

[14] Letter dated November 23, 2009 from NJDEP Air Director Bill O'Sullivan to USEPA Region II Chief Ray Werner. (New Jersey's Lead Designation Recommendation Supporting Data, Attachment 2)

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
		years,[15] New Jersey meets the definition of a Priority III region according to 40 C.F.R. 51.150, thus is not required to develop emergency episode plans for sulfur dioxide, nitrogen dioxide, carbon monoxide, or fine or coarse particulate matter (PM2.5 and PM10). According to 40 C.F.R. 51.152(c) "Areas classified Priority III do not need to develop episode plans." Furthermore, 40 C.F.R. 51.152(d)(1) gives the USEPA Administrator the discretion to exempt areas designated as attainment or unclassifiable from any requirement to develop emergency episode plans. The USEPA designated all of New Jersey as "unclassifiable / attainment" for the lead NAAQS on November 8, 2011, thus qualifying the State for such an exemption.[16,17] The USEPA regulations at 40 C.F.R. 51.150 provide that lead is not an identified pollutant associated with significant harm levels. The USEPA recognized in its guidance that 40 C.F.R. Part 51, subpart H (51.150-51.152) and Appendix L of that subpart do not apply to lead.[18] Therefore, no emergency episode plans are required for lead.

[15] New Jersey's monitored levels of air pollutants can be found on the USEPA's AQS website at http://www.epa.gov/airtrends/factbook.html
[16] Letter dated June 14, 2011 from USEPA Region II Administrator Judith A. Enck to NJ Governor Chris Christie.
[17] 76 Fed. Reg. 72113 (November 22, 2011)
[18] 2011 Lead NAAQS SIP Guidance Document, page 13.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(H)	*Provide for revision of such plan –* *(i) From time to time as may be necessary to take account of revisions of such primary or secondary NAAQS or the improved or more expeditious methods of attaining such standard, and* *(ii) Except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements, or to otherwise comply with any additional requirements established under this chapter (CAA).*	The Department of Environmental Protection Act of 1970, as amended, at N.J.S.A. 13:1D-9 contains the authority to develop and adopt the necessary regulations for SIP development.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(I)	*In the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of a part D of this subchapter (relating to nonattainment areas).*	Not required in this document. The Department is not addressing this element in this infrastructure SIP submission because, according to the USEPA's interpretation of the Clean Air Act[19], this element does not need to be addressed in the context of an infrastructure SIP submission.
§110(a)(2)(J)	*Meet the applicable requirements of section 121 of this title (relating to consultation), section 127 of this title (relating to public notification), and part C of this subchapter (relating to prevention of significant deterioration of air quality and visibility protection);*	**Consultation and Public Notification (Sections 121 and 127)** Clean Air Act Section 121 requires that states provide a process of consultation with general purpose local governments, designated organizations of elected officials of local governments, and any affected Federal Land Manager in carrying out the Clean Air Act requirements. New Jersey meets with the federal land manager, regional organizations, and affected states for the purpose of the Regional Haze SIP.[20] New Jersey consults with the Metropolitan Planning Organizations regularly to discuss transportation-related air quality issues as required by the Transportation Conformity Rule. New Jersey provides the opportunity to the public to participate during the public comment period and at the public hearing for rulemaking and SIP proposals, as described in the discussion of §110(a)(2)(M) of this document. Opportunity for public comment on the Department's permit actions is required at N.J.A.C. 7:27-8.10 and N.J.A.C. 7:27-22.11. A public hearing may be held before the Department takes final action on a significant permit approval. The State also often consults with the public and the regulated community through workshops and informal stakeholder meetings.

[19] "Guidance on State Implementation Plan (SIP) Elements Under the Clean Air Act Sections 110(a)(1) and 110(a)(2)," USEPA, Stephen D. Page, Director, Office of Air Quality Planning and Standards, September 13, 2013.
[20] NJDEP. State Implementation Plan (SIP) for Regional Haze, Final. New Jersey Department of Environmental Protection, July 2009.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
		CAA §127 requires a state to provide measures that will effectively notify the public on a regular basis of instances or areas in which any air quality standard is exceeded during the preceding calendar year, to advise the public of the health hazards associated with such pollution, and to enhance public awareness of measures that can be taken to prevent such standards from being exceeded. The State has a standard operating procedure by which notifications of all NAAQS exceedances are sent to the news media. Additionally, the notifications of NAAQS exceedances are posted on the State's website (http://www.nj.gov/dep). The State's website also contains information for the public on the health hazards associated with such pollution and measures that can be taken to help prevent such standards from being exceeded. When an exceedance or unhealthy air is forecasted or occurs, the information is also sent out to participants of the USEPA's air notification system, EnviroFlash, an e-mail service that is used to broadcast information using data supplied by state or local air quality agencies. **Prevention of Significant Deterioration (PSD) and Visibility Protection** The PSD program is addressed in the discussion of CAA §110(a)(2)(C) above. For all criteria pollutants other than lead[21] and carbon monoxide, the visibility protection requirements referenced in this subsection and contained in Part C of the Clean Air Act (sections 169A and 169B) are addressed through the State's Regional Haze SIP and separate efforts involving the states of the Mid-Atlantic / Northeast Visibility Union (MANE-VU). These Part C requirements are not affected by revisions to a NAAQS. There are, therefore, no new applicable visibility protection obligations under CAA §110(a)(2)(J) resulting from the revised NAAQS for lead, NO_2, or ozone or for the readoption of the CO NAAQS. For the visibility protection requirements related to

[21] 2011 Lead NAAQS SIP Guidance Document, page 15.

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
		sulfur dioxide, nitrogen dioxide, and particulates, in general, New Jersey included all the necessary requirements in its approved Regional Haze SIP.[22]

[22] 77 Fed. Reg. 19 (January 3, 2012)

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(K)	Provide for - *(i) The performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and* *(ii) The submission, upon request, of data related to such air quality modeling to the Administrator;*	Any new or modified significant source in the State must obtain a permit to construct and a certificate to operate before the source can be built. (See N.J.S.A. 13:1D-9 and N.J.S.A 2C-8 and 19 and N.J.A.C. 7:27-8.) Before issuing the permit, the Department may use modeling, as necessary, to affirm that compliance with the NAAQS will be maintained when a new major source of emissions is coming online or an existing source is undertaking a modification that would lead to a significant increase in its potential to emit. (See N.J.A.C. 7:27-8.4(j) and 8.5.) A major source may also be required to perform atmospheric modeling pursuant to N.J.A.C. 7:27-22.8. The Department will provide appropriate modeling data to the USEPA Administrator upon request.
§110(a)(2)(L)	*Require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this chapter, a fee sufficient to cover –* *(i) The reasonable costs of*	N.J.S.A. 26:2C-9.5, N.J.S.A. 26:2C-9.6, and N.J.S.A. 26:2C-9.b(7) authorize New Jersey to charge emission fees to major sources under the major stationary source permit fee rules at N.J.A.C. 7:27-22.31. These fees pay for the direct and indirect expenses to administer New Jersey's Title V Operating Permit Program. This fee program has been approved by the USEPA, which approved New Jersey's Title V Operating Permit Program, effective November 30, 2001 (66 Fed. Reg. 63168, December 5, 2001), and has approved subsequent revisions to New Jersey's operating permit program rules at N.J.A.C. 7:27-22 as recently as July 26, 2007. (See 72 Fed. Reg. 41025.)

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
	reviewing and acting upon any application for such a permit, and if the owner or operator receives a permit for such a source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action), until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under subchapter (Title) V of this chapter.	

Clean Air Act Section and SIP Requirement – "*Each implementation plan submitted by a State under the Clean Air Act shall be adopted by the State after reasonable notice and public hearing. Each plan shall*		**New Jersey Authority and Compliance Measures**
§110(a)(2)(M)	*Provide for consultation and participation by local political subdivisions affected by the plan*	New Jersey provides an opportunity for consultation and participation to local political subdivisions during the public comment period of a proposed SIP revision. The APCA (N.J.S.A. 26:2C-8) and the New Jersey Administrative Procedures Act (NJAPA) (N.J.S.A. 52:14B-1 et seq.) require a public notice and opportunity to comment process for any rulemaking. When necessary, additional consultation and participation by local political subdivisions are provided by the counties pursuant to the CEHA. CEHA agencies may be provided advance notice of Department actions and may be consulted before proposal and finalization of Department rules. For each major SIP revision, the Department also provides appropriate public notice, and provides the opportunity to submit written comments, and allows the public and local entities the opportunity to request a public hearing, in conformance with the USEPA's notice requirements at 40 C.F.R. Part 51.102. New Jersey consults regularly with the Metropolitan Planning Organizations to discuss transportation-related air quality issues, as required by the Transportation Conformity Rule including, but not limited to, the North Jersey Transportation Planning Authority, the South Jersey Transportation Planning Organization, and the Delaware Valley Regional Planning Authority. These agencies routinely provide data to the Department that is needed for air pollution control planning efforts and the Department consults them regarding future air pollution control plans. The Department will continue this coordination and consultation concerning transportation-related issues.

6. Interstate Transport Provisions of Section 110(a)(2)(D) For All NAAQS Pollutants

New Jersey has addressed the interstate transport requirements of the Clean Air Act §110(a)(2)(D)(i)(I) by implementing effective rules to control sources that may significantly contribute to the nonattainment of a federal ambient air quality standards in another state and, therefore, addressed New Jersey's downwind contributions from New Jersey sources. New Jersey also has no rules that interfere with the ability of another state to maintain attainment of any ambient air quality standard in that State.

Criteria Pollutants significantly transported between States

New Jersey has adopted extensive measures to control emissions from sources located in New Jersey. These include controlling emissions of pollutants that may be transported to other states, namely, oxides of nitrogen, ozone, particulates (PM2.5 and PM10) and sulfur dioxide. A list of the measures taken by the State of New Jersey to reduce emissions of criteria pollutants is set forth in Appendices B and H. Many of New Jersey's rules to control air emissions are more stringent than similar rules in nearby states. For example, New Jersey is reducing oxides of nitrogen (NO_x) emissions with its NO_x RACT rules by an estimated 64 tons per day on High Electric Demand Days, starting with the 2015 summer ozone season. New Jersey has also reduced NO_x emissions from EGU's and refineries via consent decrees and Administrative Consent Orders by an estimated 90% from 2000 to 2011.

Ozone – Since 1990, New Jersey has reduced its summer NO_x emissions by 63% and its VOC emissions by about 61%. New Jersey has enforceable performance standards for NO_x and VOC emissions from power plants and other sources, among the most effective air pollution control regulations in the country. Set forth below are some of New Jersey's measures to control emissions of ozone precursors:

- All major facility permits for new sources issued by the Department limit NO_x emissions based on 3-hour or 24-hour averaging times. These shorter averaging times lower NO_x emissions on a daily basis during the summertime (when they are needed to control outdoor ozone levels), rather than allowing facilities to emit high levels of NO_x during a summer day while still meeting an annual or ozone season cap.
- NO_x RACT rules include similar short-term emission limits for existing sources of NO_x , including all existing coal, oil and gas-fired EGU's.
- New and modified major facilities are subject to more stringent NO_x emission limits than RACT to meet federal and state new source review (NSR) requirements. Such major new equipment must achieve the lowest achievable emission rates.
- Advances in the art of air pollution control for significant equipment at minor facilities must be applied to new VOC and NO_x sources of air pollution, including domes on new gasoline storage tanks.
- The NO_x RACT and NSR requirements in New Jersey more effectively control ozone levels than do the USEPA's air transport rules (Clean Air Interstate Rule (CAIR) and the now-vacated Cross State Air Pollution Rule (CSAPR)) because New Jersey's facilities

must meet daily NO_x performance standards for all units, while facilities in other States may, under the federal rules, purchase allowances to cover their excess emissions.

- New Jersey's daily enforceable emission limitations better address ozone nonattainment than emission trading programs that allow the averaging of NO_x emissions over the entire summer. Five month compliance periods are insufficient to ensure attainment of the ozone NAAQS because emissions can be high on days when ozone levels are high. Five month averaging does not sufficiently lower emissions on the hottest summer days when peak electric demand and peak ozone levels occur.
- Unlike other states that significantly impact New Jersey's air quality, New Jersey power plants cannot turn off their NO_x pollution controls and use excess CAIR NO_x allowances to meet emission limits.
- New Jersey's NO_x RACT performance standards require advanced NO_x emission controls for EGU's that operate on high energy demand days (HEDD) . The HEDD units in New Jersey typically are fueled with gas or oil.
- New Jersey has a statewide motor vehicle Inspection and Maintenance program that ensures New Jersey's motor vehicles operate with acceptable levels of emissions.
- New Jersey has adopted the motor vehicle emission standards used by the State of California (the California car standards) to ensure that only the lowest emitting vehicles available in the nation are sold in New Jersey.

If states that contribute to New Jersey's ozone levels adopted New Jersey's NO_x RACT rules and other of New Jersey's air pollution control regulations, then New Jersey's ozone levels are expected to go down.

Sulfur Dioxide - All major sources of sulfur dioxide are well-controlled and subject to enforceable short-term operating permit emission limits for sulfur dioxide.

- Pursuant to New Jersey's air quality rules, operating coal-fired power plants in New Jersey control SO_2 emissions by use of scrubbers that comply with the adopted SO_2 RACT rules, including short-term SO_2 emission limits enforced with SO_2 continuous emission monitors.
- Fluid catalytic cracking units at refineries in New Jersey are required to use acid gas emissions scrubbers and are subject to short-term SO_2 emission limitations.
- SO_2 levels will be further reduced due to New Jersey's rule that requires low sulfur content in distillate fuel oil of 500 ppm in 2014, and 15 ppm in 2016.
- As a result of New Jersey's legal action and a petition to the USEPA under Section 126 of the Clean Air Act, the Portland Power plant, just over the state border in Pennsylvania, has reduced SO_2 emissions from its two coal-fired EGUs by 60% and these units will be shut down permanently in 2014. This action will ensure attainment of the SO_2 NAAQS in Warren County, NJ and its vicinity.

New Jersey's air rules and its success in reducing transport of SO_2 from upwind states will result in compliance with the one-hour SO_2 National Ambient Air Quality Standard statewide in 2014. These measures will also ensure that no New Jersey facility will cause an SO_2 violation in any other state.

When USEPA issues guidance or rules for modeling SO_2 sources, the Department will conduct any modeling or take any necessary steps that are required. New Jersey's operating permit program ensures compliance with the one-hour SO_2 NAAQS, based on authority at N.J.A.C. 7:27-22.8, which requires that major sources not cause violations of any NAAQS.

Fine particles – All air quality monitors in the State of New Jersey meet the NAAQS for PM2.5. New Jersey has recommended to the USEPA that all of New Jersey be designated attainment for PM2.5, based on ambient monitoring and the evaluation of impacts on neighboring states. New York and Delaware do not have any PM2.5 nonattainment areas. Pennsylvania has determined that nonattainment for PM2.5 in its commonwealth is caused by local, not regional, sources.[23]

Among New Jersey's stringent controls for fine particles are the following measures.

- Baghouse controls for particulate emissions are installed on all New Jersey coal-fired power plants, except one which is converting to natural gas or shutting down.
- The secondary formation of fine particulate matter (PM2.5) occurs in the atmosphere through chemical reactions with pollutants to form small, respirable solid and liquid particles. The SO_2 and NO_x controls listed in the previous sections will lower the secondary formation of fine particulate matter both in New Jersey and regionally.
- A diesel retrofit program is being implemented to lower particulate emissions from the existing public fleet of diesel vehicles in New Jersey. Governor Christie's April 20, 2011Executive Order #60 and N.J. A.C. 7:27-32, New Jersey's regulation for retrofitting vehicles, will retrofit about 17,000 diesel vehicles when fully implemented.

Criteria Pollutants not significantly transported between States

Carbon Monoxide (CO) – Carbon Monoxide is not significantly transported between states. There are no carbon monoxide nonattainment areas in New Jersey or in any of its contiguous states. Carbon monoxide emissions in New Jersey do not cause nonattainment of the carbon monoxide standards in another state. New Jersey's approved carbon monoxide SIP appropriately focused on the localized carbon monoxide hot spots; that is, locations where ambient air monitoring reflects concentrated high levels of carbon monoxide at roadway intersections resulting from their proximity to a large number of mobile sources emitting carbon monoxide.[24]

Nitrogen Dioxide (NO_2) - Localized high concentrations of nitrogen dioxide do not generally occur as a result of transported emissions from out of state. Emission sources in New Jersey are not causing violations of the nitrogen dioxide NAAQS in any other state.

There are no nitrogen dioxide nonattainment areas in New Jersey or any of its contiguous states. The USEPA recognized that most ambient exposures to peak nitrogen dioxide concentrations are associated with roadways and so stated in its report entitled "Exposure Assessment for nitrogen

[23] Commonwealth of Pennsylvania, Final Designation Recommendations for the 2012 PM2.5 Standard, available at http://www.dep.state.pa.us/dep/deputate/airwaste/aq/attain/pm25des/Final_Designation_Recommendations.pdf
[24] New Jersey State Implementation Plan (SIP) for the Attainment and Maintenance of the Carbon Monoxide National Ambient Air Quality Standards, May 3, 2004, http://www.nj.gov/dep/baqp/sip/04co-o3f.htm

dioxide" (available at http://www.epa.gov/ttn/naaqs/standards/nox/s_nox_cr_rea.html). [25] Specifically, these notices reflected and referenced the conclusions the USEPA had drawn in its supporting Risk and Exposure Assessment (REA) for nitrogen dioxide that concentrations of on-road mobile source pollutants (including NO_x) typically display peak concentrations on or immediately adjacent to roads.[26]

Any new or modified major source of nitrogen dioxide is evaluated for its impacts through the NSR permit review process as described in Table 3 of this document, and violations of any NAAQS would not be allowed at any locations.

Lead - The USEPA recognizes that ambient lead concentrations are higher near known sources of lead emissions. The USEPA discussed lead's transport properties in its 2011 guidance by acknowledging that it would be rare for a source's lead emissions to contribute significantly to another state's nonattainment or interfere with the maintenance of the lead NAAQS in another state. [27,28] There are no longer significant sources of lead emissions in the State. This is supported by the low ambient concentrations monitored in New Jersey and in nearby states. Appendix F of this SIP revision contains additional information concerning the sources of lead.

The USEPA did not designate any lead nonattainment areas within any other state that shares a border with New Jersey (i.e. within New Jersey's shared Combined Statistical Areas). New Jersey has control measures and enforceable emission limits in place to address its lead sources. With these actions, New Jersey is adequately addressing impacts to other states.

Regional Haze Aspects of Clean Air Act Section 110(a)(2)(D)(i)

New Jersey's Regional Haze SIP addresses visibility requirements and was approved by the USEPA on January 3, 2012 (77 Fed. Reg.19).[29] New Jersey participates with the states of the Mid-Atlantic / Northeast Visibility Union (MANE-VU) to address regional haze issues affecting New Jersey's Class I area (the Brigantine Wilderness Area of the Edwin B. Forsythe National Wildlife Refuge). New Jersey consulted with other states outside of MANE-VU in developing its Regional Haze SIP revision.

42 U.S.C. § 7410(a)(2)(D)(i)(II)[30] requires the Regional Haze SIP to contain adequate provisions prohibiting any new or modified source or other type of emissions activity within the State from

[25] Near-Road NO_2 Monitoring Technical Assistance Document, U.S. Environmental Protection Agency, June 2012, EPA-454/B-12-002, available at http://www.epa.gov/ttn/amtic/files/nearroad/NearRoadTAD.pdf and See also the preambles to the Notice of Proposed Rulemaking (74 Fed. Reg. 34404 at 34408, (July 15, 2009)) and the Notice of Final Rulemaking (75 Fed. Reg. 6474 at 6479, (February 9, 2010)) for the primary NAAQS for nitrogen dioxide.
[26] The REA is the EPA's *Risk and Exposure Assessment to Support the Review of the NO_2 Primary National Ambient Air Quality Standard* (U.S. Environmental Protection Agency, 2008b).
[27] 73 Fed. Reg. 66971 (November 12, 2008).
[28] 2011 Lead NAAQS SIP Guidance Document page 8.
[29] NJDEP. State Implementation Plan (SIP) for Regional Haze, Final. New Jersey Department of Environmental Protection, July 2009.
[30] CAA §110(a)(2)(D)(i)(II)

emitting any air pollutants in quantities that will interfere with measures required to be included in the SIP of another State to prevent significant deterioration of air quality or to protect visibility. New Jersey's existing NSR programs satisfy the requirements of 40 C.F.R. 51.165(b)(1) and 40 C.F.R. 51.166 for new or modified sources. The details of these programs are addressed in the discussion of CAA §110(a)(2)(C)) of this SIP revision.

As part of the permit review, New Jersey's delegated PSD program evaluates the new or modified source's impact on any nearby Class I area (Brigantine in New Jersey's case) to ensure that the SO_2, NO_2, PM10, and PM2.5 Class I increments are not violated. New Jersey's delegated PSD program also prevents these sources from significantly impacting visibility. The PSD program requires the evaluation of the new source's visibility impact on any nearby Class I areas. Guidance on conducting the visibility analysis is available in the Federal Land Managers' Air Quality Related Values Work Group (FLAG) Phase 1 Report – Revised (2010).

7. Conclusion

This SIP revision contains the required elements of 42 U.S.C. § 7410(a)(1) and (2) (CAA §110(a)(1) and (2)). It also addresses the following items conditionally approved or disapproved in the USEPA's June 14, 2013 final rule concerning New Jersey's Infrastructure SIP[31].

- PSD (Sections C, J): By being delegated to implement the USEPA's PSD program, New Jersey meets the federal PSD permitting requirements.

- Emergency Episodes (Section G): By updating and publishing the criteria for emergency episodes in Appendix I, New Jersey is meeting the contingency plan portion of the Clean Air Act §110(a)(2)(G) element concerning emergency powers and adequate contingency plans.

- Conflict of Interest (Section E(ii)): By providing as part of this SIP, those applicable sections of the New Jersey's Conflicts of Interest Law at N.J.S.A. 52:13D-14 and 52:13D-16, New Jersey is satisfying the Clean Air Act §110(a)(2)(E(ii)).

- Delegation of Authority (Section E(iii)): By providing as part of this SIP, a location where a listing of the current participants in the County Environmental Health Act (CEHA) program can be obtained, and by including a copy of CEHA and a typical agreement between the State and CEHA delegated agencies, New Jersey is satisfying the Clean Air Act §110(a)(2)(E(iii)).

Through this SIP revision, inclusive of New Jersey's APCA as reflected in Appendix A and regulations as listed in Appendix B, the State of New Jersey demonstrates that it has the authority and regulatory program necessary to meet the Clean Air Act infrastructure and transport requirements for all pollutants having an established NAAQS. New Jersey also demonstrates that it has addressed the interstate transport of air pollutants by developing effective air pollution control rules, containing enforceable emission limitations, to address all significant air pollution sources.

[31] 78 Fed. Reg. 35764 (June 14, 2013)

The State of New Jersey
Department of Environmental Protection
Appendices to the State Implementation Plan (SIP) Revision
Sections 110(a)(1) and 110 (a)(2) for the:
Lead
Sulfur Dioxide
Nitrogen Dioxide
Ozone
PM2.5 and PM10
Carbon Monoxide
National Ambient Air Quality Standards and Regional Haze
September, 2014

Appendix A - New Jersey Air Pollution Control Act (APCA) N.J.S.A. 26:2C-1 et seq. (available on-line at http://www.njleg.state.nj.us/)

Appendix B - List of New Jersey Rules Adopted Pursuant to the Air Pollution Control Act and included in New Jersey SIPs. (Free official copies of the Department's rules are available from the Lexis Nexis website at http://www.lexisnexis.com/njoal/). Unofficial copies are available from the Department's website at http://www.nj.gov/dep/aqm/rules.html.)

Appendix C - Copy of N.J.A.C. 7:27-12, Prevention and Control of Air Pollution Emergencies (unofficial copy available on-line at http://www.state.nj.us/dep/aqm/Sub12.pdf; a free official copy is available from the Lexis Nexis website at http://www.lexisnexis.com/njoal/)

Appendix D - Copy of a sample Memorandum of Understanding developed between the State of New Jersey and a county or local government entity under the County Environmental Health Act (CEHA)

Appendix E- New Jersey's County Environmental Health Act (CEHA), N.J.S.A. 26:3A2-21 et seq. An official copy of CEHA is available from the New Jersey Legislature's website at http://www.njleg.state.nj.us/. The Department has an unofficial copy available on its website at http://www.nj.gov/dep/enforcement/cehastatute.pdf.

Appendix F - Additional Considerations Concerning the Transport of Lead in New Jersey

Appendix G - USEPA Guidance Materials and Federal Register Notices Referenced in this SIP

Appendix H – List of control measures adopted by the State of New Jersey to address the intrastate and interstate transport of pollutants

Appendix I – Emergency Air Quality Control Criteria

Appendix J – Copy of N.J.A.C. 7:27-8, Permits and Certificates for Minor Facilities (and Major Facilities without an Operating Permit) (unofficial copy available on-line at http://www.state.nj.us/dep/aqm/Sub8.doc; a free official copy is available from the Lexis Nexis website at http://www.lexisnexis.com/njoal)

Appendix K – Response to Comments and Documentation of the Public Outreach and Notification Process for this Proposed SIP Revision

Appendix L- Documentation of the Guidance Documents Used to Prepare the Proposed Revision to New Jersey's State Implementation Plan Concerning Section 110 Requirements for All NAAQS and Visibility

Appendix B – List of New Jersey Regulations Adopted Pursuant to New Jersey's Air Pollution Control Act and included in State Implementation Plans

Note: Free official copies of the Department's rules are available from the Lexis Nexis website at http://www.lexisnexis.com/njoal/). Unofficial copies are available from the Department's website at http://www.nj.gov/dep/aqm/rules.html

New Jersey Rules	Pollutants Covered by Rule	Included in SIPs at:
N.J.A.C 7:27-2 Control and Prohibition of Open Burning	CO, PM, VOC	40 CFR Ch. 1 Subpart FF 52.1570 (8), (9), (44)(i), 52.1605
N.J.A.C 7:27-3 Control and Prohibition of Smoke from Combustion of Fuel	PM, TSP	40 CFR Ch. 1 Subpart FF 52.1570 (29), (35), 52.1605
N.J.A.C 7:27-4 Control and Prohibition of Particles from Combustion of Fuel	PM, TSP	40 CFR Ch. 1 Subpart FF 52.1570 (29), (35), (71)(i)(B), (88)(i), (88)(ii)(A) 52.1605
N.J.A.C 7:27-5 Prohibition of Air Pollution (includes odor provisions)	All Criteria and Toxic Air Pollutants	40 CFR Ch. 1 Subpart FF 52.1570 (35), 52.1605
N.J.A.C 7:27-6 Control and Prohibition of Particles from Manufacturing Processes	PM, TSP	40 CFR Ch. 1 Subpart FF 52.1570 (20), (38)(i)(D), 52.1604 (a), 52.1605
N.J.A.C 7:27-7 Sulfur	PM, SO_2, TSP	40 CFR Ch. 1 Subpart FF 52.1570 (39)(i)(C), 52.1601 (a), 52.1605
N.J.A.C 7:27-8 Permits and Certificates for Minor Facilities (and Major Facilities without an Operating Permit)	All Criteria and Toxic Air Pollutants	40 CFR Ch. 1 Subpart FF 52.1570 (14), (38)(i)(A), (39)(i)(C), (51)(i)(C), (63)(i)(B), (63)(ii)(B). (81)(ii), (88)(ii)(A), 52.1605
N.J.A.C 7:27-9 Sulfur in Fuels	SO_2	40 CFR Ch. 1 Subpart FF 52.1570 (7), (12), (13), (15), (16), (17), (18), (21), (33), (91)(i)(A), (91)(ii)(A), 52.1605
N.J.A.C 7:27-10 Sulfur in Solid Fuels	PM, SO_2, TSP	40 CFR Ch. 1 Subpart FF 52.1570 (19), (29), (31), (88)(i), (88)(ii)(A), 52.1601 (b), 52.1605
N.J.A.C 7:27-11 Incinerators	PM	40 CFR Ch. 1 Subpart FF 52.1605

N.J.A.C 7:27-12 Prevention and Control of Air Pollution Emergencies	All Criteria and Toxic Air Pollutants	40 CFR Ch. 1 Subpart FF 52.1605
N.J.A.C 7:27-13 Ambient Air Quality Standards	CO, NO_2, O_3, Pb, SO_2, TSP (PM)	40 CFR Ch. 1 Subpart FF 52.1570 (38)(i)(B), (38)(ii)(A), (39), (40), (42), (42)(ii)(B), (44), (47), 52.1605
N.J.A.C 7:27-14 Control and Prohibition of Air Pollution from Diesel-Powered Motor Vehicles (Includes Idling)	PM, TSP	40 CFR Ch. 1 Subpart FF 52.1570 (10), (11), (39)(i)(A), (87) 52.1605
N.J.A.C 7:27-15 Control and Prohibition of Air Pollution from Gasoline-Powered Motor Vehicles (Includes Idling)	CO, NO_x, PM, VOC	40 CFR Ch. 1 Subpart FF 52.1570 (37), (47)(i)(A), (71)(i)(A), (92)(i)(A), 52.1605
N.J.A.C 7:27-16 Control and Prohibition of Air Pollution by Volatile Organic Compounds	PM, VOC	40 CFR Ch. 1 Subpart FF 52.1570 (10), (11), (23), (25), (45), (46)(i), (46)(ii)(A), (49), (51), (51)(ii)(C), (63), (74) 52.1582 (a), (a)(1), (a)(2), (a)(3), (a)(4), (76)(ii), (81)(ii), (88)(i), (88)(ii)(A), 52.1605
N.J.A.C 7:27-17 Control and Prohibition of Air Pollution by Toxics Substances	Air Toxics, VOC	40 CFR Ch. 1 Subpart FF 52.1570 (44)(ii), (51)(i)(C), (63)(i)(B), (63)(ii)(B), 52.1582 (b), 52.1605
N.J.A.C 7:27-18 Control and Prohibition of Air Pollution from New or Altered Sources Affecting Ambient Air Quality (Emission Offset Rules)	CO, NO_x, Pb, PM_{10}, TSP, SO_2, VOC	40 CFR Ch. 1 Subpart FF 52.1570 (27), (38)(i)(C), (40)(i)(A), (54)(i)(A), 52.1578(a), 52.1578(a)(1), 52.1578(a)(2), 52.1605
N.J.A.C 7:27-19 Control and Prohibition of Air Pollution by Oxides of Nitrogen	NO_x	40 CFR Ch. 1 Subpart FF 52.1570 (38)(i)(D), (60), (66), (81), (88)(i), (88)(ii), (90), 52.1605
N.J.A.C 7:27-20 Used Oil Combustion	CO, Pb, SO_2, VOC	
N.J.A.C 7:27-21 Emission Statements	Reporting Rule for Criteria Air Pollutants and Toxics	40 CFR Ch. 1 Subpart FF 52.1570 (30), (53)(i)(A), (75), (88)(i), (88)(ii)(A), 52.1605
N.J.A.C 7:27-22 Operating Permits	All Pollutants except CO_2	40 CFR Ch. 1 Subpart FF 52.1570 (41)(i)(A), (41)(i)(B), (81)(ii).
N.J.A.C 7:27-23 Prevention of Air Pollution from Architectural Coatings	VOC	40 CFR Ch. 1 Subpart FF 52.1570 (50), (50), (51)(i)(C), (63)(i)(B), (63)(ii)(B), (78),

		(89)(i)(B)(1), (89)(ii), 52.1605
N.J.A.C 7:27-24 Prevention of Air Pollution from Consumer Products	VOC	40 CFR Ch. 1 Subpart FF 52.1570 (62), (79), (89)(i)(B)(2), (89)(i)(c), (89)(ii), 52.1605
N.J.A.C 7:27-25 Control and Prohibition of Air Pollution from Vehicular Fuels	CO, VOC	40 CFR Ch. 1 Subpart FF 52.1570 (45)(i), (51)(i)(C), (52), (58)(i)(A), (63)(i)(B), (63)(ii)(B), (68)(i), (89)(i)(B)(3), (89)(ii), 52.1605
N.J.A.C 7:27-26 Prevention of Air Pollution from Adhesives, Sealants, Adhesives Primers and Sealant Primers	VOC	40 CFR Ch. 1 Subpart FF 52.1570 (65)(i), (67)(i), (89)(i)(A)(1), (89)(ii)
N.J.A.C 7:27-27 Control and Prohibition of Mercury Emissions	Hg	40 CFR Ch. 1 Subpart FF 52.1570 (82)
N.J.A.C 7:27-28 Heavy-Duty Diesel New Engine Standards and Requirements Program	PM	
N.J.A.C 7:27-29 Low Emissions Vehicle (LEV) Program	CO, PM,VOC	40 CFR Ch. 1 Subpart FF 52.1570 (84)
N.J.A.C 7:27-30 CAIR	NO_x, SO_2	40 CFR Ch. 1 Subpart FF 52.1570 (83)(i)
N.J.A.C 7:27-31 Ozone Transport Commission and SIP Call NOx Budget Program	NO_x	40 CFR Ch. 1 Subpart FF 52.1570 (30), (53)(i)(A), (69)(i), (70)(i), (83)(i) 52.1605
N.J.A.C 7:27-32 Diesel Retrofit Program	NO_x	
N.J.A.C 7:27-34 TBAC Emissions Reporting	Reporting Rule for Criteria Air Pollutants and Toxics	40 CFR Ch. 1 Subpart FF 52.1570 (89)(i)(A)(2), (89)(ii)

Appendix F – Additional New Jersey Specific Information Concerning the Transport of Lead

The USEPA recognizes that ambient lead concentrations are higher near known sources of lead emissions. Larger particles will deposit from the air quickly and travel short distances compared to smaller particles that are transported over longer distances.[1] In 2011, the USEPA acknowledged that it would be rare for a source's lead emissions to contribute significantly to another state's nonattainment or interfere with the maintenance of the lead NAAQS in another state.[2]

New Jersey has taken a number of actions to address sources of lead within the State. New Jersey's federally approved SIP measures are listed in 40 C.F.R. Part 52, Subpart FF. In New Jersey's 1985 SIP revision for the attainment and maintenance of the 1978 lead standard, the control strategy process for identifying and controlling lead emissions at new or modified and existing sources is outlined.[3] New Jersey's rules that affect lead emissions or can contribute toward maintaining the lead NAAQS are N.J.A.C. 7:27-4, 5, 6, 8, 11 (and 7:26-10.7), 15, 18, 19, and 20.

The control measures implemented in New Jersey address its contributions to downwind areas, ensuring that its sources' emissions do not interfere with the attainment or maintenance of the lead NAAQS or measures that prevent significant deterioration and protect visibility in another state. New Jersey will continue to identify sources of lead and reduce their emissions under its control strategy assessment process.

In order to address the federal requirements for the lead NAAQS, New Jersey utilizes a weight-of-evidence approach, using the best data available, as presented in its designation recommendations submitted to the USEPA on October 15, 2009.[4] The USEPA recommended that states could rely upon the technical data used to support initial area designations for lead to support its conclusions of its analysis for these requirements.[5] Additional technical information for New Jersey's recommendation of attainment was submitted to the USEPA on November 23, 2009.[6] The technical information and the USEPA's response to the State's recommendations are utilized in this proposed SIP revision as evidence that New Jersey does not significantly contribute to a nonattainment area or interferes with the maintenance of the lead NAAQS in another state.

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[1] 73 Fed. Reg. 66971 (November 12, 2008).

[2] USEPA Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, to Regional Air Directors, "Guidance on State Implementation Plan (SIP) Elements Required Under Sections 110(a)(1) and (2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS)," October 14, 2011, page 8.

[3] NJDEP. New Jersey State Implementation Plan for the Attainment and Maintenance of the National Ambient Air Quality Standards for Lead. New Jersey Department of Environmental Protection, April 1985.

[4] Letter dated October 15, 2009 from NJDEP Acting Commissioner Mark N. Mauriello to USEPA Region II Acting Administrator George Pavlou.

[5] Ibid. 2, page 8.

[6] Letter dated November 23, 2009 from NJDEP Air Director Bill O'Sullivan to USEPA Region II Chief Ray Werner.

Most importantly, there are no lead sources in New Jersey with emissions greater than 0.5 tons per year (tpy) that are impacting nearby areas. This conclusion is based on the following:

Main sources of lead in New Jersey have been eliminated, including gasoline

Atmospheric lead originates primarily as a product of fossil fuel combustion. Sources also include lead smelting and manufacturing of batteries and of tetramethyl and tetraethyl lead.[7] These sources are usually located in industrial zones and are classified as point sources. The major point sources of lead in New Jersey have been shut down. The extensive sampling, testing, and mitigation plans of these sources was described in New Jersey's existing lead SIP.[8]

Area sources, on the other hand, are distributed more uniformly throughout the environment. Until the 1980's, the major source of environmental lead exposure was automotive emissions. With the federal phase-out program for lead in gasoline, the significance of vehicular lead emissions is no longer the primary concern. The federal regulations of fuels and fuel additives, along with the necessity for using unleaded gasoline in automobiles equipped with catalytic converters, have proven effective in reducing exposure to atmospheric lead. However, lead is still used in aviation gasoline for piston-engine aircraft.[9]

New Jersey has no sources above the 0.5 tpy or 1.0 tpy monitoring thresholds

The USEPA defines a point source of lead as any stationary source whose actual emissions are 5.0 or more tpy of lead or lead compounds measured as elemental lead.[10] Under 40 C.F.R. 51.117, "The point source inventory on which the summary of the baseline for lead emissions inventory is based must contain all sources that emit 0.5 or more tons of lead per year." In 2010, the USEPA revised the lead emission rate at which monitoring is required for lead sources to 0.5 tpy.[11] The USEPA retained the 1.0 tpy emission threshold for airport facilities and is requiring a monitoring study at 15 airports (none in New Jersey) with lead emission inventories of 0.50 to 1.0 tpy that they identified as having characteristics that may cause or contribute to concentrations that approach or exceed the lead NAAQS. New Jersey's point source and airport facility inventory estimates of lead emissions are below the current monitoring threshold requirements, with one exception discussed next, as documented in the State's 2009 initial area designations.[12]

New Jersey's only source above the 0.5 tpy threshold in 2008 was below the threshold in 2009 and 2010

As outlined in the State's emissions inventory in the initial area designations for the lead NAAQS, the Covanta Essex County Resource Recovery Facility (RRF), a solid waste

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[7] Ibid. 2
[8] 40 C.F.R. 52.1570(c) (last revised 1987 for lead).
[9] USEPA. Aircraft - Nonroad Engines, Equipment, and Vehicles. United States Environmental Protection Agency, http://www.epa.gov/otaq/aviation.htm, July 27, 2011.
[10] 40 C.F.R. 50.100(k)(ii)(2).
[11] 75 Fed. Reg. 81126 (December 27, 2010).
[12] Ibid. 6, Attachment 2

combustor facility, was the highest emitting point source for lead emissions.[13] According to the most recent stack testing, the Covanta facility's lead emissions are below 0.5 tpy. The table below shows the lead emissions reported to the State from 2011 back to 2005.

In addition, the NJDEP recently installed 1 lead monitor at the Newark Firehouse station, and confirmed that the lead emissions of the Covanta Essex County RRF meet the 0.50 tpy criteria.[14] The table below shows the latest emissions of lead from the Covanta facility.

Lead Emissions for Covanta Essex County RRF, 2005-2011*

Year	Emissions (tons per year)
2011	0.35
2010	0.17
2009	0.37
2008	0.85
2007	0.71
2006	0.81
2005	0.61

*Emissions reported to New Jersey's Emission Statement Program

The lead emissions for the years 2009 through 2011 are below the levels (0.5 tpy) that would require ambient air monitoring.

Adjacent and downwind monitors are below the standard for lead

Ambient air monitors in New York and Pennsylvania, which are within New Jersey's shared Combined Statistical Areas (CSAs), are reporting lead concentrations significantly below the NAAQS. Monitoring data for the other states are outlined in New Jersey's 2009 initial area designations.[15] The USEPA did not designate any nonattainment areas in the surrounding nearby areas for the revised lead NAAQS, nor were any nonattainment areas designated in New Jersey.[16] Orange County, New York, which borders Sussex and Passaic counties in Northern

[13] Ibid. 6, Attachment 2
[14] Ambient Air Network Monitoring Plan 2011. New Jersey Department of Environmental Protection, Bureau of Air Quality Monitoring, June 2011. http://www.njaqinow.net/
[15] Ibid. 3
[16] USEPA. Area Designations for 2008 Lead Standards, State Designations. http://www.epa.gov/leaddesignations/2008standards/state.html. Refer to Regions 2 and 3 for the USEPA response letters to New York and Pennsylvania.

New Jersey, was designated "unclassifiable" based upon preliminary 2011 air monitoring data (AQS ID 36-071-3002) indicating a possible violation of the NAAQS in 2008.[17] The New York State Department of Environmental Conservation (NYSDEC) had originally concluded in its 2009 designations analysis that the 2006-2008 air monitoring data at monitors nearby the lead source, Revere Smelting and Refining Corporation, met the NAAQS.[18] The USEPA has not finished the process of designating the nonattainment area surrounding this facility.

The USEPA suggests lead sources with emissions less than 0.5 tpy or greater than 2 miles from a state border generally do not impact a neighboring state by significantly contributing to its nonattainment or interfering with its maintenance of the lead NAAQS.[19] The areas designated by the USEPA as nonattainment in Bucks County, Pennsylvania (Lyons and North Reading)[20] are greater than 2 miles from New Jersey. The closest area, Lyons Nonattainment Area, is approximately 40 miles from the state border but New Jersey analyzed these areas to ensure that their impact was negligible. Based upon the technical analyses by the Pennsylvania Department of Environmental Protection (PADEP) and the USEPA, two distinct areas within Berks County were designated as nonattainment (75 Fed. Reg. 71033, November 22, 2010) due to source-specific lead emissions.[21,22] These facilities were modeled and the data did not support designating any areas to the east. The table below is a summary of the evidence supporting the nonattainment area designations.

Summary Data to Support "Nearby" Nonattainment Areas in Pennsylvania

Designated Area	Nonattainment County	Nonattainment Townships/ Boroughs	Facility >1.0 tpy	2007 Pb Emissions (tpy)	Air Monitor DV ($\mu g/m^3$)
Lyons	Berks (p)	Maxatawny, Richmond, Lyons,	East Penn	2.59	0.22

[17] USEPA. Preliminary Federal Register Notice: Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards. http://www.epa.gov/leaddesignations/2008standards/regs.html, November 8, 2011.
[18] Letter dated October 15, 2009 from NYSDEC Assistant Commissioner J. Jared Snyder to USEPA Acting Administrator George Pavlou. (New York's Initial Lead Designation Recommendation)
[19] Ibid. 2, page 8.
[20] USEPA, 2008 Lead Standards - Region 3 Initial Nonattainment Designations, http://www.epa.gov/leaddesignations/2008standards/rec/region3R.html.
[21] PADEP, Designation Recommendations for the 2008 Lead National Ambient Air Quality Standard. Pennsylvania Department of Environmental Protection, December 2009.
[22] USEPA. Technical Support Document - Pennsylvania Area Designations for the 2008 Lead National Ambient Air Quality Standard. United States Environmental Protection Agency, June 2010.

		Kutztown			
North Reading	Berks (p)	Muhlenberg, Laureldale, Alsace	Exide	1.47	0.38

*p=partial, DV=Design Value 2007-2009

All lead monitors measuring concentrations below the 1.5 μg/m^3 lead NAAQS were shutdown in New Jersey

Lead concentrations in New Jersey were so low compared to the 1.5 μg/m^3 NAAQS that many of the monitoring sites were discontinued. New Jersey's lead monitoring location in New Brunswick was discontinued in 2008, after the shutdown of New Jersey's primary lead stationary source, Delco Remy, a battery manufacturer, on February 20, 2007. Historical monitoring data and the 2006-2008 ambient air lead monitoring data for New Jersey are discussed in detail in the 2009 initial area designations.[23] A CBSA population oriented monitor was recently added to a firehouse in Newark, NJ.

[23] Ibid. 6, Attachment 2

Appendix H – Administrative Actions and Regulations Adopted by the State of New Jersey since 2002 to Control Air Pollution

New Jersey's Post 2002 Control Measures

Measure	Effective Start Date of Benefits	Pollutant	New Jersey Administrative Code	USEPA Approval
Adhesives & Sealants	2009	VOC	NJAC 7:27-26	7/22/10
Architectural Coatings 2005	2005	VOC	NJAC 7:27-23	11/30/05
Asphalt Paving (cutback and emulsified)	2009	VOC	NJAC 7:27-16.19	8/3/10
Asphalt Production Plants	2009, 2011	NO_x	NJAC 7:27-19.9	8/3/10
Case by Case NOx and VOC (FSELs/AELs)	2009	NO_x, VOC	NJAC 7:27-16, 19	8/3/10
Consumer Products 2005	2005	VOC	NJAC 7:27-24	1/25/06
Consumer Products 2009	2009	VOC	NJAC 7:27-24	7/22/10
CTG Group 1: Printing	2009	VOC	NJAC 7:27-16.7	8/3/10
Diesel Smoke IM Cutpoint Rule Amendments	2010, 2011	$PM_{2.5}$, NO_x	NJAC 7:27-14	Pending
Diesel Vehicle Retrofit Program	2008-2015	$PM_{2.5}$	NJAC 7:27-32, 14	NA
EGU - BL England ACO	2000-2015	$PM_{2.5}$, SO_2, NO_x	NA	NA
EGU - Coal-fired Boilers, Oil and Gas Fired Boilers	2013	$PM_{2.5}$, SO_2, NO_x	NJAC 7:27-4.2, 10.2, 19.4	8/3/10
EGU - PSEG-Consent Decree	2002-2010	$PM_{2.5}$, SO_2, NO_x	NA	Filed 7/26/02; amended 11/30/06
EGU-High Electric Demand Day (HEDD)	2009, 2015	SO_2, NO_x	NJAC 7:27-19.29	8/3/10
Energy Master Plan	Ongoing	Various	NA	NA
Glass Manufacturing	2012	NO_x	NJAC 7:27-19.10	8/3/10
ICI Boilers 2009	2009-2011	NO_x	NJAC 7:27-19.7	8/3/10
ICI Boilers, Turbines and Engines 2005	2007-2010	NO_x	NJAC 7:27-27.19	7/31/07
Low Sulfur Distillate and Residual Fuel Strategies	2014, 2016	SO_2, NO_x	NJAC 7:27-9	1/3/12

Mercury Rule	2006-2012	Hg, $PM_{2.5}$, SO_2, NO_x	NJAC 7:27-27	NA
Mobile Equipment Refinishing (Autobody)	2005	VOC	NJAC 7:27-16	7/2/04
Municipal Waste Combustors (Incinerators)	2009, 2010	NO_x	NJAC 7:27-19.13	8/3/10
New Jersey Clean Construction Program	2014	$PM_{2.5}$	NA	NA
New Jersey Low Emission Vehicle (LEV) Program	2009 (1)	$PM_{2.5}$, SO_2, NO_x, VOC	NJAC 7:27-29	2/13/08
Nonattainment New Source Review (NNSR)	Ongoing	$PM_{2.5}$, SO_2, NO_x, VOC	NJAC 7:27-8	NA
NO_x Budget	1999, 2003	SO_2, NO_x	NJAC 7:27-30	10/1/07
Petroleum Storage	2010-2019	VOC	NJAC 7:27-16.2	8/3/10
Portable Fuel Containers 2005	2005-2015[1]	VOC	NJAC 7:27-24	1/25/06
Portable Fuel Containers 2009	2009-2019[1]	VOC	NJAC 7:27-24	7/22/10
Prevention of Significant Deterioration (PSD)	Ongoing	$PM_{2.5}$, SO_2, NO_x, VOC	NA	NA
Refinery Consent Decree (Hess)	2015	$PM_{2.5}$, SO_2, NO_x, VOC	NA	NA
Refinery Consent Decree (Sunoco)	2005-2010	$PM_{2.5}$, SO_2, NO_x, VOC	NA	Filed 12/2/03; amended 3/15/04; terminated 3/5/12
Refinery Consent Decrees (ConocoPhillips)	2006-2010	$PM_{2.5}$, SO_2, NO_x, VOC	NA	Filed 1/27/05
Refinery Consent Decrees (Valero)	2006-2010	$PM_{2.5}$, SO_2, NO_x, VOC	NA	Filed 6/16/05
Sewage and Sludge Incinerators	2009	NOx	NJAC 7:27-19.28	8/3/10
Solvent Cleaning	2005	VOC	NJAC 7:27-16	7/2/04
Stage I and II	2003	VOC	NJAC 7:27-16	7/2/04
Vehicle Idling Rule Amendments	2011	$PM_{2.5}$, NO_x	NJAC 7:27-14.1, 14.3	4/14/09
Vehicle IM Program	1974	VOC, NO_x, CO	NJAC 7:27-15	
Vehicle IM Program Revisions 2009	2010	VOC, NO_x, CO	NJAC 7:27-15	9/16/11

[1] This rule is a "turnover" type rule which means this measure has cumulative benefits each year until complete fleet or equipment turnover occurs.

Legend/Notes:

NA = Not Applicable
EGU - Electric Generating Unit
ICI = Industrial, Commercial and Institutional Boilers
IM = Inspection and Maintenance
RICE = Reciprocating Internal Combustion Engines
MACT = Maximum Achievable Control Technology
CTG = Control Technology Guideline

Appendix K

Documentation of the Public Outreach and Notification Process for the Proposed Revision to New Jersey's State Implementation Plan Concerning Section 110 Requirements for All NAAQS and Visibility

Notice of the proposed SIP and the opportunity for public hearing was posted on the Department's website (http://www.state.nj.us/dep/) on June 4, 2014 at two locations (http://www.nj.gov/dep/baqp/sip/110/Final%20Proposed%20Infrastructure%20SIP.pdf) and http://www.nj.gov/dep/baqp/sip/siprevs.htm. The public notice for the proposed revision was posted at http://www.nj.gov/dep/baqp/sip/110/110%20SIP%20Legal%20Notice%20May_2014.pdf

Notice of the proposed SIP and the opportunity for public hearing was sent by e-mail to over 500 interested parties using e-mail addresses from the Department's listserv including the Department's air rules listserv (those people registering for news of the Department's air pollution rules and regulations) and the environmental justice e-mail list (those people involved in environmental justice outreach with the Department) . In addition, 28 air quality contacts from other states and air quality regional organizations and six contacts at the USEPA were e-mailed the notice. Paper copies of the notice were mailed to 8 interested parties. Additional notification consisted of faxing notice to 14 newspapers at the New Jersey State House and to the Department's three regional Compliance and Enforcement offices. These notices were all issued at least 30 days prior to the announced date of the potential public hearing and close of comment period. The public comment period ended on July 23, 2014. Two parties, the Sierra Club and the State of Connecticut, submitted written comments to the proposed SIP and those comments are addressed in this Attachment 4 of this Appendix.

In addition, notice of the proposed SIP and the opportunity to request a hearing appeared in the July 7, 2014 edition of the New Jersey Register (46 N.J.R. 1653). No request for a hearing was received by the Department.

Attachment 1 contains the notice announcing the availability of the proposed SIP revision and the public hearing.

Attachment 2 contains documentation of the notices and the New Jersey Register.

Attachment 3 contains the notice posted to cancel the public hearing. The Department offered the opportunity for a Public Hearing to be held on July 16, 2015. No one requested that the hearing be held so the public hearing was cancelled by notice posted at http://www.state.nj.us/dep/baqp/sip/cancel110.pdf

Attachment 4 to the Section 110 SIP contains the Department's response to comments on the proposed SIP revision and a copy of those comments.

Appendix K - Attachment 1

Notice announcing the availability of the proposed SIP revision and public hearing the Section 110 SIP posted at http://www.nj.gov/dep/baqp/sip/siprevs.htm.

ENVIRONMENTAL PROTECTION
ENVIRONMENTAL MANAGEMENT
DIVISION OF AIR QUALITY

Notice of Proposed State Implementation Plan (SIP) Revision and Public Hearing for New Jersey's Multi-pollutant Infrastructure SIP, meeting the requirements of Section 110(a)(1) and (2) of the Clean Air Act (42 U.S.C. § 7410(a)(1) and (2))

Take notice that the New Jersey Department of Environmental Protection (Department) is proposing a revision to the "infrastructure" portion of the State Implementation Plan (SIP) to demonstrate New Jersey's ability and authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and visibility requirements.
This proposed SIP revision addresses the infrastructure requirements of the federal Clean Air Act (42 U.S.C. § 7410(a)(1) and (2) (Section 110(a)(1) and (2))) for the National Ambient Air Quality Standards (NAAQS) for lead, sulfur dioxide, nitrogen dioxide, fine and course particulate, carbon monoxide, and ozone. It also addresses the visibility and interstate transport infrastructure requirements for demonstrating that New Jersey has the authority and infrastructure to implement, maintain, and enforce an air quality management program that provides for attainment and maintenance of the NAAQS and visibility standards.
Copies of the Department's proposed SIP revision are available on the Department's web site at www.nj.gov/dep/baqp/siprevs.html and from the Department's Bureau of Air Quality Planning at 401 E. State Street in Trenton, New Jersey. A copy of this notice is also available on the web site at www.nj.gov/dep/baqp/

A **public hearing** concerning the proposed SIP revision will be conducted **only if requested in writing** by July 8, 2014. If no request for a public hearing is received, the hearing will be cancelled by a notice posted by July 11, 2014, on the Department's web site at http://www.nj.gov/dep/baqp/. If a public hearing is requested, it will be held on Wednesday, July 16, 2014 at 11:00 a.m. at the NJDEP Building, 5th Floor Large Conference Room, 401 East State Street, Trenton, New Jersey.

Any written comments must be submitted by close of business, Wednesday, **July 23, 2014**. Please email comment(s) as an e-mail or document attachment to: NJDEP-BAQP@ dep.state.nj.us. Please include the BAQP identification number of **BAQP 2014-001** in the subject line of the e-mail. The Department encourages electronic submittal of comments.

In the alternative, comments may be submitted on paper to:
New Jersey Department of Environmental Protection
Attn: BAQP 2014-001
Air Quality Planning
401 East State Street, 7th Floor
Mail Code 401-07H
P.O. Box 420
Trenton, New Jersey 08625-0420

Appendix K - Attachment 2

Documentation of e-mail notices and the New Jersey Register notice of July 7, 2014

Ray Papalski

From: owner-airrules@listserv.state.nj.us on behalf of Papalski, Ray <Ray.Papalski@dep.nj.gov>
Sent: Wednesday, June 04, 2014 3:02 PM
To: airrules@listserv.state.nj.us
Subject: Proposed New Jersey's Multi-Pollutant Infrastructure SIP Revision -Corrected Link

A proposed revision to the "infrastructure" portion of the New Jersey State Implementation Plan (SIP) to demonstrate the State's ability and authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and visibility requirements is available on the Department's web site at http://www.nj.gov/dep/baqp/sip/siprevs.htm and from the Department's Bureau of Air Quality Planning at 401 E. State Street in Trenton, New Jersey. A copy of this notice is also available on the web site at www.nj.gov/dep/baqp/ . This proposed SIP revision addresses the infrastructure requirements of the federal Clean Air Act (42 U.S.C. § 7410(a)(1) and (2) (Section 110(a)(1) and (2))) for the National Ambient Air Quality Standards (NAAQS) for lead, sulfur dioxide, nitrogen dioxide, fine and course particulate, carbon monoxide, and ozone.

A public hearing concerning the proposed SIP revision will be conducted only if requested in writing by the public by July 8, 2014. If no request for a public hearing is received, the hearing will be cancelled by a notice posted by July 11, 2014 on the Department's web site at http://www.nj.gov/dep/baqp/. If a public hearing is requested, it will be held on Wednesday, July 16, 2014 at 11:00 a.m. at the NJDEP Building, 5th Floor Large Conference Room, 401 East State Street, Trenton, New Jersey.

Any written comments must be submitted by close of business, Wednesday, July 23, 2014. Please email comment(s) as an e-mail or document attachment to: NJDEP-BAQP@ dep.state.nj.us. Please include the BAQP identification number of BAQP 2014-001 in the subject line of the e-mail. The Department encourages electronic submittal of comments.

In the alternative, comments may be submitted on paper to:

New Jersey Department of Environmental Protection
Attn: BAQP 2014-001
Air Quality Planning
401 East State Street, 2nd Floor
Mail Code 401-07H
P.O. Box 420
Trenton, New Jersey 08625-0420

----------This message has been sent by the New Jersey Department of Environmental Protection END moderate = yes moderator =
mungedomain = no
noadvertise << END

Ray Papalski

From: Outlaw, Riche
Sent: Thursday, June 05, 2014 3:21 PM
To: Gaddy, Kim; Harper, Rev Fletcher; Held, Joann; Kelly Francis; Kim T. Gaddy; Valorie Caffee; Anderson, Steve; Donald, Joe; Driber, Sherry; Eldridge, Joe; Fontecchio, Christa; Gray, John; Hansberry, Heather; Jerald Fagliano; Krause, Julie; McLaughlin, Frank; Molly Greenberg ; Peter Montague; Pflugh, Kerry; Pringle, David; Sheats, Nicky; Siekerka, Michele; Taccini, Angelene; Willinger, Allan
Subject: New Jersey State Implementation Plan (SIP) proposed revision

Good afternoon EJAC and others:

On behalf of DEP's Bureau of Air Quality Planning, please see the letter below regarding a proposed revision to the "infrastructure" portion of the New Jersey State Implementation Plan (SIP). Any comments regarding the letter should be sent to address and email noted in the letter.

Sincerely,

Riché S. Outlaw
EJ Coordinator
Deputy Commissioner's Office
401 E. State Street
PO Box 402
Trenton, NJ 08625-0402
Office: 609.292.2908
Direct: 609.633.0747
Mobile: 609.775.7455

Dear Interested Party,

A proposed revision to the "infrastructure" portion of the New Jersey State Implementation Plan (SIP) to demonstrate the State's ability and authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and visibility requirements is available on the Department's web site at www.nj.gov/dep/baqp/siprevs.html and from the Department's Bureau of Air Quality Planning at 401 E. State Street in Trenton, New Jersey. A copy of this notice is also available on the web site at www.nj.gov/dep/baqp/ . This proposed SIP revision addresses the infrastructure requirements of the federal Clean Air Act (42 U.S.C. § 7410(a)(1) and (2) (Section 110(a)(1) and (2))) for the National Ambient Air Quality Standards (NAAQS) for lead, sulfur dioxide, nitrogen dioxide, fine and course particulate, carbon monoxide, and ozone.

A public hearing concerning the proposed SIP revision will be conducted only if requested in writing by the public by July 8, 2014. If no request for a public hearing is received, the hearing will be cancelled by a notice posted by July 11, 2014 on the Department's web site at http://www.nj.gov/dep/baqp/. If a public

hearing is requested, it will be held on Wednesday, July 16, 2014 at 11:00 a.m. at the NJDEP Building, 5th Floor Large Conference Room, 401 East State Street, Trenton, New Jersey.

Any written comments must be submitted by close of business, Wednesday, July 23, 2014. Please email comment(s) as an e-mail or document attachment to: NJDEP-BAQP@ dep.state.nj.us. Please include the BAQP identification number of BAQP 2014-001 in the subject line of the e-mail. The Department encourages electronic submittal of comments.

In the alternative, comments may be submitted on paper to:

New Jersey Department of Environmental Protection
Attn: BAQP 2014-001
Air Quality Planning
401 East State Street, 2nd Floor
Mail Code 401-07H
P.O. Box 420
Trenton, New Jersey 08625-0420

Ray Papalski

Subject: RE: Proposed New Jersey's Multi-Pollutant Infrastructure SIP Revision

From: Papalski, Ray [Ray.Papalski@dep.nj.gov]
Sent: Wednesday, June 04, 2014 9:02 AM
To: djshaw@gw.dec.state.ny.us; melanie.loyzim@maine.gov; doug.mcvay@dem.ri.gov; dick.valentinetti@state.vt.us; cwright@des.state.nh.us; cecily.beall@dc.gov; mgdowd@deq.virginia.gov; Ali.mirzakhalili@state.de.us; jeepps@state.pa.us; gaburn@mde.state.md.us; Nancy.Seidman@state.ma.us; anne.gobin@po.state.ct.us; Joseph Jakuta; Wick Havens; Andy Bodnarik; jmcdill@marama.org; swierman@marama.org; lweiss@nescaum.org; rgsliwin@gw.dec.state.ny.us; Paul.Bodner@ct.gov; rwstanna@gw.dec.state.ny.us; mpsheeha@gw.dec.state.ny.us; mxreis@gw.dec.state.ny.us; John.Sipple@state.de.us; David.Fees@state.de.us; ashulman@state.pa.us; nherb@pa.gov; sbogart@pa.gov; fradkin.kenneth@epa.gov; Forde.Raymond@epamail.epa.gov; Lau.Gavin@epamail.epa.gov; Feingersh.Henry@epamail.epa.gov; Laurita.Matthew@epamail.epa.gov; Truchan.Paul@epamail.epa.gov
Subject: Proposed New Jersey's Multi-Pollutant Infrastructure SIP Revision

Dear Interested Party,

A proposed revision to the "infrastructure" portion of the New Jersey State Implementation Plan (SIP) to demonstrate the State's ability and authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and visibility requirements is available on the Department's web site at www.nj.gov/dep/baqp/siprevs.html and from the Department's Bureau of Air Quality Planning at 401 E. State Street in Trenton, New Jersey. A copy of this notice is also available on the web site at www.nj.gov/dep/baqp/ . This proposed SIP revision addresses the infrastructure requirements of the federal Clean Air Act (42 U.S.C. § 7410(a)(1) and (2) (Section 110(a)(1) and (2))) for the National Ambient Air Quality Standards (NAAQS) for lead, sulfur dioxide, nitrogen dioxide, fine and course particulate, carbon monoxide, and ozone.

A public hearing concerning the proposed SIP revision will be conducted only if requested in writing by the public by July 8, 2014. If no request for a public hearing is received, the hearing will be cancelled by a notice posted by July 11, 2014 on the Department's web site at http://www.nj.gov/dep/baqp/. If a public hearing is requested, it will be held on Wednesday, July 16, 2014 at 11:00 a.m. at the NJDEP Building, 5th Floor Large Conference Room, 401 East State Street, Trenton, New Jersey.

Any written comments must be submitted by close of business, Wednesday, July 23, 2014. Please email comment(s) as an e-mail or document attachment to: NJDEP-BAQP@ dep.state.nj.us. Please include the BAQP identification number of BAQP 2014-001 in the subject line of the e-mail. The Department encourages electronic submittal of comments.

In the alternative, comments may be submitted on paper to:

New Jersey Department of Environmental Protection
Attn: BAQP 2014-001
Air Quality Planning
401 East State Street, 2nd Floor
Mail Code 401-07H
P.O. Box 420
Trenton, New Jersey 08625-0420

approximately 49,500 gross alpha screening test samples over the next year. This number also includes the New Jersey Department of Health laboratory that has a capacity for 5,200 tests annually.

During the five most recent calendar years, 2009 through 2013, totals of 6,483, 6,074, 6,467, 5,577, and 6,548 gross alpha screening tests were reported to the Department for these counties in response to the requirements of the PWTA and the N.J.A.C. rules. This number includes tests for real estate transactions and leased properties. Based on the 6,548 reported tests for 2013, and the estimated capacity of 49,500 tests by the laboratories, the Department has demonstrated that the laboratory capacity still remains more than sufficient.

Five of the 10 laboratories certified by New Jersey performed rapid gross alpha analyses of New Jersey private well water samples during calendar year 2013. About nine percent of these tests were performed by a single certified commercial laboratory located in New Jersey. About 75 percent of the tests were analyzed by laboratories located in the New Jersey/Pennsylvania/New York tri-state area with about 25 percent of the tests performed by a laboratory located in a Southeastern state.

The certified laboratories reported that the current cost range for testing remained the same as the two years prior, from $30.00 to $200.00 per sample. Also, the median cost dropped slightly from $61.00 to $60.00 per sample. The Department believes that the costs remain reasonable.

The Department will continue to evaluate laboratory capacity for the conduct of gross alpha screening test on an annual basis, as required by the PWTA.

For further information on the PWTA rules, please contact the Department's toll-free information hotline: 1-866-4PW-TEST or 1-866-479-8378 or the website, www.nj.gov/dep/pwta. Information regarding certified laboratories can be obtained through the Office of Quality Assurance at its website, www.nj.gov/dep/oqa or by telephone at (609) 292-3950.

(a)

SITE REMEDIATION PROGRAM

Notice to Receive Interested Party Comments on Proposed Consent Judgment to Recover Cleanup and Removal Costs for the Noble Oil Company Site in the Township of Tabernacle, Burlington County

Take notice that the New Jersey Department of Environmental Protection (the Department) hereby gives notice of a proposed Consent Judgment concerning recovery of unreimbursed cleanup and removal costs resulting from discharges at the Noble Oil Company property, located at 30 Cramer Road, Tabernacle, Burlington County (the Site). The Site is also known and designated as Block 325, Lot 1.03, on the Tax Map of the Township of Tabernacle, which the Department has designated as Site Remediation Program Interest No. 014267.

The Department, under the authority of the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq. (Spill Act), proposes to enter into this Consent Order with Loeffel's Waste Oil Service, Inc. of Rolling Ridge Road, West Milford, and Augustus E. Erbe, Jr., t/a Loeffels Waste Oil Service.

Under the proposed Consent Judgment, Loeffel's Waste Oil Service, Inc., of Rolling Ridge Road, West Milford, and Augustus E. Erbe, Jr., t/a Loeffels Waste Oil Service, have agreed to settle their alleged liability to the Department for unreimbursed cleanup and removal costs resulting from discharges of hazardous substances at the Noble Oil Company property by payment of $125,000 to the Department.

It is the intent of the Department and Loeffel's Waste Oil Service, Inc., of Rolling Ridge Road, West Milford, and Augustus E. Erbe, Jr., t/a Loeffels Waste Oil Service, that this Consent Order constitutes a judicially approved settlement within the meaning of N.J.S.A. 58:10-23.11f(b) of the Spill Act and 42 U.S.C. § 9613(f)2 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1984, as amended (CERCLA), 42 U.S.C. §§ 9601 et seq., for the purpose of providing protection from contribution actions or claims for matters addressed in this Consent Order.

Copies of the proposed Consent Order are available for inspection at the Department's main office at 401 East State Street, in Trenton, New Jersey, and via the Internet at www.nj.gov/dep/srp/legal. A copy of the Department's files concerning the Site is available for review by contacting the Office of Record Access, NJDEP, P.O. Box 420, Mail Code 401-06Q, Trenton, NJ 08625-0420 or via e-mail at records.custodian@dep.state.nj.us.

Interested persons may submit comments on the entry of this Consent Order to:

Kevin Kratina, Assistant Director
New Jersey Department of Environmental Protection
Site Remediation Program/Enforcement & Information Support Element
Mail Code: 401-05G
PO Box 420
Trenton, NJ 08625-0420

All comments must be submitted within 30 calendar days of the date of this public notice. The Department will consider all comments received and may decide to withdraw or withhold consent to the entry of the Consent Order if comments received disclose facts or considerations which show that the Consent Order is inappropriate, improper, or inadequate.

(b)

ENVIRONMENTAL MANAGEMENT
DIVISION OF AIR QUALITY

Notice of Proposed State Implementation Plan (SIP) Revision and Public Hearing for New Jersey's Multi-pollutant Infrastructure SIP, meeting the requirements of Section 110(a)(1) and (2) of the Clean Air Act (42 U.S.C. § 7410(a)(1) and (2))

Take notice that the New Jersey Department of Environmental Protection (Department) is proposing a revision to the "infrastructure" portion of the State Implementation Plan (SIP) to demonstrate New Jersey's ability and authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and visibility requirements.

This proposed SIP revision addresses the infrastructure requirements of the Federal Clean Air Act (42 U.S.C. § 7410(a)(1) and (2) (Section 110(a)(1) and (2))) for the National Ambient Air Quality Standards (NAAQS) for lead, sulfur dioxide, nitrogen dioxide, fine and course particulate, carbon monoxide, and ozone. It also addresses the visibility and interstate transport infrastructure requirements for demonstrating that New Jersey has the authority and infrastructure to implement, maintain, and enforce an air quality management program that provides for attainment and maintenance of the NAAQS and visibility standards.

Copies of the Department's proposed SIP revision are available on the Department's web site at www.nj.gov/dep/baqp/sip/siprevs.html and from the Department's Bureau of Air Quality Planning at 401 E. State Street in Trenton, New Jersey. A copy of this notice is also available on the web site at www.nj.gov/dep/baqp/.

A **public hearing** concerning the proposed SIP revision will be conducted **only if requested in writing** by the public by July 8, 2014. If no request for a public hearing is received, the hearing will be cancelled by a notice posted by July 11, 2014, on the Department's web site at http://www.nj.gov/dep/baqp/. If a public hearing is requested, it will be held on Wednesday, July 16, 2014, at 11:00 A.M. at the NJDEP, 5th Floor Large Conference Room, 401 East State Street, Trenton, New Jersey.

Any written comments must be submitted by close of business, Friday, **July 23, 2014**. Please e-mail comment(s) as an e-mail or document attachment to: NJDEP-BAQP@dep.state.nj.us. Please include the BAQP

Appendix K - Attachment 3

Notice posted on http://www.nj.gov/dep/baqp/sip/siprevs.htm to cancel the Section 110 SIP public hearing.

Cancellation of Public Hearing on Wednesday, July 16, 2014 concerning New Jersey's proposed Infrastructure SIP revisions

The Department of Environmental Protection **will not be holding** the public hearing scheduled on Wednesday, July 16, 2014 for the proposed Infrastructure State Implementation Plan (SIP) revision. This proposed Infrastructure SIP revision demonstrates New Jersey's ability and authority to implement, maintain, and enforce the National Ambient Air Quality Standards and visibility requirements. There will be no public hearing because no request from the public to hold the hearing was received. Written comments may still be submitted until July 23, 2014 by e-mail to NJDEP-BAQP@dep.state.nj.us ,with **BAQP 2014-001** in the subject line, or by letter to NJDEP, Attn: BAQP 2014-001, Air Quality Planning, 401 East State Street - 2nd floor, Mail Code 401-07H, P.O. Box 420, Trenton, NJ, 08625-0420.

Appendix K - Attachment 4

The New Jersey Department of Environmental Protection's Response to Comments on the Proposed Revision to New Jersey's State Implementation Plan Concerning the Clean Air Act's Section 110 (Infrastructure) Requirements for All NAAQS and Visibility

Comments on the proposed Section 110 State Implementation Plan (SIP) revision were submitted by two entities: the State of Connecticut's Department of Energy and Environmental Protection (CT DEEP) and the Sierra Club (SC). The comments and the Department's responses are below.

Comment 1: New Jersey is a national leader in the development and implementation of emissions control strategies and has reduced summertime emissions of nitrogen oxides by 63% and volatile organic compounds by 61% since 1990. Daily limits, rather than seasonal limits, ensure that air pollution control equipment is operated every day during the ozone season. (CT DEEP)

Response 1: We agree. In particular, New Jersey's ozone season daily oxides of nitrogen limits on electric generating units has set the bar for other states to better address high temperature day ozone exceedances of the NAAQS.

Comment 2: New Jersey is one of the largest upwind contributors to Connecticut's ongoing ozone nonattainment problem, and New Jersey should explore all possible source categories for the possibility of additional federal or state controls, including federal controls on marine engines and replacement catalytic converters. (CT DEEP)

Comment 3: Connecticut looks forward to working with New Jersey and all upwind ozone contributors, as well as any downwind state that Connecticut may impact, to solve this shared national problem, and Connecticut is in the process of securing the modeling resources necessary to perform an in-house analysis to supplement those analyses being developed by others like the Ozone Transport Commission. (CT DEEP)

Responses 2 and 3: Emissions from sources in New Jersey are a component of the ozone levels in Connecticut. New Jersey will continue to work with the State of Connecticut, including regional modeling efforts, in identifying the extent of that contribution. New Jersey will also continue to work cooperatively with all States in the eastern United States, through the Ozone Transport Commission, on identifying any new or more stringent state or federal air pollution controls needed. A component of this evaluation must also include local impacts from sources located in Connecticut. In particular, Connecticut should focus on those on-road and non-road mobile sources operating on highways in proximity to ozone monitors, especially where highway construction is causing significant NOx emissions due to traffic congestion and construction equipment. Should additional control strategies be identified, New Jersey will consider these control strategies for implementation in New Jersey and all contributing States.

Comment 4: Commenter presented a discussion of the public health impacts and societal costs of sulfur dioxide and ozone pollution. The health and economic benefits of meeting the National Ambient Air Quality Standards for sulfur dioxide and ozone was also presented. (SC)

Response 4: High levels of sulfur dioxide and ozone are dangerous to human health and the environment. There is no disagreement that meeting the National Ambient Air Quality Standards in New Jersey results in benefits to human health and the environment. With the shutdown of the Portland coal-fired electrical generating unit in Pennsylvania on June 1, 2014, consistent with the court approved consent agreement, New Jersey no longer has any SO_2 exceedances at any monitor in the state. Also, every operating coal-fired electrical generating unit in New Jersey has a scrubber that controls SO_2 emissions. Hence, there are not high levels of SO_2 emitted in New Jersey.

High ozone levels throughout the northeastern United States, and in other parts of the country, are having a deleterious effect upon human health. The USEPA cited these health effects when it set the 75 ppb ozone standard in 2008 as "increases in school absenteeism, respiratory hospital emergency department visits among asthmatics and patients with other respiratory diseases, hospitalizations for respiratory illnesses, symptoms associated with adverse health effects (including chest tightness and medication usage), and premature mortality (nonaccidental, cardiorespiratory deaths)". In the past thirty years, New Jersey has prepared many State Implementation Plan revisions to attain the ozone standard, and will continue to work with other states through the Ozone Transport Commission, to identify additional measures to lower outdoor ozone levels even more. It is, however, beyond the scope of this infrastructure SIP to address specific plans and measures to show attainment of any specific NAAQS as these plans are submitted under Part D of the Clean Air Act and not as a part of the Infrastructure SIP.

Comment 5: The plain language and legislative history of the Clean Air Act and the USEPA's regulations and guidance require that infrastructure SIP's must impose emission limits adequate to prevent exceedances of the National Ambient Air Quality Standards in areas currently designated as attaining these standards. (SC)

Comment 6: The proposed SIP fails to address attainment of the 2010 [75 ppb 1-hour] SO_2 and 2008 [75 ppb 8-hour] Ozone NAAQS. EPA regulations, guidance, and Supreme Court decisions hold that Infrastructure SIP's must impose emission limits adequate to prohibit NAAQS exceedances in areas not designated nonattainment [i.e.; in attainment and unclassifiable areas].

Comment 7: The proposed SIP fails to include enforceable 1-hour SO_2 emission limitations to ensure attainment and maintenance of the primary [75 ppb] SO_2 NAAQS. (SC)

Response Comments 5 through 7: The Clean Air Act's Section 110(a)(2)(A) does not require Section 110 SIP revisions to impose emission limits to prevent violations of the National Ambient Air Quality Standards (NAAQS). Section 110(a)(1) of the Clean Air Act requires "a plan which provides for implementation, maintenance, and enforcement of such primary

standard." Per USEPA's guidance[1], the Section 110 SIP should only "identify existing EPA-approved SIP provisions or new SIP provisions that the air agency has adopted and submitted for EPA approval that limit emissions of pollutants relevant to the subject NAAQS". The USEPA guidance further states that "Emission limitations and other control measures needed to attain the NAAQS in areas designated nonattainment ...will be due on a different schedule from the section 110 infrastructure elements and will be reviewed and acted upon with regard to approvability for the specific purposes of such an attainment plan under CAA title 1 part D through a separate process at a later time." The identification of the existing EPA-approved SIP provisions or new SIP provisions that New Jersey has adopted and submitted for EPA approval that limit emissions of pollutants relevant to the subject NAAQS is shown in Section 4 of New Jersey's proposed Section 110 SIP.

New Jersey's proposed Section 110 SIP revision demonstrates that New Jersey has the ability and authority to implement, maintain, and enforce the primary and secondary NAAQS within the State. The plan also shows New Jersey's ability to impose emission limits adequate to prevent exceedances of the NAAQS in attainment areas (to prevent an exceedance of the standard) and in areas not attaining these standards (to attain the standard). These emission limits have already been established within air pollution control permits, or will be established for new sources of air pollution, pursuant to the regulations shown in Appendix B of this SIP revision. These regulations have been submitted and approved by the USEPA as part of the New Jersey State Implementation Plan as shown in Appendix B of this submittal.

Comment 8: The proposed SIP fails to include enforceable 1-hour SO_2 emission limitations to ensure attainment and maintenance of the primary SO_2 NAAQS, and New Jersey has not even attempted to show how coal-fired power plants in New Jersey will ensure compliance with the 1-hour 75 ppb SO2 standard. (SC)

Response 8: New Jersey's current rules in the SIP include low sulfur fuel requirements for distillate and residual fuels (N.J.A.C. 7:27-9) and SO_2 emission limits which require the use of SO_2 scrubbers on coal burning power plants (N.J.A.C. 7:27-10). All the coal-fired power plants in New Jersey have scrubbers and continuous SO_2 emissions monitors to determine continuous compliance with these emission limits. As of June 1, 2014, when the coal units at the Portland power plant in Pennsylvania shut down, all New Jersey SO_2 monitors indicate compliance with the SO_2 NAAQS by a wide margin.

Comment 9: The proposed Infrastructure SIP must include enforceable SO_2 emission limits with a one-hour averaging period that applies at all times including periods of start-up, shut-down, and malfunction. (SC)

Response 9: New Jersey's rules in the issued under Subchapter 8 of New Jersey's code (N.J.A.C. 7:27-8) and under Title V of the Clean Air Act for major sources (N.J.A.C. 7:27-22). EPA does not require 1-hour emission limits for SO_2. New Jersey emission limits for SO_2

[1] "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)", page 13, Stephen D. Page, Director, USEPA, Office of Air Quality Planning and Standards, September 13, 2013.

emissions on coal-fired power plants are for a 24-hour and 30-day averaging periods. Also the coal burning power plant permits contain limits on the sulfur content of coal. A sufficiently stringent 24 hour emission limit is adequate to comply with the 1 hour NAAQS.[2] All coal burning units have continuous emissions monitors (CEMS) to determine compliance at all times.

Comment 10: Enforceable SO_2 emission limits are necessary to avoid future nonattainment designations in areas where modeling or monitoring shows that SO_2 levels exceed the one-hour [75 ppb] NAAQS. (SC)

Comment 11: The SIP must be based on an analysis of whether New Jersey's emissions significantly contribute to nonattainment and maintenance of the 2010 SO_2 NAAQS in downwind States. (SC)

Response 10 and 11: New Jersey already has effective low sulfur fuel and SO_2 scrubber requirements that minimize SO_2 levels in New Jersey and other states. Additionally, New Jersey has been successful in past legal actions against near-by out-of-state sources, including Martin's Creek and Portland power plants in Pennsylvania, to resolve violations of the SO_2 NAAQS in New Jersey caused by these out of state power plants. Coal units at both of these Pennsylvania power plants have shut down as a result of New Jersey's action. Hence, any nonattainment areas in other states are likely to be relatively far from the New Jersey borders.

Currently, all New Jersey SO_2 monitors throughout the State are measuring attainment of the 1-hour SO_2 NAAQS of 75 ppb by a wide margin[3]. The Columbia monitor in Warren County, New Jersey had measured exceedances of the 1-hour SO_2 NAAQS in the past due to the Portland Power Plant in Pennsylvania. However, per the requirements of the court-approved settlement agreement with the Portland power plant in Pennsylvania, the operation of these coal units shut down on June 1, 2014. Since then, the SO_2 levels measured at the Columbia monitor have been less than 5 percent of the standard (i.e. less than 4 parts per billion (ppb)).

The atmospheric dispersion modeling of SO_2 sources is not included within this Section 110 Infrastructure SIP as the USEPA is proposing regulation to address how states are to perform this analysis. The Department will perform any analysis required by the USEPA's "Data Requirements Rule for the 1-Hour Sulfur Dioxide (SO_2) Primary National Ambient Air Quality Standard (NAAQS)" when the USEPA finalizes this rule. Such analysis may not be required for the coal-fired power plants in New Jersey because all coal burning units have SO_2 scrubbers and continuous emission monitors for SO_2 which demonstrates relatively low emissions of SO_2. SIP and permits do contain enforceable SO_2 emission limits. The proposed Section 110 Infrastructure SIP revision demonstrates that the Department has the authority and regulations to enforce SO_2 permit limits in all air pollution control permits

[2] "Guidance for 1-Hour SO2 Nonattainment Area SIP Submissions", page 24, USEPA, OAQPS, April 23, 2014, Stephen D. Page, Director. (http://www.epa.gov/airquality/sulfurdioxide/pdfs/20140423guidance.pdf)

[3] The 3-year design value (2011 to 2013) for the 1-hour SO_2 NAAQS ranges from 6 to 26 ppb at all New Jersey's monitoring sites with the exception of the Columbia, N.J. monitor that, until June 1, 2014, was influenced by the Portland power plant emissions. This monitor at Columbia, NJ has a 3-year design value of 91 ppb.

Comment 12: Modeling is the appropriate tool for evaluating the adequacy of Infrastructure SIP's and ensuring attainment and maintenance of the SO_2 NAAQS and New Jersey has used modeling to support a Section 126 action against a Pennsylvania power plant. (SC)

Response 12: The Department agrees that modeling is an appropriate tool for ensuring attainment and maintenance of the 1-hour, 75 ppb SO_2 NAAQS. New Jersey used modeling to show exceedance of the SO_2 NAAQS at the Portland power plant in Pennsylvania which had no SO_2 scrubber. The USEPA's proposed "Data Requirements Rule for the 1-Hour Sulfur Dioxide (SO_2) Primary National Ambient Air Quality Standard (NAAQS)" addresses the use of modeling for this similar purpose. The Department will perform modeling, if required by this rule, once it is adopted by the USEPA. New Jersey has shown in Section 5 of the proposed Section 110 Infrastructure SIP revision that it has the ability to perform, and the authority to require, atmospheric modeling pursuant to USEPA requirements.

Comment 13: New Jersey has failed to provide an analysis or demonstration that its emission reduction programs are adequate to prevent significant contributions to downwind states. The final analysis must include modeling that is sufficiently robust to demonstrate with reasonable scientific certainty that emissions from New Jersey do not contribute significantly to nonattainment in Connecticut or that modeled ozone design values in multi-state nonattainment area will achieve and maintain timely compliance with the 2008 8-hour ozone NAAQS. (CT DEEP and SC)

Response 13: Modeling to evaluate the impacts of air emissions from New Jersey on the air quality in a downwind state would only be relevant if New Jersey were asserting that the air quality impacts from New Jersey were insignificant.

Implementation of New Jersey's air regulations are minimizing the impact of stationary source emissions on our neighboring States. New Jersey requires up-to-date reasonable control levels for stationary sources (e.g., RACT control levels for states in the OTC). New Jersey is a proponent of similar reasonable control level requirements in other states. To date, the USEPA has not ensured the same stringent level of RACT controls from upwind States with "significant contribution" on New Jersey. The USEPA needs to ensure that all other States implement RACT air pollution controls and control programs, including limits on daily ozone-causing emissions during the summer.

New Jersey's measures to control emissions from mobile sources also minimize the impacts on the air quality in our neighboring states. New Jersey has a statewide enhanced motor vehicle Inspection and Maintenance program that ensures New Jersey's motor vehicles operate with acceptable levels of emissions. New Jersey has adopted the motor vehicle emission standards for new vehicles established by the State of California (the California car and heavy duty truck standards) to ensure that only the lowest emitting vehicles available in the nation are sold in New Jersey. The USEPA is responsible for addressing the emissions from new mobile sources.

New Jersey is working with other states in the Ozone Transport Region to better model air quality and to develop additional strategies to reduce ozone. The USEPA has not specified what,

if any, modeling analysis is required under the Clean Air Act Section 110(a)(2)(D). New Jersey will evaluate how to comply with any USEPA requirement once it is established.

Attainment of the ozone standard in the NNJ-NY-CT metropolitan area will require meaningful action by the USEPA on ozone transport and reductions in New York. For example, the USEPA has been slow to address transported emissions at the national level. The USEPA's proposal to revive the CSAPR NOx emissions trading rule for the 85 ppb NAAQS will be ineffective at attaining the 75 ppb NAAQS. The NOx caps in CSAPR are too high and are already being met. Also, CSAPR's ozone season caps fail to address the peak ozone levels that occurred in Connecticut on about 10 days in 2014. The USEPA is already aware that maximum daily NOx levels in some upwind states to the west of the Metropolitan Area have increased in the last 5 years. This is due in large part to electrical generating units in those states not running their emissions controls during the ozone season because it is cheaper for them to comply with emission requirements by purchasing NOx allowances than purchasing the chemicals to run their emissions controls.

The 85 ppb NAAQS would not have been exceeded in Connecticut in the past year if the USEPA had adequately addressed regional transport. Both the Clean Air Interstate Rule (CAIR) and the Cross State Air Pollution Rule (CSAPR) only provide NOx caps for the ozone season but fail to address daily NOx emissions. The USEPA's analysis of air quality improvements that would be achieved if the CSAPR NOx reductions were implemented every day, demonstrated that the NNJ-NYC-CT nonattainment area would meet the old 85 ppb ozone standard by 2014. The analysis assumed implementation of state-level CSAPR caps, and compliance by power plants with the CSAPR caps every summer, including operation of installed air pollution controls. However, some states exceed their CSAPR ozone season caps because of the flaws in the current USEPA transport rules. By contrast, emissions from power plants in New Jersey are well below the CSAPR caps, and New Jersey's NOx emission limits are applicable every day of the ozone season. The USEPA should follow New Jersey's example in developing an effective NOx transport rule.

In addition, the USEPA has failed to require reasonably available control technology (RACT) in states which contribute significantly to ozone nonattainment. There is little federal guidance or oversight on RACT, resulting in widely different RACT emission limits in nearby states. An example of this is the lack of up-to-date RACT NOx limits on High Energy Demand Day (HEDD) electric generating units in New York, which adversely impact Connecticut ozone levels. Also, the use of "behind the meter" diesel engines in New York for demand-side management on high ozone level days further exacerbates the ozone levels in Connecticut.

Until these basic flaws with RACT and with the USEPA's transport rules are resolved, efforts to achieve the ozone health standard will not be successful.

Finally, as noted in the response to Comments 2 and 3, the high levels of ozone that have been recorded in the air monitors in southern Connecticut may reflect significant contribution from local sources, namely mobile source emissions from highways in close proximity to the air monitors.

Comment 14: New Jersey's proposed infrastructure SIP fails to incorporate the 2010 SO_2 and 2008 ozone NAAQS, and New Jersey must revise its regulations so that its infrastructure SIP contains accurate, up-to-date ambient air quality standards reflective of the 2010 SO_2 and 2008 ozone NAAQS. (SC)

Response 14: New Jersey's proposed Section 110 infrastructure SIP revision references the current National Ambient Air Quality Standards in Table 1, including the 75 ppb, 1-hour standard for SO_2 and the 8-hour ozone standard of 75ppb. New Jersey's air pollution control regulations also cross-reference the federal NAAQS. For example, New Jersey's Subchapter 8 (N.J.A.C. 7:27-8) uses the following definition: ""National ambient air quality standard" or "NAAQS" means an ambient air quality standard promulgated at 40 CFR 50". A copy of this existing regulation was contained in New Jersey's proposed Section 110 SIP as Appendix J. The requirement in New Jersey's permit rules to comply with all NAAQS satisfies the Section 110 Infrastructure SIP requirements.

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

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July 23, 2014

Mr. William O'Sullivan
Director, Division of Air Quality
Air Quality Planning
401 East State Street, 7th Floor
Mail Code 401-07H
P.O. Box 420
Trenton, New Jersey 08625-0420

Attn: BAQP 2014-001 via electronic mail to NJDEP-BAQP@dep.state.nj.us

Dear Mr. O'Sullivan:

The Connecticut Department of Energy and Environmental Protection (Department) appreciates the opportunity to comment on the New Jersey Department of Environmental Protection (NJDEP) proposed revision to the "infrastructure" portion of your State Implementation Plan (SIP), which among other things, is intended to demonstrate New Jersey's ability and authority to implement, maintain, and enforce the 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS). NJDEP proposed this SIP revision on June 4, 2014.

The Department appreciates that NJDEP is a national leader in the development and implementation of emissions control strategies. According to the proposed SIP revision, New Jersey has reduced summer time emissions of nitrogen oxides by 63% since 1990 while emissions of volatile organic compounds have decreased by almost 61% in the same time frame. Most importantly, New Jersey requires its sources meet daily, rather than seasonal, emission limits during the ozone season. This ensures that installed air pollution control equipment is operated every day during the ozone season rather than allowing sources to turn off their emission controls and use excess emission allowances on high ozone days.

However, due to our close proximity and our shared multi-state ozone nonattainment area, NJ is one of the largest upwind contributors to Connecticut's ongoing ozone nonattainment problem. As such, the Department would appreciate NJDEP exploring all possible source categories to identify sources where additional state or federal controls are feasible. For example, additional federal controls on marine engines or new state rules on replacement catalytic converters could yield significant cost effective emission reductions.

While the Department appreciates NJDEP's attempt to address its "good neighbor" requirement in section 6 of the proposed SIP revision, the Department believes that the final analysis must include modeling that is sufficiently robust to demonstrate with reasonable scientific certainty

that emissions from New Jersey do not contribute significantly to nonattainment in Connecticut or that modeled ozone design values in the multi-state nonattainment area will achieve and maintain timely compliance with the 2008 8-hr ozone NAAQS.

The Department is in the process of securing the modeling resources necessary to perform in-house analyses to supplement those being developed by New Jersey, the Ozone Transport Commission, EPA and others. The Department looks forward to working with New Jersey and all upwind contributors as well as any state downwind of Connecticut which we may impact to solve this shared national problem. If you have any questions, or if the Department can be of any assistance, please contact me at 860-424-3450.

Sincerely yours,

Anne R. Gobin, Chief
Bureau of Air Management

cc: David Shaw (NYDEC)
David Conroy (EPA Region 1)
Richard Ruvo (EPA Region 2)

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July 23, 2014

VIA FIRST CLASS MAIL AND EMAIL (NJDEP-BAQP@dep.state.nj.us)

New Jersey Department of Environmental Protection
Attn: BAQP 2014-001
Air Quality Planning
401 East State Street, 7th Floor
Mail Code 401-07H
P.O. Box 420
Trenton, New Jersey 08625-0420

Re: BAQP 2014-001: Sierra Club Comments Concerning New Jersey's Proposed Infrastructure State Implementation Plan Applicable to the Lead, Sulfur Dioxide, Nitrogen Dioxide, Ozone, PM2.5 and PM10, and Carbon Monoxide National Ambient Air Quality Standards and Regional Haze

Dear Sir or Madam:

On behalf of Sierra Club, its over 17,000 members in New Jersey, and others who are adversely impacted by New Jersey's sources of sulfur dioxide ("SO_2") and ozone pollution, I submit the following comments on New Jersey's Proposed Infrastructure State Implementation Plan ("SIP") Revision under Clean Air Act Sections 110(a)(1) and 110 (a)(2) for the Lead, Sulfur Dioxide, Nitrogen Dioxide, Ozone, PM2.5 and PM10, and Carbon Monoxide National Ambient Air Quality Standards ("NAAQS") and Regional Haze (hereinafter "Proposed I-SIP"). According to the New Jersey Environmental Protection Division of Air Quality's Notice of Proposed I-SIP, any written comments on the Proposed I-SIP must be submitted by close of business, Wednesday, July 23, 2014, making these comments timely.

In order to comply with the law, New Jersey must submit an Infrastructure State Implementation Plan ("Infrastructure SIP" or "I-SIP") that addresses all of the requirements in sections 110(a)(1) and (2) of the Clean Air Act ("CAA" or "Act") for five distinct NAAQS recently promulgated by the U.S. Environmental Protection Agency, including: (1) the June 2, 2010 one-

hour primary SO_2 standard; and (2) the March 27, 2008 eight-hour primary ozone standard. *See* 42 U.S.C. § 7410(a)(1) & (2). However, as drafted, New Jersey's Proposed I-SIP fails to satisfy several essential requirements of CAA Section 110(a)(1) and (2), including requirements to establish enforceable emission limits and to adequately address significant contributions to downwind states. The following comments explain these deficiencies in greater detail.[1]

I. BACKGROUND

A. National Ambient Air Quality Standards

The Clean Air Act ("CAA") is, at its core, a directive to protect the public from harmful air pollution. Indeed, "pollution prevention" is a "primary goal" of the CAA. 42 U.S.C. §7401(c). Pursuant to this mandate, EPA is required to promulgate national primary and secondary ambient air quality standards (NAAQS). Primary standards define the level of air quality which must be attained and maintained to prevent adverse impacts on human health, while secondary standards define the air quality required to protect the public welfare by preventing adverse impacts on other elements of the environment, such as vegetation. *See* 42 U.S.C. § 7409(b). As such, the NAAQS represent a ceiling of air pollution concentrations that apply throughout the country.

So far, EPA has identified six criteria pollutants—sulfur dioxide ("SO_2"), particulate matter ("PM"), carbon monoxide ("CO"), ozone, nitrogen oxide ("NO_2"), and lead—that, at certain levels, have scientifically demonstrated negative effects on human health and the environment. EPA has, accordingly, set NAAQS for each of these pollutants. Whenever a new or revised NAAQS is promulgated, Section 110 of the CAA requires states to submit an I-SIP which provides for the implementation, maintenance, and enforcement of such NAAQS. *See* 42 U.S.C. § 7410. The main objective of the I-SIP process is to ensure that all areas of the country meet the NAAQS—known as being in "attainment" with the standards. Areas with air quality that is worse than a standard should be designated "nonattainment" and dealt with through nonattainment SIPs. Through the I-SIP process, states are required to address elements of its air pollution control programs, including but not limited to regulatory structure, monitoring, modeling, legal authority, and adequate resources necessary to implement, maintain, and enforce the standards. *Id.* These elements are referred to as infrastructure requirements. The NAAQS, therefore, serve as the basis for the development and promulgation of I-SIPs with regard to each criteria pollutant and, as such, are the foundation upon which air emissions standards for the entire country are set, including specific emission limitations for most large stationary sources, such as coal-fired power plants.

i. SULFUR DIOXIDE: PUBLIC HEALTH IMPACTS AND THE CURRENT NAAQS

Exposure to SO_2 in even very short time periods—such as five minutes—has significant health impacts, including decrements in lung function, aggravation of asthma, and respiratory and cardiovascular morbidity. *See* Primary National Ambient Air Quality Standard for Sulfur

[1] A copy of these comments and all exhibits can be found at https://app.box.com/s/ro6qz9q0sl6od6p35y3b.

Dioxide Final Rule, 75 Fed. Reg. 35,520, 35,525 (June 22, 2010) (hereinafter "Final SO_2 NAAQS Rule"). EPA has also determined that exposure to SO_2 pollution can also aggravate existing heart disease, leading to increased hospitalizations and premature deaths. *Id.*

On June 2, 2010, EPA revised the primary SO_2 NAAQS by establishing a new one-hour standard at a level of 75 parts per billion ("ppb") which is met when the 3-year average of the annual 99th percentile of the daily maximum one-hour average concentrations is less than or equal to 75 ppb. *See id* at 35,520. The primary SO_2 NAAQS was set at such a level in order to protect public health from the serious threats posed by short-term exposure to SO_2.

Due to both the more stringent numerical limit and shorter averaging time as compared to the previous SO_2 NAAQS, the new 1-hour SO_2 NAAQS is far more protective of human health than the prior SO_2 NAAQS and promises huge health benefits. EPA has estimated that 2,300 to 5,900 premature deaths and 54,000 asthma attacks a year will be prevented by the new standard. *See* Envtl. Prot. Agency, Final Regulatory Impact Analysis (RIA) for the SO_2 National Ambient Air Quality Standards (NAAQS) tbl. 5.14 (2010). Timely implementation of the new NAAQS is, thus, critical. Considering the scientific evidence, each year implementation of the one-hour SO_2 NAAQS is delayed, 5,900 more people will die prematurely and 54,000 asthma attacks will occur unnecessarily. Further, EPA estimates that the net benefit of implementing the 75 ppb SO_2 NAAQS is up to $36 billion dollars. Final SO2 NAAQS Rule, 75 Fed. Reg. at 35,588, tbl. 2. Those individuals who suffer from health impacts caused by exposure to SO_2 levels above the NAAQS will have greater medical costs with each year implementation is delayed and, as a result, the monetized benefits of implementing the one-hour SO_2 NAAQS will go unrealized. Further, the ability of those individuals to enjoy everyday activities such as exercise, school, and work will continue to be negatively impacted.

ii. OZONE: PUBLIC HEALTH IMPACTS AND THE CURRENT NAAQS

Exposure to ozone in the air we breathe can cause serious health problems, including chest pain, coughing, throat irritation, and congestion. Exposure to unsafe levels of ozone can also worsen bronchitis, emphysema, and asthma. *See* 73 Fed. Reg. 16,436 (Mar. 27, 2008). Ground level ozone also reduces lung function and inflames the linings of the lungs, and repeated exposure may permanently scar lung tissue. *Id.* These effects can be expected to lead to increased school absences in children, absences from work by adults, increased reliance on medication, visits to doctors and emergency rooms, and hospital admissions. Research also indicates that ozone exposure may increase the risk of premature death from heart or lung disease. *Id.* What is more, ozone also damages our environment, vegetation, and trees, and impacts forests, parks, and crops.

In 2008, EPA revised the primary ozone standard to 75 ppb, determined by the annual fourth-highest daily maximum eight-hour concentration averaged over 3 years. *See* National Ambient Air Quality Standard for Ozone, 73 Fed. Reg. 16,436 (Mar. 27, 2008). In revising the ozone standard, EPA recognized it was providing increased protection for public health, especially for children, the elderly, and asthmatics. This revised standard, if properly implemented, will result in improvements in public health and the environment.

EPA estimates that by 2020, proper implementation of the 2008 eight-hour ozone NAAQS has the potential to prevent as many as 2,000 premature deaths annually.[2] *See* EPA, Fact Sheet: Final Revisions to the National Ambient Air Quality Standards for Ozone, at 1-3 (2008), available at http://www.epa.gov/glo/pdfs/2008_03_factsheet.pdf. In addition, monetized benefits from the resulting reduction in ozone pollution of up to $17 billion per year are expected due to implementation of the 2008 ozone NAAQS. *Id.*

B. Implementation of the NAAQS

The Clean Air Act creates a framework for the "development of cooperative Federal, State, regional, and local programs to prevent and control air pollution." 42 U.S.C. § 7401(a)(4). Pursuant to section 109(b)(1) of the Act, EPA has established primary NAAQS for six criteria air pollutants, "the attainment and maintenance of which . . . are requisite to protect the public health." *Id.* § 7409(b)(1). States have primary responsibility for assuring air quality within the state. *Id.* § 7407(a). Following promulgation of a NAAQS, the Act requires states to "adopt and submit to the Administrator . . . a plan which provides for implementation, maintenance, and enforcement of such primary [NAAQS]." *Id.* § 7410(a)(1). These plans are called Infrastructure SIPs. For attainment and unclassifiable areas, section 110(a)(2)(A) requires that Infrastructure SIPs "include enforceable emission limitations . . . as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements" of the Clean Air Act, including the requirement to attain and maintain the NAAQS. 42 U.S.C. §§ 7410(a)(2)(A), 7410(a)(1); *Conn. Fund for Env't, Inc. v. EPA*, 696 F.2d 169, 172 (2d Cir. 1982) (CAA requires that SIPs contain "measures necessary to ensure the attainment and maintenance of NAAQS"); *Mont. Sulphur & Chem. Co. v. EPA*, 666 F.3d 1174, 1180 (9th Cir. 2012) ("The Clean Air Act directs states to develop implementation plans—SIPs—that 'assure' attainment and maintenance of national ambient air quality standards ("NAAQS") through enforceable emission limitations.") (citing 42 U.S.C. §§ 7407(a), 7410(a)(2)(A)); *Hall v. EPA*, 273 F.3d 1146, 1153 (9th Cir. 2001) ("Each State must submit a [SIP] that specif[ies] the manner in which [NAAQS] will be achieved and maintained within each air quality control region in the State") (internal citations omitted); *see also* EPA, "Sulfur Dioxide Implementation—Programs and Requirements for Reducing Sulfur Dioxide," *available at* http://www.epa.gov/airquality/sulfurdioxide/implement.html.

EPA may approve an I-SIP only if it meets the requirements of section 110(a)(2) of the Act, with the state bearing the burden of demonstrating that it's SIP submission satisfies the

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[2] In fact, the health benefits that will be incurred under the 2008 ozone NAAQS will likely be even greater than expected. This is due to the fact that the 2008 ozone NAAQS benefits analysis was based on 2008 ozone levels and current science indicates that higher temperatures experienced since then, for instance during 2012, will soon become typical. Indeed, scientific data of climate change has projected that if greenhouse emissions are not rapidly and substantially reduced, the hottest summer of the last 20 years is expected to occur every other year, or even more frequently than that. *See, e.g.,* "Changes in Ecologically Critical Terrestrial Climate Conditions," *Science*, 2 Aug. 2013, Vol. 341, no. 6145, 486-492. Therefore, the benefits analysis of the 2008 ozone NAAQS likely underestimates the level of ozone reductions that are required under the standard and, consequently, the public health benefits which will be experienced if the NAAQS is properly implemented.

standards set forth in the CAA. *See* 42 U.S.C. § 7410(a)(2)(A)-(M). For a plan to be adequate, it "must demonstrate that the measures, rules, and regulations contained in it are adequate to provide for the timely attainment and maintenance of the national standard that it implements." 40 C.F.R. § 51.112(a) (noting also the adequacy of a plan's control measures "shall be demonstrated by means of applicable air quality models . . .").

i. THE PLAIN LANGUAGE AND LEGISLATIVE HISTORY OF THE CLEAN AIR ACT REQUIRE THAT INFRASTRUCTURE SIPS MUST IMPOSE EMISSION LIMITS ADEQUATE TO PREVENT NAAQS EXCEEDANCES IN AREAS NOT DESIGNATED NONATTAINMENT.

The Clean Air Act, on its face, requires I-SIPs to prevent exceedances of the NAAQS. Following promulgation of a NAAQS, a state must "adopt and submit to the Administrator . . . a plan which provides for implementation, maintenance, and enforcement of such [NAAQS]." 42 U.S.C. § 7410(a)(1). Pursuant to section 110(a)(2)(A), this I-SIP must "include enforceable emission limitations . . . as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements" of the Clean Air Act (which include the requirement to maintain compliance with the NAAQS). 42 U.S.C. § 7410(a)(2)(A) (emphasis added). As defined by the Act, the term "emission limitation" means "a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under this chapter." 42 U.S.C. § 7602(k). Thus, the plain language of Clean Air Act Section 110(a)(2)(A) requires that I-SIPs include enforceable emission limits on sources that are sufficient to ensure attainment and maintenance of the NAAQS.

The legislative history of the Clean Air Act also supports this interpretation. As the Senate Committee Report accompanying the 1970 Clean Air Act explained, the Act "would establish certain tools as potential parts of an implementation plan and would require that emission requirements be established by each State for sources of air pollution agents or combinations of such agents in such region and that these emission requirements be monitored and enforceable." Sen. Cmte. on Pub. Works Rpt. at 12 (Sept. 17, 1970) (emphasis added), attached hereto as Ex. 1. This mandate was reaffirmed in the subsequent Senate Conference Report, which stated that: "In order to implement the national ambient air quality standards, these [state implementation] plans must provide for emission limitations on all services in the region covered by the plan, together with schedules and timetables of compliance, systems for monitoring both ambient air and emissions from individual sources, and adequate enforcement authority." Sen. Conf. Rpt., 116 Cong. Rec. 42,381, 42,384 (Dec. 18, 1970) (emphasis added), attached hereto as Ex. 2.[3]

[3] Although the language of current section 110(a)(2)(A) was originally found in section 110(a)(2)(B), the substance has remained true to the statements found in the Senate Committee Reports. There were only two substantive changes between 1970 and the present. First, the addition of former section 172(c)'s requirement that SIPs' emission limitations, schedules, and timetables be "enforceable." *See* Rpt. of the Senate Cmte. on Envt. and Pub. Works accompanying the Clean Air Act Amendments of 1989 at 20 (Dec. 20, 1989) (explaining that

ii. EPA Regulations Implementing the Clean Air Act Require That Infrastructure SIPs Impose Emission Limits Adequate to Prohibit NAAQS Exceedances in Areas Not Designated Nonattainment.

EPA regulations implementing Clean Air Act Section 110(a)(2) also require that infrastructure SIPs contain emission limits that ensure attainment and maintenance of the NAAQS. Pursuant to these regulations, in order for EPA to approve a SIP, it "must demonstrate that the measures, rules, and regulations contained in it are adequate to provide for the timely attainment and maintenance of the national standard that it implements." 40 C.F.R. § 51.112(a). As the regulation clearly states, all SIPs must contain emission limits that adequately ensure the NAAQS is achieved. *Id.* Although EPA's implementing regulations were developed before the Clean Air Act was amended to separate Infrastructure SIPs from nonattainment SIPs—a process that began with the 1977 amendments and was completed by the 1990 amendments—the regulations nonetheless apply to I-SIPs. EPA has not changed the regulation since 1990, and in the preamble to the final rule promulgating 40 C.F.R. § 51.112, EPA expressly identifies that its new regulations were *not* implementing Subpart D, the new nonattainment provisions of the Act. *See* Air Quality Implementation Plans; Restructuring SIP Preparation Regulations, 51 Fed. Reg. 40,656, 40,656 (Nov. 7, 1986) ("It is beyond the scope of th[is] rulemaking to address the provisions of Part D of the Act . . . ."). Consequently, EPA intended 40 C.F.R. § 51.112 to apply to I-SIPs. Thus, it is clear that I-SIPs must contain "measures, rules, and regulations" sufficient to ensure maintenance of the NAAQS.

iii. Prior Interpretations of the Act by EPA Require that Infrastructure SIPs Impose Emission Limits Adequate to Prohibit NAAQS Exceedances in Areas Not Designated Nonattainment.

EPA has relied on section 110(a)(2)(A) and 40 C.F.R. § 51.112 on multiple occasions to reject Infrastructure SIPs that did not contain specific emissions limits sufficient to demonstrate attainment and maintenance of the NAAQS. For example, in March 2006, EPA disapproved Missouri's attempt to revise the SO_2 emission limits in its I-SIP for two power plants because the new emission limits would not ensure maintenance of the three-hour sulfur dioxide NAAQS then in effect. *See* Approval and Promulgation of Implementation Plans; State of Missouri, 71 Fed. Reg. 12,623, 12,624 (Mar. 13, 2006). In so doing, EPA explained that "Section 110(a)(2)(A) of the [Act] requires, in part, that the [state implementation] plan include emission limitations to meet the requirements of the Act, including the requirement in section 110(a)(1) that the plan must be adequate to attain and maintain ambient air quality standards." *Id.* EPA further explained that "40 C.F.R. 51.112 requires that the plan demonstrate that rules contained in the SIP are adequate to attain the ambient air quality standards." *Id.* In the case of Missouri's

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"Paragraph (1) of rewritten section 110(c) combines and streamlines existing section 110(a)(2)(b) and the enforceability requirements of section 172(c) of current law"), attached as Ex. 3; *see also* 42 U.S.C. § 7502(c) (section 172(c)) (requiring that a SIP revision submitted before July 1, 1982 pursuant to a demonstration under subsection (a)(2) "shall contain enforceable measures to assure attainment of the applicable standard not later than December 1, 1987"). Second, the clarification in the 1990 Clean Air Act Amendments that the "means[] or techniques" for meeting the requirements of the Act included "economic incentives such as fees, marketable permits, and auctions of emissions rights." 42 U.S.C § 7410(a)(2)(A).

proposed I-SIP, EPA expressed concern that the SO_2 emission rates for the two power plants in question were "not protective of the short-term sulfur dioxide NAAQS" because, while Missouri had lowered the emission rates for the facilities, it had dramatically increased the averaging times (from a 3-hour average to an annual average) without providing "a demonstration, as required by the [Clean Air Act] and EPA regulations, that the [sulfur dioxide national ambient air quality] standards, and particularly the three-hour and the twenty-four hour standards, can be protected by an annual emission limit." *Id.*

More recently, in December 2013, EPA rejected a revision to Indiana's sulfur dioxide I-SIP pursuant to 40 C.F.R. § 51.112, because Indiana failed to demonstrate that the I-SIP, as revised, was sufficient to ensure maintenance of the sulfur dioxide NAAQS. *See* Approval of Air Quality Implementation Plans; Indiana; Disapproval of State Implementation Plan Revision for ArcelorMittal Burns Harbor; Final Rule, 78 Fed. Reg. 78,720, 78,721 (Dec. 27, 2013). In that instance, Indiana had submitted a request to EPA to revise its sulfur dioxide I-SIP for the ArcelorMittal Burns Harbor facility in order to remove the SO_2 emission limit for the blast furnace flare at the facility. *Id.* In the proposed disapproval, EPA explained that "[u]nder 40 C.F.R. 51.112(a), each SIP must demonstrate that the measures, rules, and regulations it contains are adequate to provide for the timely attainment and maintenance of the NAAQS." *See* Approval of Air Quality Implementation Plans; Indiana; Disapproval of State Implementation Plan Revision for ArcelorMittal Burns Harbor; Proposed Rule, 78 Fed. Reg. 17,157, 17,158 (Mar. 20, 2013). EPA rejected the proposed amendment because Indiana did not demonstrate that the existing emission limit for the ArcelorMittal blast furnace gas flare was "redundant, unnecessary, or that its removal would not result in or allow an increase in actual SO_2 emissions," and, consequently, that removal of the limit would not "affect the validity of the emission rates used in the existing attainment demonstration, thus undermining the SIP's ability to ensure protection of the SO_2 NAAQS." *Id.* at 17,159; *see also* 78 Fed. Reg. at 78,721.

iv. SUPREME AND APPELLATE COURT OPINIONS HOLD THAT INFRASTRUCTURE SIPS MUST IMPOSE EMISSION LIMITS ADEQUATE TO PROHIBIT NAAQS EXCEEDANCES IN AREAS NOT DESIGNATED NONATTAINMENT.

Since the inception of the modern Clean Air Act in 1970, courts have interpreted the language presently found in Section 110(a)(2)(A) to require that SIPs contain enforceable emission limits sufficient to prevent exceedances of the NAAQS. In *Train v. NRDC*, a seminal case on SIP approval requirements, the Supreme Court explained that:

> In complying with this requirement [that an I-SIP provide for attainment and maintenance of the NAAQS] a State's plan must include 'emission limitations,' which are regulations of the composition of substances emitted into the ambient air from such sources as power plants, service stations, and the like. They are the specific rules to which operators of pollution sources are subject, and which if enforced should result in ambient air which meets the national standards.

421 U.S. 60, 78 (1975); *see also id.* at 67 (citing language from then-current section 110(a)(2)(B) now found in section 110(a)(2)(A)).

Courts of Appeals have followed this holding without exception. For example, in *Pennsylvania Department of Environmental Resources v. EPA*, the Third Circuit stated that the Clean Air Act "directs the EPA to withhold approval from a state implementation plan if the 'maintenance of [the] standard' cannot be assured." 932 F.2d 269, 272 (3rd Cir. 1991).[4] The court observed that the "need to maintain the Clean Air Act standards once they are reached is well-recognized by the Courts." *Id.* Other courts have provided similar analyses. In *Mision Industrial, Inc. v. EPA*, for example, the First Circuit explained that, "[b]efore approving an air quality implementation plan or revision, the Administrator must determine that it 'includes emission limitations . . . and such other measures as may be necessary to insure attainment and maintenance of (the) primary or secondary standard . . . .'" 547 F.2d 123, 129 (1st Cir. 1976) (quoting former section 110(a)(2)(B)).

The 1990 Clean Air Act amendments do not alter this picture. Court decisions since the 1990 amendments have continued to hold that I-SIPs must have emission limits that maintain the NAAQS. In *Alaska Department of Environmental Conservation v. EPA*, the Supreme Court explained that an Infrastructure SIP under CAA section 110(a)(1) must be a "plan which provides for implementation, maintenance, and enforcement of [NAAQS]." 540 U.S. 461, 470 (2004) (quoting section 110(a)(1)). "While States have wide discretion in formulating their plans . . . SIPs must include certain measures Congress specified to assure that national ambient air quality standards are achieved." *Id.* (internal citations and quotations omitted). Thus, in order for EPA to approve an I-SIP, it "must 'include enforceable emission limitations and other control measures, means, or techniques . . . as may be necessary or appropriate to meet the applicable [CAA] requirements.'" *Id.* (quoting 42 U.S.C. § 7410(a)(2)(A)).

The circuit courts have also been clear that section 110(a)(2)(A) from the post-1990 Clean Air Act requires enforceable emission limits in I-SIPs. For example, the Ninth Circuit affirmed that "[t]he Clean Air Act directs states to develop implementation plans—SIPs—that 'assure' attainment and maintenance of national ambient air quality standards ('NAAQS') *through enforceable emission limitations.*" *Mont. Sulphur & Chem. Co.*, 666 F.3d at 1180 (citing 42 U.S.C. §§ 7407(a), 7410(a)(2)(A)) (emphasis added). Likewise, the Sixth Circuit has explained that "EPA's deference to a state is conditioned on the state's submission of a plan 'which satisfies the standards of § 110(a)(2)' and which includes emission limitations that result in compliance with the NAAQS." *Mich. Dep't of Envtl. Quality*, 230 F.3d at 185 (quoting *Train*, 421 U.S. at 79).

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[4] The court was interpreting the 1977 version of the statute to which Subpart 1 of Part D had been added, *id.* at 271 n.1, but relied on the language of then-current section 110(a)(2)(B) (now found in section 110(a)(2)(A)). *Pennsylvania Dep't of Envtl. Res.*, 32 F.2d at 272.

Additionally, in *Hall v. EPA*, the Ninth Circuit held that EPA had not fulfilled its responsibility under another provision—section 110(l)[5]—to evaluate whether a revised air quality plan will achieve the pollution reductions required under the Act. 273 F.3d at 1152. In *Hall*, the court held that EPA had incorrectly approved a revision to an air quality plan solely on the basis that the revisions did not relax the existing SIP, rather than "measur[ing] the existing level of pollution, compar[ing] it with the national standards, and determin[ing] the effect on this comparison of specified emission modifications." *Id.* at 1157-58 (*quoting Train*, 421 U.S. at 93). EPA claimed a statutory equivalence between non-relaxation of rules approved in 1981 and non-interference with current attainment requirements. *Id.* at 1155. The court rejected EPA's application of the "no relaxation" rule, finding it inconsistent with the Act because it set an improper baseline that failed to take into consideration the 1990 amendments, which set new deadlines for attainment and established other new requirements for incremental progress towards attainment. *Id.* at 1160-61. Those current attainment requirements were the baseline from which EPA should have measured "non-interference." *Id.* EPA's analysis was required to reflect consideration of the prospects of meeting current attainment requirements under a revised air quality plan. *Id.* Just as a plan revision must not interfere with attainment of the NAAQS under section 110(l), an I-SIP must likewise include enforceable limits sufficient to ensure the initial plan provides for maintenance of the NAAQS under 110(a)(2)(A).

II. SUBSTANTIVE COMMENTS

For the reasons set forth below, New Jersey's Proposed I-SIP fails to meet the requirements of Section 110(a)(2) of the Clean Air Act.[6]

A. New Jersey's Proposed Infrastructure SIP Fails to Incorporate the 2010 SO_2 and 2008 Ozone NAAQS.

As discussed in detail above, an Infrastructure SIP must provide for the implementation maintenance, and enforcement of the primary NAAQS—the levels of air quality necessary to protect public health. 42 U.S.C. § 7410(a)(1) & § 7409(b)(1). New Jersey's proposed I-SIP must address the following NAAQS:

- The 2010 SO_2 NAAQS, which imposes a new one-hour standard at a level of 196 micrograms per cubic meter ("µg/m3") or 75 ppb, which is met when the 3-year

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[5] Section 110(l) provides, in relevant part, that "[t]he Administrator shall not approve a revision of a [state implementation] plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress . . . or any other applicable requirement of this chapter." 42 U.S.C. § 7410(l).

[6] In addition to issues discussed in the sections below, the I-SIP must not allow for such things as ambient air incremental increases, variances, exceptions, or exclusions with regard to limits placed on sources of pollutants. Otherwise, New Jersey cannot assure compliance with the Act's I-SIP requirements for the 2010 SO2 and 2008 ozone NAAQS. New Jersey's proposed I-SIP must not allow for exemptions from enforcement that undermine the programs meant to ensure attainment and maintenance with the NAAQS. For example, NJDEP's I-SIP must not allow the State to exempt certain sources from obtaining permits. Nor may it undercut the State's air enforcement program by allowing various excuses as affirmative defenses or allowing NJDEP to suspend enforcement or grant variances from requirements for undue hardship or in instances of malfunction, start-up, or shutdown.

average of the 99th percentile of the annual distribution of daily maximum one-hour average concentrations is less than or equal to 75 ppb. 40 C.F.R. § 50.17(a)-(b).

- The 2008 primary ozone standard, which imposes the standard of 75 ppb of the annual fourth-highest daily maximum eight-hour concentration averaged over 3 year. 40 C.F.R. § 50.15(a)-(b).

A preliminary requirement to implementing these primary NAAQS is to incorporate the standards directly into the I-SIP meant to attain and maintain them. *See* 42 U.S.C. § 7410(a)(2)(A). Despite this essential requirement, New Jersey has failed to include the revised NAAQS in the Proposed I-SIP. This is inadequate. In order to comply with the Clean Air Act, New Jersey must revise its regulations so that its I-SIP contains accurate, up-to-date ambient air quality standards reflective of the 2010 one-hour SO_2 and 2008 eight-hour ozone NAAQS.

B. The Proposed Infrastructure SIP Fails to Include Enforceable One-hour SO_2 Emission Limitations to Ensure Attainment and Maintenance of the Primary SO_2 NAAQS.

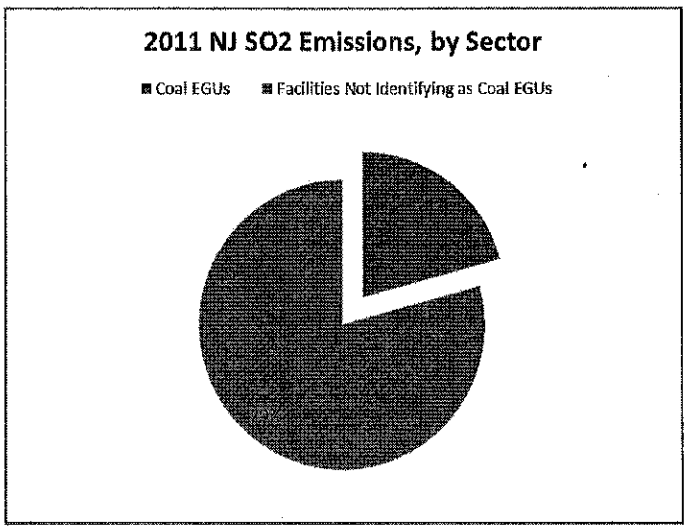
The contents of an I-SIP can be considered in two broad categories: (1) state rules, statutes, and programs; and (2) source-specific requirements. New Jersey's I-SIP must, accordingly, include regulations which set forth suitably stringent emission limits with appropriate short-term averaging periods in light of the 2010 SO_2 NAAQS. In addition, the state must also update its emission regulations to ensure that proper mass limitations and short term averaging periods are imposed on certain large sources of pollutants, including power plants. As currently drafted, New Jersey's Proposed I-SIP fails to satisfy these requirements.

i. NEW JERSEY MUST REVISE ITS PROPOSED INFRASTRUCTURE SIP TO INCLUDE ENFORCEABLE ONE-HOUR SO_2 EMISSION LIMITS FOR SOURCES THAT HAVE EMISSIONS OR EMISSION LIMITS THAT CAUSE OR CONTRIBUTE TO EXCEEDANCES OF THE NAAQS.

The Proposed I-SIP fails to include adequate enforceable emission limitations or other required measures for sources of SO_2 sufficient to ensure attainment and maintenance of the 2010 SO_2 NAAQS. As discussed above, under section 110(a)(2)(A), the I-SIP must "include enforceable emission limitations . . . as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements" of the Clean Air Act (which include the requirement to maintain compliance with the NAAQS).

Emission limits are especially important for meeting the one-hour SO_2 NAAQS given the "strong source-oriented nature of SO_2 ambient impacts." Final SO_2 NAAQS Rule, 75 Fed. Reg. at 35,570. Nationally, large point sources account for 95 percent of SO_2 emissions, 66 percent of which come from fossil fuel combustion at electric facilities. *Id.* at 35,524. As illustrated in the chart below, 21 percent (or 3,470 of 16,724 tons) of SO_2 emissions in New Jersey are from coal electric generating units ("EGUs"). *See* SO_2 NEI All Sectors (2011)_28 Apr 2014.xlsx, Excel Worksheet "Percentage Summary (All States)", attached hereto as Ex. 4; *see also* EPA, The

National Emissions Inventory, Sector Summaries, http://www.epa.gov/ttn/chief/net/2011inventory.html. 2011inventory.html.



Despite the large contribution from coal-fired EGUs to SO_2 pollution in the state, NJDEP has not even attempted to demonstrate that SO_2 emissions from coal-fired power plants and other large stationary sources allowed under the Proposed I-SIP will ensure compliance with the one-hour SO_2 NAAQS. As currently drafted, the Proposed I-SIP simply allows major SO_2 air pollution sources in the state to continue operating under their present emission limits—limits which were not set in light of the new one-hour standard. New Jersey must remedy this deficiency before it finalizes the Proposed I-SIP. Specifically, NJDEP must promulgate enforceable emission limits with one-hour averaging times for large stationary sources of SO_2 pollution into its Proposed I-SIP. These emission limits must apply at all times, including during periods of start-up, shutdown, and malfunction, to ensure that all areas of New Jersey attain and maintain the 2010 one-hour SO_2 NAAQS.[7] As a starting point, NJDEP must establish emission limits on coal-fired power plants located in the state, as these facilities are large sources of SO_2 pollution.

As the I-SIP submission does not incorporate emission limitations for large sources of SO_2 pollution, such as coal-fired power plants, the Proposed I-SIP must be revised.

[7] Modeling-based emissions limits are well-documented. For example, Minnesota has used SO_2 modeling to establish emission limits on several plants in order to avoid nonattainment designations. *See* Black Dog Plant Permit No. 03700003-11, Technical Support Document, at 5 & 10 (permit emission limits based on modeling analyses), attached hereto as Ex. 5; *see also* Allen S. King Title V Technical Support Document, at 6, 14, 16 & 39 (permit emission limits based on modeling analyses), attached hereto as Ex. 6.

ii. MODELING IS THE APPROPRIATE TOOL FOR EVALUATING THE ADEQUACY OF INFRASTRUCTURE SIPS AND ENSURING ATTAINMENT AND MAINTENANCE OF THE SO_2 NAAQS.

As outlined by EPA in the Final SO_2 NAAQS Rule, 75 Fed. Reg. at 35,551, air dispersion modeling is the best method for evaluating the short-term impacts of large SO_2 sources. This is consistent with EPA's historic use of air dispersion modeling for attainment designations and SIP revisions. Yet, New Jersey's Proposed I-SIP fails to include any air dispersion modeling-based emissions limits for large sources in the state. In fact, the Proposed I-SIP states that "[w]hen USEPA issues guidance or rules for modeling SO_2 sources, the Department will conduct any modeling or take any necessary steps that are required." Proposed I-SIP at 31. This is entirely improper and somewhat ironic since NJDEP has already successfully relied on this sort of modeling to support a claim that trans-boundary SO_2 pollution from a Pennsylvania source was contributing to nonattainment and interference with the maintenance of the one-hour SO2 NAAQS in New Jersey. *See Genon Rema, LLC v. U.S. EPA*, 722 F.3d 513, 526 (3rd Cir. 2013).

NJDEP has long been on notice that modeling data is an important resource in the SO_2 NAAQS attainment and maintenance process. In fact, in EPA's 1994 SO_2 Guideline Document, EPA noted that "for SO_2 attainment demonstrations, monitoring data alone will generally not be adequate," U.S. EPA, 1994 SO_2 Guideline Document, [hereinafter "1994 SO_2 Guideline Document"], *available at* http://www.epa.gov/ttn/oarpg/t1/memoranda/so2_guide_092109.pdf, at 2-5, and that "[a]ttainment determinations for SO_2 will generally not rely on ambient monitoring data alone, but instead will be supported by an acceptable modeling analysis which quantifies that the SIP strategy is sound and that enforceable emission limits are responsible for attainment." *Id.* at 2-1. The 1994 SO_2 Guideline Document goes on to note that monitoring alone is likely to be inadequate: "[f]or SO_2, dispersion modeling will generally be necessary to evaluate comprehensively a source's impacts and to determine the areas of expected high concentrations based upon current conditions." *Id.* at 2-3.

Indeed, EPA's approval and acceptance of modeling for making attainment designations stretches back decades and demonstrates that modeling is equally applicable to determining the adequacy of an Infrastructure SIP. In 1983, the Office of Air Quality Planning and Standards ("OAQPS") issued a Section 107 Designation Policy Summary explaining that "air quality modeling emissions data, etc., should be used to determine if the monitoring data accurately characterize the worst case air quality in the area." Sheldon Meyers Memorandum re Section 107 Designation Policy Summary (April 21, 1983) at 1, attached hereto as Ex. 7. Without modeling data, the worst-case air quality may not be accurately characterized. In certain instances, EPA has relied solely on modeling data to determine nonattainment designations; demonstrating modeling is accepted and trustworthy. *See id.* at 2. In fact, reliance on modeling for nonattainment designations occurred as far back as the Carter Administration when, in 1978, EPA designated Laurel, Montana as nonattainment "due to measured and modeled violations of the primary SO_2 standard." *Mont. Sulphur & Chem. Co.*, 666 F.3d at 1181 (citing 43 Fed. Reg. 8,962 (Mar. 3, 1978)).

EPA's final 2010 SO_2 NAAQS rule simply built upon EPA's historical practice of using modeling to determine attainment and nonattainment status for SO_2 NAAQS. In doing so, EPA properly recognized the "strong source-oriented nature of SO_2 ambient impacts," Final SO_2 NAAQS Rule at 35,370, and concluded that the appropriate methodology for purposes of determining compliance, attainment, and nonattainment with the new NAAQS is modeling. *See id.* at 35,551 (describing dispersion modeling as "the most technically appropriate, efficient and readily available method for assessing short-term ambient SO_2 concentrations in areas with large point sources."). Accordingly, in promulgating the 2010 SO_2 NAAQS, EPA explained that, for the one-hour standard, "it is more appropriate and efficient to principally use modeling to assess compliance for medium to larger sources . . . ." *Id* at 35,570. EPA subsequently explained in a White Paper on the Implementation of the 2010 Primary 1-Hour SO_2 NAAQS that using modeling to determine attainment for the SO_2 standard "could better address several potentially problematic issues than would the narrower monitoring-focused approach discussed in the proposal for the SO_2 NAAQS, including the unique source-specific impacts of SO_2 emissions and the special challenges SO_2 emissions have historically presented in terms of monitoring short-term SO_2 levels for comparison with the NAAQS in many situations (75 FR 35550)." EPA White Paper at 3-4, available at http://www.epa.gov/airquality/sulfurdioxide/pdfs/20120522whitepaper.pdf.

In addition, the use of modeling in the context of the SO_2 NAAQS has been upheld by the courts. For example, in *Montana Sulphur*, the company challenged a SIP call, a SIP disapproval, and a Federal Implementation Plan ("FIP") promulgation, because they were premised on a modeling analysis that showed the Billings/Laurel, Montana area was in nonattainment for SO_2. 666 F.3d at 1184. The court rejected Montana Sulphur's argument that EPA's reliance on modeling was arbitrary and capricious or otherwise unlawful. *Id.* at 1185; *see also Sierra Club v. Costle*, 657 F.2d 298, 332 (D.C. Cir. 1981) ("Realistically, computer modeling is a useful and often essential tool for performing the Herculean labors Congress imposed on EPA in the Clean Air Act"); *Republic Steel Corp. v. Costle*, 621 F.2d 797, 805 (6th Cir. 1980) (approving use of modeling to predict future violations and incorporating "worst-case" assumptions regarding weather and full-capacity operations of pollutant sources). Further demonstrating the superiority of modeling, the D.C. Circuit has acknowledged the inherent problem of using monitored data for criteria pollutants, namely that "a monitor only measures air quality in its immediate vicinity." *Catawba County v. EPA*, 571 F.3d 20, 30 (D.C. Cir. 2009).

Indeed, EPA employs and relies on modeling to inform its designations because the agency is well aware that modeling produces reliable results. For example, as John C. Vimont, EPA Region 9's Regional Meteorologist, has stated under oath:

> EPA does recognize the usefulness of ambient measurements for information on background concentrations, provided reliable monitoring techniques are available. EPA does not recommend, however, that ambient measurements be used as the sole basis of setting emission limitations or determining the ambient concentrations resulting from emissions from an industrial source. These should be based on an appropriate modeling analysis.

Declaration of John C. Vimont at 1, 11 (emphasis added), attached hereto as Ex. 8. Testimony as to the accuracy and appropriateness of modeling has also been presented by Roger Brode, a physical scientist in EPA's Air Quality Modeling Group who co-chairs the AMS/EPA Regulatory Model Improvement Committee (AERMIC) and the AERMOD Implementation Workgroup. *See* Declaration of Roger W. Brode at 1, 2, attached hereto as Ex. 9. Mr. Brode has stated under oath that AERMOD is "readily capable of accurately predicting whether the revised primary SO_2 NAAQS is attained and whether individual sources cause or contribute to a violation of the SO_2 NAAQS." *Id.* at 2. Mr. Brode has explained:

> As part of the basis for EPA adopting the AERMOD model as the preferred model for nearfield applications in the *Guideline on Air Quality Models*, Appendix W to 40 CFR Part 51, the performance of the AERMOD model was extensively evaluated based on a total of 17 field study data bases (AERMOD: Latest Features and Evaluation Results. EPA-454/R-03-003. U.S. Environmental Protection Agency, Research Triangle Park (2003), portions of which are attached to this affidavit) ("EPA 2003"). The scope of the model evaluations conducted for AERMOD far exceeds the scope of evaluations conducted on any other model that has been adopted in Appendix W to Part 51. These evaluations demonstrate the overall good performance of the AERMOD model based on technically sound model evaluation procedures, and also illustrate the significant advancement in the science of dispersion modeling represented by the AERMOD model as compared to other models that have been used in the past. In particular, adoption of the AERMOD model has significantly reduced the potential for overestimation of ambient impacts from elevated sources in complex terrain compared to other-models.

Id. at 3-4 (emphasis added).

EPA's practice in a number of other contexts also demonstrates that modeling is a technically superior approach for ascertaining impacts on NAAQS, as well as the extensive history of EPA's preference for modeling over monitoring to evaluate compliance. For example, all NO_2, PM2.5, SO_2 NAAQS, and Prevention of Significant Deterioration ("PSD") increment compliance verification analyses are performed with air dispersion modeling, such as running AERMOD in a manner consistent with the Guideline on Air Quality Models. 40 C.F.R. § 52.21(l)(1). Indeed, in order to ensure consistency in how air impacts are determined, both existing sources and newly permitted sources should be assessed using the same methods. AERMOD modeling performs particularly well in evaluating emission sources with one or a handful of large emission points. The stacks are well characterized in terms of location, dimensions, and exhaust parameters, and have high release heights. AERMOD accurately models medium-to-large SO_2 sources—even with conditions of low wind speed, the use of off-site meteorological data, and variable weather conditions. Indeed, AERMOD has been tested and performs very well during conditions of low wind speeds:

> AERMOD's evaluation analyses included a number of site-specific meteorological data sets that incorporate low wind speed conditions. For example, the Tracy

> evaluation included meteorological data with wind speeds as low as 0.39 meter/second (m/s); the Westvaco evaluation included wind speeds as low as 0.31 m/s; the Kincaid SO_2 evaluation included wind speeds as low as 0.37 m/s; and the Lovett evaluation included wind speeds as low as 0.30 m/s. Concerns . . . regarding AERMOD's ability to model low wind speed conditions seem to neglect the data used in actual AERMOD evaluations.

Comments of Camille Sears 1, at 10, attached hereto as Ex. 10 (citing AERMOD evaluations and modeled meteorological data, *available at* http://www.epa.gov/ttn/scram/dispersion_prefrec.htm).

Finally, EPA's use of air dispersion modeling and AERMOD in particular was upheld in the context of New Jersey's Clean Air Act § 126 petition for resolution of cross-state impacts experienced in New Jersey due to SO_2 emissions from a Pennsylvania power plant. *See Genon Rema, LLC v. U.S. EPA*, 722 F.3d 513, 526 (3rd Cir. 2013). In this case, the EPA granted the New Jersey Department of Environmental Protection's 126 petition, finding that trans-boundary SO_2 emissions from the Portland coal-fired power plant in Pennsylvania were significantly contributing to nonattainment and interference with the maintenance of the one-hour SO_2 NAAQS in New Jersey. *Id.* at 518. Notably, EPA based its finding on a review of the AERMOD dispersion modeling submitted by New Jersey, its independent assessment of AERMOD, and other highly technical analyses. *Id.* The court upheld EPA's decision after examining the record, which showed that EPA had thoroughly examined the relevant scientific data and clearly articulated a satisfactory explanation of the action that established a rational connection between the facts found and the choice made. *Id.* at 525-28. Thus, New Jersey is well aware of the benefit, reliability, and accuracy of modeling in the context of the one-hour SO_2 NAAQS and has, itself, relied on this sort of modeling to protect the SO_2 NAAQS within its boundaries. Therefore, the State's decision in its Proposed I-SIP to abstain from modeling any stationary sources with regard to the one-hour SO_2 NAAQS is illogical.

For the one-hour SO_2 NAAQS, modeling is the most accurate means of determining attainment with the NAAQS, *see* Final SO_2 NAAQS Rule at 35,551, 35,570, yet New Jersey's Proposed I-SIP lacks SO_2 emissions limitations informed by air dispersion modeling. As a result, the Proposed I-SIP fails to ensure that New Jersey will achieve and maintain the 2010 one-hour SO_2 NAAQS. To comply with the Act's obligations, New Jersey's I-SIP must be revised to include adequate emissions limits informed by modeling—that is, source-specific one-hour SO_2 emission limits that show no exceedances of the NAAQS when modeled.

iii. THE PROPOSED INFRASTRUCTURE SIP MUST INCLUDE ENFORCEABLE SO_2 EMISSION LIMITS WITH A ONE-HOUR AVERAGING PERIOD THAT APPLY AT ALL TIMES.

An emission limitation necessary to comply with CAA Section 110(a)(2)(A) means "a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under this

chapter." 42 U.S.C. § 7602(k). Therefore, SO_2 emission limitations contained in the I-SIP must include proper averaging times. Otherwise a proper numerical emission limit could still allow for peaks that exceed the NAAQS and yet not register as exceedances because they would be averaged with lower emissions at other times. The one-hour SO_2 NAAQS requires a one-hour averaging period.

In various contexts, EPA has stated that one-hour averaging times are necessary to comply with one-hour standards. For instance, in 2011, EPA disagreed with the Kansas Department of Health and Environment's issuance of a PSD permit that contained a 30-day averaging time rather than a one-hour averaging period. *See* Letter from Karl Brooks, Regional Administrator, EPA Region 7 to Dr. Robert Moser, Secretary, Kansas Department of Health and Environment (Feb. 3, 2011), attached hereto as Ex. 11. EPA explained:

> [i]t is well known that there can be considerable variability in actual 1-hour emission rates. Therefore, to ensure protection of the 1-hour . . . SO_2 NAAQS . . . the permit needs to contain . . . SO_2 1-hour average emission limits for both new and existing steam generating units. To ensure the source does not cause or contribute to air pollution in violation of the NAAQS, the emission limits should be consistent with the modeling rates and have the same averaging period, i.e. in this case maximum hourly emission limits consistent with the 1-hour NAAQS.

Id. at 2. Similarly, in its disapproval of Missouri's SIP in 2006, EPA determined that emission rates in the SIP were "not protective of the short-term sulfur dioxide NAAQS" because they were based on an annual average. *See* Approval and Promulgation of Implementation Plans; State of Missouri, 71 Fed. Reg. 12,623, 12,624 (Mar. 13, 2006). In 2011, the Environmental Appeals Board confirmed that emission limits for SO_2 should be based on hourly averaging times, and rejected an agency's attempt to use a 3-hour averaging time instead. *In re: Mississippi Lime Co.*, PSDAPLPEAL11-01, 2011 WL 3557194, at *26-27 (E.P.A. Aug. 9, 2011) ("Emission limits should be based on concentration estimates for the averaging time that results in the most stringent control requirements. 40 C.F.R. pt. 51, app. W, § 10.2.3.1.a.").

In addition to including emissions limits based on a one-hour averaging period, New Jersey's Proposed I-SIP must require monitoring of SO_2 emission limits on a continuous basis using a continuous emission monitor system or systems. Clean Air Act section 110(a)(2)(F) requires New Jersey's Proposed I-SIP to establish a system to monitor emissions from stationary sources and to submit periodic emissions reports. In order to ensure emission limits which are protective of the one-hour SO_2 NAAQS, the I-SIP must require that SO_2 emissions are monitored from sources during every hour of operation, regardless of whether SO_2 pollutant control equipment has been installed or not.

New Jersey's I-SIP must implement, maintain, and enforce the NAAQS and therefore must include "enforceable emission limitations" to ensure its effectiveness. 42 U.S.C. § 7410(a)(2)(A). Only one-hour averaging periods can ensure compliance with the one-hour SO_2

NAAQS.[8] Therefore, to ensure that all areas in New Jersey attain and maintain the one-hour SO_2 NAAQS, NJDEP must revise its I-SIP to include enforceable emission limits with one-hour averaging times, monitored continuously, for power plants and other large sources of SO_2. These emission limits must apply at all times, including periods of start-up, shutdown, and malfunction.

iv. ENFORCEABLE SO_2 EMISSION LIMITS ARE NECESSARY TO AVOID NONATTAINMENT DESIGNATIONS.

In addition to being a required component of the I-SIP, enforceable emission limits are necessary to avoid future nonattainment designations in areas where modeling or monitoring shows that SO_2 levels exceed the one-hour NAAQS. *See* EPA, Next Steps for Area Designations and Implementation of the Sulfur Dioxide National Ambient Air Quality Standard at 4 (Feb. 6, 2013), available at http://www.epa.gov/airquality/sulfurdioxide/pdfs/20130207SO2StrategyPaper.pdf (explaining that agencies should work to avoid a nonattainment designation by "establishing and submitting to EPA enforceable emission limitations ensuring that attainment with the SO_2 NAAQS (in the form of permit limits, source-specific SIP revisions, or other permanent and enforceable legal documents) occurs prior to the date that final designations based on modeling information are issued")); *see also* Final SO_2 NAAQS Rule, 75 Fed. at 35,553 (areas will "be designated 'nonattainment' if either available monitoring data or modeling shows that a violation exists, or 'attainment' if both available monitoring data and modeling indicate the area is attaining" (emphasis added)). Currently, no areas in New Jersey have been designated as nonattainment, but that can be expected to change as the designation process continues and air dispersion modeling is conducted for large SO_2 sources in and around the state.

Nonattainment designations create rigorous Clean Air Act requirements with which states must comply, including offsets and nonattainment NSR. By using this infrastructure SIP opportunity to set enforceable emissions limits with regard to the SO_2 NAAQS, New Jersey could not only protect public health but also avoid having counties formally designated as nonattainment. Addressing the issue now will also bring regulatory certainty to owners of coal-fired power plants in New Jersey, which could ultimately save these regulated entities money. Many large stationary sources of SO_2 pollution, including coal-fired power plants, will need to analyze and likely improve the efficiency of their sulfur controls in light of recent environmental rules and standards, such as MATS, CAIR/CSAPR, Regional Haze, and various NAAQS. As a result, establishing emission limits and pollution control requirements through this I-SIP will allow sources to plan with greater certainty how they intend to comply with all potentially applicable requirements, including the 2010 SO_2 NAAQS, and determine whether additional SO_2 controls must be installed in order to meet these requirements. Addressing the issue here would better allow sources to comply with life-saving pollution reduction rules most economically.

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[8] Though any averaging time longer than one hour will impermissibly allow exceedances of the short-term standard, if a state nonetheless uses a longer averaging time, the numerical emission limits at minimum would then need to be ratcheted down accordingly to ensure that no short-term exceedances of the standard occur.

Indeed, industry itself has made this same exact point to EPA, though in slightly different terms:

> Multiple recently-issued rules all focus on large combustion source-related emissions (e.g. boilers) and may require significant capital expenditures to achieve compliance. The compliance options and deadlines for these rules, however, vary widely. If the rules compliance deadlines and requirements are not coordinated, the sources subject to them will be forced to make investment decisions without a full understanding of what may be required to comply with the rules having later compliance deadline. This may result in a series of sub-optimized decisions . . . [with a] suboptimal overall solution—both from a cost and environmental perspective. For example . . . a source could invest in Boiler MACT controls without a full understanding of the SO_2 NAAQS issued because SO_2 air dispersion modeling has not yet been completed . . . .

See NAAQS Implementation Coalition Comments on the 10th Modeling Conference, March 6, 2012 Joseph C. Stanko, Hunton and Williams, at 10, attached hereto as Ex. 12. By regulating these sort of facilities now via appropriate emission limits and requirements in this I-SIP, the state of New Jersey can prevent a source from incurring additional expenses through piecemeal legislation. Accordingly, NJDEP must amend the Proposed I-SIP to establish enforceable emission limits to ensure that large sources of SO_2 do not cause exceedances of the one-hour SO_2 NAAQS.

v. THE INFRASTRUCTURE SIP MUST BE BASED ON AN ANALYSIS OF WHETHER NEW JERSEY'S EMISSIONS SIGNIFICANTLY CONTRIBUTE TO NONATTAINMENT AND INTERFERENCE WITH THE MAINTENANCE OF THE 2010 SO_2 NAAQS IN DOWNWIND STATES.

As drafted, New Jersey's Proposed I-SIP fails to sufficiently demonstrate how it will prevent emissions within the state from significantly contributing to nonattainment and interfering with the maintenance of the 2010 SO_2 NAAQS in other states. This requirement is commonly known as the "Good Neighbor Provision" and is found in Section 110(a)(2)(D)(i) of the Clean Air Act. Under section 110(a)(2)(D), an I-SIP must contain "adequate provisions (i) prohibiting . . . any source . . . from emitting any air pollutant in amounts which will—(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard . . . ." 42 U.S.C. § 7410(a)(2)(D)(i)(I).

Under the Good Neighbor Provision of Section 110(a)(2)(D)(i), New Jersey's Infrastructure SIP is required to contain adequate provisions prohibiting any source or other type of emission activity in one State from contributing significantly to nonattainment or interfering with maintenance of the NAAQS in another State. New Jersey claims that is has implemented rules to control sources that may significantly contribute to the nonattainment of a federal ambient air quality standards in another state and, therefore, that it has addressed its downwind contributions from New Jersey sources. *See* Proposed I-SIP at 29. However, New

Jersey has failed to include any sort of demonstration that these listed measures adequately control SO_2 emissions to a level that the state's contribution to any downwind nonattainment or maintenance area is less than significant for the 2010 SO_2 NAAQS. Therefore, in order to comply with Section 110(a)(2)(D)(i), New Jersey's Proposed I-SIP must be revised to include such an analysis. Without such a demonstration, the state cannot certify that its Proposed I-SIP complies with Section 110(a)(2)(D)(i) of the Act.

C. The Proposed Infrastructure SIP Fails to Include the Requisite Analysis to Demonstrate that New Jersey Does Not Significantly Contribute to Nonattainment or Interference with Maintenance of the 2008 Ozone NAAQS in Downwind States.

As drafted, New Jersey's Proposed I-SIP fails to sufficiently address how it plans to prevent its emissions from significantly contributing to nonattainment and interfering with the maintenance of the 2008 Ozone NAAQS in other states in accordance with the "Good Neighbor Provision" of Clean Air Act Section 110(a)(2)(D)(i). In addition to maintaining its own air quality, New Jersey is required to prevent significant contributions to nonattainment in, or interfere with the maintenance of the 2008 Ozone NAAQS by, any other State. *See* 42 U.S.C. 7410(a)(2)(D)(i). It has already been demonstrated that emissions of air pollutants in New Jersey are contributing to other states' pollution problems. *See* EPA website, Cross-State Air Pollution Rule in New Jersey, http://www.epa.gov/cleanairactbenefits/whereyoulive/nj.html (stating that air pollution reductions under CSAPR would contribute to improved air quality in CT, DE, ME, MD, MA, NH, NY, PA, RI, and VA.). While we appreciate the list of state measures meant to control emissions of ozone precursors that New Jersey has noted in its Proposed I-SIP, *see* Proposed I-SIP at 29-30, New Jersey has failed to provide an analysis or demonstration that its emission reduction programs are adequate to prevent significant contributions to downwind states. Therefore, New Jersey's submittal is inadequate and must be revised to satisfy its requirement under Section 110(a)(2)(D)(i).

In order to comply with Section 110(a)(2)(D)(i), New Jersey's I-SIP must include an analysis demonstrating that its contribution to any downwind maintenance or nonattainment area is less than a significant level for the 2008 Ozone NAAQS. That is, the state must show that NOx emissions from New Jersey do not contribute more than 0.75 ppb to ozone in downwind nonattainment or maintenance areas. Without such a demonstration, the state cannot certify that its Proposed I-SIP complies with Section 110(a)(2)(D)(i) of the Act.

New Jersey cannot simply cite to its NOx RACT rules or its NSR requirements to certify that the state is not contributing to nonattainment or interference with maintenance of the NAAQS in downwind states. *See* Proposed I-SIP at 29. For instance, New Jersey has failed to demonstrate in the context of this I-SIP that the NOx RACT emission limits are stringent enough to adequately control emissions from it large stationary sources, nor has it shown that those limits have been properly included in all relevant Title V permits. New Jersey has failed to demonstrate that it has set enforceable emission limits in this I-SIP on any large sources contributing to problems with the attainment and maintenance of the NAAQS in other states. Thus, although New Jersey has claimed to have taken steps to include enforceable emissions

limits with shorter averaging times and required certain pollution controls, because the state has failed to demonstrate that it is not significantly contributing to any downwind nonattainment or maintenance areas, the Proposed I-SIP must be revised to include such an analysis so that it complies with Section 110(a)(2)(D)(i) of the Clean Air Act.

Once the state properly analyzes its contributions to downwind states with regard to the 2008 Ozone NAAQS, if the state determines that it does significantly contribute, it would need to remedy that contribution through appropriate I-SIP requirements. In such a case, short-term stringent emission limits and installation and continuous operation of control devices, such as selective catalytic reduction ("SCR") technology, on EGUs are generally the most cost effective option to ensure the 2008 Ozone NAAQS is attained and maintained.

For instance, in New Jersey, where the entire state has been designated nonattainment under the 2008 Ozone NAAQS, all EGUs should have short-term emission limits based on available and demonstrated control technology. In particular, a limit of 0.07 pound per MMBtu ("lb/MMBtu") based on an eight-hour averaging time that applies at all times, including during startup and shut down is readily achievable. In fact, EPA has long acknowledged that 90% removal efficiency for SCR on coal-burning units is achievable. *See* EPA, "Ambient Air Quality Impact Report for Desert Rock Energy Facility PSD Permit," at 8, Table 3, attached hereto as Ex. 13. Thus, taking even the highest NOx emission rate that EPA has set with no post-combustion control—that is, 0.50 lb/MMBtu—and applying the 90% control achievable by SCR, an emission limit of 0.05 lb/MMBtu is clearly achievable. Even adding a "safety factor" of 40% NJDEP could establish limitations in the I-SIP at 0.07 lb/MMBtu. A review of EPA's RACT/BACT/LAER clearinghouse demonstrates that numerous PSD permits for coal-burning boilers were issued in the early 2000s with emission limits of 0.07 lb/MMBtu. Actual performance data also confirms that a 0.07 lb/MMBtu limit is easily achievable. This is not a new achievement, either. For example, during the 2006 ozone season, approximately 88 coal-fired units achieved emission limits of less than 0.07. *See* CAMD NO_x Ranked Low to High Ozone 2006, attached hereto as Ex. 14. Indeed, more recently, permits for proposed new coal plants have been issued with NO_x limits of 0.05 lb/MMBtu. For example, a 2009 Permit to Install issued in Michigan for the Consumers Energy Karn-Weadock plant included a NO_x emissions limit of 0.05 lb/MMBtu. *See* Permit to Install 341-07, December 29, 2009 at 9, available at http://www.deq.state.mi.us/aps/downloads/permits/pubnotice/341-07/341-07.pdf. In fact, as far back as 2001, Babcock & Wilcox Company stated that a 0.016 lb/MMBtu limit was achievable for units burning bituminous coal and a 0.008 lb/MMBtu limit could be achieved for those burning Powder River Basin coal. *See* How Low Can We Go? Controlling Emissions in New Coal Fired Power Plants (2001) at 5, Table 2, available at http://170.94.134.156/ftproot/Pub/commission/p/Closed%20Permit%20Dockets%202006-2010/08-007-P%20AEP%20Service%20Corp%20%26%20Swepco-Hempstead%20Co%20Hunting%20Club/2008-12-03_Ex._58_B%26W_How_Low_Can_We_Go.pdf. Accordingly, New Jersey's I-SIP must be revised to include appropriate emissions limits for the State's coal-fired EGUs.

In addition, if, based on the requisite analysis of contributions to downwind states, New Jersey determines that a reduction in pollution is necessary to prevent significant contribution

to downwind nonattainment and maintenance areas and necessary emission limits are set, those limits should be set on a pounds per hour ("lb/hr") basis, based on, at most, a corresponding 0.07 lb/MMBtu limit. That is, a lb/hr limit should be calculated by multiplying 0.07 MMBtu/hr times the EGU's maximum, or maximum allowable, heat input. Setting a lb/hour limit will ensure consistent protection of the ambient air quality regardless of whether the claimed maximum heat input capacity for the unit is accurate or changes in the future. In addition, a lb/hour limit would address the issue of variations in mass emissions during startup and shutdown so that even if the NO_x emission rate in lb/MMBtu is higher during startup and shutdown (for instance when SCR technology cannot be engaged), hourly emissions of SO_2 would not cause or contribute to violations of the one-hour SO_2 NAAQS.

Finally, where emission limits are necessary, New Jersey should set any limit with, at most, an 8-hour averaging time to protect the 8-hour averaging time of the 2008 Ozone NAAQS. Without short-term averaging times, stationary sources could emit NO_x at higher rates at precisely the time when the ozone levels are the worst and still meet an emission limit with a longer-term average period by reducing their NO_x emissions during periods when the ozone levels are not as severe.

III. CONCLUSION

For the reasons set forth above, New Jersey's Proposed I-SIP fails to ensure that 2010 SO_2 and 2008 Ozone NAAQS are attained and maintained. New Jersey must adopt new provisions in the I-SIP to protect public health and comply with the Act's requirements. The Sierra Club is happy to provide any other information that might assist New Jersey in developing an I-SIP that fully complies with the Clean Air Act.

Respectfully submitted,

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Appendix L

Documentation of the Guidance Documents Used to Prepare the Proposed Revision to New Jersey's State Implementation Plan Concerning Section 110 Requirements for All NAAQS and Visibility

To prepare this Section 110 State Implementation Plan (SIP), the Department has relied upon the following guidance documents of the USEPA:

"Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)", page 13, Stephen D. Page, Director, USEPA, Office of Air Quality Planning and Standards, September 13, 2013. Available at: http://www.epa.gov/airquality/urbanair/sipstatus/docs/Guidance%20on%20Infrastructure%20SIP%20Elements%20Multipollutant%20FINAL%20Sept%202013.pdf

"Guidance for 1-Hour SO2 Nonattainment Area SIP Submissions", page 24, USEPA, OAQPS, April 23, 2014, Stephen D. Page, Director. Available at: (http://www.epa.gov/airquality/sulfurdioxide/pdfs/20140423guidance.pdf)

USEPA Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, to Regional Air Directors, "Guidance on State Implementation Plan (SIP) Elements Required Under Sections 110(a)(1) and (2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS)," October 14, 2011. Available at: http://www.epa.gov/airquality/lead/pdfs/20111014infrastructure.pdf

USEPA Memorandum from William T. Harnett, Director, Office of Air Quality Planning and Standards, to the Regional Air Directors, "Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 2006 24-Hour Fine Particle (PM2.5) National Ambient Air Quality Standards (NAAQS)," September 25, 2009. Available at: http://www.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20090925_harnett_section_110(a)_sip_2006_24-hr_pm2.5_naaqs.pdf

Near-Road NO_2 Monitoring Technical Assistance Document, U.S. Environmental Protection Agency, June 2012, EPA-454/B-12-002. Available at: http://www.epa.gov/ttn/amtic/files/nearroad/NearRoadTAD.pdf