

**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

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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
$\mu\text{g}/\text{m}^3$	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
PM ₁₀	Coarse Particulate Matter
PM _{2.5}	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 (NO₂), ozone, particulate matter (PM_{2.5} and PM₁₀) and sulfur dioxide (SO₂). 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 $\mu\text{g}/\text{m}^3$	1978	Quarterly Average	Attaining	Attainment
	0.15 $\mu\text{g}/\text{m}^3$	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
PM ₁₀	150 $\mu\text{g}/\text{m}^3$	1987	24-hour	Attaining	Attainment
PM _{2.5}	15.0 $\mu\text{g}/\text{m}^3$	1997	Annual	Attaining	Attainment
	35 $\mu\text{g}/\text{m}^3$	2006	24-hour	Attaining	Attainment
	12 $\mu\text{g}/\text{m}^3$	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		State designation recommendations, June 23, 2011 – Not attaining for municipalities in four counties and unclassifiable for the rest of the State
	75 ppb	2010	1-hour		
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 (SO₂), nitrogen dioxide (NO₂), fine and coarse particulate (PM_{2.5} and PM₁₀), carbon monoxide (CO) and ozone (O₃) 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 (µg/m³) to 0.15 µg/m³.

Nitrogen Dioxide (NO₂): On February 9, 2010, the USEPA revised the 1-hour primary standard for NO₂ 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.

PM_{2.5} and PM₁₀: On October 17, 2006, the USEPA revised the primary and secondary 24-hour PM_{2.5} standard from 65 µg/m³ to 35 µg/m³. It also retained the annual PM_{2.5} standard of 15 µg/m³ and a primary and secondary 24-hour PM₁₀ standard of 150 µg/m³. The USEPA finalized changes to the annual PM_{2.5} NAAQS on January 15, 2013 (78 Fed. Reg. 3086, January 15, 2013), revising the annual PM_{2.5} standard by lowering the level to 12.0 µg/m³, but retaining the 24-hour standard at a level of 35 µg/m³ and generally retaining the current suite of secondary standards. This SIP revision also applies to any changes of the annual PM_{2.5} NAAQS, as it also satisfies the Clean Air Act requirements for these latest revisions to the annual PM_{2.5} NAAQS.

Sulfur Dioxide (SO₂): On June 22, 2010, the USEPA revised the 1-hour primary standard of 75 ppb for SO₂ 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 $\mu\text{g}/\text{m}^3$ 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 $\mu\text{g}/\text{m}^3$ annual PM_{2.5} NAAQS. On January 15, 2010, New Jersey submitted Infrastructure SIP revisions to the USEPA for the 2006 35 $\mu\text{g}/\text{m}^3$ 24-hour PM_{2.5} 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 PM_{2.5} NAAQS, its implementation guidance⁵ 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 PM_{2.5} 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 PM_{2.5} NAAQS, including a response to the USEPA’s 2008 findings for the annual PM_{2.5} 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 (PM_{2.5}) 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 PM_{2.5} 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 PM_{2.5} standard (15 µg/m³).⁸ The State's 2010 Certification reflects the State's specific authority to address the 2006 daily PM_{2.5} standard (35 µg/m³).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 –		New Jersey Authority and Compliance Measures
<i>“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</i>		
§110(a)(2)(A)	<i>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.</i>	<p>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.</p> <p>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.</p> <p>The USEPA SIP-approved rules are identified in 40 C.F.R. 52.1570 and 52.1604.</p>

<p>Clean Air Act Section and SIP Requirement – <i>“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</i></p>	<p>New Jersey Authority and Compliance Measures</p>
<p>§110(a)(2)(B) <i>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;</i></p>	<p>New Jersey’s authority at N.J.S.A 26:2C-9a addresses the requirement to conduct ambient air quality monitoring.</p> <p>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.</p>
<p>§110(a)(2)(C) <i>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</i></p>	<p>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,</p>

Clean Air Act Section and SIP Requirement – <i>“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</i>	New Jersey Authority and Compliance Measures
<i>ambient air quality standards are achieved, including a permit program as required in parts C and D;</i>	<p>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.</p> <p>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 modification¹³. 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.</p>

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 PM_{2.5} so that all of New Jersey is now classified in attainment for PM_{2.5}. 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))

<p>Clean Air Act Section and SIP Requirement – <i>“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</i></p>	<p>New Jersey Authority and Compliance Measures</p>
<p>§110(a)(2)(D) <i>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></p> <p style="padding-left: 40px;"><i>(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</i></p> <p style="padding-left: 40px;"><i>(II) interfere with measures required to be included in the applicable implementation plan for any other</i></p>	<p>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 (NESAUM), 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.</p> <p>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.</p> <p>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</p>

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	<p data-bbox="499 418 751 669"><i>state under part C of this subchapter to prevent significant deterioration of air quality to protect visibility.</i></p> <p data-bbox="781 418 1906 597">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.</p> <p data-bbox="781 636 1906 743">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.</p>

<p>Clean Air Act Section and SIP Requirement – <i>“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</i></p>	<p>New Jersey Authority and Compliance Measures</p>
<p>§110(a)(2)(D)</p>	<p><i>Contain adequate provisions – (ii) insuring compliance with the applicable requirements of Sections 126 and 115 (relating to interstate and international pollution abatement);</i></p> <p>The provisions for these two Clean Air Act sections are addressed separately below and pertain to all pollutants.</p> <p><u>Section 126 of the Clean Air Act</u></p> <p>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.</p> <p>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.</p> <p><u>Section 115 of the Clean Air Act</u></p> <p>CAA §115 requires a state to revise its SIP if pollutants emitted from the state endanger public health or welfare in a foreign country.</p> <p>New Jersey does not border any foreign country and emissions from New Jersey do not endanger public health or welfare in any foreign country.</p>
<p>§110(a)(2)(E)</p>	<p><i>Provide (i) necessary assurances that the state (or, except</i></p> <p>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</p>

Clean Air Act Section and SIP Requirement – <i>“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</i>	New Jersey Authority and Compliance Measures
<i>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.)</i>	<p>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.</p> <p>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.</p>

Clean Air Act Section and SIP Requirement – <i>“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</i>	New Jersey Authority and Compliance Measures
<p>(ii) <i>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</i></p>	<p>(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.</p> <p>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.</p> <p>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.</p> <p>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/.</p> <p>Consistent with the Uniform Ethics Code, the Department has established procedures for reporting any work conducted by a state employee outside of the Department.</p>

Clean Air Act Section and SIP Requirement – <i>“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</i>	New Jersey Authority and Compliance Measures
	<p>(iii) <i>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;</i></p> <p>(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.</p> <p>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.</p>

<p>Clean Air Act Section and SIP Requirement – <i>“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</i></p>	<p>New Jersey Authority and Compliance Measures</p>
<p>§110(a)(2)(F) <i>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.</i></p> <p><i>(ii) Periodic reports on the nature and amounts of emissions-related data from such source.</i></p> <p><i>(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.</i></p>	<p>Major and minor sources are required to monitor and report emissions.</p> <p>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.</p> <p>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.</p> <p>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).</p>

Clean Air Act Section and SIP Requirement – <i>“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</i>	New Jersey Authority and Compliance Measures
§110(a)(2)(G) <i>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.)</i>	<p>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.</p> <p>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.</p> <p>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.</p> <p>In addition, based on the USEPA’s historical precedent for the other pollutant classification schemes¹⁴ and ambient air monitoring data recorded for the past several</p>

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 – <i>“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</i>	New Jersey Authority and Compliance Measures
	<p>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 (PM_{2.5} 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.</p> <p>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.</p>

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.

<p>Clean Air Act Section and SIP Requirement – <i>“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</i></p>	<p>New Jersey Authority and Compliance Measures</p>
<p>§110(a)(2)(H)</p> <p><i>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).</i></p>	<p>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.</p>

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
<p>§110(a)(2)(I) <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).</i></p>	<p>Not required in this document.</p> <p>The Department is not addressing this element in this infrastructure SIP submission because, according to the USEPA’s interpretation of the Clean Air Act¹⁹, this element does not need to be addressed in the context of an infrastructure SIP submission.</p>
<p>§110(a)(2)(J) <i>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);</i></p>	<p>Consultation and Public Notification (Sections 121 and 127)</p> <p>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.</p>

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 – <i>“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</i>	New Jersey Authority and Compliance Measures
	<p>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.</p> <p>Prevention of Significant Deterioration (PSD) and Visibility Protection</p> <p>The PSD program is addressed in the discussion of CAA §110(a)(2)(C) above. For all criteria pollutants other than lead²¹ 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, NO₂, or ozone or for the readoption of the CO NAAQS. For the visibility protection requirements related to</p>

²¹ 2011 Lead NAAQS SIP Guidance Document, page 15.

Clean Air Act Section and SIP Requirement – <i>“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</i>	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 – <i>“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</i>	New Jersey Authority and Compliance Measures	
§110(a)(2)(K)	Provide for - <i>(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</i> <i>(ii) The submission, upon request, of data related to such air quality modeling to the Administrator;</i>	<p>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.</p> <p>The Department will provide appropriate modeling data to the USEPA Administrator upon request.</p>
§110(a)(2)(L)	<i>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> <i>(i) The reasonable costs of</i>	<p>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.)</p>

Clean Air Act Section and SIP Requirement – <i>“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</i>	New Jersey Authority and Compliance Measures
	<i>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.</i>

Clean Air Act Section and SIP Requirement – <i>“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</i>	New Jersey Authority and Compliance Measures
§110(a)(2)(M) <i>Provide for consultation and participation by local political subdivisions affected by the plan</i>	<p>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.</p> <p>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.</p> <p>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.</p>

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 (PM_{2.5} 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 SO₂ emissions by use of scrubbers that comply with the adopted SO₂ RACT rules, including short-term SO₂ emission limits enforced with SO₂ 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 SO₂ emission limitations.
- SO₂ 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 SO₂ 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 SO₂ NAAQS in Warren County, NJ and its vicinity.

New Jersey's air rules and its success in reducing transport of SO₂ from upwind states will result in compliance with the one-hour SO₂ National Ambient Air Quality Standard statewide in 2014. These measures will also ensure that no New Jersey facility will cause an SO₂ violation in any other state.

When USEPA issues guidance or rules for modeling SO₂ 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 SO₂ 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 PM_{2.5}. New Jersey has recommended to the USEPA that all of New Jersey be designated attainment for PM_{2.5}, based on ambient monitoring and the evaluation of impacts on neighboring states. New York and Delaware do not have any PM_{2.5} nonattainment areas. Pennsylvania has determined that nonattainment for PM_{2.5} 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 (PM_{2.5}) occurs in the atmosphere through chemical reactions with pollutants to form small, respirable solid and liquid particles. The SO₂ 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, 2011 Executive 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 (NO₂) - 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 PM_{2.5} 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 NO₂ 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 NO₂ 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 SO₂, NO₂, PM₁₀, and PM_{2.5} 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 SIP³¹.

- 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)

