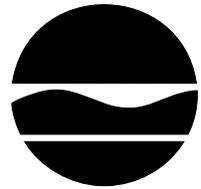


Department of Environmental Conservation  
Division of Air Resources



Joseph J. Martens  
Commissioner

**NEW YORK  
STATE IMPLEMENTATION PLAN  
FOR THE  
INFRASTRUCTURE ASSESSMENT FOR OZONE  
UNDER SECTIONS 110(a)(1) AND (2)  
OF THE CLEAN AIR ACT**

**FINAL PROPOSED REVISION**

**MARCH 2013**

New York State Department of Environmental Conservation

**Andrew M. Cuomo, GOVERNOR**

**Joseph J. Martens, COMMISSIONER**

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**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S  
INFRASTRUCTURE ASSESSMENT PURSUANT TO  
CLEAN AIR ACT SECTIONS 110(A)(1) AND (2)  
FOR THE 2008 OZONE NAAQS**

**INTRODUCTION:**

On March 12, 2008, the U.S. Environmental Protection Agency (EPA) revised the National Ambient Air Quality Standards (NAAQS) for ground-level ozone. The primary and secondary standards were revised to levels of 0.075 parts per million (ppm), averaged over eight hours. Pursuant to Clean Air Act (CAA) sections 110(a)(1) and (2), each state must meet basic State Implementation Plan (SIP) requirements related to the attainment of a new or revised NAAQS. Section 110(a)(1) requires “a plan which provides for implementation, maintenance, and enforcement” of a primary and secondary NAAQS, while section 110(a)(2) lists the specific required elements. Such SIPs meeting the requirements of CAA sections 110(a)(1) and (2) must be submitted within three years after promulgation of a new or revised standard. However, on September 16, 2009, the EPA announced it would reconsider its 2008 decision setting the ozone NAAQS at a level of 0.075 ppm. Consequently, submission of this infrastructure SIP was postponed because the EPA delayed implementation of the 2008 8-hour ozone NAAQS pending the reconsideration. Now that reconsideration of the 2008 ozone NAAQS has been abandoned, the New York State Department of Environmental Conservation (DEC) is fulfilling its obligation under the CAA.

This submission by the DEC addresses each of the required infrastructure elements of CAA section 110(a)(2), and affirms that New York’s SIP meets the requirements of CAA sections 110(a)(1) and (2). The required elements are described in the following sections of the CAA:

- 110(a)(2)(A): Enforceable Emission Limitations and Other Control Measures
- 110(a)(2)(B): Ambient Air Quality Monitoring, Compilation, Analysis, and Reporting
- 110(a)(2)(C): Programs for Enforcement, Prevention of Significant Deterioration (PSD), and New Source Review (NSR)
- 110(a)(2)(D): Interstate Transport Provisions
- 110(a)(2)(E): Assurance of Adequate Personnel, Funding, and Authority
- 110(a)(2)(F): Stationary Source Monitoring System and Reporting
- 110(a)(2)(G): Emergency Powers and Contingency Plans
- 110(a)(2)(H): Authority for SIP Revisions for Revised NAAQS
- 110(a)(2)(I): Authority for SIP Revisions for New Nonattainment Areas
- 110(a)(2)(J): Consultation with Government Officials, Public Notification, PSD, and Visibility Protection
- 110(a)(2)(K): Air Quality Modeling and Data Reporting
- 110(a)(2)(L): Permitting Fees
- 110(a)(2)(M): Consultation/Participation with Affected Local Entities



## INFRASTRUCTURE SIP REQUIREMENTS:

### Section 110(a)(2)(A): Enforceable Emission Limitations and Other Control Measures

*“Each such plan shall [. . .] 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 chapter.”*

This infrastructure SIP is not intended to identify nonattainment emission controls. Enforceable emission limitations and other control measures for ozone in New York were developed for the 1990 1-hour and 1997 8-hour ozone NAAQS, and have been approved by the EPA. These regulations control emissions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) from stationary, area, and mobile sources. Emissions are controlled for both older sources (e.g., Reasonably Available Control Technology (RACT) regulations) and new sources (e.g., NSR PSD requirements). These requirements are placed in federally-enforceable permit conditions under DEC’s permitting program. The most recent regulations that were included in the 1997 8-hour ozone SIP for the New York metropolitan area and that have been approved by the EPA include 6 NYCRR Parts 228, 234, 235, 239 and 241.

On May 21, 2012, the EPA designated the nonattainment areas for the 2008 ozone NAAQS.<sup>1</sup> The Jamestown, NY and New York–Northern New Jersey–Long Island, NY–NJ–CT areas (NYMA) were designated nonattainment. The DEC has requested that EPA reclassify the NYMA as a “moderate” nonattainment area in accordance with the provisions of CAA sections 181(a)(4) and 181(b)(3). The DEC is in the process of determining the additional control measures necessary to bring these areas into attainment with the 2008 ozone NAAQS.

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<sup>1</sup> Federal Register Vol. 77, No. 98; Monday, May 21, 2012; p.30088 (effective July 20, 2012)

## Section 110(a)(2)(B): Ambient Air Quality Monitoring, Compilation, Analysis, and Reporting

*“Each such plan shall [. . .] provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to (i) monitor, compile, and analyze data on ambient air quality, and (ii) upon request, make such data available to the Administrator.”*

The DEC measures air pollutants at more than 60 sites across the state, using continuous and/or manual instrumentation. These sites are part of the federally-mandated National Core Network (NCore) and the State and Local Air Monitoring Stations (SLAMS) Network. Real time direct reading measurements include gaseous criteria pollutants (ozone, sulfur dioxide, oxides of nitrogen, carbon monoxide), PM<sub>2.5</sub> (fine particulate with a diameter less than 2.5 microns), and meteorological data. In addition, the DEC operates a toxics monitoring network of eleven sites, two of which are part of the National Air Toxics Trends Stations (NATTS).

The near real-time data for gaseous pollutants and PM<sub>2.5</sub> are used for Air Quality Index (AQI) projection, and can be accessed by the interested public on the DEC’s web site. The DEC also provides real-time data to the EPA for AIRNow live national ozone mapping. All ambient measurements undergo data validation and are subsequently submitted to the EPA’s Air Quality System (AQS) for public access. The DEC commits to continue to operate an air quality monitoring network that complies with the EPA requirements and to submit this data to the EPA’s AQS.

As of July, 2007, each state (or where applicable, local) agency is required to “adopt and submit to the Regional Administrator an annual monitoring network plan which shall provide for the establishment and maintenance of an air quality surveillance system that consists of a network of SLAMS monitoring stations including FRM, FEM, and ARM monitors that are part of SLAMS, NCore stations, CSN stations, state speciation stations, SPM stations, and/or, in serious, severe and extreme ozone nonattainment areas, PAMS stations, and SPM monitoring stations.”<sup>2</sup> The DEC prepares an Annual Monitoring Network Plan as part of the fulfillment of these new requirements. The latest iteration was recently finalized and submitted to EPA on June 28, 2012. Should any changes be planned for the state’s monitoring sites or the network plan, the DEC will provide notification to appropriate staff at the EPA’s Region 2 office.

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<sup>2</sup> Code of Federal Regulations, Title 40, Section 58.10

Section 110(a)(2)(C): Programs for Enforcement, Prevention of Significant Deterioration (PSD), and New Source Review (NSR)

*“Each such plan shall [. . .] 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 [NAAQS] are achieved, including a permit program as required in parts C and D of this subchapter.”*

Environmental Conservation Law (ECL) § 19-0305 authorizes the commissioner of the DEC to enforce the codes, rules and regulations of the DEC established in accordance with article 19. The SIP is a compilation of rules and regulations that have been duly promulgated (and are occasionally revised) by the DEC in accordance with its statutory authority and consistent with the State Administrative Procedures Act. Therefore, the DEC has the authority to enforce all SIP measures.

The DEC has a SIP-approved PSD/NSR program under 6 NYCRR Part 231, “New Source Review for New and Modified Facilities.” Part 231 includes 8-hour ozone and PM<sub>2.5</sub> PSD and NSR permitting requirements for major stationary sources in the state. The recent revision to Part 231 also added greenhouse gases to the list of regulated contaminants. PSD regulates sources located in attainment areas, while NSR regulates sources in nonattainment areas. Major stationary sources are defined in Part 201 as sources with the potential to emit 100 tons per year (tpy) or more of NO<sub>x</sub> and 50 tpy of VOC (except in a severe ozone nonattainment area, where the thresholds are lowered to 25 tpy of NO<sub>x</sub> or VOC).

New York ensures that all applicable federal PSD requirements that are included in PSD permits are incorporated into Title V operating permits, and that all federally-enforceable requirements are applied and enforced. Title V of the CAA requires states to implement a permitting program for major stationary sources. This federal requirement is supported by 40 CFR Part 70. Section 19-0311 of Article 19 of the ECL directs the DEC to establish a permitting program to implement Title V of the CAA. The DEC’s permitting regulations are set forth at 6 NYCRR Part 201, "Permits and Certificates." Major sources of air pollution are covered by State Facility permits (Subpart 201-5) and Title V permits (Subpart 201-6). In addition, the DEC has implemented a permitting program for minor sources of air pollution; these sources are covered by minor facility registrations (Subpart 201-4).

With the above permitting requirements in place, New York affirms that the current NSR and PSD permitting programs remain in effect and continue to apply to the state’s major stationary sources, and that the requirements from these programs are federally enforceable.

## Section 110(a)(2)(D): Interstate Transport Provisions

*110(a)(2)(D)(i): “Each such plan shall [...] contain adequate provisions: prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such primary or secondary [NAAQS], or interfere with measures required to be included in the applicable implementation plan for any other state under part C of this subchapter to prevent significant deterioration of air quality to protect visibility.”*

*110(a)(2)(D)(ii): “Each such plan shall [. . .] contain adequate provisions insuring compliance with the applicable requirements of sections 126 and 115 (relating to interstate and international pollution abatement).”*

In accordance with the EPA guidance issued on August 15, 2006,<sup>3</sup> states may continue to rely on their existing Nonattainment New Source Review (NNSR) and PSD permitting programs to prevent significant deterioration of air quality within their own boundaries and in adjacent states. The section 110(a)(2)(C) discussion above confirms that New York has a SIP-approved PSD and NSR program that remains in effect and continues to apply to the state’s major stationary sources, including provisions for 8-hour ozone. New York commits to the continued enforcement of all SIP measures and the regulation of construction of new or modified stationary sources to meet NNSR requirements. In addition, New York ensures that all applicable federal PSD requirements that are included in PSD permits are incorporated into Title V operating permits, and that all federally-enforceable requirements are applied and enforced.

New York has implemented numerous NO<sub>x</sub> control regulations. RACT has been required on major sources of NO<sub>x</sub> throughout the state since 1995. These regulations have been periodically updated (in 1999, 2004 and 2010) to keep up with advances in control technology. New York, with the other Ozone Transport Commission (OTC) States, established the first NO<sub>x</sub> budget trading program for electricity generating units (EGUs) and other large sources of NO<sub>x</sub> in 1999 in a further effort to reduce ozone. These programs resulted in substantial NO<sub>x</sub> emission reductions prior to federal efforts to reduce ozone transport. While many States outside of the ozone transport region have implemented controls on EGUs to meet Title IV requirements and to comply with the Clean Air Interstate Rule (CAIR), they have not been required to implement RACT on all major NO<sub>x</sub> sources. This has allowed higher emission rates in these states and has resulted in significantly higher NO<sub>x</sub> emissions budgets in EPA’s transport rules (see Table 5 below entitled “Actual Ozone Season Electric Generating Units NO<sub>x</sub> Emissions and Emission Rates”). New York’s NO<sub>x</sub> emission rates from EGU’s and other large boilers are often less than half of the emission rates from units located in upwind states that the EPA has identified as significantly contributing to nonattainment in New York State.

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<sup>3</sup> U.S. EPA “Guidance for State Implementation Plan (SIP) Submissions to Meet Current Outstanding Obligations Under Section 110(a)(2)(D)(i) for the 8-Hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards.” August 15, 2006.

In addition, several nonattainment areas in states that have been determined to significantly contribute to downwind nonattainment have been granted NO<sub>x</sub> waivers under the provisions of section 182(f) of the CAA. As a result, these areas have not implemented NO<sub>x</sub> controls. For example, the Cleveland area is only about 100 miles from the Jamestown, NY nonattainment area and EPA’s analysis shows that Ohio emissions contribute over 18% of the ozone in Jamestown. EPA needs to take immediate action to address these emission inequities as they continue to significantly contribute to the Jamestown and New York City ozone nonattainment areas.

Despite this inequity, the DEC promulgated its latest revision to 6 NYCRR Subpart 227-2, “Reasonably Available Control Technology (RACT) for Major Facilities of Oxides of Nitrogen (NO<sub>x</sub>)” in 2010 in order to further reduce concentrations of ozone and PM<sub>2.5</sub> in New York and downwind states. The regulation imposes strict NO<sub>x</sub> emission limits on seven categories of stationary combustion installations; these revisions lowered the size thresholds for two categories of sources, and increased the stringency of emission limits for six categories.

Major facilities existing prior to June 1, 2010 must comply with the new NO<sub>x</sub> RACT emission limits by July 1, 2014. A summary of NO<sub>x</sub> RACT emission limits, in pounds NO<sub>x</sub> per million Btu in Subpart 227-2 can be found in the tables below:

Table 1: Very Large Boilers (By Boiler Configuration)

	‘Tangential’	‘Wall’	‘Cyclone’	‘Stokers’
‘Fuel Type’				
Gas Only	0.08	0.08	na	na
Gas/Oil	0.15	0.15	0.43	na
Coal Wet Bottom	0.08	0.08	0.08	na
Coal Dry Bottom	0.08	0.08	na	0.08 <sup>4</sup>

Table 2: Large Boilers

Fuel Type	Emission Limit
Gas only	0.06
Gas/Oil	0.15
Pulverized Coal	0.12
Coal	0.08 <sup>5</sup>

Table 3: Mid-size Boilers

Fuel Type	Emission Limit
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<sup>4</sup> This emission limit also applies to fluidized bed boilers that combust no more 30 percent other solid fuels (e.g. tire-derived fuel, waste wood), on a Btu basis.

<sup>5</sup> This emission limit also applies to fluidized bed boilers that combust no more 30 percent other solid fuels (e.g. tire-derived fuel, waste wood), on a Btu basis.

Gas only	0.05
Distillate Oil/Gas	0.08
Residual Oil/Gas	0.20

Based on historic operation and compliance assumptions made by the DEC, it is expected that the proposed NO<sub>x</sub> RACT limitations will result in NO<sub>x</sub> emission reductions of 28,796 tons per year, or 78.9 tons per day, from 2007 levels.

The DEC has also promulgated NO<sub>x</sub> RACT rules for Portland Cement Plants (6 NYCRR Subpart 220-1), Glass Plants (6 NYCRR Subpart 220-2), Asphalt Production (6 NYCRR 212.12), Minor Sources (6 NYCRR Subpart 227-3) and other general process emission sources (6 NYCRR 212.10).

Preliminary inventory work illustrated in Table 4 shows that these additional control measures are expected to result in total NO<sub>x</sub> emissions of 49,758 tons per year from point sources in New York State in the year 2020; for a total annual reduction of 33,275 tons per year, or 40%, from 2007 emissions.<sup>6</sup>

Table 4: 2020 Emissions Inventory Projections for Point Sources in New York State

	<b>2007 NO<sub>x</sub> Emissions (tons per year)</b>	<b>2020 NO<sub>x</sub> Emissions (tons per year)</b>	<b>Emissions Reduction (tons per year)</b>
POINT - EGU	35,583	21,290 <sup>6</sup>	14,293
POINT - NONEGU	47,520	28,468	19,052
POINT -TOTAL	83,033	49,758	33,345

In addition to limiting point source emissions of NO<sub>x</sub>, the DEC has promulgated regulations that limit the emission of VOCs from major and area sources. These regulations include:

- 6 NYCRR Part 205, Architectural and Industrial Maintenance (AIM) Coatings
- 6 NYCRR Part 226, Solvent Metal Cleaning Processes
- 6 NYCRR Part 228, Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers
- 6 NYCRR Part 229, Petroleum and Volatile Organic Liquid Storage and Transfer
- 6 NYCRR Part 230, Gasoline Dispensing Sites and Transport Vehicles
- 6 NYCRR Part 233, Pharmaceutical and Cosmetic Manufacturing Processes
- 6 NYCRR Part 234, Graphic Arts
- 6 NYCRR Part 241, Surface Coating Processes, Commercial and Industrial Adhesives, Sealants and Primers

<sup>6</sup> MANE-VU grown inventory used for modeling.

The DEC has also promulgated the strict California low emission vehicle program under the provisions of Clean Air Act section 177. These regulations result in reduced emissions of NO<sub>x</sub> and VOC from on-road mobile sources and represent the strictest motor vehicle emission control program allowed.

New York is addressing visibility protection requirements through its Regional Haze SIP, which was initially submitted in November, 2009, and subsequently updated, with additional requirements under the Best Available Retrofit Technology (BART) program. The DEC placed NO<sub>x</sub> emission limitations on 19 BART applicable sources. On August 28, 2012, the EPA published its final action on New York's Regional Haze SIP. The EPA approved a revision to the ECL that regulates the sulfur content of fuel oil, the revision to 6 NYCRR Part 249, "Best Available Retrofit Technology (BART)," and 17 of the single-source SIP revisions for BART. (EPA's action also included Federal Implementation Plans (FIPs) for three units at the two remaining facilities: one EGU at Dynegy's Danskammer Generating Station, and two EGUs at Dynegy's Roseton Generating Station.)

New York has been a participating state in the CAIR since it was issued by the EPA in 2005. This cap-and-trade program was designed to solve the interstate pollution issues specifically addressed in this section, CAA section 110(a)(2)(D), for the 1997 ozone NAAQS. After being remanded to the EPA by the U.S. Court of Appeals (Court), the EPA issued its replacement, the Cross-State Air Pollution Rule (CSAPR). Although the CSAPR's focus is on the 1997 ozone NAAQS and not the current 2008 ozone NAAQS, it would have aided New York and other states with upwind contributors in meeting their clean air obligations. This rule was vacated by the Court on August 21, 2012, and the EPA has been directed to continue to implement the CAIR until such time that a valid replacement to the CSAPR is promulgated.

In the CAIR final rule, the EPA allocated the region-wide annual budget and ozone-season budget amount to the individual States on a fuel-adjusted heat-input. State NO<sub>x</sub> budgets were determined by multiplying 1999-2002 heat input data (summed by fuel) by the different adjustment factors for the different fuels (i.e., 1.0 for coal, 0.4 for gas and 0.6 for oil). As a result, the effective 2015 New York State annual NO<sub>x</sub> emission rate is 0.094 pounds per million British thermal units (lbs/mmBtu) as compared to the 2015 CAIR NO<sub>x</sub> emission rate of 0.125 lbs/mmBtu. In comparison, the upwind states of Kentucky, Indiana, North Carolina, Tennessee and Iowa all have effective 2015 annual NO<sub>x</sub> emission rates above 0.140 lbs/mmBtu.

According to the EPA, these fuel-adjustment factors reflect the inherently higher emissions rate of coal-fired plants, and consequently the greater burden on coal plants to control emissions. The EPA says that it provides for a more equitable budget distribution by recognizing that different States are facing the reduction requirements with different starting emission profiles. The Court found that "because the fuel adjustment factors shifted the burden of emission reductions solely in pursuit of equity among upwind states—an improper reason—the resulting state budgets were arbitrary and capricious". The DEC agrees with this interpretation. Higher emissions budgets with higher emission rates upwind from New York undoubtedly puts New York at a disadvantage both environmentally and economically when trying to attain the ozone NAAQS.

From an ozone season NO<sub>x</sub> emission rate perspective, New York had the fifth lowest NO<sub>x</sub> emission rate of all eastern states in 2011 as illustrated in Table 5 below. Perhaps more striking is the actual ozone season NO<sub>x</sub> emissions for states most immediately upwind of New York, specifically Pennsylvania, Indiana, Ohio, Kentucky, Michigan and Illinois.

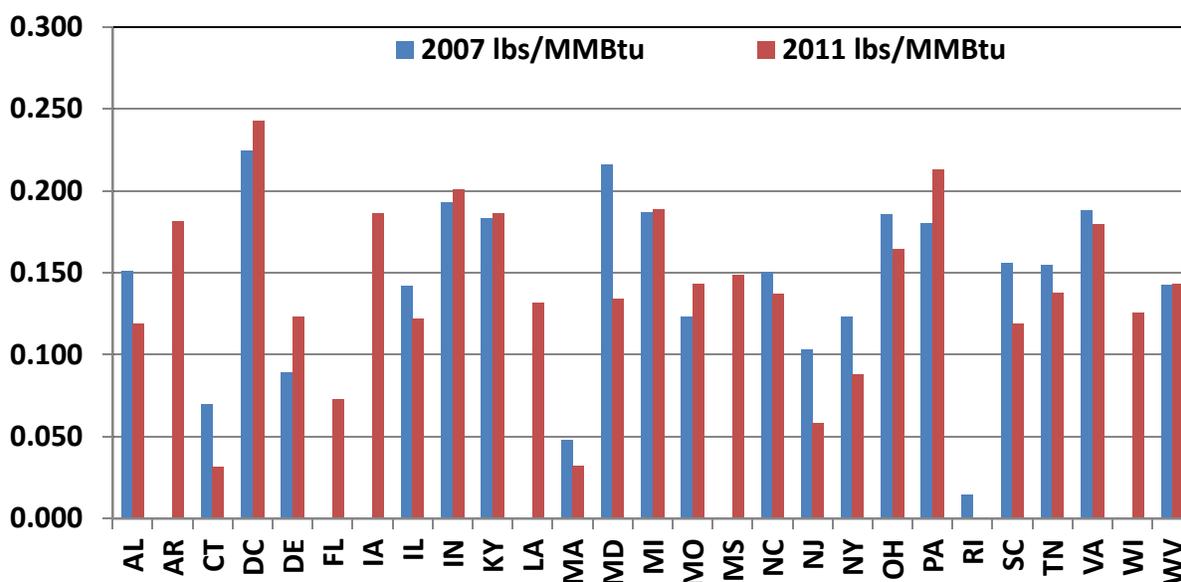
Table 5: Actual Ozone Season Electric Generating Units NO<sub>x</sub> Emissions and Emission Rates\*

State	2007 Emissions (tons NO <sub>x</sub> )	2011 Emissions (tons NO <sub>x</sub> )	Change in Emissions from 2007 to 2011 (%)	2007 Emission Rate (lbs NO <sub>x</sub> /MMBtu)	2011 Emission Rate (lbs NO <sub>x</sub> /MMBtu)	Change in Emission Rate from 2007 to 2011 (%)
PA	57,615	65,933	14	0.180	0.213	18
IN	56,204	54,816	-2	0.193	0.201	4
OH	57,862	45,147	-22	0.186	0.165	-11
KY	40,210	40,089	0	0.183	0.186	2
MI	34,354	32,941	-4	0.187	0.189	1
FL	N/A	29,755	N/A	N/A	0.073	N/A
AL	28,744	28,362	-1	0.151	0.119	-21
IL	35,283	27,504	-22	0.142	0.122	-14
MO	12,961	26,912	108	0.123	0.143	16
WV	28,967	25,189	-13	0.142	0.143	0
NC	28,390	24,062	-15	0.150	0.137	-9
LA	N/A	22,785	N/A	N/A	0.132	N/A
AR	N/A	17,868	N/A	N/A	0.182	N/A
VA	22,957	17,494	-24	0.188	0.179	-5
IA	N/A	17,179	N/A	N/A	0.187	N/A
TN	23,261	16,657	-28	0.155	0.138	-11
SC	18,418	14,068	-24	0.156	0.119	-23
WI	N/A	13,818	N/A	N/A	0.126	N/A
MS	N/A	13,389	N/A	N/A	0.149	N/A
<b>NY</b>	<b>20,986</b>	<b>12,399</b>	<b>-41</b>	<b>0.123</b>	<b>0.088</b>	<b>-29</b>
MD	15,538	8,201	-47	0.216	0.134	-38
NJ	7,773	3,556	-54	0.103	0.058	-44
DE	5,454	1,982	-64	0.089	0.123	38
MA	3,666	1,760	-52	0.048	0.032	-33

CT	2,153	854	-60	0.070	0.031	-55
DC	139	201	45	0.225	0.243	8
RI	187	N/A	N/A	0.015	N/A	N/A

\*Source: EPA Clean Air Markets Division

Figure 1: Emission Rate Comparison



Recent preliminary projection inventory work developed by the DEC shows that New York State will achieve a 46.6% reduction in overall annual NO<sub>x</sub> emissions from 579,471 tons in 2007 to 328,457 tons in 2020. Furthermore, New York State will achieve a 20.8% reduction in overall annual VOC emissions from 484,440 tons in 2007 to 368,784 tons in 2020. The 2007 emissions are grown and then controlled based on existing programs (e.g., NO<sub>x</sub> RACT, LEV2 and federal non-road measures). As one can see, New York is set to obtain a significant overall decrease in emissions from 2007 to 2020, and much of this has already occurred.

Because of the strict requirements it has placed on its sources of precursor emissions for ozone, both NO<sub>x</sub> and VOC, and on the wide range of sources it has regulated, both mobile and stationary, the State of New York has met its obligations under section 110(a)(2)(D). As shown above, New York has limited emissions from motor vehicles to the maximum extent allowed by law and has adopted some of the strictest stationary source programs in the country. This has resulted in substantial emission reductions and projections indicate that this trend will continue for the foreseeable future.

Another fact that cannot be ignored is that New York shares the nonattainment area with the States it most significantly contributes to – the New York–Northern New Jersey–Long Island, NY–NJ–CT.<sup>7</sup> As such; New York is required to work with the states of New Jersey and Connecticut to develop an attainment plan for the NYMA. To a lesser extent, New York also contributes significantly to nonattainment or interferes with maintenance in the States of Maryland, Massachusetts, Pennsylvania, Rhode Island and Virginia and the District of Columbia. Each of these States is a member of the OTC. The OTC was established in 1990 by section 184 of the CAA with the express purpose of controlling interstate transport of ozone. New York will continue to work with these States to assure that it addresses its contribution to nonattainment and any interference with maintenance of the ozone NAAQS.

As shown above, New York has lived up to the spirit and letter of the good neighbor provisions (section 110(a)(2)(D)) of the Clean Air Act and will continue to do so with the additional emissions reductions expected from the already implemented programs. It is past time for EPA to require controls in upwind States that will prohibit emissions that contribute significantly to nonattainment and interfere with maintenance of the ozone NAAQS in New York State.

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<sup>7</sup> [http://www.epa.gov/airtransport/pdfs/CSAPR\\_Ozone%20and%20PM2.5\\_Contributions.xls](http://www.epa.gov/airtransport/pdfs/CSAPR_Ozone%20and%20PM2.5_Contributions.xls) , which is part of docket item EPA-HQ-OAR-2009-0491-4228.

Section 110(a)(2)(E): Assurance of Adequate Personnel, Funding, and Authority

*“Each such plan shall [. . .] provide:*

*(i) necessary assurances that the state (or, except 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 provision of federal or state law from carrying out such implementation plan or portion thereof),*

*(ii) requirements that the state comply with the requirements respecting state boards under section 128,*

*(iii) 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.”*

ECL section 19-0305 authorizes the DEC’s Commissioner to enforce the codes, rules, and regulations of the DEC established in accordance with this article. The SIP is a compilation of the rules and regulations that are promulgated to achieve attainment of a NAAQS. Therefore, the DEC has the authority to enforce all SIP measures.

The Division of Air Resources (DAR), which currently hosts 221.5 full-time positions, receives both operating and capital funding. Operating funds are allocated to the DAR annually and are used for daily administrative expenses. These expenses include salaries, fringe benefits, and indirect and non-personnel services such as travel, supply, and equipment costs. Indirect costs are, in turn, allocated to other departments or divisions that support DAR activities. The DAR is allocated operating funds from the following sources: General Fund, Co-operative Agreements (i.e., EPA section 103 and 105 grants) and the Clean Air Fund, which is comprised of the Title V and Mobile Source accounts.

Capital funds may be allocated to DAR at the discretion of the New York State legislature and are used for the financing or acquisition of capital facilities such as the construction of an air monitoring site. DAR is allocated capital funds from three sources: General Fund, Mobile Source Account, and Rehabilitation and Improvement.

The New York State Public Officer's Law (POL) satisfies the condition that the state comply with the requirements respecting state boards under CAA section 128. Specifically, POL section 74(2) states “No officer or employee of a state agency, member of the legislature or legislative employee should have any interest, financial or otherwise, direct or indirect, or engage in any business or transaction or professional activity or incur any obligation of any nature, which is in substantial conflict with the proper discharge of his duties in the public interest.” POL 74(3)(e) states “No officer or employee of a state agency, member of the legislature or legislative employee should engage in any transaction as representative or agent of the state with any business entity in which he has a direct or indirect financial interest that might reasonably tend to

conflict with the proper discharge of his official duties.”

Finally, the DEC confirms 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.

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

*“Each such plan shall [. . .] 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 and 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.”*

Authority for this provision is provided under Article 19 of the ECL. In particular, ECL section 19-0311 (Operating Permit Program) states in subsection 3 that operating permits issued pursuant to this section shall include, among other things, "provisions for detailed monitoring, record-keeping and reporting, including requirements that records be kept for five years, and that monitoring records be submitted to the DEC at least every six months ..." This requirement is mirrored in 6 NYCRR Part 201-6.5(b), which requires monitoring of emissions, recordkeeping, and reporting in permit conditions that are included in all Title V permits for major stationary sources.

The DEC constructs statewide emissions inventories in order to develop control strategies for pollutants from facilities and other stationary sources. Stationary source emissions inventories are based on actual emissions data submitted by major regulated facilities through annual emission statements, and on calculated emissions from minor stationary sources based on area source procedures established by the EPA. Emissions of key pollutants are submitted to the EPA through the Consolidated Emissions Regulatory Report (CERR) for uploading to the EPA's National Emission Inventory (NEI).

## Section 110(a)(2)(G): Emergency Powers and Contingency Plans

*“Each such plan shall provide for authority comparable to that in section 303 of this title and adequate contingency plans to implement such authority.”*

Articles 3 and 19 of the ECL provide New York State with the authority to address air pollution emergencies. Among other provisions, ECL § 3-0301 entitled “General functions, powers and duties of the department and the commissioner” authorizes the DEC to prevent and control air pollution emergencies, as defined in subdivision 1 of ECL § 1-0303. In exercising such prevention and control, the department and the commissioner may limit the consumption of fuels and use of vehicles, curtail or require the cessation of industrial processes and limit or require the cessation of incineration and open burning, or take any other action that may be deemed necessary to prevent and/or control air pollution emergencies.

To prevent and control these emergency episodes, the DEC adopted 6 NYCRR Part 207, “Control Measures for Air Pollution Episode,” which implements ECL section 3-0301 and which has been approved into the SIP. Part 207 requires the owner of a “significant air contamination source” to submit a proposed episode action plan to the DEC’s Commissioner, containing detailed steps to be taken by the source owner to reduce air contaminant emissions during each stage of an air pollution episode. The regulation also enables the Commissioner to designate air pollution episodes which trigger the action plans.

In October, 2009, the DEC completed a comprehensive revision of its Air Pollution Episode Procedures to address updated PM<sub>2.5</sub> significant harm levels (SHLs) along with revised values for ozone episodes. The revision involved updating the contact information for the Bureaus of Air Quality Assurance, Stationary Sources, and Air Quality Surveillance, and the Impact Assessment and Meteorology Section, which provide important information and data-gathering services during an air pollution episode. Local-level emergency contacts were also updated. New York’s Air Pollution Episode Procedures include air pollution episode criteria for PM<sub>2.5</sub>, PM<sub>10</sub>, ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide, based on SHLs established by the EPA.

Section 110(a)(2)(H): Authority for SIP Revisions for Revised NAAQS

*“Each such plan shall [. . .] 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 availability of 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 [NAAQS] which it implements or to otherwise comply with any additional requirements established under this chapter (CAA).”*

Revisions to the SIP are authorized by sections 3-0301, 19-0103, 19-0301, 19-0303 and 19-0305 of the ECL. Article 19 of the ECL was adopted to protect New York’s air resources from pollution and to effectuate the policy of the state to maintain a reasonable degree of purity of the air resources, consistent with the public health and welfare and the industrial development of the state. To this end, the state legislature gave the DEC specific powers and duties, including the power to promulgate regulations for preventing, controlling, or prohibiting air pollution. The DEC also has the specific authority to regulate motor vehicle exhaust and approve air contaminant control systems as well as regulate fuels.

Section 71-2103 provides general enforcement authority for the air regulations. Section 71-2105 provides criminal enforcement authority. Thus, New York has the authority to revise the SIP and provide for enforcement in response to changes in the NAAQS, availability of improved methods for attaining the NAAQS, or in response to an EPA finding that the SIP is substantially inadequate. This general statement of authority is included in the SIP.

Section 110(a)(2)(I): Authority for SIP Revisions for New Nonattainment Areas

*“Each such plan shall [. . .] in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D of this subchapter (relating to nonattainment areas).”*

Revisions to the SIP are authorized by sections 3-0301, 19-0103, 19-0301, 19-0303 and 19-0305 if the ECL. Article 19 of the ECL was adopted to protect New York’s air resources from pollution and to effectuate the policy of the state to maintain a reasonable degree of purity of the air resources, consistent with the public health and welfare and the industrial development of the state. To this end, the state legislature gave the DEC specific powers and duties, including the power to promulgate regulations for preventing, controlling, or prohibiting air pollution. The DEC also has the specific authority to regulate motor vehicle exhaust and approve air contaminant control systems as well as to regulate fuels. Section 71-2103 of the ECL provides general enforcement authority for the air regulations, while section 71-2105 provides criminal enforcement authority.

This general statement of authority is included in the SIP. Part D requirements will be further addressed in the future as necessary. Such plans are required on a different schedule from the section 110 infrastructure elements and will be developed and submitted through a separate process.

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

*“Each such plan shall [. . .] 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).”*

CAA section 121 requires states to provide a satisfactory process of consultation with general purpose local governments, designated organizations of elected officials of local governments and any Federal Land Manager (FLM) having authority over federal land to which the state plan applies. On December 22, 2005, the DEC re-established a SIP Coordinating Council consisting of senior policy representatives from 19 state agencies and authorities, and a SIP Task Force consisting of officials from 37 local governments and designated organizations of elected officials. Periodic meetings of both groups were held during the ozone and PM<sub>2.5</sub> SIP development period for the 1997 NAAQS, and will continue as necessary to address the 2008 ozone NAAQS and other revised standards.

Though there are no federal lands within New York State to which the State plan applies, the DEC has participated in the consultation process of the Regional Haze SIP (40 CFR 51.308) with the FLMs, States and Tribes of the Mid-Atlantic Northeast Visibility Union (MANE-VU), and other regional planning organizations where emissions from New York are reasonably anticipated to contribute to visibility impairment to Class I areas.

CAA section 127 and 40 CFR 51.285 require state plans to contain provisions for notifying the public of NAAQS exceedances, and for increasing public awareness of measures that can be taken to prevent an exceedance and chances for participation in regulatory efforts to improve air quality. In the case of a forecasted exceedance, the public is urged to follow energy-saving and pollution-reducing steps such as limiting the use of appliances and car pooling. The public also has access to general ozone information through the DEC’s website.<sup>8</sup> Additionally, all ambient air concentrations captured by the state’s ozone monitoring network are submitted to AQS for public access.

The DEC’s website contains an AQI for reporting daily air quality to the public.<sup>9</sup> It describes how clean or polluted the air is, and what associated health effects might be a concern. It was created as a way to correlate levels of different pollutants to one scale; the higher the AQI value, the greater the health concern. When levels of ozone and/or fine particles are expected to exceed an AQI value of 100, an Air Quality Health Advisory is issued alerting sensitive groups to take the necessary precautions. The DEC, in cooperation with the NYS Department of Health, posts warnings on the above-referenced website if dangerous conditions are expected to occur. These warnings are also aired through the media, and are available on the toll-free Ozone Hotline at 800-535-1345. The Air Quality Forecast displays the predicted AQI value for eight regions in New York State. It also displays the observed values for the previous day. Air quality

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<sup>8</sup> [www.dec.ny.gov/chemical/8400.html](http://www.dec.ny.gov/chemical/8400.html)

<sup>9</sup> [www.dec.ny.gov/chemical/34985.html](http://www.dec.ny.gov/chemical/34985.html)

measurements from New York's statewide continuous monitoring network are updated hourly where available. Parameters monitored include ozone, fine particulate, carbon monoxide, sulfur dioxide, nitrogen oxides, methane/non-methane hydrocarbons, and meteorological data.

Clean Air NY<sup>10</sup> is an initiative sponsored by the New York State Department of Transportation in support of downstate air-quality efforts. Clean Air NY's network of individuals and businesses believes that every person has the power to help make New York's air healthier. It educates the public on simple everyday changes that reduce driving and provides real-time updates on Air Quality Action Days via text messaging, e-mail and media notifications. An Air Quality Action Day is announced when the DEC predicts that air pollution will approach or exceed unhealthy levels in part or all of the New York metropolitan area.

The DEC has a SIP-approved PSD/NSR program under 6 NYCRR Part 231, "New Source Review for New and Modified Facilities." New York affirms that the current NSR and PSD permitting programs remain in effect and continue to apply to the state's major stationary sources, and that the requirements from these programs are federally enforceable. These programs were discussed more thoroughly under section 110(a)(2)(C).

The visibility protection requirements referenced in this subsection are not being addressed in this infrastructure SIP submission. Visibility protection and regional haze program requirements are contained in Part C of the CAA (under sections 169A and 169B) and are being met by the DEC through separate efforts. These Part C requirements are not affected by revisions to a NAAQS. There are therefore no new applicable visibility protection obligations under section 110(a)(2)(J) resulting from the 2008 ozone NAAQS revision.

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<sup>10</sup> <http://www.cleanairny.org/cleanairny/Home/Default.aspx>

Section 110(a)(2)(K): Air Quality Modeling and Data Reporting

*“Each such plan shall [. . .] 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 [NAAQS], and*

*(ii) the submission, upon request, of data related to such air quality modeling to the Administrator.”*

The DEC’s regulations under 6 NYCRR Part 200.6, “Acceptable ambient air quality,” dictate that “no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution.”

Furthermore, 6 NYCRR Subpart 231-12: Ambient Air Quality Impact Analysis, sets forth the procedures and requirements for the performance of an air quality impact analysis to determine whether a new or modified facility complies with quantified air quality levels, including air quality standards, PSD increments and monitoring de minimis levels, air quality related values, and significant impact levels.

The DEC certifies that the air quality modeling and analysis used in SIPs complies with the EPA guidance<sup>11</sup> on the use of models in attainment demonstrations, and commits to continue to use air quality models in accordance with the EPA’s approved modeling guidance and to submit data to the Administrator if requested.

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<sup>11</sup> US EPA “Guidance on the use of models and other analyses for demonstrating attainment of air quality goals for ozone, PM<sub>2.5</sub> and regional haze.” EPA-454/B-07-002; 2007

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

*“Each such plan shall 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 reviewing and acting upon any application for such a permit, and*

*(ii) if the owner or operator receives a permit for such 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.”*

In New York State, the Title V Permit Fee Program established in ECL section 19-0311(c) requires the DEC to promulgate regulations that, among other things, require applications to identify and describe facility emissions in sufficient detail to establish the basis for the fees and applicability of requirements of the CAA. ECL section 72-0303 requires major stationary sources to pay operating permit program fees sufficient to support an appropriation approved by the legislature for the direct and indirect costs associated with the operating permit program established in section 19-0311.

In addition, paragraph 201-6.5(a)(7) of 6 NYCRR Subpart 201-6, the DEC’s approved Title V program, specifically states that “[t]he owner and/or operator of a stationary source shall pay fees to the DEC consistent with the fee schedule authorized by Subpart 482-2 of this Title.” Fees generated by this requirement fund New York’s Title V Program. New York State commits to continued implementation of the major stationary source permit fee regulations.

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

*“Each such plan shall [. . .] provide for consultation and participation by local political subdivisions affected by the plan.”*

The DEC established an Inter-agency Consultation Group (ICG) pursuant to 6 NYCRR Part 240, "Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded or Approved under Title 23 U.S.C. or the Federal Transit laws." Members of this group include the Federal Transit Administration, Federal Highway Administration, New York State Department of Transportation, United States Environmental Protection Agency, New York State Department of Environmental Conservation, and several Metropolitan Planning Organizations statewide. The ICG meets monthly and is central to the entire transportation conformity process, and serves as the underpinning for conformity determinations and as the primary mechanism for ensuring early coordination and negotiation among all parties affected by transportation conformity, including the general public, the business community, and other interested parties.

Additional consultation and participation by local political subdivisions are provided through the SIP Task Force that was established on December 22, 2005, which consists of officials from thirty-seven local governments and designated organizations of elected officials.

Participation by affected local entities, as well as the public, is provided for through 6 NYCRR Part 617, "State Environmental Quality Review." For each major SIP revision, SEQR requires the DEC to provide appropriate notice, provide the opportunity to submit written comments, and allow the public and local entities the opportunity to request a public hearing.