



Department of  
Environmental  
Conservation

# **PROPOSED NEW YORK STATE IMPLEMENTATION PLAN REVISION: TRANSPORT SUPPLEMENT FOR THE 2008 OZONE NATIONAL AMBIENT AIR QUALITY STANDARDS**

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## Introduction

DEC submitted its proposed infrastructure SIP revision for the 2008 ozone NAAQS to EPA on April 4, 2013. On August 26, 2016, EPA disapproved New York's proposed SIP revision pertaining to prongs 1 and 2 of CAA section 110(a)(2)(D)(i)(I), also known as the "good neighbor" provision related to significant contributions to nonattainment or the interference with maintenance in downwind areas.<sup>1</sup> This disapproval, effective September 26, 2016, placed EPA on a two-year clock to replace the disapproved infrastructure elements with a Federal Implementation Plan, unless New York issued a supplemental SIP revision. This submission acts as New York's supplement to prongs 1 and 2 for the 2008 ozone NAAQS. Prong 4 was approved in the same EPA action, while prong 3 was approved separately.<sup>2</sup>

## Section 110(a)(2)(D)(i)(I): Interstate Pollution Transport

EPA provided guidance for prongs 1 and 2 of the "good neighbor" provision in an October 27, 2017 memorandum titled "Supplemental Information on the Interstate Transport State Implementation Plan Submissions for the 2008 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I)." DEC does not agree with the assessment contained in this guidance, which ostensibly "indicates that there are no monitoring sites, outside of California, that are projected to have nonattainment or maintenance problems with respect to the 2008 ozone NAAQS...in 2023." This modeling projects air quality to 2023 based on flawed, unenforceable inventory assumptions and modeling methodologies. EPA relies on dozens of examples of unenforceable NOx control assumptions for units it predicts to install state-of-the-art controls or to operate already-installed SCR units. These assumptions surely result in lower projected 2023 design values and state contributions that differ from the expected reality. Even so, the Westport, CT monitor (09-001-9003) is projected to attain the 2008 NAAQS by a mere 0.1 ppb in 2023.

DEC also showed major discrepancies in projected ozone levels using the CMAQ modeling platform as opposed to the CAMx model employed by EPA; projected design values were up to 9.2 ppb higher (effectively 10 ppb when truncated) for northeastern region monitors when comparing the two models utilizing the MARAMA 2023 gamma2 emissions inventory. An Excel spreadsheet summarizing these data is included as Appendix A. Based on CMAQ (another EPA-approved modeling platform), current design values, and the increasing difficulty of achieving additional NOx and VOC reductions, DEC considers EPA's 2023 projections to be overly optimistic.

Furthermore, EPA on July 10, 2018 proposed the "CSAPR Close-Out," claiming the Cross-State Air Pollution Rule (CSAPR) Update fully addresses the 20 covered states'

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<sup>1</sup> "Partial Approval and Partial Disapproval of Air Quality Implementation Plans; New York; Interstate Transport Infrastructure SIP Requirements for the 2008 Ozone NAAQS," Final Rule. Published August 26, 2016; effective September 16, 2016. 81 FR 58849.

<sup>2</sup> "Approval and Promulgation of Implementation Plans; New York Prevention of Significant Deterioration of Air Quality and Nonattainment New Source Review; Infrastructure State Implementation Plan Requirements," Final Rule. Published December 27, 2016; effective January 26, 2017. 81 FR 95047.

interstate pollution transport obligations for the 2008 NAAQS based on the latest data and the aforementioned EPA 2023 projection modeling.<sup>3</sup>

Projecting to 2023, however, is not relevant for areas still trying to attain the 2008 ozone NAAQS. The NYMA failed to attain first by its marginal nonattainment deadline of July 20, 2015 (based on 2014 design values) and then by its moderate nonattainment deadline of July 20, 2018 (based on 2017 design values), and now requires an immediate reclassification to serious nonattainment, with an attainment deadline of July 20, 2021. EPA should rely on current air quality, not inherently imperfect modeling projections, to assess significant contributions from upwind sources. It is important to note that EPA's denial of New York's 2008 ozone good neighbor SIP relied, in part, on the fact that "the submission used a projection year (2020) to model downwind air quality that is two years beyond the July 11, 2018 [sic] moderate area attainment date for the 2008 ozone NAAQS."

EPA's projection modeling for the 2017 CSAPR Update had previously identified New York State as a significant contributor for the 2008 ozone NAAQS to multiple downwind nonattainment and maintenance sites in the northeast. Additional contribution data, with emission inputs prepared by New York and New Jersey and with CAMx modeling conducted by the University of Maryland, are provided in an Excel spreadsheet included as Appendix B, confirming significant contributions to downwind monitors. DEC asserts that, despite its contributions, New York has met its good neighbor obligations for the 2008 ozone NAAQS through the implementation and enforcement of stringent NOx and VOC control measures that go well beyond the EPA presumptive cost threshold in the CSAPR Update rule for highly cost-effective emission reductions, and through the ongoing adoption and revision of additional control measures to further ensure the reduction of ozone in both New York State and downwind areas.

Reasonably Available Control Technology (RACT) has been required on major sources of NOx throughout the state since 1995. These regulations have been periodically updated (in 1999, 2004 and 2010) to keep up with advances in control technology. Presumptive emission limits and facility-specific emission limits are based on an inflation-adjusted control cost currently valued at \$5,500 per ton of NOx reduced. (This \$5,500 per ton control cost is consistent with typical costs to install new SCR units, the most stringent add-on NOx control technology. EPA's \$1,400 per ton control threshold for the CSAPR Update, on the other hand, was selected to reflect the cost of turning on already-existing SCR control units, which has failed to happen in many cases due to the lack of enforceability.) New York's EGU NOx emission rates are among the lowest in the country, as reflected in a CSAPR Update ozone season emissions budget lower than all states other than New Jersey and Maryland.<sup>4</sup>

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<sup>3</sup> "Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard," Proposed Rule. Published July 10, 2018. 83 FR 31915.

<sup>4</sup> "Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS," Final Rule. Published October 26, 2016; effective December 27, 2016. 81 FR 74504-74650.

The \$5,500 per ton NO<sub>x</sub> RACT control cost also applies to non-EGUs. The OTC has provided a valuable platform for the collaborative development of numerous non-EGU stationary source and area source model rules, which are periodically updated to assess new control technologies.

DEC is in various stages of the rulemaking process for additional measures that will control VOC and NO<sub>x</sub> emissions from EGU, non-EGU, area, and mobile sources. DEC will further control area-source VOC emissions through updates to the following regulations:

- Part 203, “Oil and Gas Sector,”
- Part 205, “Architectural and Industrial Maintenance (AIM) Coatings,”
- Part 226, “Solvent Metal Cleaning Processes,”
- Subpart 228-1, “Motor Vehicle and Mobile Equipment Refinishing and Recoating Operations,”
- Part 230, “Gasoline Dispensing Sites and Transport Vehicles,” and
- Part 235, “Consumer Products.”

Additional NO<sub>x</sub> reductions will be realized through the following regulatory actions:

- Part 219, “Incinerators” – new subpart 219-10 will apply NO<sub>x</sub> RACT requirements to municipal waste combustion units;
- Subpart 227-2, “Reasonably Available Control Technology (RACT) for Major Facilities of Oxides of Nitrogen (NO<sub>x</sub>)” – new NO<sub>x</sub> limits for simple cycle combustion turbines (or “peaking units”), which will particularly benefit the NYMA on the hot summer days most conducive to ozone formation (known as “high electric demand days”);
- Part 222, “Distributed Generation Sources” – replacement of the currently stayed version, which will establish NO<sub>x</sub> emission limits for certain minor sources in the NYMA not subject to NO<sub>x</sub> RACT limits through subpart 227-2;
- Part 218, “Emission Standards for Motor Vehicles and Motor Vehicle Engines” – new installation, recordkeeping and reporting requirements for aftermarket catalytic converters; and
- Part 243, “Transport Rule NO<sub>x</sub> Ozone Season Trading Program” – the adoption of the CSAPR Update trading program.

Emissions from New York’s mobile onroad sector itself significantly impact downwind monitors, with 2023 contributions as high as 4.640 ppb at the Greenwich, CT monitor based on OTC/MDE modeling. The onroad modeling results are included as Appendix C. Diesel emissions typically account for a slight majority of the total modeled impact as compared to non-diesel emissions. New York controls its onroad sector through inspection/maintenance and anti-idling standards pursuant to Part 217, “Motor Vehicle Emissions,” and the implementation of the California Low-Emission Vehicle standards under Part 218, “Emission Standards for Motor Vehicles and Motor Vehicle Engines.”

EPA has the primary authority for the regulation of the onroad sector. DEC has repeatedly called upon EPA to further control the mobile emission sector, such as through more stringent greenhouse gas emission controls and heavy-duty diesel vehicle

standards.<sup>5</sup> DEC has also submitted comments against EPA's proposed repeal of emission standards for "glider" vehicles, engines, and kits, which circumvent emission standards that apply to new vehicles.<sup>6</sup> Recently, the Trump administration proposed to roll back clean car standards,<sup>7</sup> which would result in a fuel consumption increase of 206 billion gasoline gallon equivalents for calendar years 2020-2050, and an increase in NOx emissions of approximately 2.1 percent by 2050.<sup>8</sup> This action, if finalized, would further contribute to elevated ozone concentrations in the NYMA.

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<sup>5</sup> June 6, 2017 "Statement of the Ozone Transport Commission Requesting that the United States Environmental Protection Agency Assist the States by Implementing Emission Reduction Programs to Reduce NOx Emissions from High Priority Mobile Sources."

<sup>6</sup> January 5, 2018 comment letter from Basil Seggos, Commissioner, New York State Department of Environmental Conservation to E. Scott Pruitt, Administrator, U.S. Environmental Protection Agency, regarding "Reconsideration of the Application of the Final Rule entitled 'Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy Duty Engines and Vehicles – Phase 2 Final Rule.'"

<sup>7</sup> "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks," Notice of Proposed Rulemaking. Published August 4, 2018. 83 FR 42986-43500.

<sup>8</sup> "SAFE" Rule Draft Environmental Impact Statement Summary. U.S. Department of Transportation and National Highway Traffic Safety Administration. July 2018. Table S-2 and page S-8, respectively.