



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R02-OAR-2016-0413; FRL-9965-48-Region 2]

Approval and Promulgation of Implementation Plans; New Jersey; Regional Haze Five-Year Progress Report State Implementation Plan

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve New Jersey's regional haze progress report, submitted on June 28, 2016, as a revision to its State Implementation Plan (SIP). New Jersey's SIP revision addresses requirements of the Clean Air Act and its implementing regulations that the State submit periodic reports describing progress toward reasonable progress goals established for regional haze and a determination of the adequacy of the State's existing regional haze SIP. New Jersey's progress report notes that New Jersey has implemented the measures in the regional haze SIP due to be in place by the date of the progress report and that visibility in federal Class I areas affected by emissions from New Jersey is improving and has already met the applicable reasonable progress goals for 2018. The EPA is proposing approval of New Jersey's determination that the State's regional haze SIP is adequate to meet these reasonable progress goals for the first implementation period, which extends through 2018, and requires no substantive revision at this time.

DATES: Comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R02-OAR-2016-0413, to the *Federal eRulemaking Portal*: <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

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I. Background

States are required to submit a progress report in the form of a SIP revision that evaluates progress towards the reasonable progress goals (RPGs) for each mandatory Class I federal area¹ (Class I area) within the state and in each Class I area outside the state which may be affected by emissions from within the state. 40 CFR 51.308(g). In addition, the provisions of 40 CFR 51.308(h) require states to submit, at the same time as the 40 CFR 51.308(g) progress report, a determination of the adequacy of the state's existing regional haze SIP. The progress report SIP is due five years after submittal of the initial regional haze SIP. On July 28, 2009, New Jersey submitted the State's first regional haze SIP in accordance with 40 CFR 51.308.²

On June 28, 2016, New Jersey submitted as a revision to its SIP its progress report which detailed the progress made in the first planning period toward implementation of the Long Term Strategy (LTS) outlined in the 2009 regional haze SIP submittal, the visibility improvement measured at Class I areas affected by emissions from New Jersey, and a determination of the adequacy of the State's existing regional haze SIP. The EPA is proposing to approve New Jersey's June 28, 2016 SIP submittal.

II. EPA's Evaluation of New Jersey's SIP Revision

New Jersey's report on progress made in the first implementation period toward reasonable progress goals for Class I areas affected by emissions from sources in New Jersey (also known as a regional haze five-year progress report or progress report) was submitted to the EPA as a SIP revision. New Jersey has one Class I area within its borders, the Brigantine Wilderness Area (Brigantine). Emissions from New Jersey's sources were also found to impact visibility at several other Class I areas:

¹ Areas designated as mandatory Class I federal areas consist of national parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977 (42 U.S.C. 7472(a)). Listed at 40 CFR part 81, subpart D.

² On January 3, 2012, at 77 FR 19, EPA approved New Jersey's regional haze SIP submittal addressing the requirements of the first implementation period for regional haze.

Acadia National Park and the Moosehorn Wilderness Area in Maine, the Great Gulf Wilderness Area and Presidential Range/Dry River Wilderness Area in New Hampshire, and the Lye Brook Wilderness Area in Vermont. See 76 FR 49711 (August 11, 2011).

Through the consultation process, New Jersey agreed to pursue the coordinated course of action agreed to by the Mid-Atlantic/Northeast Visibility Union (MANE-VU)³ to assure reasonable progress toward preventing any future, and remedying any existing, impairment of visibility in the mandatory Class I areas within the MANE-VU region. These strategies are commonly referred to as the MANE-VU “ask.” The MANE-VU “ask” includes: a timely implementation of best available retrofit technology (BART) requirements, 90 percent or more reduction in sulfur dioxide (SO₂) emissions at 167 electric generating units (EGUs) “stacks” identified by MANE-VU (or comparable alternative measures), lower sulfur fuel oil (with limits specified for each state) and continued evaluation of other control measures.⁴ In summary, New Jersey is on track to fulfill the MANE-VU “ask” by meeting the deadlines for BART requirements, as of the date of the progress report, for all BART-eligible facilities described in the progress report, instituting 90 percent or more control at the four New Jersey units from the 167 EGUs identified by MANE-VU, and evaluating control measures including New Jersey’s Mercury Rule, adoption of performance standards at all coal-fired boilers in New Jersey, adoption of the lower limits for sulfur in fuel oil and a variety of measures⁵ developed for other programs that support regional haze emission reduction goals.

³ MANE-VU is a collaborative effort of State governments, Tribal governments, and various federal agencies established to initiate and coordinate activities associated with the management of regional haze, visibility and other air quality issues in the Northeastern United States. Member State and Tribal governments include: Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Penobscot Indian Nation, Rhode Island, St. Regis Mohawk Tribe, and Vermont.

⁴ The MANE-VU “ask” was structured around the finding that SO₂ emissions were the dominate visibility impairing pollutant at the Northeastern Class I areas and electrical generating units comprised the largest SO₂ emission sector. See “Regional Haze and Visibility in the Northeast and Mid-Atlantic States,” January 31, 2001.

⁵ Table 1 at the EPA’s proposed approval of New Jersey’s regional haze SIP at 76FR 49717 has the list of measures from other programs that also reduce the components of regional haze.

A. Regional Haze Progress Report

This section includes the EPA's analysis of New Jersey's progress report SIP submittal, and an explanation of the basis of our proposed approval.

New Jersey's 2009 regional haze SIP included the following key measures: control measures for the State's five subject-to-BART sources and control measures for four EGUs.

New Jersey has four of the 167 EGU stacks identified for control of sulfur dioxide emissions in the MANE-VU "ask." Each has reduced sulfur dioxide emissions by 90 percent or more. These sources are Mercer 1 and 2, Hudson 2 and BL England 2 (see Table 3.1 of New Jersey's progress report).

New Jersey's sources that were eligible for BART controls are: Chevron Products, ConocoPhillips Bayway Refinery, PSEG Hudson Generating Station, Vineland Municipal Electric Utility – Howard M. Down, Unit 10, and BL England Generating Station, Units 1 and 2. As documented in Table 5.1 of New Jersey's progress report, each of these sources has acted to implement BART controls or shutdown, when these actions were due by the date of the progress report.

New Jersey's progress report also notes the implementation of the MANE-VU "ask" for sulfur content of fuel oil. The New Jersey rule,⁶ approved by the EPA as part of New Jersey's regional haze plan, lowered the sulfur content of all distillate fuel oils (#2 fuel oil and lighter) to 500 parts per million (ppm) beginning on July 1, 2014 and to 15 ppm beginning on July 1, 2016. The sulfur content for #4 fuel oil was lowered to 2,500 ppm and for #6 fuel oil to a range of 3,000 to 5,000 ppm sulfur content beginning July 1, 2014.

New Jersey's progress report also documented implementation of New Jersey's Mercury Rule, adoption of performance standards at all coal-fired boilers in New Jersey, and other measures that also reduced emissions that caused haze. Although these measures were not relied upon as emission reductions for the regional haze plan, and the New Jersey progress report did not itemize the amount of

⁶ EPA's approval of New Jersey's Sulfur in Fuel rule is noted at 40 CFR 52.1605.

reductions specifically from each of these programs, these reductions are included in the overall emission reductions calculated for the progress report.

In addition, the New Jersey progress report, in chapter 7, includes the status of SO₂ emission reductions from other states that affect Class I areas in MANE-VU relative to the MANE-VU “ask.”⁷ New Jersey consulted with states in the eastern United States that affect visibility at the Class I area at Brigantine, outlining how they could meet the MANE-VU “ask” and help achieve the progress goals for Class I areas in New Jersey and other MANE-VU states. These emission reductions were included in modeling that predicted progress toward meeting the reasonable progress goals. The EPA proposes that New Jersey’s summary of the status of implementation of measures in its regional haze progress report adequately addresses the applicable provisions under 40 CFR 51.308(g), as the State demonstrated the implementation of measures within New Jersey, including applying BART at eligible sources.

During the development of the regional haze SIP for the first planning period, MANE-VU and New Jersey determined that SO₂ was the greatest contributor to anthropogenic visibility impairment at the State's Class I areas. Therefore, the bulk of visibility improvement achieved in the first planning period was expected to result from reductions in SO₂ emissions from sources inside and outside of the State. Table 7.1 of New Jersey’s Progress Report details the SO₂ emission reductions from 2002 to 2012 achieved at all the EGUs in the State, using the EPA’s Clean Air Markets Division (CAMD) data. It demonstrates a 90 percent or greater reduction in SO₂ stack emissions for each of the four EGU stacks. Table 1 summarizes the reductions based on the State’s emission inventory for 2012, compared to the State’s projection for 2018.

Table 1. SO₂ Emission Reductions from the New Jersey EGU Stacks of the MANE-VU 167 Stacks

⁷ Memorandum from NESCAUM to MANE-VU “Overview of State and Federal Actions Relative to MANE-VU Asks” dated March 28, 2013. <http://www.nescaum.org/documents/summary-memo-mane-vu-asks-20130328-final.pdf/>.

Plant ID	Unit ID	Unit Name	Actual			Goal	
			Actual 2002 Emissions (Tons)	Actual 2012 Emissions (Tons)	% Reduction (2012)	Projected 2018 Emissions (Tons)	% Reduction Expected in 2018
61057	1	Mercer 1	8,137	105	99%	814	90%
61057	2	Mercer 2	5,918	105	98%	592	90%
12202	2	Hudson 2	18,541	139	99%	1,225	93%
73242	1	BL England 1	10,080	934	91%	274	97%

As New Jersey has documented the reduction of SO₂ emissions by more than 90 percent at EGU stacks located in New Jersey, the EPA proposes to find that New Jersey has adequately addressed the applicable provisions of 40 CFR 51.308(g). New Jersey has detailed the SO₂ and nitrogen oxides (NO_x) reductions from the 2002 regional haze baseline by using the most recently available year of data at the time of the development of New Jersey's Progress Report, which was 2013. In addition, New Jersey highlighted SO₂ emissions reductions from all of New Jersey's EGUs during this same time period.

The provisions under 40 CFR 51.308(g) also require that states with Class I areas within their borders provide information on current visibility conditions and the difference between current visibility conditions and baseline visibility conditions expressed in terms of five-year averages of these annual values.

New Jersey has one Class I area, the Brigantine Wildlife Refuge. The Interagency Monitoring of Protected Visual Environments program (IMPROVE) includes a monitoring site located at Brigantine. New Jersey includes data in its progress report from the IMPROVE monitoring site to quantify air pollutants that constitute regional haze. Table 2 includes 2018 RPGs from the 2009 regional haze SIP and data from IMPROVE monitors at the Brigantine Class I area in New Jersey and in Class I areas where visibility is affected by emissions from New Jersey. This includes the baseline 2000-2004 five-year average visibility, and the most recent 2009-2013 five-year average visibility.

Table 2. Observed Visibility vs. Reasonable Progress Goals (All values in deciviews)

Class I Area IMPROVE* Site	2000- 2004 5-Year Average	2009-2013 5-Year Average	Met 2018 Progress Goal Already?	2018 Reasonable Progress Goal
20% Most Impaired Days				
Acadia National Park	22.9	17.9	Yes	19.4
Moosehorn Wilderness Area**	21.7	16.8	Yes	19.0
Great Gulf Wilderness Area***	22.8	16.7	Yes	19.1
Lye Brook Wilderness Area	24.4	18.8	Yes	20.9
Brigantine Wilderness Area	29	23.8	Yes	25.1
20% Least Impaired Days				
Acadia National Park	8.8	7.0	Yes	8.8
Moosehorn Wilderness Area	9.2	6.7	Yes	9.2
Great Gulf Wilderness Area	7.7	5.9	Yes	7.7
Lye Brook Wilderness Area	6.4	4.9	Yes	6.4
Brigantine Wilderness Area	14.3	12.3	Yes	14.3

* IMPROVE = Interagency Monitoring of Protected Visual Environments program.

** The IMPROVE monitor for Moosehorn Wilderness also represents Roosevelt Campobello International Park.

*** The IMPROVE monitor for Great Gulf Wilderness also represents Presidential Range - Dry River Wilderness Area.

Data from *Tracking Visibility Progress*, posted on NESCAUM's website at <http://www.nescaum.org/topics/regional-haze/regional-haze-documents>, supplemented by the latest IMPROVE data through 2013 as noted in New Jersey's progress report

The baseline visibility for Brigantine was 29.0 deciviews (dv) on the 20 percent most impaired days and 14.3 dv on the least impaired days. The most recent five-year average visibility data shows an improvement of 5.2 dv on the 20 percent most impaired days and 2.0 dv improvement on the 20 percent least impaired days. New Jersey's progress report also demonstrates that the State has already achieved and surpassed the 2018 RPG at Brigantine for the 20 percent most impaired days and ensured no visibility degradation for the 20 percent least impaired days for the first planning period. Sites at Class I areas affected by sources in New Jersey also have surpassed the 2018 RPGs.

The EPA proposes to find that New Jersey provided the required information regarding visibility conditions to meet the applicable provisions under 40 CFR 51.308(g) specifically providing baseline visibility conditions (2000-2004), current conditions based on the most recently available IMPROVE monitoring data (2009-2013), and an assessment of the change in visibility impairment at its Class I areas.

In its progress report SIP, New Jersey presents data from statewide emissions inventories - New Jersey's State Periodic Emissions Inventory - developed for the years 2002 and 2011, plus projected inventories for 2018, for SO₂, NO_x, fine particles with diameters that are generally 2.5 micrometers and smaller (PM_{2.5}) and volatile organic compounds (VOCs). New Jersey's emissions inventories include the following source classifications: point, area, on-road mobile, and non-road mobile. The progress report also includes more detailed information on reductions in sulfur oxides (SO_x) emissions from EGUs, and particulate matter (PM), NO_x and SO_x from BART-eligible sources.

Overall, New Jersey's emissions that affect visibility were reduced in all sectors for all pollutants, except for on-road direct emissions of PM. Compared to the 2002 emission inventory New Jersey used to model haze, emissions in 2011 were reduced by 82 percent for SO₂, 38 percent for NO_x, 23 percent for direct PM_{2.5} and by 49 percent for VOCs. New Jersey's progress report also compared the latest EPA modeling inventory calculations for New Jersey for 2018 with New Jersey's portion of the MANE-VU inventory used to set the 2018 progress goal for Brigantine. For NO_x, PM_{2.5}, SO₂, and VOCs, the EPA's modeled emissions for 2018 are lower than the 2018 emissions used in MANE-VU's modeling.

In particular, New Jersey's emissions from each of the four EGU stacks addressed in its regional haze SIP were reduced by more than 90 percent from 2002 to 2011, the latest year actual emissions are available. Projected EGU emissions for 2018, the end of the first planning period, are expected to meet or exceed the 90 percent reduction target for each EGU stack. Actual SO₂ emissions from each of the BART-eligible sources declined by more than 90 percent from 2002 to 2012. PM and NO_x emissions

decreased overall, and for each source, except for PM emissions from the ConocoPhillips Bayway Refinery. ConocoPhillips has met its BART requirements, including control of PM, but PM emissions increased because refinery throughput was higher in 2012 than 2002.

New Jersey's data indicates its 2011 emissions for SO₂, PM and VOCs are lower than the 2018 emissions projections used to model its progress goal. Statewide NO_x emissions have decreased by 28 percent to 182,140 tons per year by 2011, so as of 2011 they have not reached the 2018 target of 124,100 tons per year. However, modeling by the EPA⁸ projects New Jersey's statewide NO_x emissions to be reduced to 106,749 tons per year by 2018, so it is likely New Jersey will meet its emission targets by 2018.

The EPA is proposing that New Jersey adequately addressed the provisions of 40 CFR 51.308(g). The progress report compared the most recent updated emission inventory data available at the time of the development of the progress report with the baseline emissions used in the modeling for the regional haze SIP.

In its progress report SIP, New Jersey did not find any significant changes in emissions of SO_x, NO_x and PM_{2.5} which might have impeded or limited progress during the first planning period. As noted earlier, haze at Brigantine and other Class I areas affected by emissions from New Jersey has improved to levels that meet or exceed the RPG. The EPA therefore proposes to approve the New Jersey SIP submission.

In its progress report SIP, New Jersey concludes the elements and strategies relied on in its original regional haze SIP are sufficient to enable New Jersey and neighboring states to meet all established RPGs. As shown in Table 2, visibility on the least impaired and most impaired days from 2000 through 2011 has improved at all Class I areas affected by emissions from New Jersey (and all RPGs for 2018 have already been met). Visibility improvement at Brigantine has occurred for the most

⁸ <https://www.epa.gov/sites/production/files/2015-11/documents/o3transportaqmodelingtsd.pdf>

impaired days and no degradation of visibility has occurred for the least impaired days. Therefore, New Jersey concludes Brigantine is on track to meet the RPGs for 2018 based on the observed visibility improvement. The EPA proposes to agree that New Jersey has adequately addressed the provisions for first planning period progress reports. The EPA views this requirement as an assessment that should evaluate emissions and visibility trends and other readily available information. In its progress report, New Jersey described the improving visibility trends using data from the IMPROVE network and the downward emissions trends in key pollutants in the State and the MANE-VU region. New Jersey determined its regional haze SIP is sufficient to meet the RPGs for its own Class I area and the Class I areas outside the State impacted by the State's emissions.

New Jersey's visibility monitoring strategy relies upon participation in the IMPROVE network. The IMPROVE monitor at the Brigantine Wilderness Area is operated and maintained through a formal cooperative relationship between the EPA, the U.S. Fish and Wildlife Service, and New Jersey's Bureau of Monitoring. The IMPROVE monitor for the Brigantine Wilderness Area is located at the edge of the Wilderness Area. The air monitoring data collected is representative of the air quality within the wilderness area but does not disturb the wilderness area's ecology or natural resources. New Jersey finds that there is no need for additional monitoring sites or equipment. The EPA proposes to find that New Jersey has adequately addressed these provisions by reviewing the State's visibility monitoring strategy and determining no further modifications to the monitoring strategy are necessary.

B. Determination of Adequacy of Existing Regional Haze Plan

In its progress report, New Jersey submitted a negative declaration to EPA regarding the need for additional actions or emission reductions in New Jersey beyond those already in place and those to be implemented by 2018 according to New Jersey's regional haze plan.

In the 2016 SIP submittal, New Jersey determined the existing regional haze SIP requires no further substantive revision at this time to achieve the RPGs for Class I areas affected by the State's

sources. The basis for the State's negative declaration is the finding that visibility has improved at all Class I areas in the MANE-VU region. In addition, SO₂, and PM emissions from the latest emission inventory for New Jersey have decreased to levels below the projections for 2018. While NO_x reductions have yet to fully meet the 2018 projections, additional substantial NO_x emission reductions are expected by 2018, as projected by the latest EPA modeling inventory.

The EPA proposes to conclude that New Jersey has adequately addressed the provisions under 40 CFR 51.308(h) because visibility and emission trends indicate that the Brigantine area, in addition to all the other Class I areas impacted by New Jersey's sources, are meeting or exceeding the RPGs for 2018, and expect to continue to meet or exceed the RPGs for 2018.

III. Proposed Action

The EPA is proposing to approve New Jersey's June 28, 2016 regional haze progress report as meeting the requirements of 40 CFR 51.308(g) and (h).

IV. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);

- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175, because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law. Thus, Executive Order 13175 does not apply to this action.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Particulate matter, Regional haze, Sulfur oxides.

Authority: 42 U.S.C. 7401 et seq.

Dated: July 10, 2017.

Walter Mugdan, Acting Regional Administrator,
Region 2.

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