COPY

MAY 2011
Received
Environmental Improvement Board

STATE OF NEW MEXICO
BEFORE THE ENVIRONMENTAL IMPROVEMENT BOARD

IN THE MATTER OF PROPOSED REVISIONS
TO THE STATE IMPLEMENTATION PLAN
FOR REGIONAL HAZE

No. EIB 11-01 (R)

NEW MEXICO ENVIRONMENT DEPARTMENT
NOTICE OF RECEIPT OF COMMENTS

The Department provides this notice that it received on May 13, 2011 comments from the U.S. Environmental Protection Agency, Region 6, on the Department's proposed revisions to the State Implementation Plan for Regional Haze. The comments are attached as Exhibit A to this Notice.

Respectfully submitted,

NEW MEXICO ENVIRONMENT DEPARTMENT
OFFICE OF GENERAL COUNSEL

Charles F. Noble for

Bill Grantham
Assistant General Counsel
New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, New Mexico 87502-6110
Telephone (505) 827-2824, Fax (505) 827-1628
bill.grantham@state.nm.us

Certificate of Service

I certify that a copy of the foregoing pleading was sent by mail on May 16, 2011 to the following:

Richard A. Alvidrez, Esq.
Miller Stratvert P.A.
P.O. Box 25687
Albuquerque, New Mexico 87125

Galen M. Buller, Esq.
Miller Stratvert P.A.
P.O. Box 1986
Santa Fe, NM 87501

Attorneys for Public Service Co. of New Mexico

Charles F. Noble for

Bill Grantham

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

May 13, 2011

Ms. Rita Bates
New Mexico Environment Department
P.O. Box 5469
Santa Fe, New Mexico 87502-5469

Re: New Mexico's Proposed Regional Haze State Implementation Plan

Dear Ms. Bates:

We appreciate the opportunity to comment on New Mexico's proposed Section 309 Regional Haze State Implementation Plan (New Mexico's RH SIP). We offer the following comments, which are intended to highlight some of the more important issues:

1. It is imperative that states opting to submit a Regional Haze SIP under 40 CFR 51.309 have Western Backstop Sulfur Dioxide (SO_2) Trading Program rules that are consistent with each other in order to allow the regional SO_2 Backstop Trading Program to function effectively if it were to be triggered. The Special Penalty Provisions for the 2018 Milestone, which are found at 20.2.81.110 NMAC, are part of New Mexico's Western Backstop SO_2 Trading Program rules. In paragraph (2) of subsection C of 20.2.81.110 NMAC, New Mexico's rules provide for the allowance transfer deadline for each emissions year after the 2018 emissions year. In order to provide consistency with the rules of other Section 309 States, New Mexico needs to revise the language in paragraph (2) of subsection C of 20.2.81.110 NMAC to specify that "The allowance transfer deadline for the 2019 emissions year shall be midnight Pacific Standard Time on May 31, 2021 (or if this date is not a business day, midnight of the first business day thereafter); and for each control period after 2018 that the special penalty provisions are assessed, the May 31, 2021 allowance transfer deadline for the 2019 control period will be adjusted forward by one year." EPA does not believe it will be able to approve the backstop trading program unless it is fully consistent with the rules in other participating states and Albuquerque.

2. Pursuant to 40 CFR 51.308(e)(1)(i), New Mexico should list all best available retrofit technology (BART) eligible sources within the State. We understand this information is available in Appendix C and additional documents prepared by the Western Regional Air Partnership (WRAP) which we have drawn upon in the past as part of the development of our recent proposal (*see* 76 FR 491 (January 5, 2011)). A list of the eleven (11) BART eligible sources mentioned should be included in section 10.3 in New Mexico's Regional

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

Ex. A

Haze SIP, as well as a summary of supporting data from BART screening modeling, including New Mexico's analysis of BART eligible sources and conclusions from the BART screening modeling, and what sources were determined to be subject to BART.

3. By reference from 40 CFR 51.309(g), 40 CFR 51.308(d)(1)(ii) requires that "[f]or the period of the implementation plan, if the State establishes a reasonable progress goal that provides for a slower rate of improvement in visibility than the rate that would be needed to attain natural conditions by 2064, the State must demonstrate, based on the factors in paragraph (d)(1)(i)(A) of this section, that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the State is reasonable; . . . The State must provide to the public for review, as part of its implementation plan, an assessment of the number of years it would take to attain natural conditions if visibility improvement continues at the rate of progress selected by the State as reasonable." The proposed SIP does not include an assessment of the number of years it would take to reach natural conditions at the rate of progress selected by the State for each Class I site. This information must be included in New Mexico's Regional Haze SIP.

4. Table 6-4 of the proposed New Mexico Regional Haze SIP summarizes the best and worst 20% days for the baseline, the Uniform Rate of Progress (URP) target for 2018, and the modeled Reasonable Progress Goal (RPG) for each Class I area in New Mexico. By reference from 40 CFR 51.309(g), 40 CFR 51.308(d)(1) requires that "[f]or each mandatory Class I Federal area located within the State, the State must establish goals . . . that provide for reasonable progress towards achieving natural visibility conditions. The reasonable progress goals must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period." Modeling results for Carlsbad Caverns indicate degradation of visibility on the 20% best days. The proposed New Mexico Regional Haze SIP states that "over-prediction for area sources is likely responsible for this modeled projection of worsening visibility on the best days" (New Mexico Regional Haze SIP under 309(g); page 31). However, no further details or analysis of what pollutant, source category, or source region is responsible for the predicted degradation is given. Additional technical analysis and examination of modeling results, source apportionment, and emission inventories are necessary to support the conclusion that modeled degradation is due to area sources that are being over predicted. EPA believes there may be other causes of visibility degradation at this site on the 20% best days. For example, examination of modeling results and differences between the PRP18a and PRP18b emission inventories can provide insight into the impact of projected future-year emissions from Mexico, BART determinations, and updated permit limits in the region and these should also be investigated. New Mexico

must either demonstrate that the degradation is due to international emissions or demonstrate that incorrect emission projections are responsible for the predicted degradation in visibility. Unless these issues can be appropriately addressed, EPA will not be able to propose approval of New Mexico's reasonable progress demonstration.

5. The description of the PRP18b emission inventory given on page 53 of the New Mexico Regional Haze SIP states that the "Mexico emissions are from 1999 and were held constant for 2018." However, the WRAP Regional Modeling Simulation Specification for PRP18b provides the description of the PRP18b emissions inventory and explains that the PRP18b inventory does include projections of Mexico emissions for 2018 (see *http://pah.cert.ucr.edu/aqm/308/spec_sheets/SpecSheet_PRP18b_Aug11_2009final.doc*). Section 9.1 should be revised to include an accurate description of the emission inventories used in the CMAQ visibility modeling as wells as the emissions utilized in the CAMx source apportionment modeling.

6. As a follow-on to comments 3, 4 and 5, we remind the NMED that under the Regional Haze rule (64 FR 35714, 35747 (July 1, 1999)), "[i]f the State finds that international emissions sources are responsible for a substantial increase in emissions affecting visibility conditions in any Class I area or causing a deficiency in plan implementation, the State must submit a technical demonstration to EPA in support of its finding. If EPA agrees with the State's finding, EPA will take appropriate action to address the international emissions through available mechanisms." Although we do not expect States to restrict emissions from domestic sources to offset the impacts of international transport of pollution, States should evaluate the impacts of current and projected emissions from international sources in their regional haze programs, particularly in cases where it has already been well documented that such sources are important. The determination that international emission sources are responsible for degradation in visibility for the least impaired days or substantially impact the State's ability to reach the 2018 URP goal must be supported by a technical demonstration of a quality sufficient to enable us to confidently determine the impact of these international emissions on projected visibility conditions in the affected Class I areas.

7. Section 8 of the proposed New Mexico Regional Haze SIP under 309(g) presents the emission inventory for New Mexico. The emissions presented in this section do not reflect the values contained in the WRAP Technical Support System (TSS) for New Mexico. The emission inventories presented here appear to exclude emissions from Bernalillo County. If source apportionment results reflect contributions from all of New Mexico emission sources, including Bernalillo County emissions, the emissions discussed in the source apportionment analysis section of the New Mexico Regional Haze SIP would therefore be inconsistent with those emissions presented in Section 8. For

example, area source emissions of SOx presented in the New Mexico Regional Haze SIP (Table 8-1) are 2,383 tpy (Plan02d) and 3,983 tpy (Prp18b), but the WRAP TSS emission inventory lists these emissions as 5,433 tpy (Plan02d) and 16,285 tpy (Prp18b). In order to analyze the WRAP source apportionment results to examine the impact of growth or "over-prediction" of area source emissions in New Mexico it is necessary to identify what emissions are included under New Mexico sources. NMED should therefore explain why emissions from Bernalillo County were excluded in the presented emission inventory data, as well as present the emission data utilized in the source apportionment modeling to predict New Mexico's contributions to visibility impairment at Class I areas.

8. Section 12.2 discusses the long-term strategy to address the impacts of New Mexico emissions on visibility at Class I areas outside of the state, and presents contributions to extinction at other states. There are a number of Class I areas in close proximity to New Mexico's border that may be affected by its emissions. It is not clear if the contributions to neighboring states presented in the figures and tables in this section are the maximum contribution to any Class I area in that state or an average contribution for all Class I areas in the state. The discussion should be expanded to examine New Mexico's contributions to visibility impairment at individual sites close enough to New Mexico to reasonably be affected by these emissions. In order to satisfy the requirements of 40 CFR 51.308(d)(3) (referenced from 40 CFR 51.309(g)(2)(i)), the NMED must submit a long-term strategy that addresses regional haze visibility impairment for each mandatory Class I Federal area within the State and for each mandatory Class I Federal area located outside the State which may be affected by emissions from the State. The proposed New Mexico Regional Haze SIP does not identify at which specific Class I areas and to what degree visibility conditions are impacted by New Mexico emissions. The proposed long term strategy does not specifically address any emission reduction strategies that would reduce the impact of New Mexico emissions at any Class I area outside of the state, or provide sufficient analysis to support a conclusion that future emissions from New Mexico will not significantly impact visibility at these sites.

9. New Mexico's BART evaluation required under 40 CFR 51.309(d)(4) and/or 51.308(e) is discussed in section 10 of the proposed New Mexico Regional Haze SIP. New Mexico has proposed a NOx BART emission limit of 0.23 pounds per million British Thermal Units (lbs/MMBtu) for the four units at the San Juan Generating Station (SJGS), achievable with Selective Non-Catalytic Reduction (SNCR) technology. EPA published a proposed Federal Register notice (see 76 FR 491 (January 5, 2011)) that, among other things, proposed a NOx BART emission limit of 0.05 lbs/MMBtu for the four units at the SJGS, achievable with Selective Catalytic Reduction (SCR). New Mexico's revised Regional Haze SIP proposal includes new information for SNCR, but does not include any new significant information regarding SCR.

New Mexico proposes that the cost effectiveness of SNCR would be less than $3,700 per ton of NOx removed. In our January proposal, we proposed that the cost effectiveness of SCR would be less than $2,000 per ton of NOx removed.

In its Regional Haze SIP proposal, New Mexico predicts that using SNCR, approximately 4,900 tons NOx would be removed per year (Table 10, Appendix D). This reduction is less than what using SCR would achieve. NMED predicted in its 2010 Regional Haze SIP proposal that using SCR would remove approximately 16,100 tpy of NOx. In EPA's proposal, EPA predicts that using SCR, approximately 17,501 tons of NOx would be removed per year.

Using NMED's modeling evaluation in its proposed Regional Haze SIP, of its determinations for SNCR (0.23 lbs/MMBTU) and SCR (0.07 lbs/MMBTU), SCR yields significant additional visibility improvements at the 16 Class I areas impacted compared to SNCR (12 vs. 3 delta-deciviews). Using EPA's modeling evaluation in our proposed Federal Register notice, our proposed determination of SCR (0.05 lbs/MMBTU), which is approximately 30% lower than NMED's SCR level of 0.07 lbs/MMBTU, yields even more significant visibility improvements at the 16 Class I areas impacted compared to SNCR.

Region 6 continues to offer New Mexico our support during the rule revision process. Please let us know how we may be of further assistance.

Sincerely yours,

Carl Young

for Guy Donaldson
Chief
Air Planning Section