



United States Department of the Interior



FISH AND WILDLIFE SERVICE
National Wildlife Refuge System
Branch of Air Quality
7333 W. Jefferson Ave., Suite 375
Lakewood, CO 80235-2017

IN REPLY REFER TO

FWS/ANWS-AR-AQ

May 18, 2009

Mr. David Shaw
Director, Division of Air Resources
Office of Air Resources, Climate Change and Energy
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-3250

Dear Mr. Shaw:

On April 22, 2009, the State of New York submitted a **revised** draft implementation plan describing its proposal to improve air quality regional haze impacts at mandatory Class I areas across your region. The revised draft plan was anticipated to address Federal Land Manager (FLM) comments discussed with New York State staff in a conference call held on March 17, 2009. The comments discussed during the call covered the FLMs' review of a prior draft plan that we received on February 17, 2009. We appreciate the opportunity to work closely with the State through the initial evaluation, development, and, now, subsequent review of this plan. Cooperative efforts such as these ensure that, together, we will continue to make progress toward the Clean Air Act's goal of natural visibility conditions at all of our most pristine National Parks and Wilderness Areas for future generations.

This letter acknowledges that the U.S. Department of the Interior, U.S. Fish and Wildlife Service (FWS), in consultation with the National Park Service, has received and conducted a substantive review of your revised proposed Regional Haze Rule implementation plan in fulfillment of your requirements under the federal regulations 40 CFR 51.308(i)(2). Please note, however, that only the U.S. Environmental Protection Agency (EPA) can make a final determination regarding the document's completeness and, therefore, ability to receive federal approval from EPA.

As outlined in a letter to each State dated August 1, 2006, our review focused on eight basic content areas. The content areas reflect priorities for the Federal Land Management agencies, and we have enclosed comments associated with these priorities. We look



forward to your response as per section 40 CFR 51.308(i)(3). For further information, please contact Tim Allen (FWS) at (303) 914-3802.

Again, we appreciate the opportunity to work closely with the State of New York and compliment you and your staff on the hard work and dedication to significant improvement in our nation's air quality values and visibility.

Sincerely,



Sandra V. Silva
Chief, Branch of Air Quality
U.S. Fish and Wildlife Service

Sincerely,



Christine L. Shaver
Chief, Air Resources Division
National Park Service

Enclosures

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**U.S. Fish and Wildlife Service and National Park Service Comments
New York Draft Regional Haze Rule State Implementation Plan
May 18, 2009**

The State of New York (NY) submitted a draft Regional Haze Rule State implementation plan (SIP), pursuant to the requirements codified in federal rule at 40 CFR 51.308(i)(2), that the U.S. Department of the Interior, U.S. Fish and Wildlife Service (FWS) received on February 17, 2009. The FWS and National Park Service Air Quality (NPS) staff participated in a conference call on March 17, 2009, with NY Department of Environmental Conservation (NYDEC) staff to discuss concerns with the draft document. Subsequently, NY decided that the FWS and NPS concerns would be considered and another draft document would be sent to FWS and NPS at a future date. We received the revised draft on April 22, 2009, and the comments below reflect our review of this most recent draft SIP.

We encourage a continued dialog between our offices, and we are willing to work with the NYDEC staff towards resolving the issues discussed below. For further information, please contact Tim Allen, FWS Regional Haze lead, at (303) 914-3802.

Overall Comments

We commend NYDEC for the hard work required to write the draft SIP and the staff's willingness to discuss and consider our comments on the initial draft. However at this time, most of our concerns remain.

One of our most significant concerns is that the Best Available Retrofit Technology (BART) requirements for this Regional Haze Plan have not been met. It is our understanding that this is due in part to the lack of the State's adoption of a BART Rule that will contain the requirements for BART controls. The NY BART rule will provide affected source owners with the opportunity to conduct "exemption modeling", breaking from the non-exemption agreement made by all Mid-Atlantic Northeastern Visibility Union (MANE-VU) States. This opportunity for the affected sources has not yet been formally extended because the absent NY BART Rule is not expected to become effective until February 2010. Therefore, it is unclear which sources will be required to perform a BART determination in the State. Additionally, the threshold by which a source may be shown to cause or contribute to visibility impairment in Class I areas affected by NY will also be contained in the upcoming NY BART Rule, thus this required information is also missing from this draft SIP. The NY draft SIP acknowledges that each source subject to BART will not be required to submit a plan detailing how it will comply with the BART requirements until mid to late 2010. None the less, the approval requirements in the Environmental Protection Agency (EPA) BART Guidelines¹ make it clear that a SIP must include not only commitments, but descriptions as to how the commitments will be implemented, both of which the NY draft SIP lacks. The EPA has many times voiced its concern

¹ See 40 CFR Part 51, Appendix Y. The U.S. Environmental Protection Agency finalized its BART Guidelines on June 15, 2005, and published the preamble and final rule text in the Federal Register on July 6, 2005. The rulemaking action added Appendix Y to Part 51, titled "Guidelines for BART Determination under the Regional Haze Rule."

and objections about States that choose to submit commitment based SIPs. Therefore, it is our opinion that without a complete BART analysis and determination evaluation, the SIP fails to meet one of the basic requirements intended for Regional Haze SIPs, and therefore, the NY Regional Haze SIP may not be approvable in its current form.

Additionally, the State does not provide sufficient summary or support showing that controls will account for NY's "share" of impact at affected Class I areas. The State may use information provided by the MANE-VU. However, the information provided by MANE-VU is to be used to help form information that is specific to New York, including State specific visibility apportionment. A comparison of visibility before and after NY's emission reduction efforts is imperative toward demonstrating the effectiveness of NY's SIP.

Specifically regarding Reasonable Progress evaluation and Long Term Strategies, although NY does not have any Class I areas within its boundary, it must still conduct, summarize, and conclude that controls meet the level of "reasonable." Documents provided from MANE-VU can support this effort. However, NYDEC should provide its technical evaluation and description of its decision-making rationale. Please provide additional information explaining control level selections and the reasoning of how NYDEC supports the conclusion of reasonable control. Please relate and support the State's conclusions by using the four factors identified in the statute and rule.

Furthermore, NYDEC does not specifically identify the inconsistencies of using MANE-VU based Reasonable Progress Goal calculations. These final runs are based on Clean Air Interstate Rule (CAIR), MANE-VU "asks", and emission redistribution control assumptions. These controls are presently not realized, nor are the control commitments from other States' implementation plans which NYDEC is depending upon to accomplish reductions in the NY SIP. Therefore, more information should supplement the document that fully describes the uncertainty and whether the State or MANE-VU has any efforts planned (or in progress) to minimize these uncertainties. Specifically addressing these future estimates with more specific projections in the State's year 2013 mid-term review is important.

The regional haze rule has specific requirements including that the SIP demonstrate how controls meet BART and reasonable progress.

Finally, the modeling discussion does not provide sufficient detail to allow the reader to understand the strengths and limitations of the modeling exercise and how it specifically applies to NY. For example, the modeling discussion should provide a narrative summarizing the State's description and performance evaluation of all models used, as well as a narrative that presents performance assurances for both regional and State levels including whether model projections were used in a relative or absolute manner. It is not enough to merely reference the Appendix containing the MANE-VU modeling report.

Document Specific Comments

The remaining comments below are intended to provide specific suggestions on sections of the report which include some of the issues raised above. These comments are consistent with the priorities that we presented in our August 1, 2006, letter to the States (enclosed) that we reference in our cover letter. Our hope is that these specific comments will be helpful to NYDEC towards providing direction for building the narrative of the NY Draft SIP to satisfy the content areas mentioned above where we believe deficiencies exist.

1.0 Background and Overview of the Federal Regional Haze Regulation

Section 1.3, page 1-3 – We initially commented that a 2 percent contribution of sulfate was deemed by MANE-VU as an appropriate “area of influence” for visibility impacts on Class I areas. We asked that NYDEC summarize in more detail the method used to make this determination. We went on to say that the State should communicate in this section why they think this method is appropriate. The discussion NYDEC provided in its April 22, 2009, reply to our initial comments will suffice. Please include it in the final SIP. That text is copied here for reference:

“MANE-VU prepared a contribution assessment document in order to identify states where emissions are most likely to influence visibility in MANE-VU Class I areas. Based on this analysis, MANE-VU concluded that it was appropriate to define an area of influence including all of the states participating in MANE-VU plus other states that modeling indicated contributed at least 2% of the sulfate ion at MANE-VU Class I areas in 2002. The 2% was arrived at after a review of the back trajectory and modeling results showing that states contributing 2% (or more) make up about 90-95% of total light extinction. For states contributing 5% (or more), only about 75-80% of total light extinction is accounted for. New York agrees with the 2% criteria (sic), given the high percentage of light extinction for which it accounts. New York believes that the 2% criteria (sic) represents a level of contribution for visibility impairment from any state that needs to be assessed for mitigation. Failure to do so will result in Class I areas failing to reach their reasonable progress goals and ultimately delay needed improvements in air quality.”

Finally, we are asking again that NYDEC indicate what effect this status has on the SIP.

2. **Section 2.1, page 2-1** - Several paragraphs offer reasons why the SIP was not provided to EPA by the statute mandated date of December 17, 2007. These paragraphs mislead the reader into thinking that the State had no role or responsibility in the late completion of the NY SIP. In all fairness, NYDEC should communicate in the SIP that the due date of December 17, 2007, was clearly established in the Regional Haze Rule in June 1999, and all States, Regional Planning Organizations (RPOs) and FLMs have been aware of this deadline for some time.
3. **Figures 7-1, 7-4, 7-6, 7-7, and 7-10, pages 7-10, 7-14, 7-17, and 7-20** – These figures provide pre-baseline, State specific, and emission levels of several pollutants. In our initial comments, we pointed out that the value of how these figures supported the conclusions of

the NY SIP was unclear. We went on to say that regional haze baseline emissions in the draft NY SIP are defined as 2000-2004 and 2002 for monitoring and emissions, respectively. Additionally, tables also are labeled as V2 2002 emissions where the State identifies version 3 as the emission database used. We asked that NYDEC communicate how these figures contributed to the conclusions of the SIP. In response to our comments the State replied that:

“These figures show SO₂, NO_x, PM10, PM2.5 and ammonia emissions trends in the MANE-VU states extracted from the NEI for the years 1996, 1999, and the 2002 MANEVU inventory. Comparing emissions from each year, these figures provide an indication of whether there is an identifiable trend in emissions prior to the base year, as well as to provide the ability to show the relative emissions on a state-specific basis for these three years. The reader is thus able compare the relative emissions from each state as well as to assess whether a trend in emissions is evident over this period. This information is useful in determining what air program-related changes might be (sic) have been effective in influencing the levels of these pollutants in recent years, and is suggestive of what trends might be seen in the first planning period. For example, the discussion of these figures related to SO₂ suggests that most states show declines in year 2002 as compared to 1996 emissions. Where it occurred, the upward trend in emissions after 1996 likely reflects electricity demand growth during the late 1990s combined with the availability of banked emissions allowances from initial over-compliance with control requirements in Phase 1 of the EPA Acid Rain Program. Understanding the material presented in these graphs is useful in determining how to project emissions and judging whether projections are reasonable. The interpretation of each graph is discussed in detail in the adjacent portions of section 7.”

This language is very useful in helping the reader to understand what information NYDEC intends these graphs to communicate. Please include it in this section of the SIP.

4. **Section 7.6** – NYDEC did an excellent job identifying and discussing how the State’s emissions compare with that of MANE-VU’s, and the section provides the reader with helpful information.

8.0 Best Available Retrofit Technology (BART) Requirements

5. **Section 8.4, page 8-6** - In the last paragraph of the page, NYDEC indicates that only after rulemaking is complete (in 2010), will a final list of BART-eligible facilities be identified. This statement and subsequent wording in section 8.5 imply that work toward evaluating BART determinations has not begun. Please explain why the BART process can not or has not begun as of the submittal of this draft SIP to the FLMs. Our experience from working with other States and RPOs is that BART analysis often begins and proceeds prior to the finalization of BART rulemaking.

As we mentioned above, the Regional Haze SIP as submitted does not contain any BART determinations for sources that have heretofore been identified as likely BART candidates. Kodak Park Division, a chemical manufacturer, and Lafarge Building Materials, Inc., a Portland cement manufacturer, are the only non-CAIR sources expected to be affected by NY BART requirements as identified by MANE-VU and by NYDEC. As we understand, NYDEC will require BART-eligible Electric Generating Units (EGUs) to undergo a BART

determination, even though the State promulgated the CAIR under 6 NYCRR Parts 243, 244, and 245. MANE-VU identified 19 EGUs in New York among the top 167 stacks in the MANE-VU region for which a 90 percent reduction in SO₂ emissions is recommended by the RPO. Table 9-4 provides a listing of these units, along with the planned NO_x and SO₂ emission controls. However, without BART determinations accompanying the draft NY SIP, the reader is left wondering how these proposed emission controls were derived. A review of the listed proposed SO₂ controls concludes that only two of the units will achieve 90 percent SO₂ reduction.

The low sulfur fuel oil reduction strategy outlined in Section 9.4c of the NY draft SIP will revise the State's current fuel sulfur limits (6 NYCRR Part 225) and will implement NY's Reasonable Progress Goals. Since the expected effective date of these provisions is 2012, the NYDEC should consider requiring similar fuel sulfur limits in evaluating BART determinations.

Section 9.6 of the New York RH SIP references "eight" non-CAIR sources included in the modeling used to set reasonable progress goals that would likely be controlled under BART alone. The section clarifies that these sources appear in Table 9-6, but this table lists only two of these eight sources. If our understanding is correct, NYDEC should make it clear that these are the only two sources in NY among the eight sources referenced.

6. Section 8.3, page 8-4 – NY's BART rule is expected to provide source owners with the opportunity to conduct "exemption modeling" that demonstrates that the candidate sources do not cause or contribute to visibility impairment in Class I areas. This opportunity is not consistent with agreements made by MANE-VU States and therefore requires a discussion on how this deviation may or may not affect projects made by the MANE-VU organization.

If NY does intend to reevaluate BART from the original eligible list, the State should provide in the NY SIP the source names and descriptions that were developed and provided to MANE-VU for analysis several years ago. BART eligibility is based on Federal criteria, and there is no reason that it should be postponed due to the lack of a State rulemaking.

9.0 Reasonable Progress Goals (RPGs)

7. **Section 9.1, bottom of page 9-2** - NYDEC commits "to reducing emissions at least equal to those predicted in the model, through the measures described above". Please either summarize the MANE-VU Contribution Assessment (Appendix A) or refer the reader to another section of the main body of the SIP describing this statement. The information presented is not sufficient to explain to the reader how NYDEC will meet this objective.
8. **Section 9.5, page 9-16** - NYDEC asserts that because the State does not contain a Class I area, the State has no requirement to evaluate NY's emission control strategy using the statutory four factors. This is not accurate. As a significant contributor to visibility impairment at one or more Class I areas, it is the State's responsibility to evaluate emission reduction controls, as the regulatory authority, for reasonableness based on the four factors

for each Class I area. Although a State containing the Class I area or the RPO can suggest “reasonable” control levels, each State must make a final determination themselves.

If NYDEC agrees with the analysis of the four factors produced by MANE-VU (or someone else), please present the four factor analysis and clearly state that it represents NYDEC’s view in this section.

9. **Section 9.8 forward** - Air quality dispersion modeling results are presented showing improvements to PM concentration resulting from low sulfur fuel strategies and 90 percent reductions in SO₂ to the 167 EGU stacks. Please provide narrative summarizing the State’s description and performance evaluation of all models used. Please present performance assurances for both regional and State levels as well as whether model projections were used in relative or absolute sense. The language added in this recent draft SIP does not adequately address the information we are requesting. Again, as stated in our overall comment section, the modeling discussion does not provide enough detail of the caveats associated with the model to enable the reader to fully understand the limitations of the conclusions made based upon the output of the model and how they specifically apply to NY.

The added language does not include a narrative of the State’s description and performance evaluation of all the models used, nor does it include a discussion that presents performance assurances for both regional and State levels including whether the models were used in a relative or absolute manner. Again, it is not enough to merely reference the Appendix containing the MANE-VU modeling report. The State must explain how the information was considered by NYDEC and how it was applied specifically to NY.

10. **Section 9.12, page 9-25** – The narrative communicates that because NY is a member of a group of States that are controlling emissions, and that because the group’s strategy has been shown through computer modeling to meet the EPA’s uniform glide slope guideline for all Class I areas, “NY will therefore meet its obligation under the SIP and Regional Haze Program.” This is neither a reasonable nor an appropriate conclusion to make without further details provided in the SIP and a commitment that NY’s strategies provide a “share” of reasonable progress.

In order to state that NY is meeting its obligations for the SIP and the Regional Haze program, the State must discuss its specific emission reductions and conclude that the reductions are “reasonable” based on the four factors. As part of this demonstration, the State may also examine its emission reductions that will provide for the State’s “share” in reaching a specific Class I area’s apportionment request. For example, in section 7.6, when discussing the RPO and State emissions, NYDEC offered a before and after total of State-wide emission levels broken down by pollutant species. NYDEC could take this same approach in demonstrating the before and after of visibility impacts at the Class I areas affected by emissions originating in NY. If the regional modeling is not sufficient to demonstrate NY’s contribution to extinction at the affected Class I areas, the SIP should document the changes in extinction achieved by the regional plan at these Class I areas, by pollutant species, and compare those overall extinction changes with changes in NY’s emissions of the associated precursor emissions. This would help assure that the State is

contributing its “share” toward reasonable progress. It may help to discuss the specific sources or regions with significant size/location relationships with a Class I area where controls are located. Although categorical controls are effective, specific control evaluation is very important because Class I areas are not evenly distributed geographically. If NYDEC believes that emissions reductions in any part of the State contributes more or less proportionally toward reductions in associated visibility impairing aerosols in all the affected Class I areas, then the SIP should present that working assumption in support of an assessment of State-wide reductions as meeting reasonable progress requirements.

The State must include in the SIP a discussion that reviews visibility conditions in affected Class I areas before and after NY control efforts. Otherwise, there is no demonstration that the control efforts will be effective. The Regional Haze Rule makes the requirement for visibility apportionment from each State clear. At 40 CFR 51.308(d)(3)(ii), the rule states:

“The State must demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emissions reduction needed to meet the progress goal for the area. If the State has participated in a regional planning process, *the State must ensure it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through the process.*”
(Italics are added for emphasis.)

It is reasonable to assume that in order for the State to ensure it has included all measures needed to achieve its apportionment that each State needs to know what that apportionment is. At 40 CFR 51.308(d)(3)(iii), the rule states:

“The State may meet this requirement by relying on technical analyses developed by the regional planning organization and approved by all State participants.”

The claim that NY State-specific visibility apportionment is not required because MANE-VU has performed the analyses and the member States (including NY) have agreed on the measures to achieve the reasonable progress goal and approved the analyses is insufficient. MANE-VU did not provide its member States with visibility apportionment information, so therefore NYDEC cannot make claim that it is relying on the RPO’s technical analyses, because the MANE-VU technical analyses are incomplete. The language in the rule assumes that the technical analyses done through the regional planning process included State specific apportionment information. Furthermore, the rule states that every State must demonstrate that it has included in its SIP “**all measures**” necessary to obtain “**its share of the emissions reduction**” needed to meet the progress goal for the area. NYDEC cannot state or demonstrate that all measures necessary for NY are included in the SIP to meet area progress goals, when the State has no idea how its share of emission reductions will affect visibility in each Class I area.

11. The State has done a good job discussing its commitment to ensure that the New Source Review/ Prevention of Significant Deterioration (PSD) Program in the State will work towards the interests of their regional haze goals. Please provide information on how NYDEC will use future permit review to contribute to progress in the regional haze process. Adding language that NYDEC intends to meet the requirement of full consultation with the FLMs for review of visibility impacts required by the NSR/PSD programs is one suggestion.

10.0 Long Term Strategy

12. **Section 10.2.2, page 10-6** - Consider adding tables similar to 10-1 to include future apportionment modeled predictions in both a percentage and mass basis.
13. **Section 10.2.4, page 10-16, last paragraph** - Simply stating that model performance was conducted by the provider is insufficient. Please provide a summary of RPO and State-level model performance of all tools utilized for the SIP. Please see comment 9.
14. **Section 10.4.2, page 10-45** – The language added to this section in response to our initial comment is helpful. The language does a great job discussing MANE-VUs approach, but it doesn't include language that concludes that this approach is the approach for NY. Please elaborate in this section to include how the MANE-VU approach applies to the specific nature and sources within NY.
15. **Section 10.5.2, page 10-55** - The section on Agricultural and Forestry Smoke Management is exemplary.
16. **Section 10.7, page 10-62, second paragraph** - This paragraph concludes that measures taken by NYDEC are reasonable and therefore, meet the State's "share." More information is needed in order to substantiate this claim. Please see comment 9.

[This is a "generic" version of the letter that was personalized and sent to all State Air Directors by the FWS Branch of Air Quality and NPS Air Resources Division.]

FWS/ANWS-AR-AQ

August 1, 2006

«MrMs» «First» «Last»
«Title»
«State_Agency»
«MailAddress»
«MailCity», «State» «MailZip»

Subject: Regional Haze Rule Consultation with Federal Land Management Agencies

Dear «StateAirDirector»

Over the past several years, the U.S. Fish and Wildlife Service (FWS), National Park Service (NPS), and Forest Service have participated in regional planning efforts addressing ways for States, and Tribes if they so choose, to protect and improve visibility in Class I national parks and wildernesses through implementation of the Regional Haze Rule (RHR). Along with other stakeholders, we have had many opportunities to contribute to ongoing Regional Planning Organization (RPO) development of policy guidance and technical information. As States begin to develop their regional haze State implementation plans (SIPs) based on RPO work, we are interested in working directly with your staff to offer our perspective as managers of affected Class I areas and to maintain our support for an effective national regional haze program.

The primary purpose of this letter is to provide you general insights about FWS and NPS interests with respect to upcoming SIP development and consultation activities. It is not intended to dictate policy or guidance. Rather, in the enclosure to this letter we include discussion on a list of topics to enhance your understanding of our views on key SIP components. We also provide lead contacts for FWS and NPS staff that will be available to work with your staff during early phases of SIP development as well as coordinate the required formal 60-day review/consultation with the official Federal Land Manager (FLM) for the Department of the Interior.

The RHR requires States to inform the FLMs of the appropriate State contact for exchange of information regarding SIP development. Many States provided us with a contact person shortly after the RHR was published. It would be helpful if you could confirm your contact or provide a current single point of contact for your State to the individuals noted in the enclosure. Additional information regarding your SIP timelines would also be very helpful.

Our highest priority in working with you over the course of the next year and a half will be to help you develop a successful SIP. We understand the complexities of developing a plan reliant on non-linear relationships between emissions and subsequent visibility improvements. Our emphasis is to work with you and, as your partners, to ensure each plan utilizes all reasonable means to obtain realistic goals. We share the common goal of improving visibility in all Class I areas throughout the United States, and we would like to use this planning process to maximize goal achievement. Our hope is that through this communication we can complete the RHR requirement of formal consultation with ease and productivity.

We are looking forward to continuing our work with you and your staff as the regional haze SIPs are developed. Please don't hesitate to contact us with questions.

Sincerely,

Sandra V. Silva
Chief, Air Quality Branch
U.S. Fish and Wildlife Service

Christine L. Shaver
Chief, Air Resources Division
National Park Service

Enclosure

cc:
Forest Service: Rich Fisher, Donna Lamb
EPA Regional Air Division Directors
Regional Planning Organization Directors