

# United States Department of the Interior

OFFICE OF THE SECRETARY Washington, D.C. 20240

Lisa P. Jackson, Commissioner New Jersey Department of Environmental Protection 401 E State Street 7<sup>th</sup> Floor, East Wing P.O. Box 402 Trenton, New Jersey 08625-0402

OCT 2 9 2008

Dear Commissioner Jackson:

On September 19, 2008, the State of New Jersey submitted a draft implementation plan describing its proposal to improve air quality regional haze impacts at mandatory Class I areas across your region. We appreciate the opportunity to work closely with the State of New Jersey through the initial evaluation, development, and, 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 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 proposed Regional Haze Rule implementation plan in fulfillment of your requirements under the Code of 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, Physical Science, NWRS Air Quality Branch at (303) 914-3802.

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

Sincerely,

Lyle Laverty

Assistant Secretary for Fish and Wildlife and Parks

Enclosures

# U.S. Fish and Wildlife Service Comments New Jersey Draft Regional Haze Rule State Implementation Plan October 14, 2008

On June 12, 2008, the State of New Jersey (NJ) 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), to the U.S. Department of the Interior, U.S. Fish and Wildlife Service (FWS). Shortly after receiving the draft SIP, the Fish Wildlife Service (FWS) and National Park Service Air Quality staff discussed concerns with the draft document during a telephone conference call attended by State staff. Subsequently, NJ 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 new draft on September 19, 2008, and the comments below reflect our review of this most recent SIP.

We look forward to your response as per section 40 CFR 51.308(i)(3), and as always, we are willing to work with the NJ Department of Environmental Protection (NJDEP) staff towards resolving the issues discussed below. For further information, please contact Tim Allen, FWS Regional Haze lead, at (303) 914-3802.

# **Overall Comment**

We commend New Jersey for working with us to revise its draft SIP, submitted in June 2008, to address most of the original concerns identified by previous consultation with the FWS and NPS. However, one concern of major significance remains. This concern regards commitment statements to perform work or implement rules that support final emission controls. A SIP must include not only commitments, but descriptions as to how the commitments will be implemented. In response to past FWS and NPS comments and the recent vacatur of the Clean Air Interstate Rule (CAIR), the NJ September, 2008, draft SIP includes even more commitment statements that lack implementation strategies as compared to the original June, 2008, draft. As such, in our opinion, the SIP is incomplete. There is a significant amount of ongoing work to which NJ has committed with no apparent completion dates. One example of a significant omission is the lack of Best Available Retrofit (BART) analysis and determinations. The Environmental Protection Agency has many times voiced its concern and objection regarding States which choose to submit commitment-based SIPs.

Because CAIR has been vacated, BART and the MANE-VU 167 stack "asks" have become the primary method for controlling sulfur dioxide (SO<sub>2</sub>) in the region. New Jersey, in both of these cases (BART and MANE-VU 167 stack "asks"), makes commitments in the SIP to propose or pursue controls. Specific information on the timeline of such efforts is a requirement of the Regional Haze Rule and is missing from the NJ SIP. Because of the significant number of these time-line limited commitments, it would be helpful to consolidate these issues into a single section and utilize that list as the primary checklist for the 2013 mid-term review.

Furthermore, New Jersey does not specifically identify the inconsistency of using MANE-VU based Reasonable Progress Goal (RPG) calculations. These final runs are based on CAIR and MANE-VU "asks" control assumptions. These controls are presently not realized, nor are there

commitments with implementation plans specified to accomplish these controls in the SIP. Therefore, more information should supplement the document that fully describes the uncertainty and whether the State or the Regional Planning Organization (RPO) has any efforts planned (or in progress) to minimize these uncertainties. Specifically addressing these future estimates with more specific projections in the State's 2013 mid-term review is imperative.

Additionally, in some cases, administrative consent orders and consent decrees are referenced in the SIP as being in place to address emissions for sources that also happen to be major haze contributing sources. Although, these agreements may meet the goals for other State/Clean Air Act programs, the Regional Haze Rule has specific requirements, including that the SIP document demonstrate how such controls required for other programs also meet BART and reasonable progress.

# **SPECIFIC COMMENTS**

The remaining comments, below, are organized according to the priorities that we presented in our August 1, 2006, letter, which outlined the Regional Haze concepts that are of importance to the FWS and NPS. Many of the following comments will also provide direction towards building the narrative of the Draft SIP to satisfy the documentation and content area deficiencies noted above.

#### **General Comment**

On page ix, a reference is made to Appendix H-1, where Brigantine is listed as "Brigantine National Park." Brigantine is a National Wilderness Area, within the Edwin B. Forsythe National Wildlife Refuge and is not a national park.

## Uniform Rate of Progress/Emissions Inventory

Page 5-1, this section offers a minimal discussion on Emission Inventory levels used by MANE-VU. "On-the-Way," "On-the-Books," and "Beyond On-the-Way" levels are offered. Finally on page 5-2, another inventory with MANE-VU's latest control expectations is introduced. Although the components are presented, little to no information indicates whether the information is accurate. Again, many of the listed control programs are neither implemented by the MANE-VU States nor included as a form of commitment by New Jersey. Please present a discussion of these uncertainties.

#### Best Available Retrofit Technology

Page 6-1, section 6, represents a commitment to conduct BART. Although we recognize the improved effort to describe the regulatory components made by NJ since earlier drafts of its SIP, the information provided in the September, 2008, version does not meet the need for completed BART determinations.

Additional statements made on pages 6-3 and 6-4 indicate BART will be met by other control agreements. Please indicate when the supporting analysis will be made available. FWS

specifically requests that NJ afford the Federal Land Management agencies an adequate review period when the State drafts its BART determinations, and that the decisions also be vetted through the State's public notice procedures.

#### **Preliminary BART Analysis Comments**

While NJDEP has not yet provided its BART decisions, it has shared various information, including company-submitted BART analyses, to the federal land management (FLM) agencies. FWS has reviewed this preliminary information, and offers the following comments for the State's consideration.

*Identification of facilities subject to BART:* 

Six facilities are possibly subject to BART:

General Chemical Chevron Products Company Amerada Hess Corp. Port Reading Refinery PSEG Hudson Generating Station Sunoco Eagle Point Refinery ConocoPhillips Bayway Refinery

General Chemical was listed as "subject to BART" in the Proposed New Jersey Department of Environmental Protection (NJDEP) Reasonably Available Control Technology (RACT) SIP, but it was noted that it may close by December, 2006. This facility was not listed as being subject to BART in the draft NJ Regional Haze SIP. Please clarify the status of General Chemical - Was it closed? If not, is it subject to BART? If it is subject to BART then a full BART determination should be provided.

The Northeast States for Coordinated Air Use Management (NESCAUM) listed Chevron Products Company as subject to BART, but nothing in the NJ SIP acknowledges Chevron Products Company. Is this facility subject to BART? If not, it should be discussed as to why it is not subject to BART and supporting data and information should be included in the NJ SIP. If it is subject to BART then a full BART determination should be provided.

Amerada Hess Corporation's Port Reading Refinery is listed in the NJ SIP as being subject to BART, but nothing in the SIP or the BART appendices makes any reference to it. Is this facility subject to BART? If not, it should be dropped from the list, but it should be justified as to why it was not included. If it is subject to BART then a full BART determination should be provided.

PSEG Hudson Generating Station Unit #2 is one of ten coal-fired boilers serving New Jersey's Electric Generating Units (EGU). It was the only unit that was singled out as being "subject to BART" for nitrogen oxides ( $NO_x$ ) and  $SO_2$  emissions. This unit is also subject to an earlier Consent Decree (CD). It is not clear why the NJDEP made this unit subject to BART for  $NO_x$  and  $SO_2$  even though it could have been eliminated for consideration by the Clean Air Interstate Rule (CAIR). Since NJDEP included it as being regulated under BART, the comments below assume this unit is covered by BART.

Facilities covered by Consent Decrees and other control requirements:

PSEG Hudson Generating Station, Sunoco Eagle Point Refinery and ConocoPhillips Bayway Refinery are all under CDs that were in effect prior to the July 6, 2005, BART Rule, as follows:

PSEG Hudson Generating Station July 26, 2002 Amended 2006

Sunoco Eagle Point Refinery 2003

ConocoPhillips Bayway Refinery January 27, 2005

Since these CDs were in effect prior to the BART rule, the particular emission controls outlined in the CDs can be considered "baseline" emission levels prior to consideration of additional BART controls. However, addition of reducing agents and/or catalyst levels on existing equipment configurations (e.g., Selective Catalytic Reduction (SCR) or Flue Gas Desulphurization (FGD)) should be presented as part of the BART analyses, including costs and benefits of each alternative as discussed for the individual facilities below.

It would be helpful if NJ explained in the SIP why there are only 4 BART sources in the State, especially considering that there were no exemptions given in the MANE-VU States. For example, Pennsylvania had 32 BART sources, but very few exceeded 0.5 deciviews. One would expect a similar situation in NJ.

NJDEP is coordinating BART with the Reasonably Achievable Control Technology (RACT) requirements under its Ozone SIP, but has not yet reached BART conclusions.

Under the yet-to-be-proposed multi-pollutant refinery rules and the proposed August 4, 2008 coal-fired boiler rules, the refineries and the EGU that are subject to BART will be required to perform a top-down analysis of their affected emission units. The NJDEP is commended for embarking on this correct procedure, but it should have already been performed and the conclusions presented in the SIP with respect to the BART determinations. There is no provision in the BART Guidelines<sup>1</sup> that allows the SIP to contain commitments for future BART determinations.

The NJ SIP states that existing enforcement initiatives and consent decrees already require emission reduction measures which are likely to be BART. This may not necessarily be the case. According to the BART Guidelines, control alternatives should be analyzed unless the proposed controls are considered to be "the most stringent controls available." This is the case even if a proposed control (e.g., Selective Catalytic Reduction (SCR) or Flue Gas Desulphurization (FGD)) can meet the "presumptive" level of control for an Electric Generating Unit (EGU) with capacity greater than 750 megawatts. If the cost of control options that achieve adequate and responsible visibility improvement remains reasonable after presumptive BART is achieved,

<sup>&</sup>lt;sup>1</sup> See 40 CFR Part 51, Appendix Y. The U.S. Environmental Protection Agency finalized it's 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 Determinations Under the Regional Haze Rule."

<sup>&</sup>lt;sup>2</sup> Ibid., See Section IV.D.STEP 1.9.

adequate and responsible visibility improvement should remain an active consideration before the BART analysis is concluded. The FLM agencies believe that cost effective control options that result in emissions control greater than presumptive BART should be given equal consideration to lower-cost options that achieve presumptive BART. This can include consideration of the addition of reducing agents and/or catalyst levels on existing equipment configurations.

The following sections provide unit-specific comments for each of these three facilities under consent decrees:

# **PSEG Hudson Generating Station Unit #2**

The most stringent NO<sub>x</sub> control available is considered to be combustion controls in addition to SCR. PSEG proposed SCR for the Hudson Unit #2, but did not include the addition of various combustion controls. Therefore, the NJ SIP should include cost and visibility impairment information for the addition of various combustion controls (e.g., low NO<sub>x</sub> burners, over-fire air).

PSEG has proposed FGD that meets the "presumptive" emission limit of 0.15 lb/MMBtu for  $SO_2$  control. The NJDEP should consider additional reducing agents or catalyst levels that can reach emission rates of 0.09 lb/MMBtu or below.

Section 6.3 of the draft NJ Regional Haze SIP states, "...air pollution controls being installed on the Unit 2 coal-fired boiler at PSEG – Hudson Generating Station, pursuant to a consent decree (CD), will satisfy BART requirements." If this is an official conclusion, we would recommend that it be reconsidered given the above discussion.

In the interest of more information, was Selective Non Catalytic Reduction (SNCR) and Fly Ash Conditioning System installed by 1/1/2007? Was Ultra Low Sulfur Coal initiated by 5/1/2007?

#### **Sunoco Eagle Point Refinery**

By April 30, 2008, the CD required Sunoco to install NO<sub>x</sub> control equipment on the Fluid Catalytic Cracking Unit (FCCU) to meet an emission limit of 20 parts per million volumetric-dry ppmvd (365-day rolling average) or accept that limit. The NJ SIP should confirm that Sunoco has met this requirement of the consent decree. Additionally, the NJ SIP should describe the equipment that was installed and demonstrate that the installation meets BART. The FLM agencies would appreciate access to the NO<sub>x</sub> operating data that was due by October 31, 2003, and the NO<sub>x</sub> control alternative study that was due by March 31, 2004. This information would assist the FLMs in evaluating the degree to which the BART requirements were met by the CD (i.e., converting 20 ppmvd (365-day rolling average) into lb/MMBtu on a 30-day rolling average). Similar questions are relevant for:

- SO<sub>2</sub> controls of 25 ppmvd (365-day rolling average) at the FCCU;
- PM emissions from the FCCU:

- NO<sub>x</sub>, SO<sub>2</sub> and PM emissions from the heaters and boilers; and
- NO<sub>x</sub> and SO<sub>2</sub> emissions from the sulfur recovery plant.

## **ConocoPhillips Bayway Refinery**

By December 31, 2006, the CD required ConocoPhillips to install enhanced SNCR with optimization studies and a demonstration covering a period out to May 31, 2009. These studies are intended to lead to an emission limit of 20 ppmvd (365-day rolling average). What is the status of Sunoco meeting that requirement? NJDEP should demonstrate in the RHSIP how compliance with the above CD requirement meets BART. A control alternatives analysis for NO<sub>x</sub> control should have been presented. The FLMs would appreciate access to the NO<sub>x</sub> operating data that has been generated to date to assist in the evaluation of the degree to which the BART requirements have been met. Similar questions are relevant for:

- Continued operation of wet gas scrubber at 25 ppmvd (365-day rolling average);
- Installation of SCR on the Crude Pipestill Heater by December 31, 2010;
- NSPS applicability to heaters and boilers;
- NSPS applicability to three sulfur recovery plants by April 11, 2005; and
- Optimization studies of Claus train by June 30, 2005.

#### Area of Influence

Page 7-2, please provide references on  $1/d^2$  impact relationship. We are not familiar with this method of assessing visibility impacts.

Page 7-3 and 7-5, Tables indicate that several States attribute to visibility impacts at the Brigantine Wilderness Area at a greater level than New Jersey itself does. New Jersey should include more information in this section detailing the responses it received from these higher-impacting States that followed NJDEP's letter indicating attribution of visibility impairment.

Page 7-11, New Jersey identifies itself as a contributor to visibility impacts at Class I areas located in Maine, New Hampshire, and Vermont. No follow-up discussion is provided in this section on how existing or future controls in NJ account for the State's "reasonable" contribution to improving visibility and addressing existing impairment in these out-of-State areas.

#### Reasonable Progress Goals and Long Term Strategy

Page xv, includes a statement indicating that the projection of reasonable progress goals will meet EPA's default 2018 goal for Brigantine. This statement is not substantiated and appears contradictory given the loss of controls anticipated from CAIR, the non-timely evaluation of BART controls, and the apparent lack of acceptance of the MANE-VU "ask" (167 stacks and sulfur content in heating oil).

Page xvi-xviii, NJ makes commitments for BART, the NJ multi pollutant preventative standard, 167 stack "ask", and heating oil sulfur content, wood burning strategies, and reinstatement of the

NOx budget allowance allocation rule. Please provide more detail on when these commitments will be realized.

Page 8-4, a discussion of the MANE-VU "asks" is offered. Achieving the Reasonable Progress Goals, per the modeling analyses used to support the draft NJ SIP, will involve other MANE-VU States implementing the control measures included in the "ask." No discussion is presented on how many of these efforts have been realized or committed to outside of NJ.

Page 8-5, again, RPG results are presented given MANE-VU final modeling/EI assumptions. These assumptions include CAIR and "asks" that are not likely to occur. No discussion is provided to qualify these future RPG estimates.

Please include a robust section on the 2013 mid-term review. The State has a significant number of on-going efforts that should be consolidated into one section and identified for update as part of the mandated review.