



# United States Department of the Interior

NATIONAL PARK SERVICE

Air Resources Division

P.O. Box 25287

Denver, CO 80225



IN REPLY REFER TO:

February 17, 2011

N3615 (2350)

Glenn Keith  
Deputy Director, Planning and Evaluation Division  
Bureau of Waste Prevention  
Department of Environmental Protection  
One Winter Street, 7<sup>th</sup> Floor  
Boston, Massachusetts 02108

Dear Mr. Keith:

In January 2009, the National Park Service and the U.S. Fish & Wildlife Service provided comments on the Commonwealth of Massachusetts draft regional haze state implementation plan (SIP) describing your proposal to improve air quality and regional haze impacts at mandatory Class I areas across your region. In January 2011, the Commonwealth published its revised draft SIP for public hearing. We appreciate that the Massachusetts Department of Environmental Protection (DEP) responded to our previous comments in the revised draft SIP. The enclosed comments reflect the review and analysis of both the National Park Service and U.S. Fish & Wildlife Service on the analysis of Best Available Retrofit Technology in the revised draft SIP.

We appreciate the opportunity to work closely with DEP on the Commonwealth's efforts to protect visibility in our Class I national parks and wilderness areas. For further information regarding these comments, please contact Tim Allen of Fish & Wildlife Service at 303-914-3802 or Holly Salazer, National Park Service at 814-865-3100.

Sincerely,

Patricia Brewer  
Acting Chief, Air Resources Division  
National Park Service

Sincerely,

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

Enclosure

cc:

Ann McWilliams

US EPA Region 1

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**US Fish and Wildlife Service and National Park Service Comments  
Massachusetts Best Available Retrofit Technology Analyses  
February 17, 2011**

The Massachusetts Department of Environmental Protection (MassDEP) adopted an alternative method for meeting Best Available Retrofit Technology (BART) for the Electric Generating Units (EGU) within the state. As well, MassDEP performed a specific BART determination for the two Wheelabrator – Saugus mass burn incinerators with water wall boilers. Overall, significant NO<sub>x</sub> and SO<sub>2</sub> emission controls within the state have been achieved.

BART emission limits must be established as federally enforceable limits and then be reflected as applicable requirements in the sources' operating permits. It is stated on page 73 of the State Implementation Plan (SIP) that MassDEP intends to issue a federally enforceable permit cap to General Electric – Lynn. All of the draft permits or other enforceable commitments implemented as a result of BART should be included as an appendix to the BART section of the SIP and not be merely future commitments. This would include the emission caps for General Electric – Lynn and the permit limits (particularly particulate matter) for Wheelabrator – Saugus (discussed later).

Section 8.10 of the SIP states that adherence by Massachusetts EGUs to the proposed “Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone” (75 Federal Register 45210), known as the “Transport Rule,” will assure statewide SO<sub>2</sub> and NO<sub>x</sub> emission reductions greater than a BART Benchmark as determined by the “NESCAUM Five-Factor Analysis of BART-Eligible Sources” in Appendix R. This will provide an alternative method of compliance as authorized by the federal Regional Haze Program.<sup>1</sup> Using the numerical demonstration provided by MassDEP, it appears that additional emission reductions over BART would be realized so as to achieve the greater reasonable progress toward improved visibility in Class I areas. However, the SIP should contain an affirmative statement by MassDEP that if the proposed Transport Rule should not become final or contain an effective date within the required BART implementation timeframe,<sup>2</sup> that MassDEP will commit to enact a State rule to implement emission limitations similar to those which are envisioned in the proposed Transport Rule so as to be compliant with BART.

As stated in Section 8.11, the proposed alternative method for BART does not apply to particulate matter (PM) control. The second paragraph presents an argument that a de minimus visibility impact on Class I areas of less than 0.1 deciview is reason to not require further PM controls. Actually, the determination as to whether PM controls are necessary under BART is made by ascertaining the cost of implementing various controls, rather than making a subjective judgment of visibility impact. Once a *source* is found to be subject-to-BART, controls on PM emissions from an *emission unit* may be found to be so insignificant that the cost of control is excessive and addition of PM emission controls is not required under BART. Also, the U.S. Environmental Protection Agency (EPA) BART Guidelines state:

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<sup>1</sup> See 40 CFR 51.308(e) (2).

<sup>2</sup> See 40 CFR Part 51, Appendix Y, Section V.

“... you should consider ways to improve the performance of existing control devices, particularly when a control device is not achieving the level of control that other similar sources are achieving in practice with the same device. For example, you should consider requiring those sources with ESPs performing below currently achievable levels to improve their performance.”<sup>3</sup>

“It is important, however, that in analyzing the technology you take into account the most stringent emission control level that the technology is capable of achieving.”<sup>4</sup>

Since fabric filters and electrostatic precipitators (ESPs) are capable of 99.5% PM control efficiency and a controlled particulate matter emission rate of 0.015 lb/MMBtu, the emission limits proposed in the last column of Table 20 could be made more stringent. Please either explain why the permitted levels of PM controlled by fabric filters and ESPs cannot meet more stringent emission limitations, or reduce the permitted level of control in accordance with the capabilities.

in Section 8.9 MassDEP makes a future commitment that Wheelabrator – Saugus will modify its NO<sub>x</sub> control plan to comport with possible forthcoming revisions in Massachusetts regulations. Normally, future commitments are not acceptable in BART determinations unless accompanied by an enforceable permit requirement, but since the NO<sub>x</sub> emissions already meet Maximum Achievable Control Technology (MACT) requirements for Municipal Waste Combustors (MWC), such a future commitment is acceptable.

Each of the Wheelabrator units meets a current PM emission limit of 27 mg/dscm, or less, at 7 percent oxygen (dry basis), but they do not necessarily meet the 2006 EPA Emissions Guideline for PM of 25 mg/dscm. MassDEP states that it intends to propose to adopt this lower PM emissions limit in revisions to 310 CMR 7.08(2) planned for 2011 and that Wheelabrator – Saugus will be required to comply with the lower PM emissions rate. All enforceable commitments that are intended to meet BART should be contained in the Massachusetts Regional Haze SIP or in an appendix to the SIP. Therefore, the SIP should contain a PM emission limit of 25 mg/dscm for the two Wheelabrator units with an effective date not later than five years after EPA approval of the SIP.<sup>5</sup> This inclusion in the SIP would not change the effect on Wheelabrator of the proposed State regulatory action.

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<sup>3</sup> Ibid.. See Section IV.D.STEP 3.4.

<sup>4</sup> Ibid.. See Section IV.D.STEP 3.1.

<sup>5</sup> Ibid.. See Section V.