MANE-VU

Mid-Atlantic/Northeast Visibility Union

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August 31, 2006

Re: MANE-VU response to stakeholder comments on *Contributions to Regional Haze in the Northeast and Mid-Atlantic United States: MANE-VU Contribution Assessment*

Dear Stakeholders:

The Mid-Atlantic/Northeast Visibility Union (MANE-VU) appreciates the comments and feedback received on our draft report *Contributions to Regional Haze in the Northeast and Mid-Atlantic United States: MANE-VU Contribution Assessment* which was released in May, 2006. MANE-VU is a regional planning organization formed to support the planning efforts of its members as they prepare to comply with visibility requirements under the regional haze rule [64 Fed. Reg. 35714 (July 1, 1999)]. The organization's membership includes: Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, the Penobscot Indian Nation, Rhode Island, the St. Regis Mohawk Tribe, Vermont, as well as federal land management agencies and the U.S. EPA.

Numerous issues have been raised with regard to potential improvements and refinements to our report. Each comment has been carefully considered by the authors of this report and many of the proposed improvements have been incorporated directly into the final draft. The most significant issue which have been raised by stakeholders relate to the use (or lack thereof) of future emission inventories as opposed to the MANE-VU 2002 base year inventory. Another issue raised by stakeholders relates to the use of the CALPUFF dispersion model for distances over 300 kilometers where the model's characterization of diffusion may cause results to be overestimated for sources beyond this distance. Finally, stakeholders are eager to learn whether MANE-VU intends to adopt an alternative method for calculating reconstructed extinction or use the default approach included in current U.S. EPA guidance.

With regard to the emission base year, the intention of the contribution assessment is primarily to identify source that are contributing to our present visibility problems. MANE-VU does intend to conduct additional modeling work using many of these same platforms, as well as the Community Multi-scale Air Quality (CMAQ) model, for the 2018 projection inventories that are still being developed by the RPO. The results of these analyses will be published in a pollution apportionment technical memorandum and will serve as the primary basis for setting reasonable progress goals for MANE-VU class I areas. That, however, was not the intent of this document.

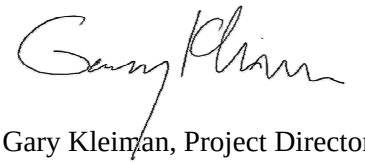
MANE-VU recognizes the limitation of the CALPUFF model and its treatment of dispersion. We also recognize the limitations of the REMSAD model with respect to its ability to accurately simulate oxidant fields and photochemistry. Clearly the data analysis techniques like Q/d have their own limitations and it is with exactly this spirit ("all models are wrong, some are useful") that we have presented results from multiple methods to demonstrate the degree of agreement between them. That is, despite the fact that each platform has its strengths

and weaknesses, the agreement between them in apportioning contributions to sulfate observed in MANE-VU class I areas gives us confidence that none of these approaches is too far from the truth. While we agree with commenters that the CALPUFF results for sources over 300 kilometers should not be presented as a stand-alone work product, we feel that they do add to a weight of evidence demonstration that these sources do appear to have significant combined influence on observed sulfate concentrations in all MANE-VU Class I areas.

Estimated natural background and current baseline visibility conditions must be used together to provide information on the uniform rate of progress that serves as a path of comparison for the process of setting reasonable progress goals. While we have included information on the implications of utilizing the IMPROVE steering committee recommendation for an alternative method to calculate baseline visibility conditions, we are not aware of a similar procedure that has been approved by the IMPROVE steering committee for the calculation of natural background conditions. As our statement on natural background conditions from June of 2004 states, "the Board supports the MANE-VU Class I states' use of these [U.S. EPA] defaults, and recommends these defaults be refined if and when scientific data and alternative methods warrant a change in one or more of the default parameters and such a change would be economical and practical to implement, result in a significant change in the natural background goal, and not create inconsistencies elsewhere." This continues to be true and MANE-VU will revisit this issue when the IMPROVE steering committee provides a consensus approved alternative method for the estimation of natural background visibility conditions for the MANE-VU region.

We appreciate all of the stakeholders review and participation in the review of this document. We are sure that it stands as an improved document as a result. Thank you for your interest in our technical work.

Sincerely,



Gary Kleiman, Project Director
Mid-Atlantic/Northeast Visibility Union Contribution Assessment