



File Code: 2580

Date: April 8, 2009

Ms. Anne Gobin
Chief, Bureau of Air Management
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106

Dear Ms. Gobin:

This letter is in response to the Connecticut Draft Regional Haze State Implementation Plan (SIP) dated February 4, 2009, which was submitted to the Federal Land Managers for review. Since you represent the responsible agency, we are providing our technical review comments (Enclosure 1) to you which focus on the eight content areas outlined in our October 13, 2006, letter to you (Enclosure 2).

We now have a new Air Resource Management Team available to work with you and your staff on all air resource issues that are of concern to the Forest Service's Eastern Region. Please add the Air Resources Specialist for Connecticut, Ralph Perron, rperron@fs.fed.us (802) 222-1444 to your Federal Land Manager list. Consultation and collaboration with our Agency, as required in the Code of Federal Regulations (CFR), can be maintained through Mr. Perron.

We look forward to working with you to improve air quality values, including progress towards the visibility goal set by Congress for our Class I areas. In spite of our legal involvement in this process, please be aware that only the United States Environmental Protection Agency can make a determination about the document's completeness and provide final approval.

We would appreciate a response regarding our comments per Section 51.308(i)(3) of the CFR. Please contact Mr. Perron if you have technical questions about the substance of our comments.

Sincerely,

/s/ Lee Nightingale (for)
KENT P. CONNAUGHTON
Regional Forester

Enclosures (2)

cc: Ralph Perron, Meg Mitchell, Tom Wagner, Richard Gillam



Enclosure 1

USDA Forest Service Comments Regarding Connecticut Draft Regional Haze Rule State Implementation Plan (SIP)

The air program staff of the U.S. Forest Service has reviewed the Connecticut Draft Regional Haze State Implementation Plan (SIP) dated February 4, 2009, and has developed the comments listed below. We look forward to the Connecticut Department of Environmental Protection response to these comments, as required in the Code of Federal Regulations (CFR) per section 40 CFR 51.308(i)(3). For further information regarding these comments, please contact Ralph Perron at (802) 222-1444 (rperron@fs.fed.us) or Rick Gillam at (404) 347-5058 (rgillam@fs.fed.us). The comments below are categorized by the emphasis areas outlined in our letter to Ms. Anne Gobin dated October, 13, 2006, included as Enclosure 2. That letter discussed our perspectives relevant to Regional Haze SIP preparation.

Overall Comments:

We are interested in the Connecticut Regional Haze SIP because analyses conducted by MANE-VU have shown that air emissions sources located in Connecticut affect visibility in Forest Service Class I areas in the states of Vermont, New Hampshire, and West Virginia (see Table 2.1 of Draft SIP and Attachment B – MANE-VU Contribution Assessment). Overall, Connecticut has done a commendable job compiling the Regional Haze SIP and addressing the requirements of the Regional Haze Rule. The following sections provide our comments related to specific sections of the Draft SIP.

Specific Comments:

Natural Condition and Uniform Rate (Section 4 of Draft CT RH SIP)

- No comments.

Emission Inventories (Section 6 of Draft CT RH SIP)

- The discussion of emissions inventories is generic and only explains the work done by MANE-VU and NESCAUM. This section should include additional discussion of how the Connecticut specific emissions (presented in Tables 6.1 & 6.2) were generated.
- We would like Connecticut to commit to tracking emissions annually and reporting how the projected emissions compare to actual emissions in the mid-course review due in 2012 and required SIP revision due in 2018.

Area of Influence (Section 2 of Draft CT RH SIP)

- The discussion regarding Connecticut's contribution to visibility impairment at other States' Class I areas in Section 2 of the Draft SIP is brief. Section 8.2 of the Draft SIP provides additional information on Connecticut's contribution to sulfate impacts. It is suggested that additional discussion be added to Section 2, including a reference to Section 8.2.

Reasonable Progress Goals and Long Term Strategy (Sections 10 and 11 of Draft CT RH SIP)

- Since Connecticut has no Class I areas, it is acceptable to state that Connecticut agrees with the reasonable progress goals established by the States of Maine, New Hampshire, Vermont and New Jersey for their Class I areas. Even though the impacts are minimal, this section should also, at least, recognize that emissions from Connecticut sources impact Class I areas in West Virginia and Virginia as well.
- Section 11.5 of the Draft SIP discusses source retirement and replacement schedules and refers to Table B-5 in Attachment N for specific sources. Table B-5 in Attachment N does not specifically identify Connecticut sources that have been shutdown – it appears to list all sources in the MANE-VU region. A table identifying specific sources in Connecticut that have shut down should be added to Section 11.5. Are there any other sources that are planning to shut down before 2018? If information is available for any other sources that are expected to shut down before 2018, it should also be discussed in this section.

Wildland Fire (Section 11.7 of Draft CT RH SIP)

- We agree that based on existing inventories of smoke emissions from wildfires and prescribed fires, they are not a significant emission source for Connecticut or a significant contributor to regional haze in downwind Class I areas at this time. It would be helpful to add a reference to the specific sections in Attachment V which support this claim. Also, we request that Connecticut commit to track smoke emissions in the future to help determine the level of contribution for future planning periods.

Regional Consistency (Section 3 of Draft CT RH SIP)

- No comments.

Verification and Contingencies

- No comments.

Coordination and Consultation (Section 3 of Draft CT RH SIP)

- No comments.

Best Available Retrofit Technology (BART) (Section 9 of Draft CT RH SIP)

- No comments.

Additional Suggestions:

- Section 5 discusses the monitoring strategy being used to assess visibility conditions. Even though Connecticut does not have any Class I areas, this section demonstrates the importance of continued operation of the IMPROVE monitoring network. We ask that Connecticut add a statement expressing their support for continued operation of the IMPROVE network.
- In Sections 7.1 and 7.3, brief discussions of model performance would be helpful.



File Code: 2580-2

Date: October 13, 2006

Ms. Anne Gobin
Director, Bureau of Air Management
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Dear Ms. Gobin:

Over the past several years, members of both our staff and yours have participated with neighboring states and tribes in the Central States Regional Air Partnership to develop best approaches and tools for preparing plans that will reduce haze in Class I areas. With preparation of your Regional Haze State Implementation Plan (SIP) at hand, we want to focus on collaboration with you and your staff to ensure success. As you know, consultation with you is required in the Regional Haze Rule (RHR). This is a priority for our air program.

Our focus will be on Class I wildernesses, which the United States Department of Agriculture (USDA) Forest Service (FS) is responsible for. We are coordinating with the other Class I area managers, the National Park Service, and the US Fish and Wildlife Service to facilitate a common message from all federal land managers (FLM). We anticipate leveraging strengths of each FLM to our joint advantage. Since the FLM will be seeking a close working relationship with every state in this SIP writing process, the expectation is to share ideas from across the nation. The objective of every SIP is to play a critical role in a national emissions reduction plan.

Enclosed are detailed perspectives pertinent to the SIP preparation. Any comments or questions should be directed to Ann Acheson, the principal FS point of contact, at (740) 373-9055 ext. 23 or aacheson@fs.fed.us. She will consult on your SIP throughout the required 60-day comment period, sharing our best insights and recommendations. Ann will also work with others on our staff, especially our National Haze Coordinator, Ann Mebane and the Department of Interior. Ann can be contacted at (307) 587-4597 or amebane@fs.fed.us.

As required in the RHR, please identify, at your earliest convenience, your key point(s) of contact. Send all correspondence electronically to both Ann Acheson and Ann Mebane to ensure a successful consultation and SIP.

Sincerely,

/s/ Forrest L. Starkey (for)
RANDY MOORE
Regional Forester

Enclosure



Enclosure 1

Subject: Connecticut and Regional Haze Rule Consultation with the United States Department of Agriculture (USDA) Forest Service (FS)
September 2006

The following perspectives are merely suggestions or recommendations not direction or requirements. They are deliberately very similar to those prepared by the Department of Interior to contribute to a common sense of purpose for improving haze in all Class I areas. We are sending these perspectives to each state. In so doing, we hope to facilitate inter-state coordination. At the same time, we fully acknowledge the discretion afforded in the Regional Haze Rule (RHR) for unique and creative solutions by individual states in writing plans that reduce haze.

Natural Condition and Uniform Rate

These factors apply mainly to states that have Class I areas. Other states that contribute to visibility impairment in Class I areas located in a different state might consider including discussion and conclusions on these factors in their individual plans.

The basic calculation of baseline, natural condition, and uniform rate builds the foundation for the entire RHR State Implementation Plan (SIP) process. Considerable discussion and debate at the science and policy level has occurred regarding appropriate methods to be used. As a consequence, several equations that include varying parameters or multipliers are available. Because these calculations can have a significant effect on the resulting progress goal, it is important to provide a detailed description of the methods used in the SIP. Calculations that include only portions of established methods or utilize unique approaches will be better understood if the rationale for these differences is fully explained in the SIP or its supporting documentation. We encourage states to use calculations that are based on equations recommended by the Interagency Monitoring of Protected Visual Environments (IMPROVE) steering committee and that are consistent with recommended approaches from the pertinent Regional Planning Organization (RPO) and the Environmental Protection Agency (EPA) region.

Emission Inventories

Given the complexities associated with modern comprehensive emission inventories, spending some considerable effort in describing how these inventories were developed and used will be important. Emission descriptions will be most informative if they include an evolutionary discussion that includes an actual, base-year inventory used to evaluate model performance; a typical base-year inventory that represents the five year, average state which establishes modeled visibility impacts; and various future year, controlled inventories that demonstrate future visibility conditions. Consider adding future year inventories that are clearly partitioned to delineate source types (by text, charts, or graphics) that are included in each model simulation. Benefits to future visibility conditions suggested in the SIP that are not also clearly linked to a future inventory or are not clearly included in future model analysis, will warrant additional discussion.

One part of your emission inventory includes the implementation of “Best Available Retrofit Technology” (BART) on a subset of pre-Prevention of Significant Deterioration sources. The BART source identification, elimination, and level determination will be of particular interest for review. We would prefer to see a clear progression through the three basic BART phases and a thorough description of the RHR prescribed factor analysis (if applicable). Consider discussing whether BART levels apply to individual or grouped source categories.

Area of Influence

The area of influence of significant visibility-impairing sources is an important SIP element. We suggest that each state clearly identify and apportion by state, or other geographic means, the significant levels of pollutants contributed to each Class I area by source. Developing this information together with neighboring States and Tribes will facilitate consistency. Discussions of changing source area contributions at both the base- and future-year levels will help demonstrate SIP progress. Consider the benefits of presenting this information in the form of transported mass by pollutant or through individually calculated visibility impairment measures. Using a percentage or “Top 10” ranking for current contributions by geographic area may or may not clearly describe progress over time.

Reasonable Progress Goals and Long Term Strategy

Establishing reasonable progress goals for Class I areas in your state and/or acknowledging reasonable progress goals for Class I areas in other states that are affected by emissions from your state, as well as defining associated emissions strategies to meet these goals, form the basis of the SIP process under the RHR.

In developing the statute’s required Long Term Strategy (LTS), your state is offered broad flexibility when determining reasonable progress goals and associated emissions. As noted earlier, the RHR includes a requirement for states to assess a uniform rate of progress and compare that rate to the reasonable progress goals set by those states with Class I areas. We feel that this uniform rate of progress assessment is useful in determining the geographic and economic extent a state can consider when developing the LTS associated with the reasonable progress goals.

In general, we will be looking at the degree to which the LTS is supported by RPO technical work and at the level of consistency among the contributing states. For Class I areas where your state is setting a year 2018 reasonable progress goal of equal or less impairment compared to the uniform rate of progress, our review will focus holistically on (1) whether strategies are applied equitably across source types; (2) if both local and regional emission strategies have been fully examined; and (3) how consistent assessments and strategies are applied regionally.

For Class I areas where the reasonable progress goal is more impaired than the uniform rate of progress, consider presenting information on a component basis. Components could consist of emission source category as before, but also include contributions from individual pollutants or by geographic source area. Our intent is to better understand where and why a strategy falls short of the uniform progress rate goal.

Because each region has focused their emission control strategy on different conditions, presenting results in a component format may assist in showing what level of progress was made in the focus area, versus other less controllable factors.

Wildland Fire

Your state has considerable flexibility as it addresses all anthropogenic sources of visibility impairment, including fire. The RHR requires consideration of smoke management techniques for agricultural and forestry management practices in the development of the LTS part of the SIP. On a short-term basis, fire has the potential to cause significant visibility reduction in Class I areas. If fire contributes to the index used to track long-term, reasonable progress in a Class I area, the visibility SIP should identify how it will be addressed. Your state may already have a smoke management program (SMP) that adequately describes how visibility impairment from fire will be

addressed. If fire has been determined to contribute to visibility impairment, we suggest including a fire emissions inventory along with a comment about its reliability and a projection for changes to the future inventory. If your state has a SMP, is it a basic smoke management program or an enhanced smoke management plan? And has the SMP been certified by the Environmental Protection Agency (EPA) Interim Air Quality Policy on Wildland and Prescribed Fire? Identify the specific SMP requirements for minimizing visibility impairment in Class I areas. Are there differences in state regulation for the way in which smoke from agricultural burning and forest fires are treated? Is there a difference in the way emissions from wildfire, prescribed fire, and wildland-fire-use (WFU) fire are identified and treated on private, state, and federal lands?

Regional Consistency

The RPOs have been working toward regionally-consistent approaches to address visibility impairment throughout the SIP development process. There may be circumstances when different methods were used or impairment assessments reached different conclusions. The FLM understands that each state knows what emission control methods or air quality management strategies work best for its areas. Each state may wish to develop strategies that are independent from RPO or neighboring areas.

In this context, our review of “regional consistency” will have less to do with individual discretion each state has in making decisions, and more on how well a group of states identifies and addresses similar agreed upon goals for each Class I area within a common area of influence.

Regional consistency can also be difficult to evaluate if neighboring SIPs (or portions of SIPs) are released for review at different times. We expect that thorough inter-state consultation processes will lead to consistent descriptions of apportionment and emission control goals, thus resulting in development of similar progress goals, regardless of release dates.

Verification and Contingencies

Little emphasis has been placed in the RHR on verification and even less on contingency planning. By rule, each SIP must identify the monitoring data used to specify the original baseline and also as part of an ongoing progress review at five year intervals.

Given the uncertain future of any individual monitoring site, we suggest that the SIP address the representation of both primary and alternative data sites for each Class I area.

Consider not only the data necessary to measure progress, but also how to account for and mitigate both unexpected and reasonably foreseeable emissions growth, changes to the geographic distribution of emissions, and substantive errors that may be found in emission inventories or other technical bases of the SIPs. These factors, as well as other unanticipated circumstances, may adversely affect your state’s ability to achieve the emissions reductions projected by the SIP. Considering these factors through adaptive management or continual review strategies may assist in avoiding these circumstances.

Coordination and Consultation

The 1999 RHR requires states to consult with the FLM agencies at least 60 days prior to holding any public hearing on a RHR, SIP, or SIP revision (40 CFR 51.308(i)). As named in the cover letter to this enclosure, a single FS air specialist has been assigned to your state.