Appendix F-2c

VISTAS Consultation with MO Air Pollution Control Program

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Correspondence Record

Date	From	To	Description
June 22, 2020	VISTAS	MO APC	Request for Regional Haze Reasonable Progress Analysis for Missouri Source Impacting VISTAS Class I Areas
October 19, 2020	MO APC	VISTAS	Initial Response to June 22, 2020 Letter from VISTAS Requesting Regional Haze Reasonable Progress Analysis for Missouri Source Impacting VISTAS Class I Areas

Visibility Improvement State and Tribal Association of the Southeast

June 22, 2020

Darcy A. Bybee, Director
Missouri Air Pollution Control Program
PO Box 176
Jefferson City, Missouri 65102-0176

RE: Request for Regional Haze Reasonable Progress Analysis for Missouri Source Impacting VISTAS Class I Areas

Dear Ms. Bybee:

The Regional Haze Regulation 40 CFR § 51.308(d) requires each state to "address regional haze in each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State which may be affected by emissions from within the State." 40 CFR § 51.308(f) requires states to submit a regional haze implementation plan revision by July 31, 2021. As part of the plan revision, states must establish a reasonable progress goal that provides for reasonable progress towards achieving natural visibility conditions for each mandatory Class I Federal area (Class I area) within their state. 40 CFR § 51.308(d)(1) requires that reasonable progress goals "must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period."

In establishing reasonable progress goals, states must consider the four factors specified in § 169A of the Federal Clean Air Act and in 40 CFR § 51.308(f)(2)(i). The four factors are: 1) the cost of compliance, 2) the time necessary for compliance, 3) the energy and non-air quality environmental impacts of compliance, and 4) the remaining useful life of any potentially affected sources. Consideration of these four factors is frequently referenced as the "four-factor analysis."

To assist its member states, the Visibility Improvement State and Tribal Association of the Southeast[1] (VISTAS) and its contractors conducted technical analyses to help states identify

[1] The VISTAS states are Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

sources that significantly impact visibility impairment for Class I areas within and outside of the VISTAS region. VISTAS initially used an Area of Influence (AoI) analysis to identify the areas and sources most likely contributing to poor visibility in Class I areas. This AoI analysis involved running the HYSPLIT Trajectory Model to determine the origin of the air parcels affecting visibility within each Class I area. This information was then spatially combined with emissions data to determine the pollutants, sectors, and individual sources that are most likely contributing to the visibility impairment at each Class I area. This information indicated that the pollutants and sector with the largest impact on visibility impairment were sulfur dioxide (SO_2) and nitrogen oxides (NO_x) from point sources. Next, VISTAS states used the results of the AoI analysis to identify sources to "tag" for PM (Particulate Matter) Source Apportionment Technology (PSAT) modeling. PSAT modeling uses "reactive tracers" to apportion particulate matter among different sources, source categories, and regions. PSAT was implemented with the Comprehensive Air Quality Model with extensions photochemical model (CAMx Model) to determine visibility impairment due to individual sources. PSAT results showed that in 2028 the majority of visibility impairment at VISTAS Class I areas will continue to be from point source SO_2 and NO_x emissions. Using the PSAT data, VISTAS states identified, for reasonable progress analysis, sources shown to have a sulfate or nitrate impact on one or more Class I areas greater than or equal to 1.00 percent of the total sulfate plus nitrate point source visibility impairment on the 20 percent most impaired days for each Class I area. This analysis has identified the following source in Missouri that meets this criterion:

- New Madrid Power Plant-Marston (29143-5363811)

Information regarding projected 2028 SO_2 and NO_x emissions and visibility impacts on VISTAS Class I areas is shown in the table attached to this letter (Attachment 1).

As required in 40 CFR § 51.308(d)(1)(i)(A), VISTAS, on behalf of Alabama, Kentucky, and North Carolina, requests that Missouri conduct, or require that the source in question initiate, and share when completed, the results of a reasonable progress analysis for the noted source with VISTAS. This will be helpful to the VISTAS states as they begin the formal Federal Land Manager consultation process for their individual draft Regional Haze Plans in early 2021. So that the VISTAS states can include the results of your state's reasonable progress analysis in developing the long-term strategies for Class I areas in their states, we request that you submit this information to VISTAS no later than October 30, 2020. If the reasonable progress analysis cannot be completed by this date, please provide, no later than this date, notice of an attainable date for completion of the analysis. If you determine that a four-factor analysis is not warranted for the identified source, please provide the rationale for this determination by the requested date.

In developing projected 2028 emissions for the source, VISTAS utilized ERTAC_16.0 emissions projections and granted Missouri an opportunity for updates in February 2020. VISTAS is now giving another opportunity for review these projections to verify that they are reasonable.

Should you be aware of significantly different emission projections for 2028 for the source or pollutants, please provide revised estimates within thirty (30) days of the date of this letter. The applicable VISTAS states will review any revised emission estimates, determine if a reasonable progress analysis is not needed to meet their regional haze obligations, and notify you accordingly.

Updated 2028 emission projections, if necessary, the results of your state's reasonable progress analysis for the requested source, and any necessary ongoing communications should be sent via email to vistas@metro4-sesarm.org.

Should you have any questions concerning this request, please contact me through September 30, 2020, at 404-361-4000 or hornback@metro4-sesarm.org.

Sincerely,

John E. Hornback
Executive Director
Metro 4/SESARM/VISTAS

Attachment

Copies: Ron Gore, Alabama Air Division
Melissa Duff, Kentucky Division for Air Quality
Mike Abraczinskas, North Carolina Division of Air Quality
Michael Vince, Central States Air Resource Agencies

Attachment 1: Projected 2028 SO_2 and NO_x Emissions and VISTAS Class I Area Impacts

Table 1. New Madrid Power Plant-Marston (29143-5363811)
Modeled SO_2 = 11,158.3 tpy, Modeled NOx = 4,054 tpy

Impacted VISTAS Class I Areas	Sulfate PSAT (Mm^{-1})	Nitrate PSAT (Mm^{-1})	Total EGU & non-EGU Sulfate + Nitrate (Mm^{-1})	Sulfate PSAT % Impact	Nitrate PSAT % Impact
Sipsey Wilderness Area	0.220	0.012	16.370	1.34%	0.07%
Shining Rock Wilderness Area	0.158	0.001	12.313	1.28%	0.01%
Mammoth Cave National Park	0.289	0.022	25.289	1.14%	0.09%
Linville Gorge Wilderness Area	0.134	0.000	12.884	1.04%	0.00%

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Michael L. Parson, Governor
Carol S. Comer, Director

October 19, 2020

Chad LaFontaine
Executive Director
Metro 4/SESARM/VISTAS
Email: clafontaine@metro4-sesarm.org

Sent Via Electronic Mail

RE: Initial Response to June 22, 2020 Letter from VISTAS Requesting Regional Haze Reasonable Progress Analysis for Missouri Source Impacting VISTAS Class I Areas

Dear Chad LaFontaine

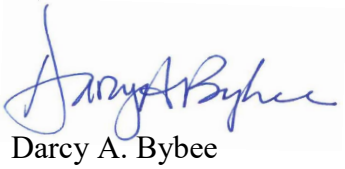
This letter serves as the Missouri Department of Natural Resources' Air Pollution Control Program's (Air Program's) initial response to a letter from John Hornbeck with VISTAS dated June 22, 2020. In the letter, VISTAS indicated that projected emissions in 2028 from the New Madrid Power Plant located in New Madrid County Missouri were anticipated to impact visibility at federal Class I areas located in Alabama, Kentucky, and North Carolina. As such, VISTAS requested that Missouri conduct, or require that the New Madrid Power Plant initiate, and share with VISTAS when completed, the results of a reasonable progress analysis pursuant to the federal Regional Haze Rule. The VISTAS letter requested that we submit this information to VISTAS by October 30, 2020.

On July 29, 2020, the Air Program sent a letter to the New Madrid Power Plant requesting the information needed to conduct a reasonable progress analysis for the source pursuant to the Regional Haze Rule. In our letter, we requested that New Madrid submit the information by September 1, 2020; however, the source requested and was granted an extension to submit the information. We can provide the information we receive once we have it and have reviewed it. We anticipate that results of our analysis will be available to share with VISTAS by the end of the 2020 calendar year.

Thank you for your attention to this matter. If you have any questions, please contact Emily Wilbur with the Missouri Department of Natural Resources' Air Pollution Control Program at P.O. Box 176, Jefferson City, MO 65102, at (emily.wilbur@dnr.mo.gov) or by telephone at (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Darcy A. Bybee
Director

DAB:abc

Enclosure: New Madrid Power Plant Response to the Air Program's July 2020 Information Request Pursuant to the Regional Haze Rule