

## CONSULTATION PROCESS AND DOCUMENTATION

The following table outlines DEQ communications with federal, state, and local partners as well as stakeholders on Regional Haze.

| Date               | Method             | Entities Involved  | Topic/Problem/   | Outcome   | Notes/Links   |
|--------------------|--------------------|--|--|---|---|
| December 5–7, 2017 | In-Person Workshop | States, Federal Land Managers, EPA National and Regional Offices                       | Lessons learned from Planning Period I<br>States Planning Needs and Responsibilities<br>Regional Consultation                                  | States shared lessons learned from approaches during the first planning period and how to apply those lessons to Planning Period II.<br><br>EPA provided updates on Rule changes and litigation.<br><br>CenSARA states consultation process began for Planning Period II. | <a href="http://www.westar.org/Docs/regional%20haze%20workshop%202017/Dec5-7%202017national-regional-stateRegionalHazeWorkshop_final.pdf">http://www.westar.org/Docs/regional%20haze%20workshop%202017/Dec5-7 2017national-regional-stateRegionalHazeWorkshop_final.pdf</a> |
| February 20, 2019  | Webinar            | EPA, Tribal Entities, Federal Land Managers, States                                    | EPA hosted; “Technical Guidance on Tracking Visibility Progress for the 2nd Implementation Period of the Regional Haze Program” release by EPA | Q&A and review of the guidance  | <a href="https://www.epa.gov/visibility/technical-guidance-tracking-visibility-progress-second-implementation-period-regional">https://www.epa.gov/visibility/technical-guidance-tracking-visibility-progress-second-implementation-period-regional</a>                     |
| March 5, 2019      | Web-Conference     | CenSARA States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Screening Methods discussion   | Demonstration and discussion of the Arkansas Potential Screening Methods worksheet, Updates   | CenSARA States and Federal Partners Communication   |
| April 9, 2019      | Conference Call    | CenSARA States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Early planning discussion  | Further discussion of screening methods, EPA Technical Guidance   | CenSARA States and Federal Partners Communication   |

| Date               | Method          | Entities Involved   | Topic/Problem/  | Outcome   | Notes/Links  |
|--------------------|-----------------|---|---|---|--|
| May 7th, 2019      | Conference Call | CenSARA States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7                | Early planning discussion   | Nat'l Reg. Haze meeting discussion; Updates; Information sharing with neighboring states  | CenSARA States and Federal Partners Communication            |
| June 4, 2019       | Conference Call | CenSARA States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7                | National RH Meeting Planning Discussion   | Revised agenda for National RH Meeting; State & Federal partner RH planning updates   | CenSARA States and Federal Partners Communication            |
| June 25, 2019      | Conference Call | States, Federal Land Managers, EPA National and Regional Offices                                      | Emissions platform and modeling for RH  | Update on development of 2016 v1 emissions platform and projects (including 2020 mobile emissions estimates), EPA and state modeling of the 2016 platform, Update on EPA's regional haze modeling | Federal/State Technical Work Collaboration Group             |
| July 9, 2019       | Conference Call | CenSARA States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7                | National RH Meeting Planning Discussion; Updates  | Logistics for National RH Meeting; State & Federal partner RH planning updates  | CenSARA States and Federal Partners Communication            |
| August 13, 2019    | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | National RH Meeting Planning Discussion; Updates  | VISTAS data not to be used until updated; RH Guidance with OMB to be released soon  | CenSARA and VISTAS States and Federal Partners Communication |
| September 3, 2019  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | National RH Meeting Planning Discussion; Updates  | Review of the RH Guidance; Discussion of which inventory year to use for anthropogenic emissions  | CenSARA and VISTAS States and Federal Partners Communication |
| September 10, 2019 | Webinar         | EPA, States   | Guidance on Regional Haze State Implementation Plans for the Second Implementation Period | EPA-led webinar for newly released RH Guidance  | --   |

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|---------------------|--|---|--|---|--|
| October 28–30, 2019 | In-Person Meeting  | States, Federal Land Managers, EPA National and Regional Offices                                      | National RH Meeting: Guidance Approaches for Planning Period II, Planning Period II progress | Check-in on progress, identify needs for state-to-state, state-to-FLM, and state-to-EPA informal consultation   | Federal and State Partners Communication                     |
| November 5, 2019    | Conference Call  | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates  | Discussion of drafting a regional timeline; Wrap-up discussions from National RH Meeting  | CenSARA and VISTAS States and Federal Partners Communication |
| December 3, 2019    | Web-Conference   | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Discussion of planning—next steps; AR presentation of possible screening tool                | On-the-books emission reductions; regional timeline/state goals; 4-factor analysis source identification methods; AR shared draft Consultation Plan and possible Screening Tool   | CenSARA and VISTAS States and Federal Partners Communication |
| December 30, 2019   | Modified Methodology PowerPoint Presentation & Email Invitation to Schedule Consultation Meeting | Arkansas DEQ to: Indiana DEM Illinois DEQ Kentucky DEQ Oklahoma DEQ                                   | Arkansas 4-Factor Analysis and Affected Sources  | Arkansas DEQ received EPA’s, FLMs’, and other states’ feedback during round one discussions regarding the Arkansas’s draft 4-Factor Analysis Methodology; Arkansas DEQ presented revised methods and results, and invited other states to schedule formal consultation meetings | Interstate Consultation                                      |
| January 7, 2020     | Conference Call  | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates  | State plans for approaching 4-factor analyses source identification; Consultation plan updates; VISTAS Modeling Protocol; Timelines updates   | CenSARA and VISTAS States and Federal Partners Communication |

| Date             | Method          | Entities Involved   | Topic/Problem/   | Outcome   | Notes/Links  |
|------------------|-----------------|---|--|---|--|
| January 16, 2020 | Conference Call | EPA Region 6 and Oklahoma DEQ   | Planning Period II progress and updates  | Next steps/timeline   | EPA Consultation   |
| January 29, 2020 | Web-Conference  | Arkansas DEQ and Oklahoma DEQ   | Discussion of Visibility Threshold Selection Methodology and Affected Facilities in Oklahoma | Arkansas DEQ shared its methodology for what sources to pull forward for four-factor analysis as contributing to Arkansas Class I areas and preview of anticipated asks                                   | Interstate Consultation                                      |
| February 4, 2020 | Letter          | Arkansas DEQ and Oklahoma DEQ   | "Asks" from Arkansas DEQ   | Arkansas requested DEQ determine if 4-factor analysis is appropriate for three sources  | Interstate Consultation                                      |
| February 4, 2020 | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates  | State progress on 4-factor analyses source identification; Consultation plan updates; Timelines updates   | CenSARA and VISTAS States and Federal Partners Communication |
| March 3, 2020    | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates  | Regional timeline with state specific approaches – individual state status; Progress on source ID for 4-factor analysis; Consultation plan progress; VISTAS sharing modeling protocol with CenSARA states | CenSARA and VISTAS States and Federal Partners Communication |
| March 19, 2020   | Conference Call | OG&E and Oklahoma DEQ   | Planning Period II progress and updates  | Next steps/timeline   | Stakeholder Engagement                                       |
| March 25, 2020   | Conference Call | EPA Region 6 and Oklahoma DEQ   | Discussion of Visibility Threshold Selection Methodology                                     | EPA provided feedback on potential revisions to improve the source selection methodology  | EPA Consultation   |

| Date           | Method          | Entities Involved   | Topic/Problem/  | Outcome  | Notes/Links  |
|----------------|-----------------|---|---|--|--|
| April 2, 2020  | Web-Conference  | Texas CEQ and Oklahoma DEQ  | Texas presentation on modeled impacts on Class I areas and source selection methodology | Discussion of Texas contributions to Oklahoma  | Interstate Consultation                                      |
| April 7, 2020  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates   | States' progress on 4-factor ID, consultation plans, facility notification (ICRs); IMPROVE dataset discussion (2017 or 2019); EPA R6 is proposing to discuss the FLM consultation requirements with OAQPS and OGC and then come back to talk to the states | CenSARA and VISTAS States and Federal Partners Communication |
| April 9, 2020  | Conference Call | EPA Region 6 and Oklahoma DEQ   | Discussion of Visibility Threshold Selection Methodology                                | EPA provided feedback on potential revisions to improve the source selection methodology   | EPA Consultation   |
| April 14, 2020 | Conference Call | National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service, and Oklahoma DEQ          | Initial Discussion of Visibility Threshold Selection Methodology                        | FLMs provided feedback on potential revisions to improve the source selection methodology  | Federal Land Manager Consultation                            |
| April 15, 2020 | Web-Conference  | AR, LA, OK RH Discussion  | EPA R6 feedback on source selection methodology   | States discussed EPA feedback and discussed technical basis for adjustments, if any to source selection methodology  | Interstate Consultation                                      |
| April 20, 2020 | Webinar         | States & EPA  | Ask CAMD Session on CAMD Data Products  | CAMD presentation & demonstration of tools useful in RH planning   | --   |
| April 20, 2020 | Conference Call | National Parks Conservation Association and Oklahoma DEQ  | Share Methodology   | Next steps/Timelines   | Stakeholder Engagement                                       |

| Date            | Method          | Entities Involved   | Topic/Problem/  | Outcome   | Notes/Links  |
|-----------------|-----------------|---|---|---|--|
| April 21, 2020  | Webinar         | VISTAS & MJOs states  | VISTAS Modeling Results to MJOs and States                      | VISTAS presentation   | --   |
| April 21, 2020  | Conference Call | Louisiana DEQ and Oklahoma DEQ  | Discussion of Louisiana's Source Selection Methodology          | No Louisiana Sources Identified by Louisiana DEQ as contributing to Oklahoma                                  | Interstate Consultation                                      |
| April 20, 2020  | Web-Conference  | National Parks Conservation Association and Oklahoma DEQ  | Presentation by NPCA of Point and Non-point sources in Oklahoma | Next steps/Timelines  | Stakeholder Engagement                                       |
| May 5, 2020     | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates                         | Status report from states of progress on SIP development and FLM and EPA updates                              | CenSARA and VISTAS States and Federal Partners Communication |
| May 7, 2020     | Email           | OK DEQ, MO DNR, and Arkansas DEQ  | Notification of Data Availability                               | ICR Responses shared; requested input for upcoming 4-factor analyses  | Interstate Consultation                                      |
| May 12, 2020    | Conference Call | Texas CEQ and Oklahoma DEQ  | Discussion of Visibility Threshold Selection Methodology        | Preliminary Consultation  | Interstate Consultation                                      |
| May 19-20, 2020 | Webinar         | WESTAR-WRAP & MJOs states   | WRAP Modeling Results   | Monitoring (May 19) and Emissions (May 20) data and display tools   | --   |
| May 20, 2020    | Webinar         | VISTAS & MJOs states  | VISTAS regional haze stakeholder briefing                       | revised glidepaths showing progress in five Class I areas outside but near the VISTAS region; expected "asks" | --   |
| May 29, 2020    | Conference Call | EPA Region 6 and Oklahoma DEQ   | Discussion of Oklahoma's Current Calculation Methodology        | EPA provided feedback on potential revisions to improve the source selection methodology                      | EPA Consultation   |

| Date          | Method          | Entities Involved   | Topic/Problem/                          | Outcome  | Notes/Links   |
|---------------|-----------------|---|---|--|---|
| June 2, 2020  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | States discussed EPA feedback and discussed technical basis for adjustments, if any, to source selection methodology   | CenSARA and VISTAS States and Federal Partners Communication  |
| June 3, 2020  | Web-Conference  | National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service, and Oklahoma DEQ          | Source Selection Methodology            | FLMs provided feedback on potential revisions to improve the source selection methodology  | Federal Land Manager Consultation   |
| June 22, 2020 | Conference Call | OG&E and Oklahoma DEQ   | Discussion of RH analyses               | Next steps/timelines   | Stakeholder Engagement  |
| June 23, 2020 | Webinar         | WESTAR-WRAP & MJOs states   | WRAP Modeling Results                   | TSS Orientation; Recap / progress on Monitoring and Emissions Data display tools for Regional Haze plans; Modeling and Visibility Projections results access and display topics for weight of evidence | <a href="https://www.wrapair2.org/calendar/viewitem.jsp?&amp;cal_item_id=31183">https://www.wrapair2.org/calendar/viewitem.jsp?&amp;cal_item_id=31183</a> |
| June 25, 2020 | Webinar         | WESTAR-WRAP & MJOs states   | WRAP Modeling Results                   | Modeling Results and Applications presentations – methodology and “how-to-use”; Next steps on modeling results delivery and continuing updates to TSS  | <a href="https://www.wrapair2.org/calendar/viewitem.jsp?&amp;cal_item_id=32183">https://www.wrapair2.org/calendar/viewitem.jsp?&amp;cal_item_id=32183</a> |
| July 7, 2020  | Conference Call | Grand River Dam Authority and Oklahoma DEQ  | Discussion of 4-factor Analysis         | Next Steps   | Stakeholder Engagement  |

| Date           | Method          | Entities Involved   | Topic/Problem/                          | Outcome   | Notes/Links   |
|----------------|-----------------|---|---|---|---|
| July 17, 2020  | Letter          | Oklahoma DEQ to Texas CEQ   | “Ask” Letter                            | Oklahoma requests that Texas consider 14 SO <sub>2</sub> sources and 4 NO <sub>x</sub> sources for further analysis | <a href="https://www.deq.ok.gov/wp-content/uploads/air-division/RH_2021_ConsultationRequest_TX.pdf">https://www.deq.ok.gov/wp-content/uploads/air-division/RH_2021_ConsultationRequest_TX.pdf</a> |
| July 17, 2020  | Letter          | Oklahoma DEQ to Nebraska DEE  | “Ask” Letter                            | Oklahoma requests that Nebraska consider one source for further analysis (OPPD Nebraska City Station)               | <a href="https://www.deq.ok.gov/wp-content/uploads/air-division/RH_2021_ConsultationRequest_NE.pdf">https://www.deq.ok.gov/wp-content/uploads/air-division/RH_2021_ConsultationRequest_NE.pdf</a> |
| July 17, 2020  | Letter          | Oklahoma DEQ to Louisiana DEQ   | “Ask” Letter                            | Oklahoma requests that Louisiana consider one source for further analysis (Cleco Power)                             | <a href="https://www.deq.ok.gov/wp-content/uploads/air-division/RH_2021_ConsultationRequest_LA.pdf">https://www.deq.ok.gov/wp-content/uploads/air-division/RH_2021_ConsultationRequest_LA.pdf</a> |
| July 17, 2020  | Letter          | Oklahoma DEQ to Arkansas DEQ  | “Ask” Letter                            | Oklahoma requests that Arkansas consider two sources for further analysis (White Bluff & Independence)              | <a href="https://www.deq.ok.gov/wp-content/uploads/air-division/RH_2021_ConsultationRequest_AR.pdf">https://www.deq.ok.gov/wp-content/uploads/air-division/RH_2021_ConsultationRequest_AR.pdf</a> |
| July 21, 2020  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | States completing source selection, ICRs, and reaching out to other states for info                                 | CenSARA and VISTAS States and Federal Partners Communication  |
| August 4, 2020 | Webinar         | VISTAS agencies, EPA, FLMs, RPOs and surrounding states   | 2028 Regional Haze Modeling Results     | Provide update on regional haze modeling conducted by VISTAS  | ---   |



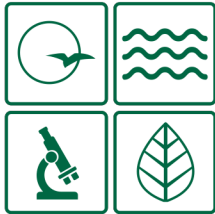
| Date               | Method          | Entities Involved   | Topic/Problem/                                    | Outcome   | Notes/Links  |
|--------------------|-----------------|---|---|---|--|
| August 11, 2020    | Web-Conference  | TCEQ and Oklahoma DEQ   | Consultation on Texas proposed Regional Haze plan | Texas communicated their planned recommendations for their Commission   | Interstate Consultation                                      |
| August 17, 2020    | Conference Call | Missouri DNR and Oklahoma DEQ   | "Asks" from Missouri DNR                          | Missouri requested DEQ perform 4-factor analysis for sources already on Oklahoma list   | Interstate Consultation                                      |
| September 1, 2020  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates           | States are drafting SIPs, finalizing ICR analysis, reaching out to other states for info  | CenSARA and VISTAS States and Federal Partners Communication |
| September 10, 2020 | Conference Call | Panhandle Eastern and Oklahoma DEQ  | Discussion of 4-factor Analysis                   | Next Steps  | Stakeholder Engagement                                       |
| September 11, 2020 | Letter          | Missouri DNR and Oklahoma DEQ   | "Asks" From Missouri DNR                          | Missouri formally requested DEQ perform 4-factor analysis for sources already on Oklahoma list  | Interstate Consultation                                      |
| September 24, 2020 | Conference Call | Oxbow and Oklahoma DEQ  | Discussion of 4-factor Analysis                   | Next Steps  | Stakeholder Engagement                                       |
| October 6, 2020    | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates           | Some states beginning EPA, FLM, and/or Public review stages; Others wrapping up consultations (with facilities and/or other entities) | CenSARA and VISTAS States and Federal Partners Communication |
| November 3, 2020   | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates           | Some states beginning EPA, FLM, and/or Public review stages; Others wrapping up consultations (with facilities and/or other entities) | CenSARA and VISTAS States and Federal Partners Communication |

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|-------------------|-----------------|---|---|---|--|
| November 20, 2020 | Email           | National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service, and Oklahoma DEQ          | Notification of 4-Factor Requests and Responses Posted to Website | FLMS given opportunity to begin reviewing 4-Factor Analyses Responses   | Federal Land Manager Consultation                            |
| December 1, 2020  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates                           | Some states beginning EPA, FLM, and/or Public review stages; Others wrapping up consultations (with facilities and/or other entities)                             | CenSARA and VISTAS States and Federal Partners Communication |
| December 14, 2020 | Conference Call | Nebraska DEE and Oklahoma DEQ   | Consultation  | Discussion of   | Interstate Consultation                                      |
| February 5, 2021  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates                           | Some states under EPA, FLM, and/or Public review stages; Others wrapping up consultations (with facilities and/or other entities); others still developing drafts | CenSARA and VISTAS States and Federal Partners Communication |
| March 2, 2021     | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates                           | Some states beginning EPA, FLM, and/or Public review stages; Others wrapping up consultations (with facilities and/or other entities)                             | CenSARA and VISTAS States and Federal Partners Communication |
| April 12, 2021    | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates                           | Some states addressing comments from EPA, FLM, and/or Public review stages; Others wrapping up consultations (with facilities and/or other entities)              | CenSARA and VISTAS States and Federal Partners Communication |
| May 4, 2021       | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates                           | Some states addressing comments from EPA, FLM, and/or Public review stages; Others wrapping up consultations (with facilities and/or other entities)              | CenSARA and VISTAS States and Federal Partners Communication |

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|----------------|-----------------|---|---|--|---|
| June 1, 2021   | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates   | Several states in public review stages; Some finalizing for submittal to EPA by deadline; Others still wrapping up consultations (with facilities and/or other entities) | CenSARA and VISTAS States and Federal Partners Communication  |
| July 6, 2021   | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates   | Several states in public review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities)             | CenSARA and VISTAS States and Federal Partners Communication  |
| July 13, 2021  | Webinar         | States, Federal Land Managers, EPA National and Regional Offices                                      | EPA hosted; “Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period” release by EPA | Q&A of new guidance memo   | <a href="https://www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf">https://www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf</a> |
| August 3, 2021 | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates   | Several states in public review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities)             | CenSARA and VISTAS States and Federal Partners Communication  |

| Date              | Method          | Entities Involved   | Topic/Problem/                          | Outcome  | Notes/Links  |
|-------------------|-----------------|---|---|--|--|
| September 7, 2021 | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | Several states in public review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities) | CenSARA and VISTAS States and Federal Partners Communication |
| October 4, 2021   | Email           | Arkansas, Louisiana, Missouri, Nebraska, Texas  | Shared draft RH SIP                     | --   | --   |
| October 5, 2021   | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | Several states in public review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities) | CenSARA and VISTAS States and Federal Partners Communication |
| November 2, 2021  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | Several states in public review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities) | CenSARA and VISTAS States and Federal Partners Communication |
| December 7, 2021  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | Some states are in the review process, getting ready to submit a draft for comment or addressing previous comments   | CenSARA and VISTAS States and Federal Partners Communication |
| December 17, 2021 | Conference Call | Region 6  | Comments on draft SIP                   | Reviewed some of EPA's comments and Oklahoma's initial thoughts  | EPA comments dated November 30, 2021                         |

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|------------------|-----------------|---|---|---|--|
| January 4, 2022  | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | Several states in public review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities)  | CenSARA and VISTAS States and Federal Partners Communication |
| February 1, 2022 | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | Several states in public review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities)  | CenSARA and VISTAS States and Federal Partners Communication |
| March 1, 2022    | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | Several states in public review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities)  | CenSARA and VISTAS States and Federal Partners Communication |
| April 5, 2022    | Conference Call | CenSARA States, VISTAS States, Tribal Entities, Federal Land Managers, and EPA Region Offices 6 and 7 | Planning Period II progress and updates | Several states in various review stages; Some finalizing for submittal to EPA; Others still wrapping up consultations (with facilities and/or other entities) | CenSARA and VISTAS States and Federal Partners Communication |



Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

September 11, 2020

Kendall Stegmann  
Division Director  
Oklahoma Department of Environmental Quality  
Air Quality Division  
Email: [kendal.stegmann@deq.ok.gov](mailto:kendal.stegmann@deq.ok.gov)

Sent Via Electronic Mail

Dear Kendall Stegmann

The Missouri Department of Natural Resources' Air Pollution Control Program (Air Program) is in the process of developing Missouri's State Implementation Plan (SIP) for the Second Implementation Period under the Regional Haze Rule, which is due on July 31, 2021. The SIP must address reasonable progress in mitigating visibility impairment in federal Class I areas from air pollution sources. There are two federal Class I areas located in Missouri, including the Mingo National Wildlife Refuge (Mingo) and the Hercules-Glades Wilderness area (Hercules-Glades).

The key air pollutants from anthropogenic sources impairing visibility at Mingo and Hercules-Glades are ammonium sulfate and ammonium nitrate. Ammonium sulfate is formed by chemical reactions between ammonia and sulfur dioxide (SO<sub>2</sub>) in the atmosphere. Ammonium nitrate is formed by chemical reactions between ammonia and nitrogen oxides (NO<sub>x</sub>) in the atmosphere. U.S. Environmental Protection Agency (EPA) modeling projects that these two pollutants will continue to be the key pollutants contributing to visibility impairment at Missouri's Class I areas in 2028, which is the future year being evaluated in this Regional Haze SIP.

The states in the Central States Air Resources Agencies (CENSARA) organization, which includes Missouri, contracted with Ramboll US Corporation to produce a study examining the impact of point sources of NO<sub>x</sub> and SO<sub>2</sub> on each Class I area in the central region of the United States and nearby states. For each Class I area, the study took into account light extinction-weighted wind trajectory residence times, 2016 sulfur dioxide and nitrogen oxides facility emissions, and distance from sources of nitrogen oxides and sulfur dioxide to Class I Areas. The study produced an area of influence (AOI) for each Class I area, which shows the geographic areas with a high probability of contributing to anthropogenic visibility impairment.

Based on the results of the AOI study, the Air Program performed a screening analysis to identify specific sources in Missouri and other states that warrant further analysis and evaluation



Kendall Stegmann  
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for potential emission controls. As discussed with your staff during a phone call on August 17, 2020, the Air Program's screening analysis identified the following sources in your state that are reasonably anticipated to impact visibility conditions at the Hercules-Glades Class I area.

Muskogee Generating Station  
Grand River Energy Center

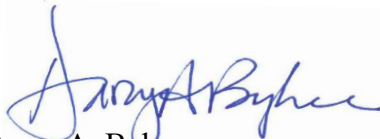
Therefore, the Air Program requests that Oklahoma consider whether performing a four-factor analysis is appropriate for each of these sources in accordance with 40 CFR 51.308(f)(2)(i) and, if so, whether any control measures for sulfur dioxide or nitrogen oxides are necessary to make reasonable progress towards natural visibility at Hercules-Glades during the second planning period.

We look forward to working with you on this important effort. We request that you share with the Air Program your determinations and reasoning for performing or not performing a four-factor analysis on each of the above-listed sources. For any of these sources in which Oklahoma performs a four-factor analysis, the Air Program requests that Oklahoma share the results of the analysis, including any technical supporting documentation, and provide an opportunity for consultation on the analysis, your state's long-term strategy, and the anticipated impact on visibility at Hercules-Glades.

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](mailto:emily.wilbur@dnr.mo.gov)) or by telephone at (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Darcy A. Bybee  
Director

DAB:sdc

c: William (Cooper) Garbe, Oklahoma DEQ ([cooper.garbe@deq.ok.gov](mailto:cooper.garbe@deq.ok.gov))



# ARKANSAS

## ENERGY & ENVIRONMENT

February 4, 2020

Melanie Foster  
Rules and Planning Section  
Air Quality Division  
Oklahoma Department of Environmental Quality

Sent Via Electronic Mail

Dear Ms. Foster:

The Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ), seeks consultation with Oklahoma Department of Environmental Quality (ODEQ) to develop a coordinated emission management strategy for Regional Haze State Implementation Plan (SIP) Revisions due on July 31, 2021 as required under 40 CFR 51.308(f)(2)(ii) for Caney Creek and Upper Buffalo wilderness areas.

The key pollutants from anthropogenic sources impairing visibility at Caney Creek and Upper Buffalo are ammonium sulfate and ammonium nitrate.<sup>1</sup> Ammonium sulfate is formed by chemical reactions between ammonia and sulfur dioxide (SO<sub>2</sub>) in the atmosphere. Ammonium nitrate is formed by chemical reactions between ammonia and nitrogen oxides (NO<sub>x</sub>) in the atmosphere. Environmental Protection Agency (EPA) modeling projects that these two pollutants will continue to be the key pollutants contributing to visibility impairment at Arkansas Class I areas in 2028.<sup>2</sup>

The states in the Central States Air Resources Agencies (CENSARA) organization, which includes Arkansas, contracted with Ramboll US Corporation (Ramboll) to produce a study examining the impact of stationary sources of NO<sub>x</sub> and SO<sub>2</sub> on each Class I area in the central region of the United States. For each Class I area, the study took into account light extinction-weighted wind trajectory residence times, 2016 sulfur dioxide and nitrogen oxides facility emissions, and distance from sources of nitrogen oxides and sulfur dioxide to Class I Areas. The study produced an area of influence (AOI) for each Class I area, which shows the geographic areas with a high probability of contributing to anthropogenic visibility impairment.

Based on the results of the AOI study, DEQ has identified sources in your state that are reasonably anticipated to impact visibility conditions at Upper Buffalo, Caney Creek, or both. The table on the next page lists each source and the Class I Area for which the source was identified.

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<sup>1</sup> <http://vista.cira.colostate.edu/Improve/improve-data/>

<sup>2</sup> <https://www.epa.gov/visibility/visibility-guidance-documents>



| Facility                    | Class I Area               |
|-----------------------------|----------------------------|
| Muskogee Generating Station | Caney Creek, Upper Buffalo |
| Hugo Generating Station     | Caney Creek, Upper Buffalo |
| Grand River Energy Center   | Upper Buffalo              |

Therefore, DEQ requests that ODEQ consider whether performing a four-factor analysis is appropriate for each of these sources in accordance with 40 CFR 51.308(f)(2)(i) and, if so, whether any control measures for sulfur dioxide or nitrogen oxides are necessary to make reasonable progress towards natural visibility at Caney Creek and Upper Buffalo during the 2021–2028 planning period.

We look forward to working with you on this important effort. We request that you share with DEQ the results of your analysis, including any technical supporting documentation, and provide an opportunity for consultation on the analysis and your state’s long-term strategy early enough in the process for DEQ to provide feedback to ODEQ and for DEQ to incorporate emission reductions anticipated from ODEQ’s long-term strategy affecting Caney Creek and Upper Buffalo into DEQ’s reasonable progress goals for Caney Creek and Upper Buffalo.

Should you have any questions, please contact Tricia Treece at 501-682-0055 ([treecep@adeq.state.ar.us](mailto:treecep@adeq.state.ar.us)) or David Clark at 501-682-0070 ([clarkd@adeq.state.ar.us](mailto:clarkd@adeq.state.ar.us)).

Sincerely,



William K. Montgomery  
Interim Associate Director  
Office of Air Quality