



February 8, 2021

To: WESTAR States and all WRAP member agencies

Re: Regional Haze modeling delays letter

Attached please find the letter from Ramboll U.S. Contracting - Environment and Health unit, detailing and explaining the reasons for delays in completing Regional Haze modeling under contract to WESTAR. The letter thoroughly describes the chronology of issues Ramboll experienced. The Regional Haze modeling effort for the 100+ Class I areas in the WESTAR-WRAP region is complex, involving a significant amount of data processing and assimilation from multiple data sources.

The modeling is largely complete at this point and Ramboll has made extra efforts to correct the cascade of problems at their expense. WESTAR-WRAP staff have been closely monitoring and sequencing the delivery of the modeling results for application in the Regional Haze SIPs and for the western regional modeling platform applications in the future. Ramboll is completing a comprehensive analysis to address western U.S. Regional Haze planning topics. As has been the case, WESTAR-WRAP staff are available to meet on the analysis and any issues with the delays.

The modeling effort has identified issues and lessons learned about the Regional Haze Rule requirements, affecting the process and timing of modeling for western U.S. Regional Haze planning:

- The delays in Summer and Fall 2019 prior to the Covid pandemic then cascaded into more delays in the 10 months from March 2020 to the present.
- To meet the Regional Haze Rule and planning guidance objectives to focus control strategies on U.S. anthropogenic emission contributions, the series of scenarios most affected by the issues in the letter (RepBase, 2028OTBa and 2002DynamicEvaluation) had to use those more computationally- and time-intensive source apportionment methods – that decision occurred in November 2019 in response to the national EPA modeling results. Those methods are necessary to separate fire and international anthropogenic emissions contributions at each Class I area for both the 2028 Reasonable Progress Goal visibility projections and to enable the “end-of-glidepath” adjustments. Those analyses now completed by Ramboll offer options for the Regional Haze SIP planners to analyze and consider in selecting Reasonable Progress Goals.
- WESTAR-WRAP members collaborated on the National Emissions Inventory Collaborative (the NEIC or “2016v1 + projections” modeling platform) at the same time the western Regional Haze modeling effort was underway. The two parallel processes certainly created some confusion and extra effort. While the NEIC data have utility in our modeling, mostly outside the WESTAR-WRAP region, for the overall required effort on Regional Haze modeling, the simultaneous projects were difficult to perfectly align, and issues emerged for individual states’ data.