

WRAP-up: Regional Analysis for Haze Planning

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**Information / background on Round 1 Regional Haze
analysis / planning**

Western and National Regional Haze Planning Workshop:

State Planning, Regional Analysis, and National Coordination

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Key Concepts/Definitions

- **Uniform rate of progress (URP)** – the constant rate of progress in DV needed to achieve natural conditions by 2064. a.k.a., the glide path
- **Reasonable progress goals (RPGs)** - A visibility goal, in deciviews, set for each Class I area in every planning period that provides for reasonable progress towards achieving natural visibility conditions.
 - The goal for the most impaired days must provide for an improvement in visibility over the period of the implementation plan
 - The goal for the least impaired days must ensure no degradation of visibility over the period of the implementation plan.
- **Long-term strategy (LTS)** - The enforceable emissions limitations, compliance schedules and other measures necessary to achieve the reasonable progress goals for Class I areas affected by the state
 - the term “long-term strategy” or “LTS” generally refers to the set of specific measures included in a periodic regional haze SIP revision.
 - The LTS defines the RPGs

Uniform Rate of Progress

- States must analyze and determine the consistent rate of progress over time needed to attain natural visibility conditions on the 20 percent most impaired days by the year 2064. This glidepath is referred to in EPA guidance as the uniform rate of progress (URP) line. The URP is the slope of this line.
- In establishing their RPGs, states must consider the URP and the emission reduction measures needed to achieve this level of improvement in visibility for the time period covered by the implementation plan.
- When the progress anticipated in the SIP for the implementation period is less than the URP, a state must project when (after 2064) natural visibility conditions would be reached if the SIP's rate of progress were to continue beyond the end of the implementation period.
- Attaining natural visibility conditions by the end of 2064 is not an enforceable requirement of the regional haze program.

Regional Haze Plan Elements

- Natural and baseline visibility
- Long term control strategy
- Reasonable progress goals
- Monitoring strategy
- Consultation with/between land managers, states, and tribes
- Mid-course reviews and plan revisions

Emissions and Modeling - regional haze, ozone, PM, and other indicators - background & regional transport evaluation

- Emissions:
 - Address all emissions sectors for air quality planning needs
 - Use regionally-consistent Oil and Gas emissions inventories and make technical improvements
 - Implement regionally-consistent fire emissions inventories and make technical improvements
 - Track, reference, and apply effects of state-, tribal-, and EPA-mandated emissions management-related controls on regional haze, ozone, and other air pollution indicators
 - Work with and use information from industry and energy producers
 - Based on direction from state/tribal/local air agencies, develop a documented procedure and process for **projecting all emissions for future year ozone and regional haze planning**

Emissions and Modeling - regional haze, ozone, PM, and other indicators - background & regional transport evaluation

- Modeling studies to include all sources anthropogenic and natural – present and ranges in the future:
 - Contributions of Oil and Gas sources for the entire upstream and midstream sectors
 - Contributions of natural sources
 - Contributions of sources regulated by state/tribal/local air agencies
- Assess international and inter-jurisdictional transport
- Assess, reference, and provide ranges of future year air quality scenarios accounting for:
 - Climate change impacts
 - Changes and innovations in anthropogenic sources, and
 - Changes in emissions from natural systems

Key Steps to Regional Haze SIP (each state)

- Step 1 : *Ambient data analysis* – Quantify baseline, current and natural conditions of visibility and the uniform rate of progress that would achieve natural conditions in 2064.
- Step 2: *Regional scale modeling* – Model existing base year emissions to determine temporal, chemical, & spatial contributions at each Class I area.
- Step 3: *Screening of sources* – Identify the pollutants and emission sources for which a full reasonable progress analysis will be completed and explain why it is appropriate to limit the full analysis to only these sources.
- Step 4: *Source and emission control measure analysis* – Identify potential emission control measures for sources selected in the screening step and develop data on the four statutory factors and visibility benefits if they will be considered.
- Step 5: *Decisions on the LTS content* – Consider applicable factors and decide on new emission controls for incorporation into the **proposed** LTS.

Key Steps to Regional Haze SIPs (collaboration among groups of states #1)

- Step 6: *2028 baseline regional scale modeling* – Model the emission reductions that will result from implementation of the “**rules on the books now to be in effect by 2028**” that will reduce visibility impairment to set a future baseline for 2028, by assessing temporal, chemical, and spatial contributions at each Class I area.
- Step 7: *2028 LTSs v1 regional scale modeling* – Model the emission reductions that will result from implementation of the proposed LTSs from one or more states, including all other enforceable measures that will reduce visibility impairment to set the RPGs for 2028.

Key Steps to Regional Haze SIPs (collaboration among groups of states #2)

- Step 8: *Assess degree of progress or degradation and conduct glidepath checks*
 - Demonstrate that there will be an improvement on the 20% most impaired days and no degradation on the 20% clearest days. Compare the 2028 RPG for the 20% most impaired days to the 2028 point on the URP line (the glidepath) and, if required, provide additional justification for the reasonableness of the RPG.
 - Conduct collaborative consultation and consider revising one or more states' LTSs if additional measures are identified as necessary to make reasonable progress.
- Repeat Steps 7 and 8 with LTSs v2, v3, et cetera - one or more times, i.e., how much is enough?, who goes first?, et cetera
- Step 9: *Additional requirements for each SIP* – Provide additional information necessary to ensure that other requirements of the Regional Haze Rule are met.

Thanks, we are adjourned.

See you tomorrow morning, starting at 800 a.m.