



Modeling, Monitoring & Other Technical Updates

AAPCA Spring Meeting

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Ambient Air Guidance

- EPA defines “*ambient air*” as “that portion of the atmosphere, external to buildings, to which the general public has access” (40 CFR 50.1(e))
 - EPA’s longstanding policy for implementing ambient air for PSD purposes was stated in a 1980 Costle letter, “*the atmosphere over land that is owned or controlled by the source and to which public access is precluded by a fence or other physical barriers*”
 - Subsequent guidance provided over the years by EPA to recommend how to apply 1980 policy statement for specific situations
- EPA released the draft guidance “Revised Policy on Exclusions from Ambient Air” on November 9, 2018, and took public comment until January 11, 2019. The document can be found at <https://www.epa.gov/nsr/forms/draft-guidance-revised-policy-exclusions-ambient-air>.
- In the draft guidance, EPA evaluated several key terms associated with the definition including: “general public”, “access” and “building” to determine where additional flexibility may be appropriate
- After consideration of comments received, EPA plans to issue the final guidance in late Spring 2019



PAMS Update – Deadline Extension

- EPA is committed to extending the PAMS compliance deadline
- A proposal for a 2-year extension is in process
- This extension will give the monitoring agencies additional time to acquire equipment and expertise to successfully implement the PAMS requirements



PAMS Update – Equipment Contracts

- The EPA is working on four National contracts to assist the monitoring agencies in acquiring PAMS equipment
 - Markes/Agilent Auto-GCs – **Delivery and installation 90% complete**
 - CAS/Chromatotec Auto-GCs – **Contract in process with delivery and installation expected this summer**
 - NO₂ Analyzers – contract to be awarded in 2020
 - Ceilometers – contract to be awarded in 2020



PAMS Update – Budget Update

- Funding for PAMS is included in the Section 105 grants
 - Until congressional language allows for the implementation of the proposed reallocation methodology, Section 105 funds will continue to be allocated using the historical allocation methodology
- Regions have the flexibility to adjust State 105 allocations based on knowledge of minimum monitoring requirements and state monitoring networks
 - Where a state network is larger than minimally required, funding may need to be adjusted to address new or revised minimum monitoring requirements
 - Additionally, states have the flexibility to shift their grant dollars from certain activities to fund CAA-required activities



2016 Beta Platform Release

- Collaborative workgroups have developed 2016 and future-year emissions inventories and associated documentation
- States have provided and reviewed 2016-specific data for many emissions sectors, and some data for future years
- EPA ran MOVES for onroad and nonroad, ran the oil and gas tool for 2016 and projected 2014 NEI emissions to 2016 and to future years
- **The 2016beta release for 2016 data only is now available**
 - <http://views.cira.colostate.edu/wiki/wiki/9169>
 - The Intermountain West Data Warehouse (IWDW) is hosting the wiki and providing the 2016 data to requestors
- Platform options: MEGAN and BEIS for biogenics; for EGUs both ERTAC EGU and IPM will be available for future years
- The future-year data and scripts are not yet available as emissions for some sectors were just completed in March



Inventory Collaborative Next Steps

- The Collaborative is now working on:
 - Preparing to release the 2016beta future year data to co-regulators (i.e., MJOs, states, locals)
 - Inventory updates for Version 1.0 (summer, 2019)
- The next quarterly outreach call is April 3 at noon Eastern
 - <http://views.cira.colostate.edu/wiki/wiki/9169#National-Report-Out-Calls>
 - More information on the beta and plans for v1 will be available on this call



EPA's Air Quality Modeling of the 2016 Emissions Platform

- CMAQ and CAMx annual model runs for 2016 have been completed using the beta emissions inventory
- Inputs and outputs from these model runs are being shared with the MJOs and states via the Intermountain Data Warehouse
- EPA is initiating a 2016 platform evaluation forum in an effort to foster collaboration between EPA and the MJOs and states on the evaluation of the 2016 model predictions using ambient measurements



Regional Haze: Technical Guidance on Tracking Visibility Progress

- “Technical Guidance on Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Rule”
 - The guidance was released on December 20, 2018 and fulfills a commitment in EPA’s Regional Haze Reform Roadmap
- EPA held a public webinar on February 20, 2019 to explain the guidance contents and answer questions.
- The guidance document and the webinar presentation can be found here:
 - <https://www.epa.gov/visibility/technical-guidance-tracking-visibility-progress-second-implementation-period-regional>



Visibility Tracking Metric and International Adjustment

- The 2017 Regional Haze Rule revisions require a revised approach to tracking visibility improvements over time.
 - The guidance finalizes a recommended methodology to develop baseline and current visibility conditions, and natural conditions on the 20% *most impaired* and clearest days at Class I areas.
 - The recommended visibility tracking metric focuses on anthropogenic visibility impairment
- The 2017 Regional Haze Rule also includes a provision that allows states to propose an adjustment to the uniform rate of progress (URP) glidepath to account for anthropogenic international sources (and prescribed fires).
 - The guidance describes recommended tools and methods to develop optional URP adjustments



Updated EPA Regional Haze Modeling Summer 2019

- New 2016 based modeling platform with emissions projections to 2028, including sector-based PM source apportionment
 - 2028 projected deciviews and glidepath estimates at Class I areas
 - Estimate of international anthropogenic contributions
 - Model Improvements
 - New 2016 and 2028 emissions from the State/EPA platform collaborative
 - Regional model improvements
 - Updates to CAMx
 - Larger regional domain (including 36km outer domain)
 - Updated boundary conditions
 - Hemispheric CMAQ
 - Modeling will be completed by the end of the summer 2019





Modeled Emission Rates for Precursors (MERPs) Update

- For Tier 1 assessments, EPA generally expects that applicants would use existing empirical relationships between precursors and secondary impacts based on modeling systems appropriate for this purpose.
- MERPs can be viewed as a type of Tier 1 demonstration tool under the PSD permitting program that provides a simple way to relate maximum downwind impacts with a critical air quality threshold.
- EPA has provided draft technical guidance on development and use of MERPs under Appendix W for PSD permitting.
 - Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM_{2.5} under the PSD Permitting Program (EPA-454/R-16-006 December 2016)
- EPA currently working on final version of this guidance document
 - Additional hypothetical single source impact modeling included
 - More details on how to use existing modeling for NAAQS demonstrations (SIL and cumulative tests) and considering secondary PM_{2.5} for a PM_{2.5} PSD increment demonstration