National Monitoring Steering Committee Report

WESTAR Spring Business Meeting

Portland, OR

April 24, 2018

MSC Meetings

- "The NACAA Monitoring Steering Committee is composed of members of the Monitoring Committee who meet once or twice yearly with members of EPA's Ambient Air Monitoring Group and other key EPA staff to discuss issues of concern to the state and local monitoring community."

- Last meeting held February 27-28, 2018
- In Washington D.C.

- Next meeting likely in spring 2019
- Fall meeting not being held due to Ambient Monitoring Conference

Photochemical Air Monitoring Stations (PAMS)

- EPA currently holding back monies for purchasing equipment for reallocation
  - FY17 monies given to early implementers
  - FY18 monies for 13 Markes/Agilent autoGC purchases
  - FY19 monies for autoGC, ceilometer, true NO2 purchases
  - FY20 monies for replacing older existing equipment and late implementers
- $166k per site per year planned for O&M, FTE
- PAMS will be built into 105 funds
  - EPA is working with the Regional grant coordinators to include grant terms and conditions related to PAMS
- National contracts being set up for:
  - AutoGC (Markes/Agilent, CAS/Chromatotech)
  - True NO2
  - Ceilometer

Photochemical Air Monitoring Stations (PAMS)

- Quality Assurance
  - Technical Assistance Document is being updated, available late 2018
  - A generic QAPP is being developed by Battelle
    - Adopt as-is for use, or develop own QAPP for approval
  - SOP's being developed
- EPA is working with data acquisition vendors to setup protocols to collect autoGC and mixing height data
- Enhanced Monitoring Plan
  - Guidance memo to come out in summer 2018
  - Core concepts:
    - Supplement required network to understand local ozone issues
    - Coordinate with neighborhood states where appropriate
    - Amount of enhanced monitoring should reflect the severity of the ozone problem
    - Support for voluntary EMP's if not "moderate" or higher area
  - $200k one-time for equipment + $166k/year for O&M + scaled amount by Region/State for site development

$PM_{2.5}$

- Continued slow migration away from FRM to continuous FEM
- Operational notes
  - Better to operate Teledyne API T640x/T640 in a full shelter so easier to clean optics
  - Don't run SpanDust check too frequently on Teledyne API T640x/T640
  - GRIMM is more sensitive to moisture than Teledyne API T640x/T640
  - GRIMM is very responsive to smoke and needs more investigation
- SOP's for continuous FEM's being developed
  - Teledyne API T640x/T640 final draft shared on 12/21/2017
  - MetOne BAM1022 draft received from Contractor in Jan. 2018
- $PM_{2.5}$ Continuous Monitor Comparability Assessment website
  - Very popular, being updated to work with PM_{10}
- Data Quality Visual Assessment tool
  - Shiny-R app
  - $PM_{2.5}$ FRM assessment is operational
  - Working on developing for O_3

Air Toxics

- National Air Toxics Trends Stations (NATTS)
  - Ongoing proficiency tests and quarterly calls
  - TSA' s being done over 5-years at all sites, more as assistance
  - Technical Assistance Document now rev. 3, with some changes identified for future revision
- TO-Methods
  - TO-15 final version late Summer 2018
  - TO-11A draft update to go out for comments soon
- Ethylene Oxide
  - Key compound for risk in NATA
- Formaldehyde
  - TO-11A optimization work completed and report being developed
  - ORD will be evaluating continuous methods
- 2017 Community Scale Air Toxics Grants
  - Only 5 of 31 applications funded due to funding cuts

SO_2

- SO_2 Round 3 final designations published on 1/9/2018
  - Nonattainment: 6 areas in three states and two territories
  - Unclassifiable: 23 areas in ten states
  - Attainment/Unclassifiable: All remaining areas except those where additional Round 4 SO_2 air quality monitoring is underway (56 areas)
- Attainment plans for Round 2 SO_2 NAAs are due in March 2018
- 77 SO_2 monitors under Data Requirements Rule collecting data for Round 4 designations in 2020
  - There are 56 areas remaining that will be designated based on these monitors (some areas have multiple DRR monitors)
- EPA is continuing to approve SO_2 Interstate Transport SIPs

Emerging Sensor Technologies

- 2 webinars on April 30th, 2018 (3-hours each, both the same)
  - "Emerging Sensor Technologies 2014-2018 Progress Report"
- Workshop June 25-26, 2018 at RTP (in-person or remote)
  - "Deliberating Performance Targets for Air Quality Sensors"
- Air Sensors International Conference in Oakland, CA
  - Sept. 12 – 14, 2018 (+ trainings on Sept. 11)
- EPA's Air Sensor Toolbox
  - https://www.epa.gov/air-sensor-toolbox
- Now ~ 80,000 literature citations related to sensors
- Most sensors related to criteria pollutants
- No industry standardization and testing is a big issue
- EPA is developing sensor performance standards
- Some sensors are working well in testing
  - PurpleAir for particulates is becoming very popular

Office of the Inspector General Report

- Draft report issued by OIG in Nov. 2017, EPA responded in Jan. 2018
- 3 concerns on agency QA practices, 3 concerns on EPA audit procedures
- 5 recommendations from OIG in final report
  - Assess the risk of any data adjustments impacting the ozone data used in the EPA's NAAQS determinations
  - Issue guidance clarifying shelter temperature
  - Complete the QAPP review/approval process to verify that air monitoring agencies' QAPPs incorporate the EPA regulations and guidance for conducting data validations and adjustments
  - Verify that air monitoring agencies are implementing the EPA's recommended criteria for data validation and adjustments through technical system audits or other oversight mechanisms
  - Develop a process to provide assurances that data reported to the Air Quality System database have met the approved zero- and span-check validation criteria prior to regional review and approval of the air monitoring agencies' annual data certification packages
- Essential that SOPs and QAPPs be reviewed for consistency with CFR and QA Handbook
- Ensure that QA positions are filled and that training takes place
- Work with Regions to follow up on recommendations from TSA's

Questions?