

# Ambient Monitoring: National Perspectives

Richard A. (Chet) Wayland  
US EPA OAQPS  
SESARM Fall Meeting  
October 31, 2017

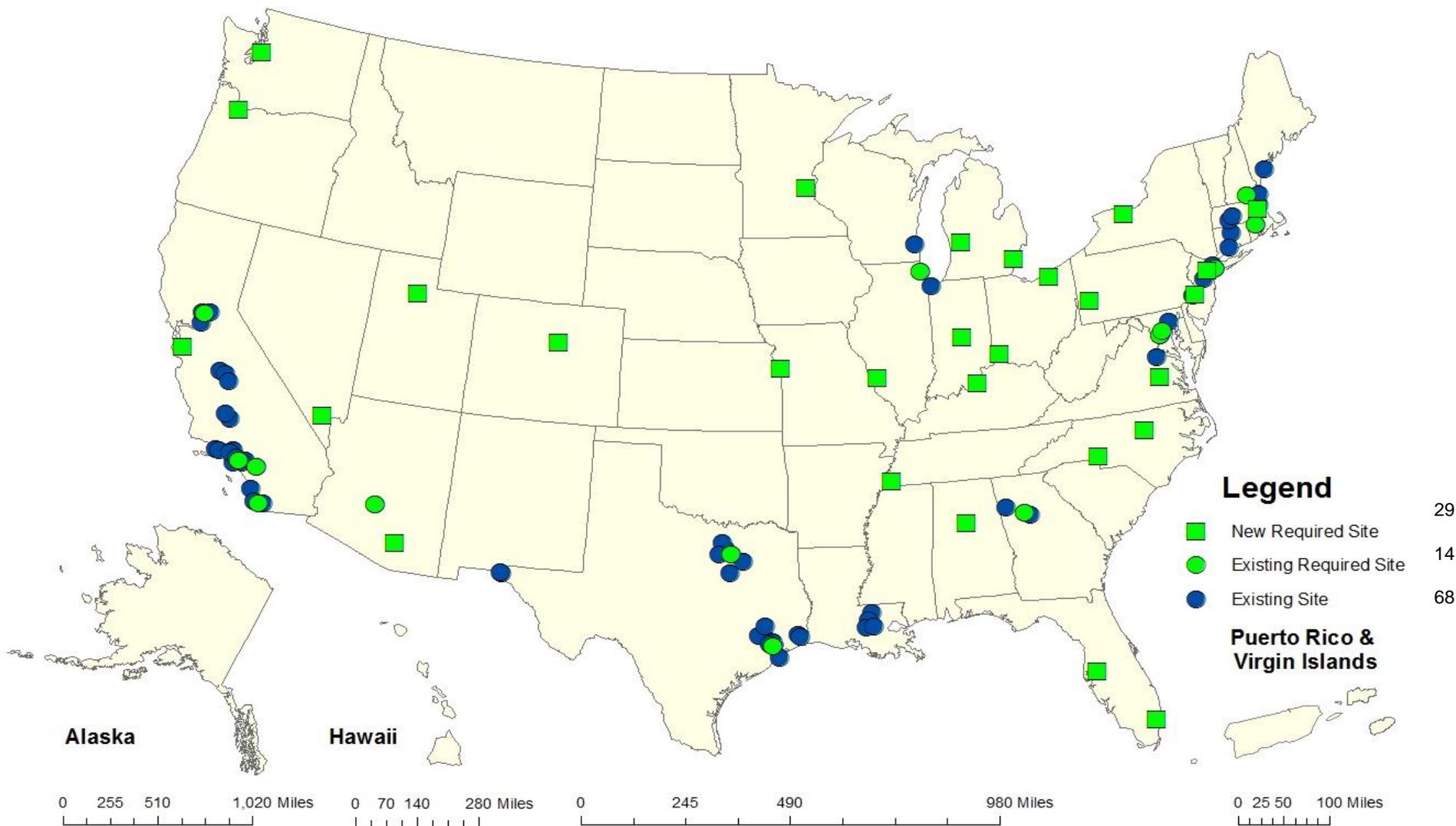
# Discussion Topics

- PAMS Update
- Quality Assurance Activities
- Monitoring Rule Litigation
- Grant Funding
- Other Highlights

# PAMS Timeline and Milestones

- PAMS plan due July 1, 2018 as part of Annual Monitoring Network Plan
- PAMS monitoring at NCore sites will need to start by June 1, 2019
- Enhanced Monitoring Plan (EMP) submitted within two years of designations OR by October 1, 2019, whichever is later
  - Applies to moderate and above NA areas and in the Ozone Transport Region
  - Delays in the designation and classifications process could push EMP deadline to a later date

# Updated PAMS Map



# PAMS Funding Reallocation

- The PAMS funding reallocation was incorporated into the overall 105 funding reallocation
  - The PAMS needs were taken into account as part of the “adequate monitoring network” to ensure adequate funding for each required PAMS site and for states needing to implement an EMP
  - Transition began in FY 2017 and will be carried out over several years

# PAMS Equipment Purchases

- The EPA has funding to ensure that state/local agencies can acquire needed equipment, including:
  - Automated Gas Chromatographs (AutoGCs)
  - True NO<sub>2</sub> instruments, and
  - Ceilometers
- The EPA is developing national contracts to facilitate purchases of these systems using these funds as requested by many monitoring agencies
- States willing and able to purchase the equipment on their own will be sent targeted funding to purchase these three items
  - Alternatively EPA will make the purchases for the states via the National Contracts, and supply the equipment to the states
- The deployment of this equipment is expected to occur over the next few years
  - 12 state/locals have already received equipment money through FY 2017
  - We are working with the remaining states to identify when and how they would like to obtain their equipment

# Quality Assurance

## Technical Systems Audit (TSA)<sup>1</sup>

TSA Workgroup - Represented by all regional offices

**Overall Goal of the Workgroup: Develop a more consistent national TSA approach to standardize experience of S/L/T agencies**

### Current activities:

#### Development of TSA Guidance Document

- Defines TSA regulatory requirements and frequencies
  - Identifies TSA best practices
  - Standardizes audit activities
- Provides tools and templates to assist auditors in various TSA activities

#### Development of New TSA Audit Questionnaire

- Eliminates redundancy
- Eliminates network design topics now addressed in Annual Network Plans
  - Clarifies audit questions
- Reorganizes the form to make it easier to complete

**The TSA Guidance Document and questionnaire will be completed by the end of September 2017 and both will be posted to AMTIC**

<sup>1</sup> Per 40 CFR 58 Appendix A – *Technical systems audits of each Primary Quality Assurance Organization (PQAO) shall be conducted at least every 3 years by the appropriate EPA Regional Office and reported to the AQS. If a PQAO is made up of more than one monitoring organization, all monitoring organizations in the PQAO should be audited within 6 years (two TSA cycles of the PQAO).*

## *What do we hope to achieve through the new guidance?*

- Consistent TSAs of PQAOs across regions
- Better TSAs through better planning by the auditors
  - Quicker turn around of TSA reports
  - Improved follow-up of TSA findings
- Improved experience filling out the questionnaire
- Provide a tool for PQAOs to use auditing their own agencies

***Most importantly, we want the TSAs to be a more effective tool to assess data quality and help improve the Quality Systems in all of the PQAOs.***

# Quality Assurance Issues

Through TSA's and Office of Inspector General Reviews<sup>2</sup> we continue to discover:

- Quality Assurance Project Plans (QAPPs) are not meeting CFR and Critical Criteria in key guidance documents
- QAPPs and Standard Operating Procedures (SOPs) do not say the same thing
  - Acceptance criteria in QAPP are not the same as the SOP
- QAPPs are over 5 years old and are not updated to reflect what is in the network or required in the Code of Federal Regulations (CFR)
- ✓ Note: Monitoring regulations in CFR were also revised in 2016 to ensure monitoring organizations with delegated QAPP self-approvals electronically send QAPPs to EPA Regions when they submit the QAPP to the monitoring organizations approving official

<sup>2</sup> Report: Certain State, Local and Tribal Data Processing Practices Could Impact Suitability of Data for 8-Hour Ozone Air Quality Determinations:

# Quality Assurance - Next Steps

- OAQPS is working with EPA Regions to review QAPP data in AQS
  - Revising AQS to include additional language about QAPPs and how to use the data
  - Removing QAPP information for sites that never monitored for a particular pollutant
  - Will add a field that reports the last time a pollutant was monitored to reduce chance of requiring a QAPP for a PQAQO that stopped monitoring that pollutant
- Revising AMP 600 report to identify any QAPP over 5 years old as a major issue (used to be 10 years)
  - Will take effect for CY 2018 data certification (May 2019)

# Monitoring Rule Litigation

- Background: In March 2016, EPA revised its air monitoring regulations. On May 27, 2016 - Sierra Club filed a petition for review with the DC Circuit court on behalf of Earthjustice and the American Lung Association due to concerns related to the process of obtaining public inspection versus public comment, the responsibility of monitoring agencies to respond to public comments in their submitted annual monitoring network plans, and the responsibility of EPA Regional Offices to obtain public comment on network plans.
- Subsequent Actions:
  - January 19, 2017 - Proposed Settlement Agreements under Clean Air Act concerning the submission and approval of ambient air monitoring network plans were posted in the Federal Register with a 30-day public comment period - <https://www.federalregister.gov/documents/2017/01/19/2017-01099/proposed-settlement-agreement-clean-air-act-petition-for-review>
  - February 21, 2017 – public comment period closed. A total of three comments were received – anonymous, Ohio EPA, TCEQ. The state comments request that the referenced guidance documents be put out for public comment – see <https://www.regulations.gov/docket?D=EPA-HQ-OGC-2017-0030>
  - June 13, 2017 – Proposed Settlement Agreements reopened for public comment along with two proposed guidance documents. – Two additional comments received.
  - Administration considering public comments in determining next steps.

# National Program Management Monitoring Appendix

- FY18 National Program Management (NPM) Guidance – Monitoring appendix available on AMTIC
  - <https://www.epa.gov/amtic/national-program-manager-npm-guidance-monitoring-appendix>
- PM<sub>2.5</sub> Transition from section 103 to 105 unlikely to begin in FY18 (dependent on final appropriation)
- National Ambient Air Monitoring Conference planned for late summer 2018

## Notables & Highlights

- Currently reviewing Community Scale Air Toxics grants (30 grants in review)
- On-going analyses of near-road monitoring network data (multiple pollutants)
- Assisting Regions helping States with storm recovery
- Developing new tools to support data review and validation (e.g., DART, AirData, FRM/FEM data quality comparison)
- Developing model SOP's for new PM methods