

# Ambient Air Monitoring

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# PAMS

Photochemical Assessment Monitoring Stations

40 CFR Part 58, Appendix D, Section 5

# 2016 Monitoring Rule

40 CFR Part 58, App. D, Section 5

- 2015 Ozone NAAQS review and subsequent 2016 rule changes redesigned PAMS requirements
  - NCore sites located in CBSAs with  $\geq 1$ M population, based on latest census figures – ***regardless of attainment status***
- PAMS measurements:
  - VOCs, O<sub>3</sub>, NO, TrueNO<sub>2</sub>, NO<sub>y</sub>, meteorological data, precipitation, mixing height, solar radiation and UV
  - Three 8-hr avg'd carbonyl samples per day on 1-in-3 day schedule OR hourly avg'd formaldehyde samples
  - June - August monitoring season

# Region 4 Implementation

- Adding 7 new PAMS areas
- Implemented at existing NCore sites in CBSAs with  $\geq 1$ M population:
  - AL – Birmingham (Jefferson Co.)
  - FL – Tampa (Hillsborough Co.), Miami (Broward Co.)
  - GA – *Atlanta (GA EPD) (existing site)*
  - KY – Louisville (Louisville Metro)
  - NC – Raleigh (NC DAQ), Charlotte (Mecklenburg Co.)
  - TN – Memphis (Memphis-Shelby Co.)
- Listed in Annual Network Plan submitted this year

# National EPA Support

## ➤ Development of QA Documents

- Technical assistance document
- QAPP
- AutoGC SOPs

## ➤ National Contract Procurement

- AutoGC (Markes-Agilent & CAS systems) – FY18/19
- TrueNO<sub>2</sub> – FY19/20
  - Photolytic analyzers may be used
- Ceilometer (Vaisala) – FY19/20

## ➤ Direct Purchase Option

- *Agencies have option to receive funding to purchase equipment directly from the manufacturers.*

# Other Notes

- Since some equipment (TrueNO<sub>2</sub>, ceilometer) will not be available via the national contract in time for the June 1, 2019 implementation date, agencies may want to purchase the equipment with their own funds and be reimbursed by EPA later.
- If agencies adopt the national QAPP, there is no further EPA review and approval required.
- No Region 4 agencies will be required to develop enhanced monitoring plans.

# QUESTIONS?

# Monitoring Network Modification Requests

In 2016, Region 4 finalized our Policy on Establishing, Discontinuing, or Relocating SLAMS to assist agencies in meeting the requirements of 40 CFR §58.10 and §58.14.

## **40 CFR §58.10 Annual monitoring network plan**

- Proposals to relocate/establish new sites must meet these requirements
- Includes 30-day public comment requirement

## **40 CFR §58.14 System modification**

- Proposals to relocate/discontinue sites must meet these requirements
- After sites are relocated/discontinued, the monitoring network must continue to meet the design requirements of Part 58, Appx D.
- The 30-day public comment requirement of 40 CFR §58.10 applies to system modifications



# Analyses to Support Network Modification Requests

- To meet CFR requirements, proposals to establish, discontinue, or relocate monitoring sites should include analyses of data and rationale.
- Appropriate analyses depend on the request. Examples include:
  - Correlation plot with nearby site(s) to determine uniqueness or redundancy
  - Trends analysis comparing the site with all other sites in the area
  - Table of most recent DVs for all sites in the area
  - Map of all monitors in the area and the proposed site(s)
  - Narrative explaining rationale for the modification and any information considered
  - If requesting discontinuation under 40 CFR §58.14(c)(1), an analysis demonstrating the monitor has shown attainment during the previous 5 years and has <10% probability of exceeding 80% of the applicable NAAQS during the next 3 years.

# Region 4 Siting Criteria Waiver Policy

- Monitoring agencies requested a policy to clarify the requirements for approving siting criteria waivers
- Draft policy was provided to agencies on March 30 and comments were requested by April 13
- Draft policy was discussed at monitoring workshop in mid-April, comments were taken at the meeting
- Comment period was extended to May 31 for agencies needing more time
- Region 4 plans to finalize the policy by late June.

## 2017 SO<sub>2</sub> Monitoring Data Summary

AQS ID	Monitor State	Monitor County	Facility Name	Facility Type Description	99th Percentile 1-hour SO <sub>2</sub> (ppb)
37-087-0013	NC	Haywood	Canton Mill - Blue Ridge Paper Products	Pulp and Paper Plant	<b>206.8</b>
21-101-1011	KY	Henderson	[Cluster of 2]: Big Rivers Electric Corporation; Century Aluminum Sebree LLC	EGUs & Primary Aluminum Plant	<b>94.0</b>
01-073-6004	AL	Jefferson	[Not a DRR Source, Cluster of 2]: ERP Compliant Coke and Drummond/ABC Coke	Coke Oven	<b>83.9</b>
37-019-0005	NC	Brunswick	CPI USA North Carolina - Southport Plant	EGU	<b>82.5</b>
37-145-0004	NC	Person	Roxboro Plant - Duke Energy Progress, LLC	EGU	31.1
13-115-0006	GA	Floyd	International Paper - Rome (formerly Temple Inland)	Pulp and Paper Plant	21.6
37-013-0151	NC	Beaufort	Aurora - PCS Phosphate Company, Inc.	Fertilizer Plant	19.2
37-021-0037	NC	Buncombe	Asheville Steam Electric Plant - Duke Energy Progress, Inc.	EGU	16.6

- 2017 monitoring data were certified on May 1, 2018.
- Monitors in current SO<sub>2</sub> nonattainment areas not shown.
- The 1-hour SO<sub>2</sub> NAAQS is 75 ppb.**