PAMS Program Update

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Outline

• Regulatory Changes Being Considered
• Target List Revisions
• AutoGC Evaluation Update
• New Data Validation/Analysis Tool
• Training Opportunities
Regulatory Revisions Being Considered

• Reduce number of required sites to 1 per area but expand PAMS applicability to all O3 non-attainment areas
  – Require PAMS at NCore sites in O3 non-attainment areas but allow for Regional approval of alternative site (e.g., existing type 2 PAMS sites)
  – Require sites to collect hourly VOC data
  – Require sites to collect carbonyls (formaldehyde, etc.)
  – Require sites to measure “true NO2” in addition to current NOy
  – Change requirement for upper air meteorology to requirement for measuring mixing height

• Require all O3 NA areas to also develop and implement an “enhanced ozone monitoring plan”
  – Could include additional O3 sites, PAMS sites, radar profilers, mobile sites, etc.
Current PAMS Network

Site Types:
- Type 4
- Type 3
- Type 2
- Type 1

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Potential New Network @ 75ppb NAAQS

Site Types
- Green: Existing PAMS Site
- Blue: No PAMS at Site
- Yellow: Current NA Areas

National Ambient Air Monitoring Conference August 2014
# Estimated Impact of Level of Ozone NAAQS on Size of Required Network

<table>
<thead>
<tr>
<th>Potential NAAQS Level (ppb)</th>
<th>Number of Sites (existing)</th>
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<tbody>
<tr>
<td>75</td>
<td>27 (14)</td>
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<tr>
<td>70</td>
<td>48 (16)</td>
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<tr>
<td>65</td>
<td>66 (17)</td>
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<td>60</td>
<td>71 (17)</td>
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Timing and other Logistical Considerations

- Any proposed PAMS regulatory changes would be included as part of the ozone NAAQS proposal which is expected to be signed in December.
- Final regulatory changes would be part of the final NAAQS package expected to be signed in October 2015.
- We are considering a staggered deployment to allow time for monitoring agencies to buy equipment (autoGCs, true NO2 analyzers, and ceilometers) and to train staff and develop SOPs and QAPPs.
- October 2017 earliest anyone would likely need to comply.
Revisions to Target List

- The specific VOC compounds to be measured at PAMS sites ("the Target list") was revised in November 2013
- Target list split into two groups – 28 priority and 29 optional compounds
- Six new compounds are being considered for addition to the priority compound list
  - α/β Pinene
  - 1,3 Butadiene
  - Benzaldehyde
  - Carbon Tetrachloride
  - Ethanol
  - Tetrachloroethylene
AutoGC Evaluation Update

- EPA is conducting an evaluation of current autoGC technology
- Laboratory phase conducted during April
  - 8 autoGC systems were included
  - Systems were challenged with various concentrations of PAMS target compounds at differing temperatures and relative humidities
- Field phase will start this fall and run through next fall
  - 6 autoGC systems will be included
  - A mobile lab will be equipped and 1-month evaluations will be conducted at up to 4 locations - Research Triangle Park, Baton Rouge, Los Angeles, and New York
  - We plan to conduct training on the systems for the host state and nearby states at each location
Thank You to Our Participants!

SRI Chromatotech Baseline & CDS ThermoFisher & Markes Agilent & Markes Defiant PerkinElmer
Day 6 of AutoGC Evaluation
New Data Validation/Analysis Tool

- EPA and Sonoma are updating the old VOCDat data analysis program
- New program is a web based app that will work with more than just VOC data (criteria pollutants, speciation data, toxics)
- App will be accessible through AirNowTech
- App is being designed primarily with monitoring agencies in mind, but will also be useful to data users.
- Functions include -
  - Prepare data for submittal to AQS
  - Various data analysis and validation tools
  - Pull data from AQS
VOCWhat?

- We decided we needed a new name since the new web app will work with more than VOC data
- Some candidates include ---
  - Aeris
  - ADAPT (Air Data Analysis Program Tool)
  - ATAQDat (Analysis Tool for Air Quality Data)
  - MyDat or MyData
Training Opportunities

- We plan to hold autoGC training on at each of the four field study locations (RTP, LA, NY, and CA)
- We will be holding online training on the new VOCData
- Keep an eye out for announcements on our listserv