Lead Monitoring Revisions

MARAMA Monitoring Committee Meeting

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U.S. EPA OAQPS
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Outline

• Source-oriented monitoring
• Monitoring at airports
• Non-source-oriented monitoring
• Monitor deployment schedule
• What should you be doing now?
Source Oriented Monitoring

• Final requirement sets emission threshold at 0.50 tpy as proposed (except for airports)
  – Consistent with supporting analyses
  – Will improve our ability to identify areas exceeding NAAQS

• Monitoring agencies are allowed to request a modeling based waiver if they can demonstrate maximum Pb concentration less than 50% of the NAAQS on rolling 3-month average.
  – Waivers are not needed if monitoring agencies can demonstrate (to RA satisfaction) that emissions are less than 0.50 tpy.

• If monitoring agencies had previously obtained a waiver for a 1 tpy source, a new waiver is not required
Monitoring at Airports

- Final requirement maintained emission threshold for airports at 1.0 tpy
- Rule also requires 1-year of Pb monitoring at 15 specific airports where concentrations may approach or exceed the Pb NAAQS
  - Airports were selected based on three criteria which lead to higher ambient Pb concentrations
    - Pb emissions >= 0.50 tpy
    - Ambient air within 150 meters of runway end or ramp-up area
    - Meteorology and airport layout that leads to majority of take-offs from one runway end
  - Pb-TSP is required to assure comparability to the NAAQS
  - No waivers will be allowed for these 15 airports
  - Monitors become “permanent” if any 3-month rolling average is equal to or exceeds 50% of the NAAQS
## List of Airports to be Monitored

<table>
<thead>
<tr>
<th>Airport</th>
<th>County</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merrill Field</td>
<td>Anchorage</td>
<td>AK</td>
</tr>
<tr>
<td>Pryor Field Regional</td>
<td>Limestone</td>
<td>AL</td>
</tr>
<tr>
<td>Palo Alto Airport of Santa Clara County</td>
<td>Santa Clara</td>
<td>CA</td>
</tr>
<tr>
<td>McClellan-Pallomar</td>
<td>San Diego</td>
<td>CA</td>
</tr>
<tr>
<td>Reid-Hillview</td>
<td>Santa Clara</td>
<td>CA</td>
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<tr>
<td>Gillespie Field</td>
<td>San Diego</td>
<td>CA</td>
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<tr>
<td>San Carlos</td>
<td>San Mateo</td>
<td>CA</td>
</tr>
<tr>
<td>Nantucket Memorial</td>
<td>Nantucket</td>
<td>MA</td>
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<td>Oakland County International</td>
<td>Oakland</td>
<td>MI</td>
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<td>Republic</td>
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<td>Brookhaven</td>
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<td>NY</td>
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<tr>
<td>Stinson Municipal</td>
<td>Bexar</td>
<td>TX</td>
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<td>Northwest Regional</td>
<td>Denton</td>
<td>TX</td>
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<tr>
<td>Harvey Field</td>
<td>Snohomish</td>
<td>WA</td>
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<tr>
<td>Auburn Municipal</td>
<td>King</td>
<td>WA</td>
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Non-Source-Oriented Monitoring

- Final rule requires Pb monitoring at NCore sites in CBSA with a population of 500,000 people or more
  - Replaces requirement to monitor in each CBSA with a population of 500,000 people or more to evaluate non-inventoried Pb sources
    - Preamble and rule provides guidance identifying fugitive Pb sources which may require monitoring
    - Rule revises RA authority slightly to clarify that it applies to re-entrained dust sources
  - Changed collocation requirement for Pb at NCore to be based on the entire NCore network rather than per PQAO
  - Pb-PM10 is allowed (and expected) at NCore
  - Leverage with PM10-2.5 is possible if using low-volume PM10
Monitor Deployment Schedule

- Final rule requires monitoring agencies to submit revised Pb monitoring plans by July 1, 2011 as part of Annual Monitoring Plan submittal.
- Final rule requires all new required monitors (source and non-source) be operational by December 27, 2011.
What Should You Be Doing Now?

• Monitoring agencies should have already been looking at what new sources may require monitoring in your jurisdiction
  – Sources emitting > 0.50 tpy
  – Monitoring agencies should use the 2008 NEI as a starting point
    • Note: EPA is evaluating Pb emissions from coal fired boilers and will provide guidance on evaluating these sources in the very near future

• Determine which sources may be eligible for a waiver
  – Refined emissions estimates less than 0.50 tpy?
  – Modeled impacts < 50% of the NAAQS?

• Begin Identifying Monitoring Locations for Sites needing modeling
  – Evaluate ambient air considerations
  – Model to identify location of “maximum concentration in ambient air”

• Determine if you have an airport on the list of airports, if so, work with the Region, OTAQ, and airport authority in evaluating suitable monitor locations

• Determine your NCore equipment needs
  – If you are planning to use a FRM/FEM low-volume PM10 monitor as part of your PM10-2.5 mass measurement, you should be ok
  – If you are planning to use a continuous or dichot, you likely will need a new PM10c sampler
  – Determine your collocation requirement
    • OAQPS is coordinating this effort for NCore to minimize impact

• Evaluate your lab analysis options - your state lab, partner with other states, private contract labs, and national lead analysis contract