2015 Air Monitoring Network Plan

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SIPRAC

Connecticut Department of Energy and Environmental Protection
Regulatory Requirement
(40 CFR 58.10)

• Annual monitoring network plan
  – Submitted by July 1 each year to EPA after 30-day public inspection.
  – Contains justification for all current and planned monitors.
  – Includes evidence monitors meet all required siting, QA, methodology, network design criteria.
  – Covers SLAMS, NCore, near-road, PAMS, STN, SPM.
  – Based on 5-year network assessments.
DEEP Current Monitoring Network
Proposed Changes to the Air Monitoring Network for 2013-2014

• Discontinue Pb (lead) sampling at New Haven.
• Report all continuous PM$_{2.5}$ sampler data for NAAQS compliance (currently 4 of 8).
• Discontinue manual PM$_{2.5}$ sampling at Westport.
• Reduce manual PM$_{2.5}$ sampling frequencies to 1/3 at NCore and near-road, 1/6 at remaining sites.
• Discontinue PAMs VOCs and NOx monitoring at Westport.
• Discontinue wind monitoring at Mansfield.
Pb Monitoring Results

Connecticut Pb-PM10 3-Month Rolling Average Values 2010-2014

Pb NAAQS Level (0.15 µg/m³)
PM$_{2.5}$ Monitoring Network
2014 Annual PM$_{2.5}$ Design Values
($\mu g/m^3$)

NAAQS = 12.0 $\mu g/m^3$
2014 Daily PM$_{2.5}$ Design Values
($\mu g/m^3$)

NAAQS = 35 $\mu g/m^3$
## PM$_{2.5}$ Network Requirements

### 40 CFR Appendix D

<table>
<thead>
<tr>
<th>Metropolitan Statistical Area</th>
<th>Estimated 2013 Population</th>
<th>Design Values &gt; 85% PM$_{2.5}$ NAAQS?</th>
<th>No. Monitors</th>
<th>Minimum No. Monitors Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgeport-Stamford-Norwalk</td>
<td>939,904</td>
<td>N</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Hartford-West Hartford-East Hartford</td>
<td>1,215,211</td>
<td>N</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>New Haven-Milford</td>
<td>862,287</td>
<td>N</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Norwich-New London</td>
<td>274,150</td>
<td>N</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Worcester (incl. Windham County)</td>
<td>926,710</td>
<td>N</td>
<td>2 (MA)</td>
<td>1</td>
</tr>
<tr>
<td>Torrington (non-MSA)</td>
<td>186,924</td>
<td>N</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Manual vs. Continuous PM Samplers
PM$_{2.5}$ FRM vs. FEM Correlation

E. Hartford McAuliffe Pk PM2.5 Continuous BAM vs FRM
2012-2014

$y = 1.0197x + 1.0295$

$R^2 = 0.8536$

$n = 979$
PM$_{2.5}$ FRM vs. FEM Correlation

Danbury PM2.5 Continuous BAM vs FRM
2012-2014

$y = 1.1565x + 0.0271$
$R^2 = 0.9306$
$n = 341$
PM$_{2.5}$ FRM vs. BAM Correlation
2012-2014 Data
Westport PAMS, shown on map, has been discontinued in 2014 with initial EPA approval. Formal approval for discontinuation is sought in this Network Plan.
Nonattainment areas are indicated by color. When only a portion of a county is shown in color, it indicates that only that part of the county is within a nonattainment area boundary.
• Draft Network Plan will be posted on DEEP website for public review


• Submit comments to:
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