2011 EPA National Air Toxics Monitoring Workshop

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Region 4 Air Toxics Monitoring Updates
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Region 4 Air Toxics Monitoring Programs

National Air Toxics Trends Stations (NATTS)

- **3 Urban Sites**
  - South Dekalb County, Georgia
  - Hillsborough County, Florida
  - Pinellas County, Florida

- **2 Rural Sites**
  - Grayson Lake (Elliott& Carter Counties), Kentucky
  - Chesterfield County, South Carolina
Region 4 Air Toxics Monitoring Programs

Community-Scale Projects

- **Louisville, KY**: Fenceline monitoring using optical remote sensing technology (ongoing)
- **Memphis, TN**: Monitoring of barge emissions (ended 9/2010)
- **West Palm Beach, FL**: Evaluation of emissions from burning sugarcane fields (ended 4/2010)
- Earlier projects conducted in Hillsborough Co., FL and Birmingham, AL
Region 4 Air Toxics Monitoring Programs

Urban Air Toxics Monitoring Program (UATMP)
*Focus: local trends assessment, source characterization, or community interest/concern

- Broward, FL (VOCs)
- Pinellas Co., FL (carbonyls)
- North Carolina (VOCs, carbonyls, etc.)
- Memphis, TN (VOCs, carbonyls) – ended in 12/2009
- Loudon Co., TN (VOCs, carbonyls) – ended in 9/2009
Regional Laboratory Evaluations

- ERG Proficiency Testing (VOCs, carbonyls)
- Participating Agencies: NC, SC, FL, KY, Pinellas, Broward Counties
- 2009 & 2010 results showed benzene, toluene, and acetone measurements were outside critical lower & upper limits for some participants
- MDLs/Health Benchmarks: Comparison between current lab MDLs to Region 4 and NATTS cancer/noncancer risk levels and MDLs
- Assessments for labs show a need for equipment upgrades and personnel training
National Priority Studies

School Air Toxics (SAT) Monitoring

- 13 sites in 5 states (MS, AL, TN, SC, KY)
- Initial monitoring completed at all sites
- Additional monitoring recommended for sites in TN, MS, and AL; slated to begin this year

BP Oil Spill

- Operated pre-existing & temporary sites in FL, MS, and AL for HAPS and criteria pollutants to assess impacts to Gulf communities
- Measured concentrations did not exceed levels of concern
Birmingham Air Toxics Monitoring Study

- School Air Toxics (SAT) monitoring conducted at 4 schools in AL for VOCs, PAHs, metals
- 2 of the 4 schools were recommended for additional monitoring due to inconclusive data
- Additional monitoring expanded to 4 sites; 2 additional sites added to assess community exposure in EJ areas
- Schedule extended to 12 months; 1:6 day sampling frequency
- Focus on VOCs, PAHs, and metals (coke oven emissions from a nearby coke plant)
- Develop risk assessment after 1 year
Birmingham Air Toxics Monitoring Study

- A more comprehensive study to assess air quality issues in the Birmingham area has been developed which includes monitoring and voluntary program awareness
- Voluntary programs including Tools for Schools, Energy Star, Children’s Health, Asthma, Mold, and Radon awareness
- Region 4 is partnering the Jefferson County, AL & local schools in this effort
- Additional efforts will focus on improving community relations through community engagement activities
Other Regional Initiatives

Region 4 Air Toxics Targeting Tool

- Development of a targeting tool based on environmental information (NATA & RSEI) & community vulnerability information (race, income, age, linguistic isolation, disability)

- Allows users to conduct various screening evaluations to identify areas where additional evaluation may be needed
Other Regional Initiatives

Mosheim, TN
- 3 month study in response to community complaints regarding a nearby recycling facility
- Particulate matter and metals to be monitored

Yellowbluff, AL
- 2-3 month study to address community concerns regarding emissions from a nearby paper mill
- Pollutants include VOCs, SO2, H2S, aldehydes
- Data currently under review
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