
2011 EPA National Air Toxics Monitoring Workshop

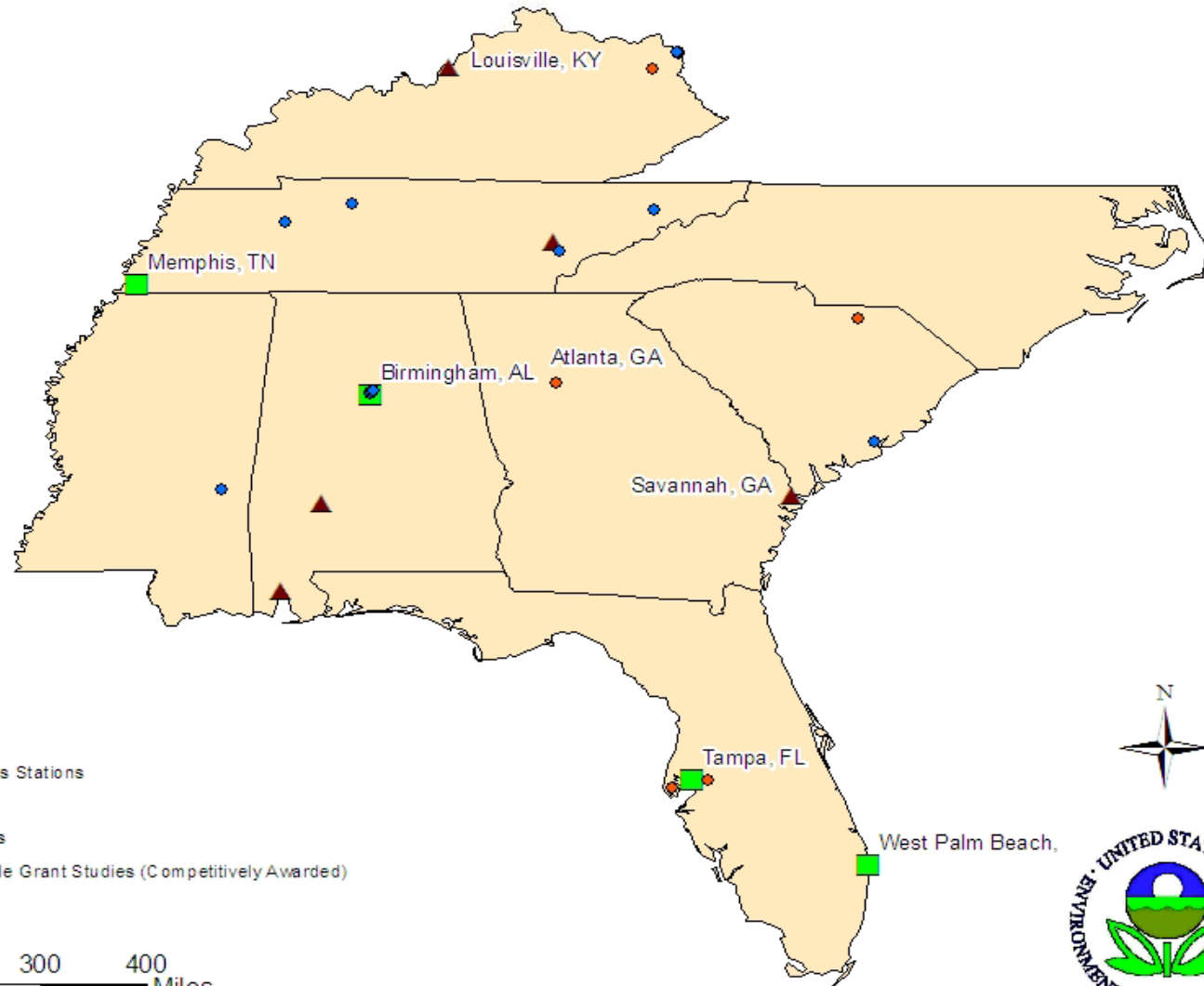
Dallas, TX ▪ April 4 - 7, 2011

Region 4 Air Toxics Monitoring Updates

Donnette Sturdivant, EPA Region 4

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EPA Region 4 Air Toxics Studies



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*

Laboratory Proficiency Initiatives

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
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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
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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

Donnette Sturdivant
sturdivant.donnette@epa.gov
404-562-9431