

# School Air Toxics Monitoring Initiative

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# CHALLENGES

I EXPECTED TIMES LIKE THIS - BUT I NEVER THOUGHT  
THEY'D BE SO BAD, SO LONG, AND SO FREQUENT.

# Genesis of School Air Toxics Monitoring Effort

- USA Today ran a December 2008 series ranking air toxics impacts at ~128,000 schools
  - Paper ranked schools using an EPA model (the Risk-Screening Environmental Indicator Model) and information from the Toxics Release Inventory
  - Also collected five days of monitored information at about 96 schools
- In Administrator Jackson's Jan. 14, 2009 confirmation hearing, Senator Boxer asked the Administrator to "send experts to schools, publicly release the data and take the steps necessary to address any health threats posed to children."
- The Administrator committed to mobilizing within 30 days to send monitors out to assess the extent of the problem and to get additional data.

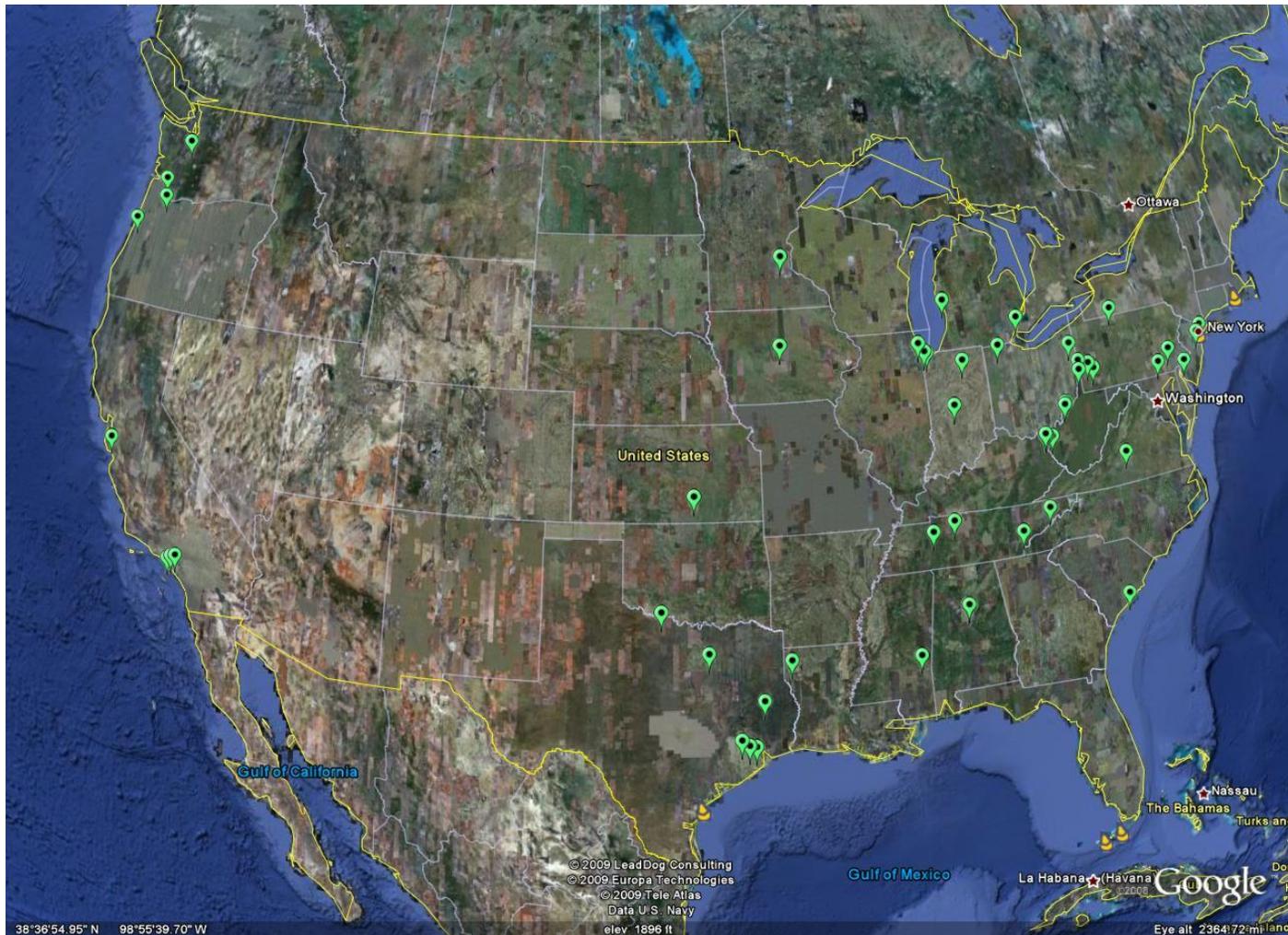
# Overview and Project Description

- Monitoring initiative announced March 2009
  - Initially 62 schools in 22 states
  - Now 63 schools plus two tribal schools
- Conducting “screening analysis” to look at how long-term exposure to toxics in outdoor air around selected schools might affect the health of school children, staff and the community.
  - Screening analysis: **“a statistical study of a population conducted to investigate the prevalence of a disease or concern”**
- Focusing on a diverse set of schools near:
  - Large industries
  - In urban areas, where air toxics come from a variety of sources
- Selected the schools based on:
  - USA Today analysis,
  - Draft 2002 National Air Toxics Assessment,
  - Consultation with EPA regional staff and state and local air agencies

# Outreach and Communication

- We met with internal EPA offices (OCH, OECA, OTAQ, OPPTS, etc.) and external stakeholders (ECOS, NACAA) to discuss the approach for selecting schools and implementing the monitoring plan.
- We met with the National Environmental Justice Action Committee (NEJAC) and have ongoing meetings to develop communications plans for communities and ways to get communities involved in the project.
- We also met with Pediatric Environmental Health Specialty Units to help develop appropriate messaging for communicating information to the public.
- EPA Regional Offices and State/Local air agencies meeting with school districts and communities prior to monitoring beginning and will follow up with meetings to review data after monitoring complete. To date, these meetings have been very well received.
- Monitoring plan, Project description and all data posted on EPA website ([www.epa.gov/schoolair](http://www.epa.gov/schoolair))

# Locations of the 63 Schools



# Monitoring Plan

- **National Monitoring Plan and Quality Assurance Plan in place for national consistency**
- **Data collection and analysis**
  - Monitoring for 60 day time period; minimum of 10-13 samples
  - Each site uses same type of monitor and are analyzed by same lab for consistency
  - Lab results for each sample are reviewed by OAQPS staff, region and state/local
- **Interim release**
  - After QA posting individual sample results to Web
    - Comparing individual samples to short-term screening levels to help gauge whether levels of individual pollutants in the air are high enough that they could cause health concerns from short-term exposure.
    - Also posting information about health effects of the pollutants
- **Summary reports**
  - After monitoring complete, we will analyze the sample results -- and information on wind speed and direction from each school, historical wind data from the area where available, information about sources of pollution in the area.
  - Will include recommendations for next steps:
    - Extend monitoring to collect additional data if needed
    - Cease monitoring if no problems identified
    - Work to respond to identified concerns

# Current Status

- 63 schools plus 2 Tribal schools to be monitored
  - 2 schools in TN completed 60-day monitoring & reports
  - 26 sites currently operating monitors assessing 29 schools
  - 2 tribal sites/schools fully operating
  - Analysis and communication strategies ongoing
  - Some number may require additional monitoring
- All data posted on school website ([www.epa.gov/schoolair](http://www.epa.gov/schoolair))
  - Final data for 2 TN schools posted week of 9/7/09
  - Interim data for all schools posted after validation/QA
- Communications ongoing with EPA, S/L/T, Communities
  - SAT team meets twice/week
  - Communications calls with regions and states regularly\*
  - Materials distributed for review (OCH, OECA, etc.) as needed

**\*Communications are critical as we have so many players (HQ, Regions, S/L/T, communities, schools, parents) in this program**

# Next Steps (FY10 & beyond)

- Issues
  - Commitment to meet with stakeholders before finalizing next steps
    - States (ECOS, NACAA) and communities (NEJAC) all expressed interest in discussing next steps with EPA
    - Other EPA offices (OCH, OECA) have an interest
  - Desire to move toward a community-based toxics monitoring approach
    - Can't cover all 128,000 schools
    - Focus on schools misses potential higher-risk areas in communities – most children spend more time away from school than in school
- Revisit EPA's current air toxics monitoring strategy in moving toward developing a long term sustainable strategy
  - With no regulatory monitoring requirements for toxics, we need to develop and implement a strategy that addresses concerns, appropriately targets communities and leverages limited resources
  - Providing resources (funds, monitoring equipment) directly to states is problematic
  - Competitive grant process works, but is extremely slow and may appear unresponsive
  - States want more control over where monitoring is occurring
  - Need to complete screening analyses and transition to a more community-based, sustainable strategy

*“Appreciation is a wonderful thing:  
It makes what is excellent in others  
belong to us as well.”*

Voltaire

*French author, humanist, rationalist, & satirist (1694 - 1778)*