

Air Toxics Data Analysis Update

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Webinars

- Presentations from S/L/T on air toxics projects that they have completed
- Fulfills grant obligation for presentation
 - As opposed to presentation at national conference
- Topics included:
 - Results of data analysis for 2003-2005 data
 - Allegheny County Air Toxics Study
 - Tonawanda County, NY Community Air Quality Study
 - Near Road-way Mobile Source Air Toxics Exposures along I-95 in Las Vegas, NV
 - Air Toxics in Mobile County, AL
 - Understanding Air Toxics in Boulder County, CO
- Looking for additional topics to present



Air Toxics Data Analysis Workbook

- Workbook designed to:
 - Serve as an overview of the topic of air toxics data analysis;
 - Provide suggestions on methodology to use in analyzing air toxics data; and
 - Document current methodology being used in national data analysis efforts.
- Covers basic overview of air toxics through advanced data analysis techniques
- Two webinar training series provided – links to training materials and recordings of sessions available on website
- Completed the workbook and posted on web at:<http://www.epa.gov/ttn/amtic/toxdat.html>

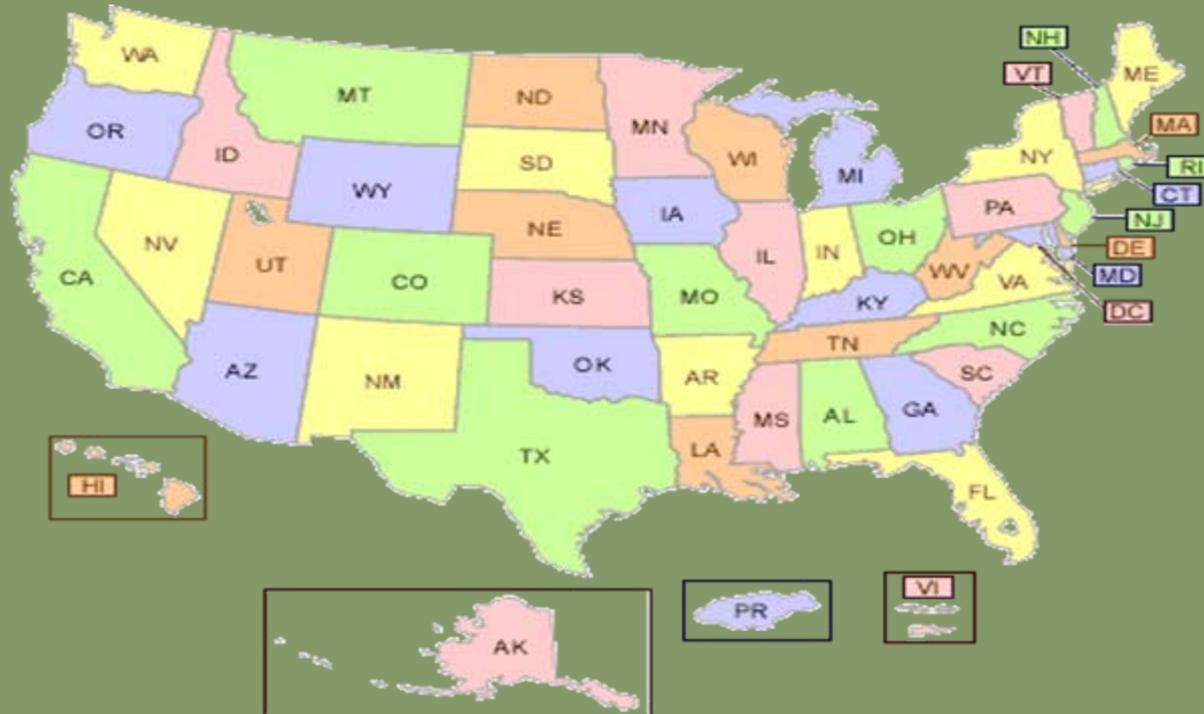


Air Toxics Data Available

- ❑ **EPA recently finalized Phase VI of the Ambient Monitoring Archive (AMA)** for hazardous air pollutants (HAPs), also referred to as the Historical Archive.
- ❑ Archive covers measurements from as early as 1973 to 2007. The AMA for HAPs currently houses 26 million data records from nearly 2,500 monitoring sites.
- ❑ Due to the size of the AMA for HAPs, the data have been split by state.

Air Toxics Data Available

- Information provided by State or Territory
- Data Dictionary available to help with fields





Community Scale Grant Results

- Results of EPA's Community Scale Air Toxics Monitoring (CSATM) Program on web: <http://www.epa.gov/ttn/amtic/local.html>
- Provides information on 35 of the 52 projects awarded with 16 projects in detail
- Report will be updated on annual basis as more final reports are received



Primary Findings

- ❑ Of 35 projects – 26 focused on speciated VOCs (e.g., benzene); carbonyls and metals also targeted in numerous studies
- ❑ Primary pollutants of concern based on NATA 1999 risks – most studies confirmed levels near or higher than predicted by NATA
- ❑ Emission sources varied by project from large industrial source to nonroad sources (rail yards) and mobile sources
- ❑ Focus on sources affecting nearby populations
- ❑ 95% of the projects met their stated goals and many projects presented results above and beyond stated goals



What EPA has learned

- Efforts have improved our overall knowledge of local air toxics issues
- Need to develop a mechanism for sharing results widely – webinars, conferences, training
- Grant competition scope needs a very clear purpose – has improved over time
- Projects typically take longer than anticipated
- Required follow-through on regions part to ensure that grant requirements are met
 - Final reports provided
 - Data entry into AQS

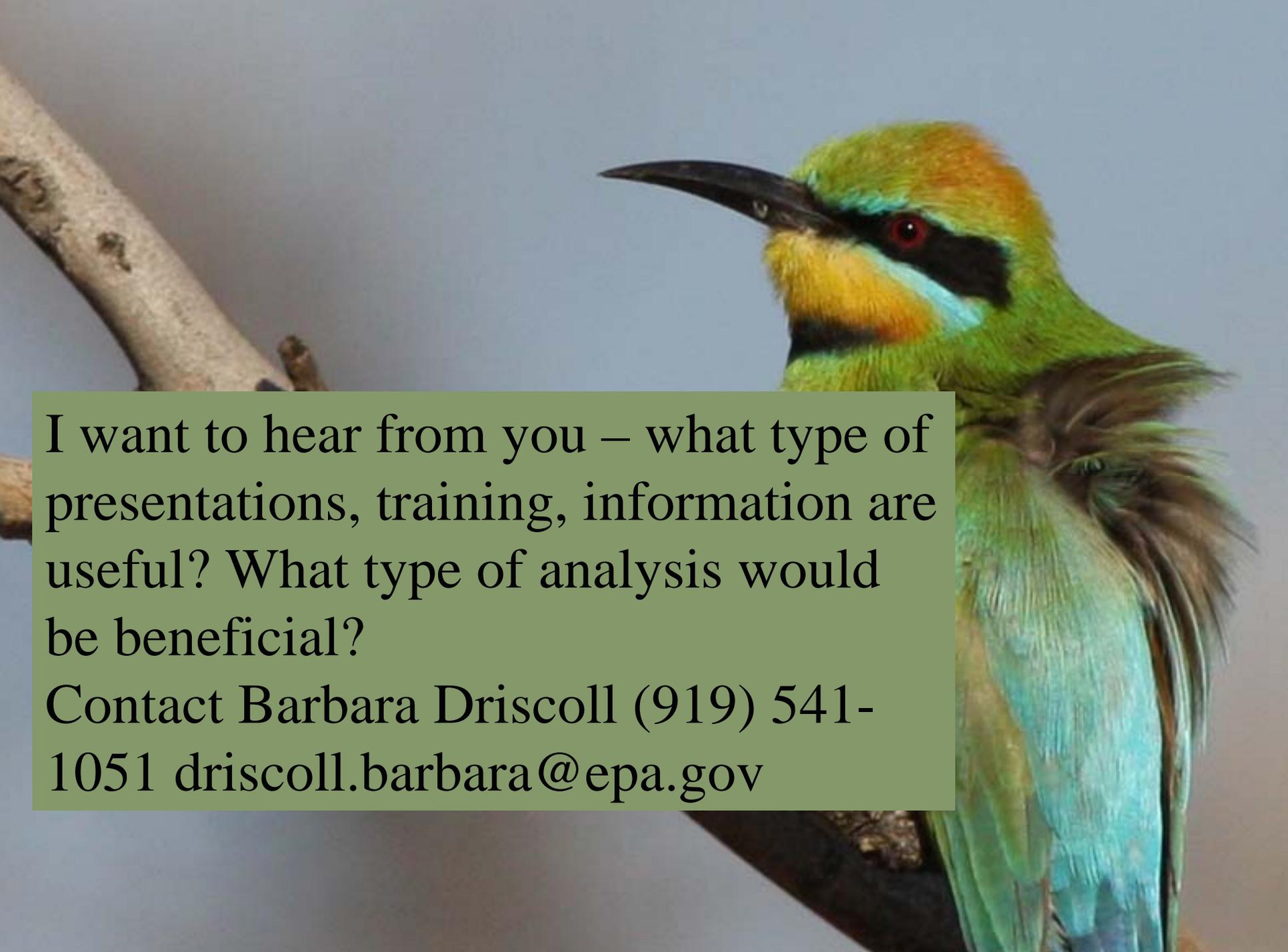


Lessons Learned by Participants

- ❑ Many of the projects would have negotiated a longer project time period
- ❑ Several projects would have created a micro-scale emission inventory before selecting monitoring locations
- ❑ Would have more site visits to verify inventory information and develop reduction strategies
- ❑ Would have worked with other agencies on public outreach and education
- ❑ Identified problems with portable monitors being evaluated – would have worked with manufacturers earlier in the process
- ❑ Issues identified with laboratories meeting low MDL requirements
- ❑ Better data analysis plan implemented sooner in process- would have asked for more funding and assistance with data analysis

Some Results

- Emission reductions negotiated/required from sources identified as concern
 - Examples: Patterson, NJ; Allegheny Cty, PA; Placer Cty, CA
- Additional monitoring negotiated at some locations based on results-airports
- Some methods tested successfully:
 - Mobile monitor for evaluating permits
 - Fixed point monitors to open path UV works for ozone and sulfur dioxide
 - Cr+6 method
 - Auto-gas chromatograph (GC)
 - PASM for short-term sampling
- Some methods tested were not successful:
 - Continuous formaldehyde monitors
 - Diffusion tube results for VOCs



I want to hear from you – what type of presentations, training, information are useful? What type of analysis would be beneficial?

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