Ideas for Future Work

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Ideas for Future Work – Overview

- Perform national assessment of more HAPs—only a fraction have been reviewed
- Perform assessments similar to those at the national level at regional, state, and local levels and then compare results to national trends

Ideas for Future Work – Data (1 of 2)

- *Validation*. Develop additional screening criteria and range checks; apply annually
- *Preparation*. Automate the database preparation, validation, and averaging process
- *Availability*. Include (or link to) more than the air toxics in the database for analysts
- *Reporting*. Develop standardized tools and laboratory data formats to facilitate data reporting for the states

Ideas for Future Work – Data (2 of 2)

- *Detection*. Work to improve the MDL of air toxics with concentrations close to or below the current MDL
- *Substitution*. Provide guidance to analysts on substitution for data below detection (may be analysis-specific)
- *Uncertainties*. Provide guidance on estimating uncertainty for air toxics concentrations (akin to $PM_{2.5}$)

Ideas for Future Work – Trends

- Compare ambient and emissions trends
- Validate model estimates with ambient concentrations
- Further investigate usefulness of meteorological trend adjustments (more sites, more pollutants, and different techniques)
- Relate ambient concentration changes to controls (accountability)
- Continue to explore the efficacy of control measures, such as MACT, and then provide a road map on how to do this (guidance, workshop, etc.)

Ideas for Future Work – Understanding Sources of Air Toxics

- Ensure measured non-toxic species are included in air toxics data sets
- Perform source apportionment to better understand common source types
- Mine existing source apportionment results for air toxics (i.e., from $PM_{2.5}$, PAMS assessments)

Ideas for Future Work – Spatial Variability

- Develop micro-scale to regional-scale monitoring guidelines for each air toxic, similar to the EPA siting guidelines for criteria pollutants (i.e., micro-scale, middle-scale, etc.)
- Characterize the spatial representativeness of each monitor for each pollutant
- Characterize spatial variability of other pollutants not yet analyzed

Ideas for Future Work – Stakeholder Support

- Continue data validation and analysis support to states
- Continue to develop prescribed analyses and demonstrate interpretation
- Provide training on validation and analysis
- Continue validation, analysis, and visualization tool development
- Place community-scale investigation results in perspective with national data

Ideas for Future Work – Communicating Results

- Encourage stakeholder participation through dissemination of community, regional-, and national-scale analysis results through workshops, websites, conferences, and journal publications