Session 2: Getting Started

- Establishing a stakeholder group
- Identifying issues of concern
- Setting project goals
- Lessons learned in setting project goals

Establishing a Stakeholder Group

- Identify individuals and groups who hold some kind of "stake" or interest in the project and its outcome
- Include community, industry, government
- Discuss entire process up front (including stakeholder expectations of outcomes)
Fostering Community Participation

- Use established community groups
- Work with your communications groups to develop outreach material
- Plan how results and findings will be shared and what actions to take
- Think about how to deliver news the community may not be expecting to hear

Examples of Projects

- **Joint Air Toxics Assessment Project (JATAP)**
  - Phoenix area, Arizona

- **Michigan Analysis of Air Toxics Data**
  - Detroit area, Michigan

- **US 95 MSAT Project (NDOT)**
  - Las Vegas, Nevada

- **Nez Perce Analysis of Air Toxics Data**
  - Lewiston, Idaho
Examples of Stakeholders

- **Federal**
  - EPA Region 9, EPA OAQPS, EPA ORD, EPA Region 5, Federal Highway Administration, EPA, ATSDR

- **State**
  - Arizona DEQ, Michigan DEQ, Manganese Workgroup, Nevada DOT, Idaho DEQ

- **Community & Environmental Groups**
  - LADCO, Clark County School District, Sierra Club

- **City and County**
  - City of Phoenix, Maricopa County AQCD, Pinal County AQCD

- **University**
  - Institute for Tribal Environmental Professionals at N. Arizona State University, American Indian Policy Institute at Arizona State University, University of Chicago, University of Michigan Wayne State University, Washington State University

- **Tribal**
  - Inter Tribal Council of Arizona, Gila River Indian Community, Salt River-Pima Maricopa Indian Community, Fort McDowell Yavapai Nation, Nez Perce Tribe

- **Industry**
  - Clearwater Pulp and Paper Mill

Identifying Issues of Concern

Investigate available information

- NATA, which shows modeled ambient concentrations, human exposure, and risk characterization to the census tract level
- Health data (e.g., cancer rates) from CDC’s national and state data
- National (and local, if available) emissions inventory
NATA is a useful prioritization tool that can help identify geographic areas, pollutants, and emission sources that should be evaluated further to gain a better understanding of risks.

http://www.epa.gov/ttn/atw/nata2005/

Issues of Concern to Your Community

- Emissions sources
- Pollutants
- Pollution transport
- Vulnerable populations
- Proximity to sources
Example Issues: JATAP

**What is the nature and extent of air toxics transport into Tribal communities?**

<table>
<thead>
<tr>
<th>Chemicals of Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-butadiene</td>
</tr>
<tr>
<td>Benzene</td>
</tr>
<tr>
<td>Formaldehyde</td>
</tr>
<tr>
<td>Arsenic compounds</td>
</tr>
<tr>
<td>Cadmium compounds</td>
</tr>
<tr>
<td>Chloroform</td>
</tr>
<tr>
<td>Nickel compounds</td>
</tr>
<tr>
<td>p-dichlorobenzene</td>
</tr>
<tr>
<td>Chromium (VI)</td>
</tr>
<tr>
<td>Ethylene oxide</td>
</tr>
<tr>
<td>Trichloroethylene</td>
</tr>
<tr>
<td>Acetaldehyde</td>
</tr>
</tbody>
</table>

Examples of Toxics Monitoring Project Topic Areas

- Supporting health effects assessments
- Evaluating and improving air quality models (that, in turn, are useful to exposure assessments)
- Establishing/understanding baseline concentrations
- Characterizing specific pollutants of concern
- Understanding spatial variation in concentrations (e.g., gradients)
- Characterizing specific emissions sources of concern
- Developing new measurement methods and techniques
- Analyzing existing data sets
Sources and Pollutants Previously Studied

- **Sources studied**
  - bus depot, port, rail yard, auto repair shops, mobile sources, chrome plating facility, coke smelter, refinery, metallurgical-coke facility, dry cleaners, oil and gas, pulp and paper mill, pesticide application, smelter, industrial point sources, airport, woodsmoke

- **Specific pollutants targeted**
  - diesel particulate matter (DPM), benzene, hexavalent chromium, styrene, carbonyl compounds, chlorobenzene, metals (e.g., Mn), acrolein

Setting Project Goals

- **Examples of goals**
- **Lessons learned in project goal setting**

- Establish a stakeholder group
- Assess issues of concern
- Set project goals
- Design full project
- Collect and QC data
- Interpret data & recommend actions
- Take action
Examples of Goals

- Characterize community air toxics concentrations to assist with development of risk reduction strategies
- Identify and quantify the impact of a specific emissions source on a community
- Test a new method of measuring an air toxic of concern
- Obtain ambient measurements to support exposure modeling and emissions inventory and model evaluation efforts
- Establish baseline concentrations for future studies

Project Goals: JATAP

- Determine the most important contributors to risk from air toxics
- Identify the likely sources of air toxics in the study area
- Assess how concentrations of air toxics in this area compare to other areas and to important health benchmarks
Project Goals: Michigan

- Create a comprehensive, quality-assured database to support subsequent data analysis projects
- Place more recent air toxics measurements into historical and national perspective
- Quantify the impact of loss of sources or emissions reductions on ambient air concentrations (i.e., accountability)
- Determine how risk levels have changed in the Detroit area and compare to Grand Rapids area
- Understand comparability and certainty in source apportionment model results
- Effectively communicate findings

Project Goals: Nez Perce

- Characterize air toxics concentrations in the Lewiston, Idaho, area of the Clearwater River Valley including a significant portion of the Nez Perce Reservation. Specifically:
  - characterize emissions from the Potlatch Pulp and Paper Mill in east Lewiston
  - determine (VOC) spatial pattern and gradient profiles
Initial Goals Are Set

• Now what?
  – Given the initial goals, what can you actually accomplish given the study realities?

• This process is likely iterative.
  – You may need to revisit the initial goals with your stakeholder group.

Lessons Learned in Project Goal Setting

• Be specific
• Goals should not be too broad
• It is hard to meet everyone’s expectations (i.e., you need to manage expectations from the beginning)
Lessons Learned in Project Goal Setting

• “Watch how large your project is, it’s always more work than you envision.”
• “Working with collaborators can be tricky.”
• “These grants are a good way to get software and training in tight budget climate.”