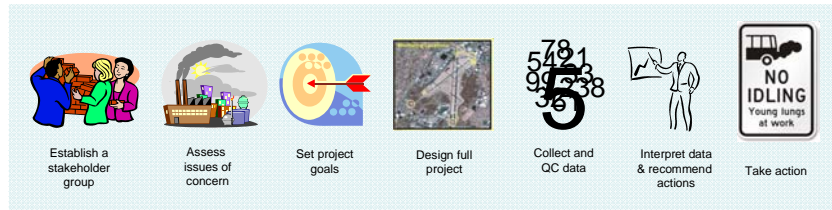# Getting Started

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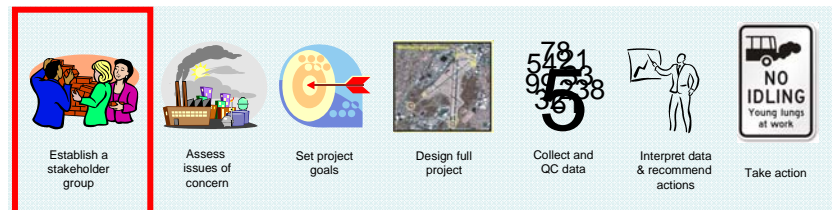

Establish a stakeholder group | Assess issues of concern | Set project goals | Design full project | Collect and QC data | Interpret data & recommend actions | Take action

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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)

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

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

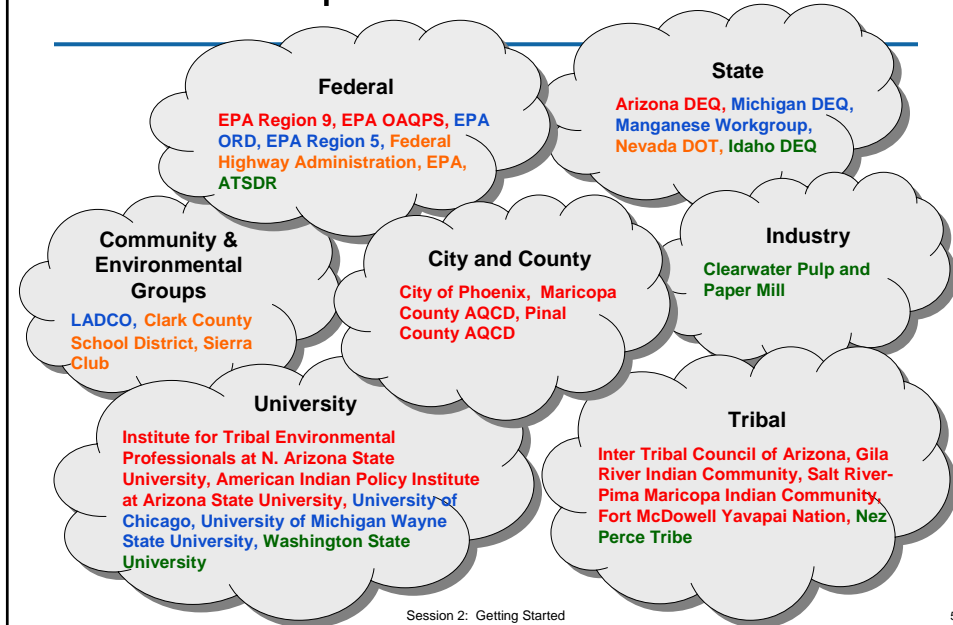**Michigan Analysis of Air Toxics Data**

Detroit area, Michigan

US 95 MSAT Project (NDOT)

Las Vegas, Nevada

Nez Perce Analysis of Air Toxics Data
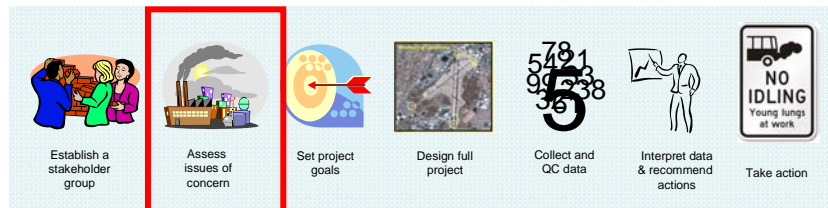
Lewiston, Idaho

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

Industry

Clearwater Pulp and Paper Mill

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
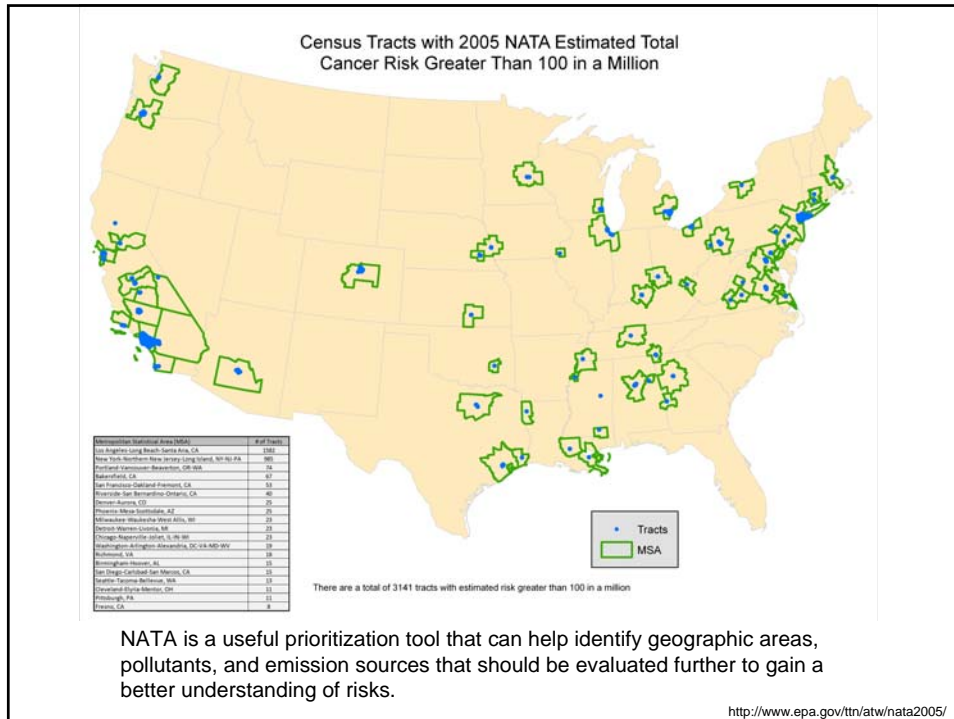
Session 2: Getting Started

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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

Establish a stakeholder group

Assess issues of concern

Set project goals

Design full project

Collect and QC data

Interpret data & recommend actions

Take action

Session 2: Getting Started

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3

Census Tracts with 2005 NATA Estimated Total Cancer Risk Greater Than 100 in a Million
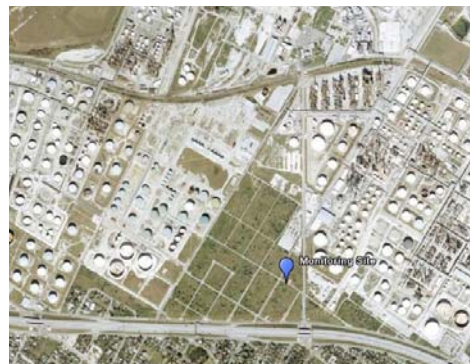
NATA is a useful prioritization tool that can help identify geographic areas, pollutants, and emission sources that should be evaluated further to gain a better understanding of risks.

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

Issues of Concern to Your Community

- Emissions sources
- Pollutants
- Pollution transport
- Vulnerable populations
- Proximity to sources

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Example Issues: JATAP

Chemicals of Interest	
1,3-butadiene	Dichloromethane
Benzene	Tetrachloroethylene
Formaldehyde	Ethylene dibromide
Arsenic compounds	Acrylonitrile
Cadmium compounds	Benzo(a)pyrene
Chloroform	Vinyl chloride
Nickel compounds	Carbon tetrachloride
p-dichlorobenzene	Acrolein
Chromium (VI)	Manganese compounds
Ethylene oxide	Barium
Trichloroethylene	Trimethylbenzene
Acetaldehyde	Lead compounds

Legend

ADEQ Site	Interstate/Freeway	Tribal Land		
JATAP Site	Highway	Airport		
Gila Site	Major Arterial	City Boundary		
	Parks			

0 5 10 20 30 Kilometers

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

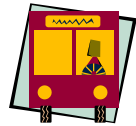
Examples of Toxics Monitoring Project Topic Areas

- 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
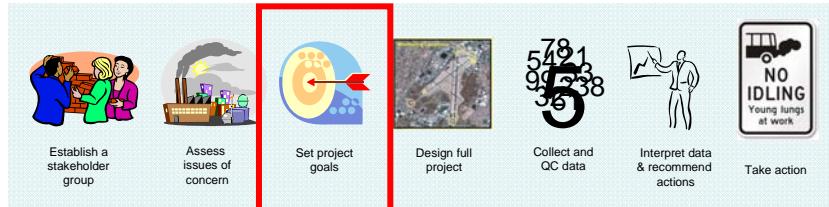
Setting Project Goals

- 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
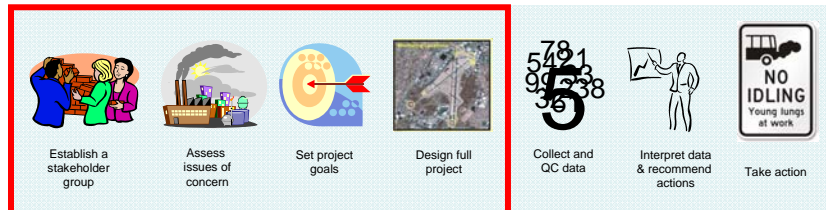 - determine (VOC) spatial pattern and gradient profiles

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.

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

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)

EXPECTATIONS

REALITY

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."