

Mexico National Emissions Inventory

Emission Inventory Needs and Enhancements Planned for Mexico

NARSTO Emission Inventory Workshop
Austin, TX
October, 2003

Leonora Rojas-Bracho



Instituto Nacional de Ecología

Content

1. Background
2. Organization
3. Scope and Objectives
4. Main Issues and Opportunities
5. Outcomes
6. Needs
7. Enhancements



Background

■ La Paz Agreement (Late 1980s)

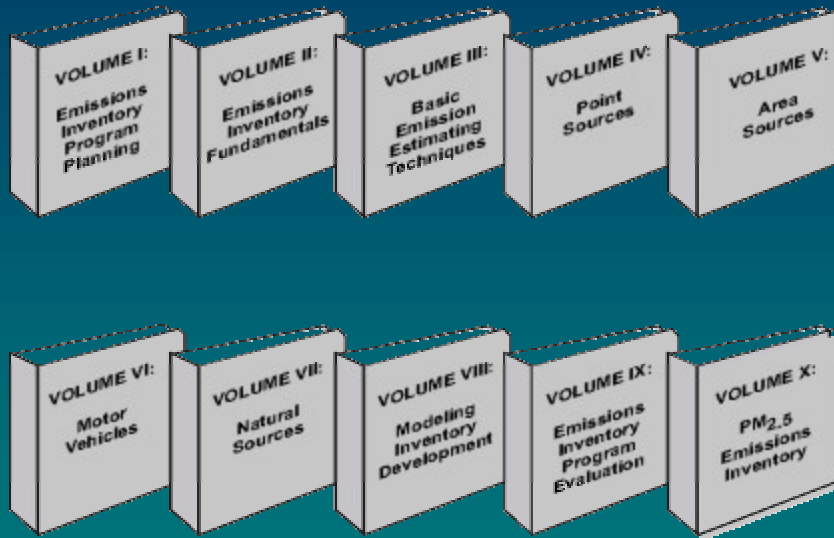


Background

- Started in 1995
- 1996-2000
 - Capacity building
 - ❖ Training and Workshops
 - ❖ Technical studies (Mobile 5 Mexico, e.g.)
 - Methodology Testing
 - ❖ Manuals
 - ❖ Advanced Workbooks
 - ❖ Inventories for Tijuana and Mexicali



Background : Emission Inventory Manuals



I. Emissions Inventory Program Planning*

II. Emissions Inventory Fundamentals*

III. Basic Emissions Estimating Techniques*

IV. Point Sources*

V. Area Sources*

VI. Motor Vehicles*

VII. Natural Sources *

VIII. Modeling Inventory Development*

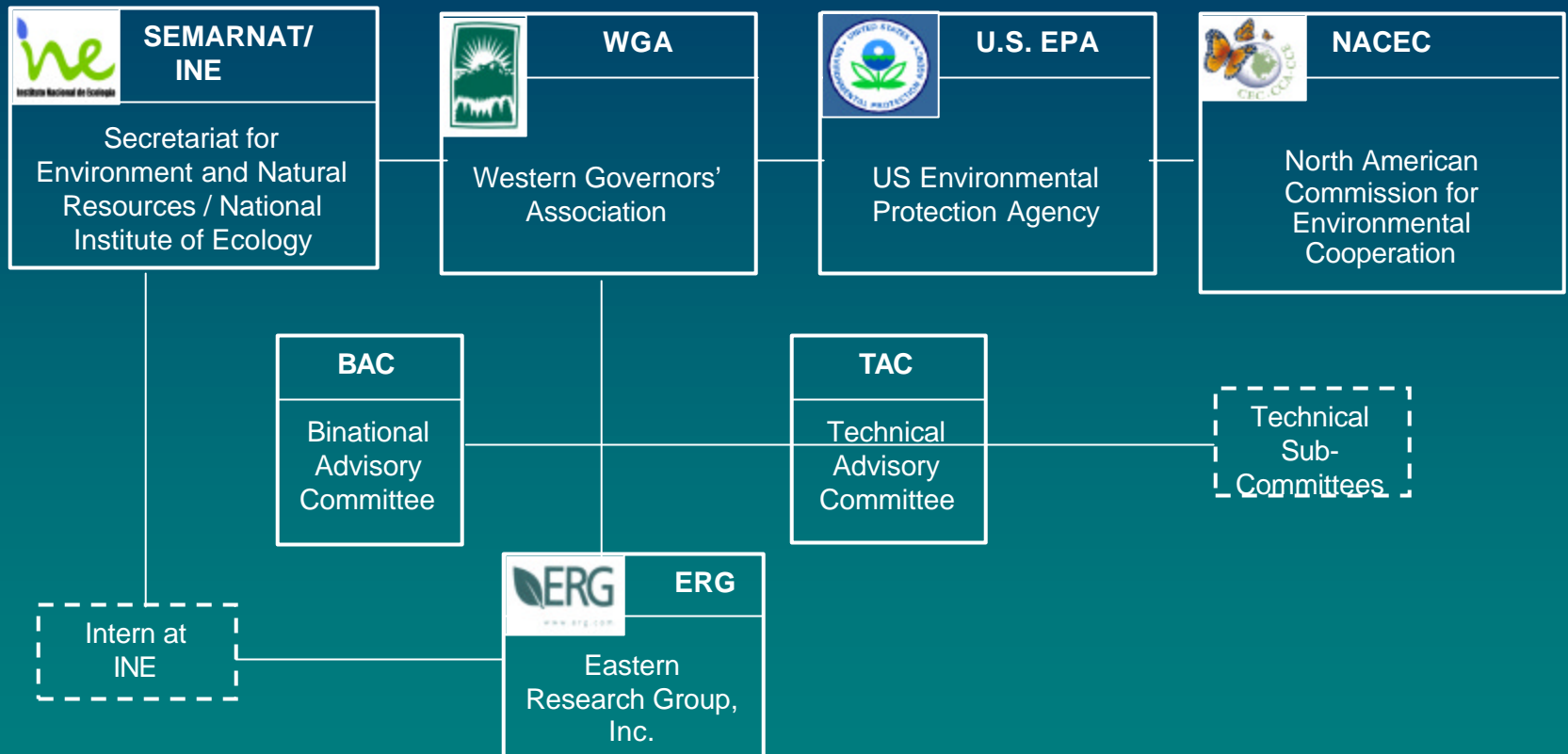
IX. Emissions Inventory Progress Evaluation

X. PM_{2.5} Emissions Inventory

* Concluded



Organization



Project Scope

- Mexico National Emissions Inventory Project (NEI)
- Emissions Inventory Manuals
- Other Studies:
 - Technical Studies
 - NONROAD-Mexico Model Development

Mexico NEI Objectives

1. Develop the first National Emissions Inventory for Mexico
2. Comply with Federal Environmental Law mandate to integrate and update a National Emissions Inventory for Mexico



Mexico NEI Objectives

3. Support NACEC efforts in the development of a regional emissions inventory
4. Promote institutional capacity-building
5. Support efforts for regional haze compliance in border US states

NEI Scope

Base year:

- 1999

Sources:

- Point, area, biogenic and mobile

Pollutants of interest:

- NO_x , SO_x , VOCs, CO, PM_{10} , $\text{PM}_{2.5}$ and NH_3



NEI Scope

Coverage:

- Phases I, II: Six Mexico-US Border States (June/03)
- Phase III: Rest of the country & MCMA (June/04)
- State and municipal level

Main Issues and Strategies

Point Sources

■ Issues:

- Federal vs. state jurisdiction
- Different reporting requirements
- Different formats

■ Strategies:

- Participation of SEMARNAT state “delegaciones” and local authorities in the TAC
- Close communication with local authorities via the state “delegaciones” (letters and meetings)
- Meetings with National Association of State Environmental Authorities (ANAAE)



Main issues and strategies

Government Stakeholders

■ Issues:

- PEMEX: 4 different companies, fuel production, distribution and use
- Energy, Transport and Agriculture Secretariats
- National Institute of Statistics, Geography and Information Technology (INEGI)

■ Strategies:

- Identification of key representatives
- Meetings and personal follow-up



Main Issues and Strategies

Non-Government Stakeholders

■ Issues:

- Manufacture, distribution and use of products (mainly solvents)
- No reporting requirement
- RETC

■ Strategies:

- Identify and contact leading trade associations
- Meetings, reports on progress and personal follow-up
- Agreed on estimation criteria



Products

- **First draft - Preliminary Emissions Inventory**
 - Six México-US border states
 - Comment period up to October 1st, 2003
 - Released early 2004

Products

■ Final inventory

- Released by mid 2004
- Valuable product for local authorities
- Useful for universities and research institutions -air quality and health applications
- Primary input for nation-wide air quality management strategies
- Solid baseline to assess control scenarios

Other Outcomes

- Improve exchange of information within SEMARNAT and with local environmental authorities
- Increase and enhance communication with other government entities
- Promote better understanding of the inventory outside of SEMARNAT



Needs

- Assess the quality of existing emissions databases and set priorities for improvement
- Build national capacity for inventory management
- Improve data management at Delegaciones and local governments
- Promote more efficient data collection with trade associations and private stakeholders
- Continue air quality management efforts such as the PROAIRES in several cities

Planned Enhancements

- Dissemination of the inventory
- Training (workshops, meetings, etc.)
 - Books from manuals
- Transfer project leadership to SEMARNAT
 - Close relationship with State Environmental Authorities and SEMARNAT delegaciones.
- Other projects

Contacts

- Technology Transfer Network (USEPA)
 - US–México Border Information Center on Air Pollution (bilingual)
 - English <http://www.epa.gov/ttn/catc/cica/cicaeng.html>
 - Spanish <http://www.epa.gov/ttn/catc/cica/cicaspa.html>



Contacts

- Project website

<http://www.erg.com/mnei>

ID and password upon request

- INE's website

http://www.ine.gob.mx/dgicurg/calaire/lineas/inventario_nacional.html

Email: vgaribay@ine.gob.mx



Thank you

lrojas@ine.gob.mx



Instituto Nacional de Ecología