

NARSTO

Emission Inventory Workshop



Innovative Methods for Emission Inventory Development and Evaluation

October 14 – 17, 2003

**Pickle Research Center
University of Texas
Austin, TX**



NARSTO

Emission Inventory Workshop



Introductions & Thanks

- Sponsors**
- Program Committee**
- Facilitators / Scribes**
- Workshop Coordinators**

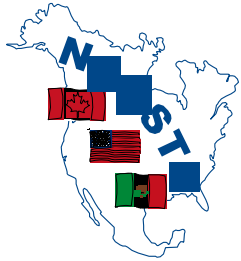


NARSTO Emission Inventory Workshop



Purpose

Identify and prioritize new and innovative tools, techniques, and methods to prepare or evaluate emission inventories with improved quality, cost, and timeliness.



NARSTO Emission Inventory Workshop



Schedule

Tuesday

Introduction

Wednesday

Measurement Methods

- Source and Flux Measurement
- Mobile and Tunnel Studies
- Ground, Aircraft and Satellite Observations

Thursday

Analysis and Application Methods

- Air Quality and Receptor Modeling
- Emission Modeling
- Evaluation, Uncertainty Assessment and Data Management

Friday

Report Out and Closing Remarks



NARSTO Emission Inventory Workshop Logistics



- Emergency Contact (512-471-5898)
- Messages (see message board in lobby)
- Lunch (on your own)
- Restaurants (list available)
- Audio/Visual (see Denzil Smith)
- Translators (large auditorium)
- Questions (contact registration desk)



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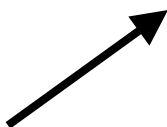


What's next??

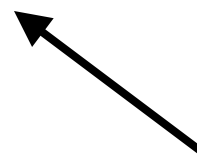
**Emission Inventory Workshop
(Synthesis Paper)**



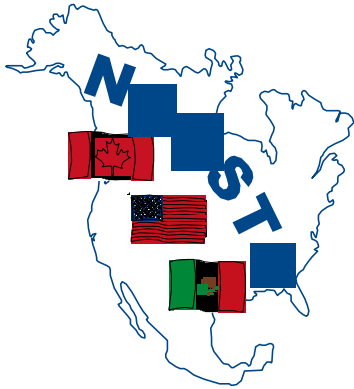
***Emissions Inventory
Assessment***



Ozone Assessment



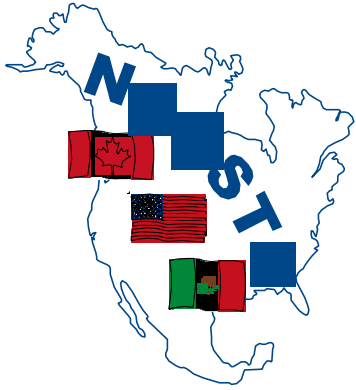
PM Assessment



NARSTO PM Assessment

**NARSTO PM Assessment Recommendations
cover six themes, including:**

*“Improve emission inventories and
emission models”*



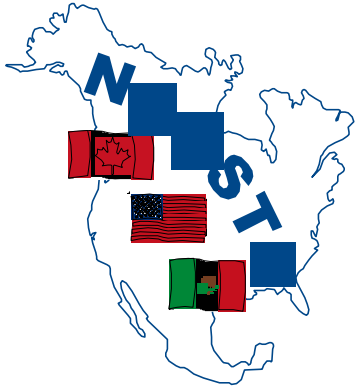
NARSTO Emission Inventory Assessment

- **Emission inventories are the foundation to cost-effective control strategies. (*Socrates, et al*)**
- **Emission inventories are the Achilles Heel of air quality management activities. (*Aristotle?*)**
- **Will a NARSTO assessment help emission inventories deliver the quality product needed in a timely and affordable manner?**



NARSTO Emission Inventory Assessment

- **Emission inventories will continue to be important for air quality management in the future.**
 - **Air Quality Forecasting**
 - **Field Studies**
 - **Risk Assessments**
 - **Control Strategy Development**
 - **Cap and Trade Programs**
 - **Economic Incentive Programs**
 - **New Source Review**
 - **Global Climate and International Transport**
 - **Accountability and Assessment**



NARSTO Emission Inventory Assessment

- **Emission inventories can benefit from new and innovative tools and techniques**
 - *Satellites, aircraft and other remote sensing techniques*
 - *Measurement and monitoring instrumentation and protocols including continuous emission monitoring systems*
 - *Computer software and hardware including the Internet and GIS capabilities*
 - *Analysis and application methods including emission and air quality modeling*



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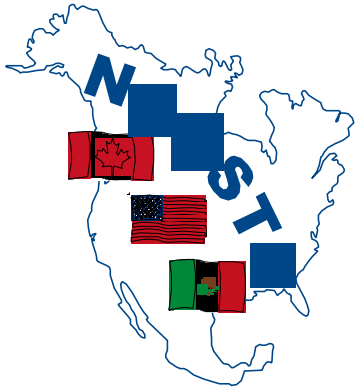
- **Emission inventories are improving (slowly)**
 - **United States**
 - *Consolidated Emission Reporting Rule*
 - *National Emission Inventory (Toxics, PM, Hg)*
 - *Regional Planning Organizations*
 - **Canada**
 - *New emission reporting rule; Confidentially addressed*
 - *VOC and PM Speciation addressed*
 - **Mexico**
 - *National Emission Inventory being developed*
 - *New emission reporting rule; Confidentially addressed*
 - **CEC**
 - *Potential for Integrated North American Emission Inventory*



NARSTO Emission Inventory Assessment

Objectives:

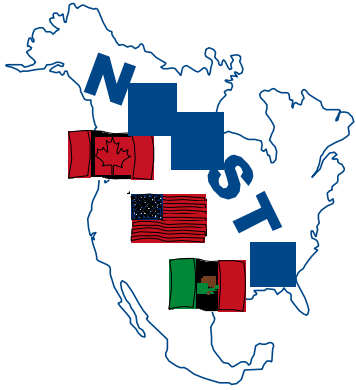
- **To promote efficient and effective use of current inventories;**
- **To set the stage for improving future emission inventories; and**
- **To establish a roadmap for the future.**



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Audience:

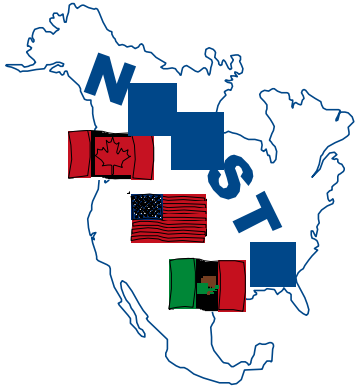
- **Decision maker for funding allocations**
- **Users of emission inventories**
 - **Policy analysts, policy planners, & policy implementers**
 - **Chemical-transport modelers**
 - **Field-campaign designers and practitioners**
 - **Planners and regulators implementing international agreements**
 - **Anyone who uses AP-42**
- **Developers of emission inventories**
 - **State and Provincial developers in US, Canada, & Mexico**
 - **Emission inventory/emission model tool developers**
 - **Instrument developers**



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Schedule:

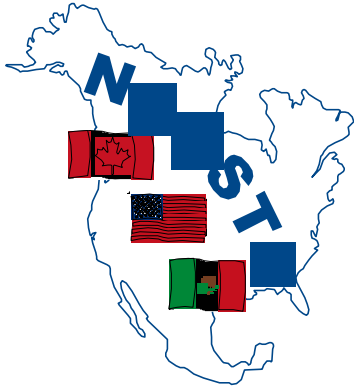
- **Kickoff – 10/03 (following Workshop)**
- **Review Draft – 9 months – 06/04**
- **Peer Review – 3 months – 09/04**
- **Revisions – 3 months – 12/04**
- **Final Report – 12/04**



NARSTO Emission Inventory Assessment

Budget:

- 6 People & \$200K
 - Support from EPA, NOAA, DOE, DOT, USDA, NASA
 - Support from States and MJO's
 - Support from Industry
 - Support from Canada & Mexico
- * *Commitment and involvement needed from stakeholders*



NARSTO Emission Inventory Assessment

Summary:

- **NARSTO Particulate Matter Assessment provides significant recommendations for emission inventory enhancement.**
- **NARSTO Emission Inventory Workshop will provide focus for research and development activities.**
- **NARSTO Assessment will provide basis to impact emission inventory activities in the future.**
- **Support from stakeholders is needed to make this happen!**
- **For more information, reference <http://www.cgenv.com/narsto>.**