



Rapid Inventory Development Pilot

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14th Annual International Emission Inventory Conference
Transforming Emission Inventories - Meeting Future Challenges Today

Overview of Presentation

- NEI Cycle
- Description of Pilot
- Schedule
- Strategies for Point Inventory
- Strategies for Nonpoint and Mobile
- Limitations of Pilot

[Current NEI Development Cycle]

- CERR Requirements for S/Ls
- Point, Nonpoint, Mobile every 3 years
- 2002 - first full reporting year
- Reporting deadline is 17 months beyond the end of the reporting year
- Historically, an additional 19 months needed to compile NEI after receipt from S/Ls

Shortening the NEI Cycle

- Goal = 24 months for 2005 inventory
- Quicker turn-around beyond 2005
- Drivers
 - External critiques of inventory
 - NAS/CAAQ reports
 - NARSTO reports
- AERR - Revision to the CERR

Rapid Development Pilot

- Investigate how to reduce the time needed by S/L agencies to prepare submittals . . .
- ***Without compromising data quality and completeness***
- Explore technology-based strategies
- Develop a 2004 emission inventory for participating agencies in 12 months

Premises for the Pilot Study

- Agencies should move to adopt electronic methods for data handling (collection, storage, and submittal preparation)
- Automated vs. Manual procedures
- Online data collection from facilities
- Extensible Markup Language (XML) for data transfer format

Pilot Schedule

- 11/04: Project Started
- 1/05-5/05: Develop/Test reporting tools
- 5/05-10/05: S/Ls develop inventories
- 10/31/05: Submittal deadline
- 12/05: Complete Pilot inventory
- 03/06: Evaluation of Pilot

Initial Phases of the Pilot Study

- Solicit participation from S/L agencies
- 11 agencies, initially
- Survey/Interview S/Ls to determine existing IT capabilities and current methods for data collection and submittal preparation
- Develop strategies

Summary Stats of Participants

- Data Collection Methods (out of 11 S/Ls)
 - 4 = Paper Forms
 - 1 = Electronic Spreadsheets
 - 3 = Custom distributed application
 - 3 = Custom web-based system
- S/L EI Cycle, 6 agencies = 17+ months
 - 2 = paper forms
 - 1 = Custom distributed application
 - 3 = Custom web-based system

[Hindrances to the S/L EI Cycle]

- Data collection
- Data review
- Conversion from in-house data structure to NEI Input Format (NIF)
- QA and correction to comply with NIF specifications

Strategies for Rapid Development

(Point Inventory)

- Web-based Online Data Collection
- Increased number of XML Submittals
- NIF File Conversion Software (NIF to XML)
- Support for pilot participants
 - Software support
 - Transitioning to XML
 - NIF compliance

Online Data Collection

- Developing a web-based facility data collection system for trial use by participating agencies
- Supported for duration of Pilot, all source code released to S/Ls for future development

Online Data Collection

- NIF-centric - NIF 3.0 point structure
- Field level validation based on NIF specifications
- Enforcement of Referential Integrity
- Reporting mechanism to review data
- XML export for submission to EPA

XML Submittals

- Current formats accepted by EPA
 - NIF 3.0 ASCII Text and MS Access (MDB)
 - XML (NEI XML 3.0)
- Submittal Format Preference for Pilot
 - Node-to-node XML
 - XML web submittal
 - NIF Text or NIF MDB

Benefits of XML

- Validation against schema
- Control data quality and completeness
- Validation immediately upon receipt at CDX before files are passed to EIG
- Instant feedback from CDX on the condition of the submittal file

XML Conversion Software

- To encourage XML submittals and aid in the transition to XML
- Adapted from NIF-to-XML originally developed for State of Delaware
- Convert NIF 3.0 compliant ASCII Text and MS Access files to XML

Strategies for Rapid Development

(Nonpoint and Mobile)

■ Nonpoint

- Testing web-based tool for estimating and submitting Nonpoint emissions
- Comprehensive, NIF compliant Nonpoint inventories

■ Mobile

- Using EPA NMIM for Onroad and Nonroad
- NMIM from S/Ls or 2002 NEI
- Preliminary 2004 VMT

Limitations of Pilot Study

- Focuses on reducing time needed by S/Ls to prepare submittal files
- Pilot inventory limited to S/L data
- No replacement or augmentation of S/L data
- Focus on criteria pollutant inventory