CENRAP Regional Planning Experience

CENRAP

Central Regional Air Planning Association

- One of five RPOs

- Formed in 1998

- Addresses regional haze and visibility issues and strategies

- Comprised of states and tribal areas of
  - Nebraska, Kansas, Oklahoma, Texas, Minnesota, Iowa, Missouri, Arkansas, Louisiana

Findings

- Ammonia
  - high level in monitored data
  - EI developed using hybrid of Carnegie Mellon University and state or local data

- Significant organic carbon
  - Potentially attributable to burning
    - Agricultural
    - Forestry

Energy Sector Findings

- Recent large changes in Oil and Natural Gas Sectors

- Opportunity to examine EGU closely
  - Integrated Planning Model
  - Required interstate and interregional cooperation and review
  - Examined assumptions for fuel usage

Issues: Inventory Completeness

- Varied level of issues with emissions inventories
  - Speciation
  - Assignment of Source Classification Codes needed for default speciation
- Activity Data
  - Not all state collect same level
- Modeling Parameters
  - Stack heights
  - velocities

Issues: Training and Experience

- Varied level of experience
  - Average experience is 3 years
- Some states had ozone nonattainment experience; others not
- Varied institutional knowledge
  - CENRAP
  - State processes

Issues: Decentralized Function

- Relied on state staff involvement
  - Project management
  - Competed with health-based standards for time
  - Staff turnover contributed to version control issues and institutional knowledge loss
- Decentralization
  - Contributed to coordination/confusion issues
  - Added time to process
- No centralized file handling or storage at RPO

Lessons Learned

- Training on development and review should be identified early and repeated
- Quality Assurance must occur every time data are "handled"
  - Extraction of state data
  - Incorporation into modeling format
  - Compiled files
  - Addition of new data
  - Temporal allocation
- Deeper centralized technical background needed for EI and modeling

Lessons Learned: EI Development

- Improve version control
  - Several contractors
  - Multiple EIs
  - Staff turnover

- Improve basic documentation on data
  - Centralized documentation needed
  - Older data used to generate final data not as well kept (e.g., throughputs)

Lesson Learned: Modeling

- Identify needed file formats earlier
  - Prior to issuing first Work Order if possible
- QA modeling inventory more often
  - Use multiple data review methods
    - Visual – tile plots
    - Ranking of sources
  - Identify most significant issues
  - Reconfirm state emissions totals at each process step

Lessons Learned: Documentation

- Version control
  - Multiple EI from different levels
  - Revisions

- More documentation needed for SIP

- Tried to capture shortcomings in Technical Summary Documents at end of process

InterRPO Recommendations

- More collaborative effort among RPOs
  - Use same base year
  - More consistent use of supplied datasets
  - Harmonize modeling datasets
    - Each state/area completes own control
  - Use same datasets in shared areas of modeling
  - Improve data exchange
- Distribute review burden of "external" EIs among RPOs
  - Canadian
  - Gulf of Mexico
  - Mexico

Future Activities

- Training identified as a necessity
  - Earlier and frequent in process to compensate for staff turnover
  - Inventory preparation and review
  - Data handling tools
- More technical training for CENRAP staff