TSS Workshop WRAP-up

June 20, 2007

June 19th - PRP18 report

Major findings -

- Emissions results detailed in Lee's talk
  - Fixed errors in assumptions behind 2018 projections, lowers SOx/NOx
  - Updated 2018 point source projections for additional permits/rules on the books
  - Known BART reductions applied
  - Presumptive SO2 BART emissions rate applied to coal EGUs defined by states as Subject-to-BART
  - Revised 2018 O&G projections by basin, primarily for NOx, spatial coverage for ~70% of gas production for WRAP region

June 19th - PRP18 report

Major findings -

- Modeling results detailed in Gail's talk
  - Model responds to point source changes, known BART reductions, and assumptions about SO2 BART
  - Smaller response to O&G emissions changes
  - Issues
    - Need "Plan02d" emissions/modeling analysis to best compare results
    - Determine reasons for increases in Fine Soil impacts?
    - Should Fine Soil RRF be set to 1.0, like Coarse Mass is already?
  - Sensitivity runs desired for 2018?
    - Isolate effect of anthropogenic sources remaining in 2018?
    - Others?

June 19-20 sessions - TSS Workshop report

Training Followup

- Lots of functionality added and changes made
- Proposed topics
  - 5 to 10 “key haze planning questions” – how do you answer them using TSS?
  - Emissions analysis tool
  - Query wizard tool
  - Log in/”analysis product storage” (includes preference settings)
  - Copying/saving data
    - local hard drive
    - links to state/federal Technical Support Documents, EIS, et cetera
    - FTP or other
  - Others?

June 19–20 sessions - TSS Workshop report

- Proposed list of key activities for TSS project team – next 30 to 60 days
  - Publish substituted IMPROVE data (9 sites) and link into TSS tools
  - Turn on emissions analysis tool
  - Complete loading of PRP18 data
  - Transparent to users, continue or begin additional “behind-the-scenes” functional improvements (may include map viewer)
- Regional Modeling Center – additional analyses

June 19–20 sessions - TSS Workshop report

Efforts to support haze plan development July 2007 & onward -

1) Data loading & completeness highest priority –
   a) Substituted IMPROVE data
   b) PRP18 emissions/modeling results
   c) Add BART-specific emissions changes so states/EPA can use those results as part of regional haze planning
   d) Results from RMC runs – any sensitivity, Plan02d, and Final RP18
2) Training on TSS use
3) Tool additions/improvements

June 19–20 sessions - TSS Workshop report

- Longer-term improvements to Data Support System projects feeding into TSS
  - FETS
    - Next version for 9/26-27 FEJF meeting, includes training
    - Work after that to begin attaching FETS data to monitoring and modeling data results on TSS
  - Emissions Data Management System (EDMS)
    - Continuing work to stabilize and update with additional data
    - Late ‘07 – begin introducing EDMS outputs into TSS displays
- Leads logically to issues with other pollutants
  - Monitoring, emissions, modeling data already exist
  - Early ’08 – begin development of displays for other pollutants (e.g., Ozone/Greenhouse Gases/Mercury/Deposition)

Potential Acquisition and Import of NASA Satellite Data into the TSS

- **2007 NASA ROSES Solicitation for "Enhancing a Decision Support System" with NASA satellite data**
- ***If* awarded, CIRA and the University of N.C. at Chapel Hill would:**
  - **Acquire and import relevant satellite data into the TSS database**
    - **Quantitative concentration values, aerosol optical depth, other**
    - **Qualitative satellite vertical profiles, maps**
  - **Incorporate and use satellite data in CMAQ**
  - **Utilize satellite data for model evaluation**
  - **Enhance TSS tools to provide access to and visualization of satellite data**
    - **Display vertical profiles for a given site to investigate aerosol events**
    - **"Fill in" sparse monitoring data to produce better contour maps**
    - **Correlate satellite data to ground-based monitoring data**
    - **Investigate long-term transport, evaluate substituted data, additional QA of monitored data, etc.**