Emissions Inventory Workgroup Meeting Notes - AIRQUEST Annual Meeting, June 7, 2012 at WSU
NW-AIRQUEST Annual Meeting 2012, June 6-8, 2012, Pullman, WA
Notes by Sally Otterson

Residential Wood Combustion (RWC)

Erik Saganic is leading a workgroup addressing RWC issues. Those interested in being part of that group should contact Eric and get on the mailing list.

Activity Data. We discussed the problem of differing assumptions across the domain, and how to reconcile this. The starting point is to compare the survey data being used by agencies, and also EPA RWC tool. There was also a suggestion to query wood suppliers.

Spatial distribution. We had previously discussed using total households for secondary/recreational wood burners, and primary wood heating households for primary wood burners. We discussed whether other characteristics might help allocate county emissions. Ideas included household income or other demographic data. Suggested data sources included the American Community Survey and Oregon's environmental justice program.

Temporal distribution. We temperature adjustments and the monitor data that suggested 50 degrees was the temperature where wood burning began. The last time we updated Airpact, we decided to adjust emissions using heating degree days based on 50 degrees. It was partly implemented, but it lacked the activity adjustment (when people burn – day of week, hour of day). We want to revisit this and Erik's group will also be discussing this. We also discussed lag times – How long after it gets cold do people wait before deciding to burn? We didn't come up with a proposal for this.

Canadian Data

Robert Nissen of Environment Canada updated us on their activities. They will produce SMOKE-ready files, and 2010 data will be ready soon. They are looking into doing individual point source temporal allocation files, as it has become an emerging issue. We haven't done this in the USA portion of the domain, but it can be done for the sources reporting the data. We will try do this in the states as well.

Wildfires are an important source in Canada and are the leading cause of poor air quality in many areas. Environment Canada is developing a plume rise model and adding wildfire to their operational forecast.

Documentation

We plan to produce documents to describe the inventory and the process we used to develop the modeling files. It's important that the users of Airpact understand the inventory. We plan to develop:

- Inventory Preparation and Quality Assurance Plan
- Executive Summary and Detailed Inventory Report
    - Graphics including charts, graphs and tables
    - EI methods

- How the EIs from all the agencies were combined
- SMOKE model processing