

Regulation 5.30 Program Status Report December 2006

Monitoring Activity

Since the last Board meeting, Louisville Metro Air Pollution Control District (APCD) has begun hot spot monitoring. The goal of the activity is to collect four weekly one-hour samples at six sites in Louisville, Kentucky, to help assess emissions from smaller businesses and mobile sources in the community. The sources chosen fall under Regulation 5.30 of the STAR Program.

The sampling began on November 29, 2006, and will continue through the week of December 18, 2006.



Research was done to find labs that were capable of performing TO-15 and

chloroprene analysis. Only two labs were found that were capable of chloroprene analysis and quantification. A quote package was submitted and Air Toxics Ltd. in Folsom, California, was selected to provide the sampling equipment and analysis. The APCD expects the data results package in January 2007.

The APCD has not yet received the U.S. Environmental Protection Agency's (EPA's) data summaries from the Cerex UVSentry comparison study, which were expected at the end of September. The Science and Ecosystems Support Division (SESD) at EPA Region 4 has not provided the APCD with an update as to when the draft report will be ready.



Emissions Inventory

Bo Fawbush is finishing his review of the 2005 FEDOOP company general emission inventories, which are required by EPA at the end of the year.

Lilibeth Lanceta continues to work on speciated emission factors for area sources. She most recently focused her activities on surface coating-architectural, automotive undercoating, traffic markings and paint, gasoline marketing, cigarette smoke, commercial deep frying, commercial charcoal grills, electrical insulation, jet fuel, and commercial consumer products. She also continues to work on emissions inventories for gas stations.

Modeling

Billy Dewitt has been fielding questions from modeling consultants, who are preparing environmental acceptability demonstrations, on behalf of Title V companies, for Category 1 toxic air contaminant emissions. He is also working with Gary Flispart and Tom Pinto on modeling mobile source emissions.

Mobile Source Dispersion Modeling

To get a handle on potential human exposure to mobile source air toxics, the APCD began dispersion modeling of high traffic intersections. The two dispersion modeling tools readily available to APCD are CAL3QHC and ISC/AERMOD. ISC/AERMOD is already used for other STAR modeling, and can work at micro and regional (countywide) scales. CAL3QHC is specifically geared for microscale screening of intersections for maximum concentrations, considering varying wind angles, queuing, volumes, etc., and has generally been used to evaluate carbon monoxide hotspots. Both models can be adapted for multiple pollutants and varying meteorological conditions to simulate hourly or daily average concentrations. Projects were begun using each of these two models to determine the mobile source concentrations at two specific intersections known to be high in traffic, Hurstbourne and Shelbyville Road and Preston and Outer Loop.

Stakeholder Group

The Regulation 5.30 Stakeholder Group will hold its sixth meeting on Thursday, December 14th. The meeting is scheduled to include a discussion of the West Louisville Air Toxics Study 2 risk assessment results and a presentation on the Board-approved Phase I implementation of the Air Quality Task Force's recommendations for further actions to reduce ozone precursor emissions. Other items to discuss will include toxics programs in other states and Stakeholder Group Committee reports. The four Stakeholder Group Committees conducted their second meetings on November 28 and December 5.