

MASSACHUSETTS SIP STEERING COMMITTEE

Meeting Summary

December 4, 2008

In Attendance:

Rich Rothstein, Km Chng Environmental
Richard Burkhart, EPA Region 1
Alison Simcox, EPA Region 1
Shawn Konary, Mirant
Bob Machaver, RJ Associates
Don DiCristofaro, Blue Sky Environmental
Wig Zamore, STEP
Keith Beasley, Massport
Jim Cope, EOT
Alan Stratton, Solutia Inc.
Brian Moran, IOMA
John Lienhard, MIT
Jacob Glickel, City of Boston

Mass DEP Staff:

Eileen Hiney
Richard Blanchet
Azin Kavian
Richard Fields
Kenneth Santlal
Christine Kirby
Bill Lamkin
Aimee Powelka

Please note that all materials distributed or presented at the December 4, 2008 meeting are available at <http://www.mass.gov/dep/public/committee/daqcpu11.htm>.

Diesel School Bus Retrofit Program (*Richard Blanchet – presentation*)

The Massachusetts Executive Office of Transportation (EOT) has provided \$16.5 million to MassDEP to retrofit all eligible school buses in Massachusetts by 2010-2011. Massachusetts has one of the highest pediatric asthma rates in the nation and studies have indicated that in-cabin particulate levels can be higher than outdoor air particulate levels. There are approximately 5000 school buses in Massachusetts which are estimated to be eligible for the EOT-funded retrofit program. To be eligible for the program, a diesel bus must be in service for a public school system, must be a pre-2007 engine model year, and must remain in-service in Massachusetts for a minimum of three years. Control technologies include a closed crankcase ventilation filter, to reroute engine air to the exhaust system, and tailpipe controls. Three different levels of tailpipe controls are being offered, depending upon bus usage, and include diesel oxidation catalysts, flow-through filters, and diesel particulate filters.

Four vendors are on contract to perform the retrofits and the first round of buses is currently being retrofitted. MassDEP has performed significant outreach to municipalities who own and operate school buses and school bus contractors. In addition, MassDEP has trained bus inspectors at the Registry of Motor Vehicles (RMV) to recognize the retrofits so that retrofitted buses will pass their safety inspections. MassDEP is working with the RMV to use their school bus data to pre-populate the online application and facilitate the use of the online application by school bus owners.

NAAQS Updates

- **Monitored ozone and PM_{2.5} data** (*Richard Fields – presentation*)

2008 was the second cleanest ozone season in the last 11 years with the low exceedance count mainly due to meteorological patterns that were not conducive to ozone formation. Preliminary data analysis indicates that Chicopee may be the only monitor exceeding the 1997 0.08 ppm ozone standard. However, the 4th highest values at many monitors indicate violations of the new 0.075 ppm ozone standard. Preliminary PM_{2.5} data for 2008 from BAM monitors (not the FRM monitors used to

determine attainment status) indicate 11 exceedances of the daily standard thus far in 2008. The same meteorological patterns that suppressed ozone buildups also helped keep PM2.5 values down.

- **2008 ozone standard** (*Eileen Hiney – presentation and handout*)

In March, 2008, EPA issued a new ozone standard of 0.075 parts per million (ppm). By March 12, 2009, states must make recommendations to EPA concerning their attainment designations. Massachusetts is expected to recommend that it be designated non-attainment statewide; 1 year later EPA will make final designations. SIPs are then due 3 years after final designations (2013). The attainment year will be based on Massachusetts' attainment classification under EPA's classification scheme, which has not yet been issued.

OTC planning has begun for the next round of SIPs to comply with the new ozone standard. The OTC Commissioners met in November and charged the OTC committees to start identifying controls.

- **Final Lead NAAQS** (*Aimee Powelka*)

On October 14, 2008, EPA strengthened the lead NAAQS to 0.15 $\mu\text{g}/\text{m}^3$ in total suspended particulate (TSP). Massachusetts expects to be in attainment statewide. TSP monitoring will be required for sources emitting one ton or more lead per year and in urban areas with populations greater than 500,000. Mass DEP staff is reviewing lead emissions data for sources. Based on its preliminary review, the largest lead source appears to be Jostens, a jewelry manufacturer in Attleboro, which reported 2000 pounds of lead emissions in 2002. Massachusetts currently has one lead monitor, located in Kenmore Square.

Climate Change

- **RGGI update** (*Bill Lamkin*)

The Regional Greenhouse Gas Registry held its first auction for CO2 allowances on September 25, 2008, with six states offering allowances for sale. The auction used a uniform price, sealed-bid format in which the auction clearing price is determined by the value of the first losing bid. Under this format, bids are ranked by value, allowances are awarded to bidders based on quantity bid in descending price order; once the available allowances for that auction have been awarded, the next (losing) bid sets the price for all allowances sold. In September, 12,565,387 allowances were sold at a clearing price of \$3.07. The next auction is scheduled for December 17, 2008. All ten RGGI states will be offering a total of 31,505,898 allowances for sale.

The RGGI states through RGGI, Inc. have hired ICF consulting to develop application forms and guidance for the documentation and verification of RGGI-approved offsets. This guidance is expected sometime in mid-2009.

- **Global Warming Solutions Act** (*Bill Lamkin*)

The 2008 Global Warming Solutions Act was passed by the state legislature this summer and signed into law in August by Governor Patrick. This legislation requires the creation of enforceable state limits on GHG emissions for the years 2020, 2030, 2040, and 2050. These limits are designed to address the Commonwealth's contribution to global climate change and to stimulate the green economy in Massachusetts.

One major provision of the Global Warming Solutions Act states that the Department of Environmental Protection, "shall adopt regulations to require the reporting and verification of statewide GHG emissions." An emergency regulation, 310 CMR 7.71, will be promulgated by the statutory deadline of

January 1, 2009, to comply with this requirement. More comprehensive regulations will be proposed as amendments to this regulation by June of 2009. A public stakeholder meeting was held on December 9, 2008. Additional stakeholder meetings are planned for January, 2009.

- **Low Carbon Fuel Standard** (*Christine Kirby - presentation*)

Governor Patrick sent a letter to the Governors of the RGGI states on June 2, 2008 inviting them to participate in the development of a regional low carbon fuel standard (LCFS). A LCFS is a performance-based standard that regulates the lifecycle carbon intensity of fuels. A LCFS would require the displacement of “high” carbon fuels (such as gasoline and diesel) with lower carbon fuels (such as low carbon biofuels and electricity generated from renewable energy). A LCFS is not a cap on carbon, but would act in concert with other efforts to reduce the carbon from mobile sources, such as vehicle greenhouse gas standards and reductions in vehicle miles traveled. A LCFS is different from other regulations because it regulates the rate of pollutant emissions per energy content and because it incorporates the emissions from the full lifecycle of the fuel.

Massachusetts, in collaboration with the other RGGI states, is investigating the feasibility of implementing a LCFS in the RGGI-region. The focus is on transportation fuels, although the inclusion of heating oil is being discussed. Six subgroups have been formed to explore all aspects of a LCFS. These include Baseline/Electric Efficiency, Sustainability (including impacts of a LCFS on other air pollutants such as NAAQS), Economic Impacts and Opportunities, Authority, Credit Trading Mechanisms, and Communication.

Updates

CAIR (*Eileen Hiney*)

At the August meeting, staff reported on the July 11 court decision vacating CAIR. CAIR had capped NO_x and SO₂ emissions from power plants in 28 states, and replaced the NO_x budget program. At that time, states had begun a coordinated response to address the gap left by the court’s decision by focusing on a Congressional fix in the remaining weeks of the 2008 session. This was not successful.

States also focused on reinstating the NO_x Budget program that covered the 2003- 2008 ozone seasons. That effort is moving ahead and states are prepared to reinstate that program. MassDEP added sunset provisions to its NO_x Budget Program (310 CMR 7.28) when it adopted MassCAIR (310 CMR 7.32). It has now proposed to amend 310 CMR 7.28 to reinstate the NO_x Budget Program starting with the 2009 ozone season and to revoke 7.32 MassCAIR. These proposed amendments have been released for public comment and a public hearing will be held on December 22.

However, the outcome of CAIR, the NO_x Budget Program, and MassDEP’s proposed amendments are still uncertain because of the status of the litigation. Despite the court’s decision, until the court issues a mandate CAIR remains officially in place. EPA suggests that states should not rescind their CAIR regulation until the mandate issues. On September 24, 2008, EPA and other parties filed a request for rehearing requesting that the Court reconsider the July 11th CAIR vacatur decision. The court is expected to make a decision on that request by Dec 17th. There is a possibility that the court will stay its mandate – thereby leaving some or all of CAIR on the books. Until there is further action by the court, MassDEP will not finalize its proposed reinstatement of the NO_x Budget Program and revocation of MassCAIR.

Mercury monitoring regulation (*Eileen Hiney*)

In the next 30 days MassDEP expects to propose revisions to the regulations that govern mercury monitoring at power plants. The revisions are in response to the vacatur of EPA's Clean Air Mercury Rule (CAMR) earlier this year.

Regional Haze SIP (*Aimee Powelka*)

The draft Massachusetts Regional Haze SIP was provided on November 25, 2008, to the EPA and to Federal Land Managers (FLMs include members of the US Fish and Wildlife Service, the National Park Service, and the US Forest Service) for comment. These federal agencies have a sixty-day review period to comment on the draft Massachusetts Regional Haze SIP. Massachusetts intends to address their comments and then release a revised version of the SIP to the public for review in the spring of 2009. Proposed BART determinations were also released to each BART-eligible facility on November 25, 2008; these determinations are also subject to EPA and FLM comment.

Solvents/Consumer Products Regulations (*Eileen Hiney*)

As part of our 8-hour ozone attainment SIP, Massachusetts committed to VOC reductions from solvents and consumer products. A solvents and consumer products regulation has been proposed and a public hearing was held on November 25. Staff expects the rule to be final in the spring of 2009.

Adhesives Regulation (*Eileen Hiney*)

MassDEP also committed to VOC reductions from adhesives as part of its 8-hour ozone attainment SIP. Amendments to the regulations for Volatile and Halogenated Organic Compounds, 310 CMR 7.18, are expected to be issued for public hearing in next 30 days. The proposed amendments will add a new section governing adhesives and sealants.

Somerville Near-Highway Pollution Studies (*Wig Zamore – presentation & handout*)

Wig Zamore presented an overview of two local near-highway pollution studies and some updates on related scientific literature (see handout). A study in Somerville was performed by Environmental Health & Engineering, Harvard School of Public Health and the Mystic View Task Force in which black carbon data was collected at two locations adjacent to I-93. Hourly downwind black carbon levels correlated with traffic counts. Additional NO₂ monitoring, averaged over two separate sample periods of two weeks each at 50 locations in Somerville, showed a correlation both with distance from the highway and with traffic density. Near highway NO₂ averages were triple the Lynn background monitor and double the NO₂ levels in Somerville 400 meters from the highways over the same 4 weeks. The City of Cambridge conducted a simultaneous NO₂ study with fairly high readings found in Harvard Square.

A second study in Somerville was performed by Aerodyne Research Inc. of Billerica, the Mystic View Task Force and Tufts University. The study investigated the spatial and temporal distribution of both particle counts and size classes of ultrafine PM near I-93 during the morning of January 16, 2008. It found substantially higher concentrations of some pollutants (CO₂, NO, NO₂, & particle number counts) at distances <200m downwind and <50m upwind of the highway during the morning rush hour (6-8:30 am). These levels decreased after 8:30 am with increases in ambient temperature and atmospheric turbulence. Particle number counts during early morning rush hour in areas closest to I-93 were about 100,000 particles per cubic centimeter. As these ultrafine particles (< 100 nanometer diameter) have high biological retention and penetration, there is a public health concern.

Next SIP Steering Committee Meeting: Thursday, April 2, 2009 at 10:00 a.m.