



**Greater Boston Breathes Better
Working Group Meeting
March 3, 2009, 10:30 am – 12:30 pm
Massachusetts Institute of Technology, Cambridge**

MEETING SUMMARY

WELCOME & INTRODUCTIONS

Ona Ferguson from CBI welcomed participants to the Greater Boston Breathes Better (GB3) Working Group meeting and thanked Steve Lanou of MIT for hosting the meeting and Ed Burke of Burke Oil for sponsoring the meeting. Participants introduced themselves. (*Appendix A: List of Attendees*).

Ona observed that GB3 has come a long way since its kick-off event in November 2005. She noted that GB3 partners have achieved many good advances in reducing transportation-based emissions in their communities, organizations, and businesses. She announced that the GB3 partnership will be awarded a Clean Air Excellence award from the Community Action Branch of EPA. GB3 was selected as one of 17 recipients from over 120 applicants. There will be an awards ceremony in Washington DC in May, which CBI will attend, along with a few other GB3 partners. GB3 partners interested in attending should contact Kate Harvey or Ona Ferguson at CBI for more information.

NEW FUNDING OPPORTUNITIES

American Reinvestment and Recovery Act

Halida Hatic of U.S. EPA Region 1 presented on new funding available for diesel emissions reduction under the American Reinvestment and Recovery Act (the "Recovery Act"). The RFA for funding opened March 19, 2009 and will close on April 28, 2009. In addition to achieving program requirements of the Diesel Emissions Reduction Program (DERA), under the Recovery Act EPA's National Clean Diesel Funding Assistance Program prioritizes projects that can be commenced quickly, reduce diesel emissions, and maximize job preservation and/or creation and promote economic recovery through a variety of diesel emission reduction strategies. The implementation period will be mid June 2009 – September 30, 2010. Grants will be awarded in the range of \$500,000 to \$2,000,000.

Halida noted that while private entities are not directly eligible to apply for funding, they can partner with eligible entities (such as municipalities and non-governmental organizations) to implement projects. She encouraged applicants to look at the Northeast Diesel Collaborative's website, for more information on the NEDC and the five key sectors (municipal, transit, ports, freight, and construction). Halida's presentation is available at:

<http://www.epa.gov/region1/eco/gb3/wg.html>

Questions:

- *Formally verified technologies that are no longer on the EPA list are not eligible technologies under this new grant program?* Correct.
- *What is the difference between the SmartWay Clean Diesel Finance Program and the Recovery Act SmartWay Clean Diesel Finance Program?* In addition to EPA's National Clean Diesel Funding Assistance program which provides grants to eligible entities, EPA has also developed the SmartWay Clean Diesel Finance Program. The Recovery Act Funding for Clean Diesel: SmartWay Clean Diesel Finance Program is a competitive grant program that will support the creation of national, state or local innovative clean diesel financial programs, which maximize job creation and preservation. Innovative financial programs include those where the loan recipient receives a unique financial incentive (i.e., better than regular market rates or conditions) for the purchase of retrofitted vehicles or equipment.

SmartWay program website: <http://www.epa.gov/smartway/> and SmartWay Clean Diesel

Finance Program website: <http://www.epa.gov/otaq/eparecovery/progfinance.htm>

2009 Northeast Diesel Collaborative (NEDC) Emissions Reduction Grant Program

Halida also provided an update on new funding that will be available through EPA's regular appropriations under the Diesel Emissions Reduction Program (DERA) in 2009. She explained that EPA is likely to receive an additional \$60 million for DERA in the new 2009 federal budget. This money will be distributed through a RFP process later in 2009. For more information the 2009 Northeast Diesel Collaborative Emissions Reduction Program, please visit the collaborative website in late summer: www.northeastdiesel.org. Applicants may apply for funding from multiple sources (ARRA, DOE, EPA, etc).

Questions:

- *Should applicants use grants.gov to submit their proposals?* Please refer to the Request For Applications (RFA) for submission instructions (<http://epa.gov/otaq/eparecovery/documents/recovery-act-national-clean-diesel-rfa.pdf>).
- *Will repowers be eligible for this funding?* It is the applicant's job to explain why the proposed action is a repower instead of a replacement. If you replace a vehicle you are eligible for up to 25% of the incremental cost for the new vehicle (defined by EPA), and you must show proof of scrappage.

Massachusetts Department of Environmental Protection

Christine Kirby from MA Department of Environmental Protection (DEP), said that MA has approximately \$920,000 available for diesel reduction projects (\$300,000 from DERA with

matching funding from American Electric Power). She anticipates that next year the state will have nearly \$2.6 million.

In 2008, MA used its funding to retrofit municipal waste collection vehicles. Installation has been slow. Retrofits are being procured through a competitive bid process between pre-approved manufacturers. MA also focused on installing idle reduction technologies on locomotives operated by the Providence & Worcester railroad and installed diesel oxidation catalysts on the head-end power units of commuter locomotive trains. Reducing emissions from MBTA operations was and continues to be a priority. Retrofits of transit buses have been done, and the Commonwealth is now hoping to expand work with the MBTA commuter locomotives.

Through the hybrid truck consortium (see Environmental Defense update below), MA DEP is reaching out to private and municipal sector truck owners.

MA DEP has also launched a school bus retrofit program, called MassCleanDiesel, which has \$16 million available for retrofitting private and municipal MA school bus fleets. MA DEP is beginning intensive outreach on the program, available at:

<http://www.mass.gov/dep/air/diesel/masscleandiesel.htm>

Questions:

- *Why did MA not pursue compressed natural gas?* The MBTA had purchased CNG buses and decided not pursue more CNG due to cost considerations.

City of Boston

Jacob Glickel of the City of Boston Environment Department said the City still has funding available for Community Climate Action grants. To date, they have awarded five \$10,000 grants for projects, among them an award to ACE to help provide access to energy efficiency programs for low-income residents and businesses. Projects that reduce energy use and pollution in Boston are eligible for funding.

MIT PRESENTATION

Steve Lanou of MIT provided an update on MIT's recent achievements and projects. MIT and the City of Cambridge completed the diesel retrofits funded by a 2005 EPA grant. Retrofits were installed on one MIT on-road vehicle and 36 municipal vehicles, including Department of Public Works vehicles, City Water Works, and garbage trucks. Completing the retrofit process took longer than they anticipated because of difficulties finding the right match between vehicles and technologies. MIT wanted to retrofit some Bobcats, tractors, and a box truck, but those vehicles were too old or not appropriate. At the time when they were evaluating options, there was no EPA or CARB verified crankcase ventilation system available on the state contract. Once the vehicle/technology was matched, they ended up with diesel oxidation catalysts, which had a simple installation processes. MIT used the state contract for retrofits and worked with Patriot International and Cummins Northeast. The result was a 20% reduction in particulate matter. MIT also purchased two new diesel shuttle buses that meet EPAs 2007 emissions standards.

MIT has a Commuter Choice Program, which includes ZipCars, shuttles and offsite locations for pooling of shuttles, parking discounts for environmentally friendly vehicles, and subsidized T passes. MIT has not added parking spaces in the past decade, and recently offered free trial T passes to anyone with a parking pass. Over 600 people took the trial T pass, and many have not gone back to using a parking pass. MIT spends approximately \$2 million a year through their T pass subsidy program. MIT is also hiring a Commuting Coordinator to focus on promoting commuting options. Finally, students at MIT have begun a project to process waste vegetable oil from MIT dining facilities into transportation-grade diesel fuel to blend with conventional diesel for a biodiesel blend. Fuel use will start with landscaping equipment, with an eye towards using it in shuttles if that is viable.

Questions:

- *Has MIT adopted a construction bid specification?* Not sure. MIT has requirements for air quality, but not sure if it adopted a bid spec.

GB3 WORKING GROUP MEMBER UPDATES

EPA: Halida Hatic mentioned that EPA awarded 2008 grants to six entities for diesel emissions reduction projects, including: entities for hybrid truck projects, refuse haulers, and Massport for electrifying the Fish Pier. She encouraged GB3 members to call her if they have questions about stimulus or regular EPA funding for diesel emissions reductions. Cyndi Veit noted that she is about to begin managing EPA diesel grants and will be available to serve as a resource for GB3 Working Group members as needed.

City of Cambridge: John Bolduc shared that the City has retrofitted five school buses and is working on retrofitting four additional school buses. The City is trying to get particulate filters, but is having some trouble getting the duty cycle evaluations done. The City also adopted a green fleets procurement policy under which departments wishing to purchase new vehicles must present three options, one of which must be a hybrid. The City now has a few hybrids in its fleet. John also noted that biking in Cambridge doubled between 2003-2008 and that the City is working on a transportation social marketing campaign in the Cambridgeport neighborhood. This is a City Smart program, and the idea is to work with individuals to help them evaluate and shift their transportation habits.

MA DEP: Gary Rennie said that the ongoing retrofit process at MA DEP is progressing well and that they are targeting waste collection vehicles. He encouraged GB3 Working Group members to check out the EPA Diesel Emissions Quantifier:
<http://cfpub.epa.gov/quantifier/view/index.cfm>

City of Boston: Jacob Glickel said that the City will retrofit most of its DPW trucks in the spring with diesel oxidation catalysts (DOCs). He also noted that the City's new solid waste contract requires DOCs.

Milton CAT: Wayne Clark stated that Milton CAT is one of the state providers on the MA DEP approved contractors list for school bus and refuse vehicle retrofits. They have installed several

diesel particulate filters for customers and are hosting customer education sessions to educate customers about regulations, technologies, and how they can prepare workplans moving forward.

Caterpillar Emissions Solutions: Jeff Jacobs noted that most of his recent activity has been around engine repowers, and that Caterpillar Emissions Solutions is currently implementing stationary retrofits and combo product SCR's for Connecticut clients. They are also seeing success in their passive filters.

Cummins Northeast: Scot Lengel commented that it has been a long process to get diesel emissions reduction technologies in the market and on vehicles, but that products on the market now achieve a 90% reduction from tailpipes emissions levels of 25 years ago. He described a time lag between the new MA DEP program approval and installation, with many school bus companies waiting until July and August to install retrofits due to bus availability. Scot said there is less talk about CNG recently, and he anticipates interest in CNG will rise again.

Environmental Defense Fund: Jana Holt reported that EDF received \$400,000 from EPA DERA and \$200,000 from MassDEP to form the Northeast Hybrid Truck Consortium. They are in the process of selecting fleets to receive the pass-through funding to purchase hybrids in New England. They expect fleets to place orders by mid-summer. They are also gearing up for the stimulus-bill round of DERA funding, within Region 1 and nationally. EDF is working to identify non-profit partners in each region to administer the grant and apply on behalf of a consortium, and are willing to help partners with the application process as needed. They are also reaching out to fleets both within Region 1 and nationally to create consortiums around the country. These can be municipalities, public fleets, private fleets, universities, etc. Those interested in purchasing hybrids through the program can go to www.edf.org/hybridtrucks for more information.

MIT: Steve Lanou said that one of MIT's biggest challenges is to figure out within grant timeframes what technology can go on what vehicles. He suggested that GB3 organize a session on *What to Expect From Technology* to give organizations a better understanding of what technologies will work, how they work, and how to interface efficiently with vendors. MIT found it helpful to gather as much information about the technologies on the front end before progressing through a grant approval process.

Electric City Cars: Paul Elwood introduced himself to the group and described the business he has just started in Belmont, Electric City Cars. This company will be selling small-sized, electric vehicles. Paul anticipates that these types of vehicles will be attractive to institutions and urban organizations.

Burke Oil: Andy Frongillo shared that Burke has installed a solar photovoltaic (PV) system that is working well. Ed Burke added that he is focusing on new capital, rather than retrofits, and that there are excellent new technologies in new vehicles. Ed also offered to provide GB3 members a tour of Burke Oil to see their new systems.

CBI: Kate Harvey said that CBI had closed out its EPA Healthy Communities Grant and City of Boston APCC grants. This work focused on construction vehicle emissions and collaborating

with Healthcare Without Harm and the Northeast Diesel Collaborative (NEDC). Outcomes included presenting at a clean hospitals conference in Boston; convening two information workshops on strategies for reducing diesel emissions at hospitals, schools, and universities in Providence, RI and Manchester, NH; and writing two new credits for idle reduction and retrofits that will be part of the Green Guide for Health Care (LEED for Health). As a result of the workshops, the City of Manchester, NH will be pursuing efforts to retrofit all of its municipal vehicles, several partners adopted construction bid specifications, and countless more will have access to the new credits under the GGHC.

Appendix 1: GB3 Working Group Meeting Attendees, March 3, 2009

Brian Beaulieu, Cummins Northeast
John Bolduc, City of Cambridge
Ed Burke, Burke Oil
Wayne Clark, Milton Cat
Paul Elwood, Electric City Cars LLC
Ona Ferguson, Consensus Building Institute
Andy Frongillo, Burke Oil
Rob Grant, Milton Cat
Jake Glickel, City of Boston
Kate Harvey, Consensus Building Institute
Halida Hatic, EPA
Jana Holt, Environmental Defense Fund
Jeff Jacobs, Caterpillar Emissions Solutions
Christine Kirby, MA Department of Environmental Protection
Steve Lanou, MIT
Scot Lengel, Cummins Northeast
Gary Rennie, MA Department of Environmental Protection
Cyndi Veit, EPA