



# LINCOLN PUBLIC SCHOOLS

BUCKNER M. CREEL  
ADMINISTRATOR FOR BUSINESS AND FINANCE

January 29, 2010

To: School Committee  
Mickey Brandmeyer  
From: Buckner Creel

Subject: Status Report – Clean Air for Kids initiative

**Background.** Members of the School Committee have expressed their concern several times over the past few years about the impacts of diesel bus engines on the Town environment generally, and, more specifically, on the air breathed by our students and faculty. The Administration shares these concerns, and looked for ways to reduce the impact of diesel emissions.

**Discussion.** We embarked on several approaches.

Five-minute rule. One way to reduce the impact of diesel emissions is to strictly enforce the Massachusetts DEP prohibition on operators idling diesel engines for more than five minutes. This stricter enforcement began more than two years ago through my conversations with the operations directors of Doherty's Garage, our transportation contractor for Lincoln bus routes, and Eastern Bus Company, provider of transportation for our Boston students. Both firms were very responsive and supportive of stricter rule enforcement, and cooperated by emphasizing the five-minute rule in their driver meetings and conversations.

Some on-the-spot corrections were necessary. By and large, schoolbus drivers are empathic and child-oriented, and the five-minute rule directly contradicted their desire to keep their bus warm for children when they board during the winter. Stephanie Brown and I emphasized this policy in our pre start-of-school meeting with all the drivers, and we have observed a very high degree of compliance this school year.

Community service learning. The five minute rule has become very visible throughout the Town. We were able to reinforce the benefits of this rule during the Community Service Learning Day held November 4, 2009. One of the breakout sessions was sponsored by the Lincoln Green Technology Committee, who focussed awareness of this issue through a discussion of the nature of the emissions produced by diesel engines. Responding to the five-minute rule focus, participants created posters for placement throughout the school and Town to reinforce the anti-idling theme.

MassCleanDiesel program. The five-minute rule improves air quality around the front of the Schools by reducing the build-up of emissions from the concentrated number of idling diesel engines. We sought a way to reduce the overall emissions throughout the entire Town during the morning and evening bus transport, not just during the pick-up period in the afternoon.

Attached is a Mass DEP brochure describing the MassCleanDiesel program. We learned of the program in late September, 2008, when the following announcement was circulated and the program declared "Open for Business":

"On June 12, 2008, Governor Deval Patrick announced the launch of MassCleanDiesel, the nation's first fully funded statewide program designed to reduce air pollution from school buses.

All eligible diesel-powered school buses will receive retrofits to keep engine fumes away from children on buses and reduce exhaust emissions to the air, at no expense to bus owners. The results: cleaner rides for kids and healthier air for everyone."

The diesel retrofit to be provided includes fitting a tailpipe diesel oxidation catalyst (DOC) device (catalytic converter) and an enhanced crankcase ventilation (CCV) filter to prevent toxic engine fumes from entering the passenger cabin. These retrofits cost several thousands of dollars, but are free to bus owners who apply for and are accepted into the MassCleanDiesel program.

The two buses provided by Eastern Bus are new, and came from the factory with the DOC and CCV technology installed. Doherty's provides seven buses under our contract; two are new enough to have come with the DOC and CCV technology installed, but the remainder were candidates for the retrofits. I discussed the program with Doherty's in late September 2008, and they applied in the following months and went onto a wait list after their buses were declared eligible.

The program got off to a slow start, and available resources were initially directed to school districts that owned their buses. Eventually, Dohertys worked its way up to the action level of the State wait list, had the retrofit kits installed, and reported to me on January 20, 2010 that the remaining five buses used on our contract were fitted with the emissions-reducing technology.

**Conclusions & Recommendations.** The Clean Air for Kids initiative is a classic example of a program with both a soft and a hard component. In response to expressed concerns from the School Committee and the larger Town population, we were able to put in place changes to operating procedures which began producing results immediately (the soft component) while we waited for the retrofit program to mature (the hard component). The Administration recommends that the School Committee authorize us to send letters of appreciation to both Doherty's Garage and Eastern Bus in recognition of their commitment to both components of the Clean Air for Kids initiative: the five-minute rule and reduced-emissions diesel buses.

With funding from the Massachusetts Executive Office of Transportation and the federal government, MassDEP is sponsoring the nation's first statewide program to reduce air pollution from school buses. The MASSCLEANDIESEL program will equip all eligible diesel-powered school buses with diesel retrofits at no expense to bus owners. The result? Reduced air pollution from buses that will mean cleaner rides to school for kids, and healthier air for everyone.



[www.mass.gov/dep](http://www.mass.gov/dep)

December 2007

The Massachusetts Department of Environmental Protection is the state agency responsible for ensuring clean air and water, the safe management of toxics and hazards, the recycling of solid and hazardous wastes, the timely cleanup of hazardous waste sites and spills, and the preservation of wetlands and coastal resources.

Commonwealth of Massachusetts, Deval Patrick, Governor

Commonwealth of Massachusetts,  
Timothy P. Murray, Lt. Governor

Executive Office of Energy and Environmental Affairs,  
Ian A. Bowles, Secretary

Executive Office of Transportation, Bernard Cohen, Secretary

Department of Environmental Protection,  
Laurie Burt, Commissioner



The Commonwealth's  
school buses are about  
to run much cleaner!

**MASSCLEANDIESEL**





## Doing the Right Thing

Taking the bus to school is by far the safest choice for hundreds of thousands of Massachusetts children every year. However, school buses, like all diesel-powered vehicles, pollute the air with harmful gases and particles. The good news is that buses' environmental impacts can be lessened. Installing diesel retrofits on buses can decrease the amount of harmful pollution generated, helping to reduce asthma attacks, respiratory problems, and other diseases associated with diesel exhaust for everyone, especially children.

### What Are "Diesel Retrofits"?

A diesel retrofit is essentially an enhanced exhaust filtering system that reduces pollution released from tailpipes of school buses and other diesel-powered vehicles. This equipment is safe and proven, and more than 500,000 vehicles worldwide have been retrofitted with this technology already. The retrofits take only a few hours to install, but they reduce pollution for many years.



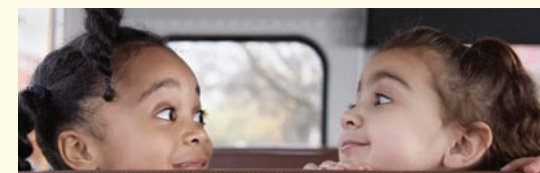
## MASSCLEANDIESEL Delivers

By 2010, the MASSCLEANDIESEL program will pay up to \$16.5 million to install diesel retrofits on several thousand Massachusetts school buses. These retrofits will provide big benefits for your community:

- **Healthier rides.** Diesel retrofits help prevent toxic engine fumes from entering buses and provide children and school bus drivers with healthier air to breathe while riding to and from school. This is especially important for children, whose developing lungs are particularly susceptible to diesel exhaust's damaging health effects.
- **Cleaner outdoor air.** School buses that receive diesel retrofits produce less tailpipe exhaust, and will release less smoke, odorous fumes, and pollutants that form smog. Every retrofitted school bus will help make the air a little bit cleaner.
- **Uncompromised vehicle performance.** Diesel retrofits have a proven track record of reducing pollution in vehicle exhaust. Since diesel retrofits became available, they have worked well for many types of vehicles, including school buses, without compromising vehicle performance or raising difficult engine maintenance issues.
- **Cost-effective results.** The MASSCLEANDIESEL program is using federal and state funds to pay for the retrofits, at no charge to bus owners. To participate in the program, school bus owners will need to enroll, obtain estimates from retrofit vendors, and arrange for retrofit installations. MassDEP will reimburse the retrofit vendor directly, provided that installations meet all terms of the program.

## Enroll Now or Pay Later!

Retrofitting your school buses is currently optional, but may be required in the future. Join the MASSCLEANDIESEL program while funding is available! After the program ends (currently planned for 2010), school bus owners will likely have to pay for their own diesel retrofits, at a cost of several thousand dollars per vehicle.



### For More Information

- Learn more about retrofitting diesel school buses and enroll in the MASSCLEANDIESEL program by visiting our Web site:  
[www.mass.gov/dep/air/masscleandiesel](http://www.mass.gov/dep/air/masscleandiesel)
- Join our mailing list to receive important announcements. E-mail your contact information to [massclean.diesel@state.ma.us](mailto:massclean.diesel@state.ma.us) or call the help line at (617) 292-5809.