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TESTIMONY OF ENVIRONMENT NORTHEAST

On Proposed Bill No. 433: An Act Creating a Diesel Emissions Reduction Grant Program

Public Hearing before the Environment Committee

February 27, 2008

Jessie Stratton, Director of Government Relations
Alice Liddell, Policy Analyst
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Representative Roy, Senator Meyer and members of the Environment Committee, thank you for the opportunity to testify today in support of Proposed Bill 433: An Act Creating a Diesel Emissions Reduction Grant Program. My name is Jamie Howland and I am a policy analyst with Environment Northeast (ENE). My colleagues Jessie Stratton and Alice Liddell are not able to be here today so I am testifying on their behalf.

ENE is a nonprofit research and advocacy organization focusing on the Northeastern United States and Eastern Canada with offices in Connecticut, Massachusetts, Rhode Island, Maine and Prince Edward Island, Canada. Our mission is to address large-scale environmental challenges that threaten regional ecosystems, human health, or the management of significant natural resources. We use policy analysis, collaborative problem solving, and advocacy to advance the environmental and economic sustainability of the region.

ENE has been working in Connecticut to reduce diesel emissions from school buses, transit buses and construction equipment for the last few years. Last year, the Connecticut Legislature signaled its commitment to reducing diesel emissions in the state by appropriating \$10 million from the general fund to retrofit all full-size school buses in the state. In addition, \$5 million in the bonding package is authorized for retrofitting the state's transit buses. These actions constitute a major commitment to cleaning up the state's fleet of existing diesel vehicles. Retrofitting these buses with pollution control equipment will reduce the serious negative health and economic impacts of diesel emissions on our most vulnerable population.

ENE is supportive of HB 433. We believe that state-funded construction activities should use only diesel construction equipment that has been retrofit with the most effective available pollution control devices to reduce particulate matter pollution. Engines from construction equipment in Connecticut were estimated to emit 694 tons of PM2.5 in 2002, the most recent year for which the state has data. This amount represents approximately 39% of total PM2.5 emissions from mobile source diesel engines (total = 1,796 tons). PM2.5 emissions from construction equipment are

significantly higher than emissions from on-road heavy-duty diesel vehicles (total = 563 tons), even though there are far fewer operating units in the state than on-road units.¹

Emissions per engine from construction equipment are significantly higher than on-road vehicles in part because EPA only began regulating emissions from off-road engines in 1996 and standards have continued to be considerably less stringent than for diesel highway trucks and buses.

Because construction engines are concentrated at job sites, sometimes for long periods of time, they can create significant pollution hot-spots. The cumulative pollution burden from these engines is of particular concern for workers on the job site and in adjacent or down-wind areas, especially if the job-site is located in an area already overburdened by air pollution from other sources. Each year, diesel pollution in Connecticut is associated with more than 200 premature deaths, 300 non-fatal heart attacks, 4,000 asthma attacks, 6,000 respiratory symptoms in children, and 24,000 work loss days. Reducing diesel emissions will improve the state's air quality and reduce health damages which currently cost Connecticut's economy an estimated \$1.3 billion annually.²

In summary, construction engines are particularly good targets for diesel emission clean-up efforts because

1. They are much dirtier than on-road engines;
2. They typically last longer than on-road engines;
3. Federal standards requiring the cleanest available engine technology do not apply to non-road engines until 2011-2012;
4. They are concentrated at job-sites, often in overburdened areas, and can create pollution hot spots.

Since 2001, the Connecticut Department of Transportation (ConnDOT) has had a Connecticut Clean Air Construction Bid Specification in place requiring contractors to reduce particulate matter emissions from construction equipment used on the I-95 Corridor Improvement Project through New Haven, "the Q-bridge Project." With the amendments agreed upon at the June 8th, 2005 meeting of the South Central Regional Council of Governments, the bid specification now contains the following baseline requirements:

- All equipment (including non-road) shall use on-road grade fuel, which switches to 15 PPM sulfur content in the second half of 2006;
- All equipment 60 HP and larger shall reduce particulate matter emissions by at least 20% by installing emission control retrofits or using clean fuels;

Reporting requirements and compliance provisions are included in the bid specification, as are certain exemptions.

ConnDOT's seven years of experience with the existing bid specification has provided a valuable base on which to build a comprehensive emission reduction policy for publicly-funded construction vehicles. Advances in technology also mean that pollution control devices which reduce PM2.5 by up to 90% can more easily be installed on certain construction equipment, and we support more

¹ MANE-VU 2002 Connecticut Emission Inventory.

² Clean Air Task Force, Diesel and Health in America: The Lingering Threat (Feb. 2005).

<http://www.catf.us/projects/diesel/>

stringent pollution control equipment be installed wherever possible to better protect human health and the environment.

This proposed legislation also complements existing statute regarding state funded construction projects. Under Section (1)(b)(4) of Special Act No. 05-07, the Department of Environmental Protection (DEP) is required to develop “an implementation strategy, to be phased in not later than July 1, 2006, on projects valued at more than five million dollars, to maximize particulate matter emissions reductions from construction equipment servicing state construction projects, and an estimate regarding the cost and benefits to the state or municipalities of implementing such strategy.”

As a result, ENE hopes that the legislature will establish a grant program to reduce diesel emissions from the retrofit, rebuilding or re-powering of state-funded construction equipment where there are significant PM2.5 emission reduction opportunities, provided that the equipment remains in Connecticut after it has been retrofitted, rebuilt or re-powered for a minimum of number of years.

ENE respectfully suggests that proposed bill 433 be amended to include the following modest changes:

Section 1:

1. The Department of Environmental Protection (DEP) should have a method with which to prioritize construction applications. We suggest that at a minimum, the language be modified so that Section 1 c) 3) regarding “a method to prioritize applications” be expanded to say *“including but not limited to consideration of a) number of hours equipment is likely to operate, b) number of years equipment is likely to remain in use in order to achieve the greatest level of emissions reduction for dollars expended.”*
2. The guidelines from DEP must be developed through a process that requires DEP to solicit and consider input from stakeholders. This could include the possibility of establishing an advisory board comprising at least one representative from each of the following: construction industry, health, business, environmental advocates.
3. There should be clear criteria by which the projects will be selected.
4. DEP should establish a record-keeping procedure for maintaining up-to-date information regarding construction equipment used on state-funded projects.

Sections 2 and 3:

5. Some small fraction of the money appropriated each year should be used for demonstration and pilot projects.

Installing devices such as diesel particulate filters on construction equipment is a win-win situation. Reducing diesel exhaust will better protect human health. It will also reduce black carbon, a component of diesel exhaust which is a powerful global warming pollution and thus will help the state achieve its Climate Change Action Plan goals.

Thank you for the opportunity to testify and we look forward to helping the committee with any assistance on this important bill to provide grants to clean up state funded construction projects.

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