



1660 L Street, NW ❖ Suite 1100 ❖ Washington, DC 20036 ❖ tel: 202.296.4797 ❖ fax: 202.331.1388

**Contact:** 

Bruce Bertelsen tel: 202/296-4797

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## MECA APPLAUDS U.S. EPA VOLUNTARY HEAVY-DUTY DIESEL RETROFIT/REBUILD PROGRAM INITIATIVE

Washington, DC -- The Manufacturers of Emission Controls Association (MECA) today praised the U.S. Environmental Protection Agency (EPA) for undertaking a comprehensive, innovative, voluntary heavy-duty diesel engine emission control retrofit/rebuild program. As part of the program, EPA has established a process under which the emission reduction capabilities of retrofit control technologies and engine rebuild kits can be quantified. This allows states and local air quality agencies that implement voluntary retrofit/rebuild programs employing those technologies to receive SIP emission reduction credits. The Northeastern States for Coordinated Air Use Management (NESCAUM) played a major role in developing emission reduction verification process, and MECA and other interested parties cooperated with EPA and NESCAUM in designing the program.

"A wide variety of diesel emission control retrofit and engine rebuild technologies are commercially available today that can provide significant emission reductions from existing onroad and off-road diesel engines. EPA's program provides the means for quantifying the emission reduction benefits of those technologies, creates incentives for state and local governments, as well as other interested parties, to promote the voluntary clean-up of existing diesel engines, and provides guidance on how to implement voluntary retrofit programs," stated MECA Executive Director Bruce Bertelsen.

EPA recently noted that by the year 2010 heavy-duty diesel engines will account for 53 percent of mobile source oxides of nitrogen (NOx) emissions and over 70 percent of the mobile source inventory for inhalable particulate (PM10). Diesel exhaust particulate matter was also recently identified as a toxic air contaminant by the California Air Resources Board. Older, higher polluting diesel engines make up a significant portion of both the NOx and PM emission inventories from heavy-duty diesel trucks, buses, and off-road equipment like those used in construction. Cleaning up emissions from these older engines could make a meaningful contribution in reducing diesel pollution.

## **Manufacturers of Emission Controls Association**

Available retrofit technologies to control diesel PM and hydrocarbon (HC) emissions include oxidation catalysts and diesel particulate filters, as well as engine upgrades and modifications including electrically-powered turbo-chargers, ceramic engine coatings, and specially designed cam shafts and fuel-borne catalysts used in combination with exhaust controls. PM retrofit technologies have demonstrated PM reductions ranging from 25 percent to over 90 percent depending on the technology selected and the engine involved. For NOx control, selective catalytic reduction (SCR) technology is now being retrofitted on select diesel engines such as marine engines and locomotives, and can achieve 75 to 90 percent NOx reductions. SCR systems also have demonstrated the capability of reducing HC by up to 90 percent and PM by up to 50 percent. Also, lean-NOx catalysts are now beginning to find use in retrofit applications. NOx reductions ranging from 10 to 40 percent have been achieved, along with reductions in PM and HC emissions. Additionally, engine timing can be adjusted to reduce NOx emissions and the PM control technologies mentioned above can be installed to reduce any off-setting PM emission increases that may occur as a result of adjusting the engine timing.

EPA's voluntary retrofit program builds on the highly successful urban bus retrofit/rebuild program mandated by the 1990 Clean Air Act Amendments. Under that program, over 10,000 urban buses have been retrofitted with PM exhaust control technology. Successful retrofit programs have also been, or are being, implemented in Sweden, Great Britain, France, Germany, Denmark, Finland, Taiwan, Korea, and elsewhere, and interest is rapidly spreading to other countries throughout the world.

"More and more countries are turning to diesel retrofit programs to help address serious air quality problems. Retrofit programs will provide significant reductions of harmful pollutants and create new market opportunities for U.S. emission control technology companies. EPA's voluntary retrofit initiative will enable retrofit technologies to showcase what can be achieved and no doubt accelerate interest in diesel engine retrofits in other parts of the world," Bertelsen noted.

For more information about EPA's voluntary heavy-duty diesel retrofit/rebuild program, go to EPA's Transportation Air Quality (TRAQ) Center Internet web site at <a href="https://www.epa.gov/oms/transp/vmweb/vmhvydty.htm">www.epa.gov/oms/transp/vmweb/vmhvydty.htm</a>. Also, MECA recently issued a report entitled <a href="mailto:Emission Control Retrofit of Diesel-Fueled Vehicles">Emission Control Retrofit of Diesel-Fueled Vehicles</a> which discusses the performance capabilities and operating experience with diesel engine emission control retrofits in the U.S. and worldwide. The report is available on MECA's Internet web site at <a href="https://www.meca.org">www.meca.org</a> or by calling MECA's Sylvia Scott at 202/296-4797.

Founded in 1976, MECA is a national association of companies which manufacture a variety of mobile source emission control equipment for automobiles, trucks, buses, and off-road vehicles and engines, as well as catalytic controls for select stationary sources.

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