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**Oral Comments Presented by the  
Manufacturers of Emission Controls Association (MECA)  
In Response to New York City Department of Environmental Protection  
Proposed Rules Concerning the Use of Ultra-Low Sulfur Fuel  
and Emission Control Technology  
In Non-Road Vehicles Used in City Construction**

**July 12, 2004**

My name is Dr. Joseph Kubsh, and I am the Deputy Director of the Manufacturers of Emission Control Association (MECA). I am pleased to be able to offer our comments today on New York City's Department of Environmental Protection proposed rules concerning the use of ultra-low sulfur fuel and emission control technology in non-road vehicles used in construction projects in New York City.

MECA is a non-profit association of the world's leading manufacturers of mobile source emission control technologies. MECA member companies have more than 30 years of experience and a proven track record in developing and commercializing exhaust emission control technologies. A number of our member companies have extensive experience in the development, manufacture, and commercial application of emission control technologies for diesel engines, including engines used in non-road applications. These companies are committed to make the necessary investments to ensure that emission control technology is available to help clean-up emissions from diesel-powered vehicles. Our members experience includes the development of retrofit emission control technologies that can be used to obtain significant reductions in particulate matter (PM) and nitrogen oxide emissions from existing on-road and non-road diesel-powered vehicles. These retrofit technologies include emulsified diesel fuel, diesel oxidation catalysts, diesel particulate filters, closed crankcase filters, lean NO<sub>x</sub> catalysts, low-pressure exhaust gas recirculation systems, selective catalytic reduction systems, and technology solutions that combine one or more of the technology options I have already mentioned. MECA detailed some of these retrofit technology options in our comments in late September 2003 written in support of New York City's then proposed law covering construction equipment.

MECA would first like to commend New York City and Mayor Bloomberg for enacting Local Law 77 in late December 2003. Requiring the use of ultra-low sulfur diesel fuel and best available technology (BAT) by non-road vehicles used in the city's construction projects will

result in significant improvements in air quality for the workers involved in future projects and for the citizens of New York City. This groundbreaking law will also serve as a model for other cities and states to use in developing similar mandatory requirements for the use of ultra-low sulfur diesel fuel and available retrofit emission control technologies in construction projects across the United States.

The proposed rule that is open for comment today provides an important first step in defining best available technology for non-road vehicles used in New York City construction projects. MECA supports the provisions of Local Law 77 that seek to make use of technologies by New York City whose emission performance has been verified by either the California Air Resources Board or United States Environmental Protection Agency verification programs. These verification procedures define the emission reduction performance and ensure the durability of retrofit technologies options. Our members have already verified a number of retrofit technology options using these verification procedures. In many cases this first wave of verified products has focused on existing on-road diesel engine applications and these verified technologies are already being successfully used in transit fleets, school buses, and refuse hauler fleets in many regions of the United States including here in New York City. A few retrofit options for non-road applications have also been verified and, MECA expects additional technology options for non-road diesel engines to be verified in the near future. These options will include technologies that reduce particulate matter (PM), NO<sub>x</sub>, or both of these pollutants with a single system option. In some cases these available or soon to be verified options combine and integrate technologies to maximize their effectiveness on PM (e.g., combining a diesel oxidation catalyst with a closed crankcase filter) or reduce PM and NO<sub>x</sub> emissions simultaneously (e.g., lean NO<sub>x</sub> catalyst + diesel particulate filter or low-pressure EGR + diesel particulate filter). Local Rule 77 also provides the Commissioner with some flexibility to add unverified technologies to the BAT list provided they are appropriate and effective, although no specific process is identified for the determination of unverified technologies. MECA supports defining a determination process that is inclusive of all available, effective options in order to maximize options for effectively reducing emissions from in-use non-road vehicles.

The dynamic nature of retrofit technology development, verification, and real-world experience, especially with respect to non-road diesel engines, speaks to the need for a best available technology determination process that needs to be frequently reviewed and updated. Rule 77 calls for this list of best available technologies to be updated at least once every six months. MECA supports this frequent determination review process and recommends that this review process be also specifically included in the proposed rule under consideration today.

The wide range of existing non-road diesel engines and equipment and, the variable use patterns that these vehicles encounter in construction projects will necessitate a variety of retrofit BAT technology determinations. The proposed rule currently contains the first Specific Determination and General Determinations specifying BAT for non-road engines rated 50 to 200 horsepower and for non-road engines rated above 200 horsepower. The proposed rule also contains Alternate Determinations that specify BAT as the use of diesel oxidation catalysts in cases where the determined BAT is not technologically compatible and, designating as BAT, diesel particulate filters used with ultra-low sulfur diesel fuel designed for a given application but not yet verified. MECA supports this first wave of BAT determinations but recommends that

these BAT options be expanded as part of the semi-annual review process as additional technology options are verified or determined to be appropriate by the Commissioner. In this way construction equipment fleet owners and other end users will have some flexibility to select from technology options that are best suited to their vehicles and usage patterns. The health of the citizens of New York City will in turn benefit from the use of the cleaner vehicles in construction projects throughout the city. Mandating the use of ultra-low sulfur fuel in these projects will also ensure the use of retrofit options that have been designed for maximum effectiveness with respect to reducing particulate matter and NOx emissions. MECA supports this mandatory requirement for ultra-low sulfur diesel fuel usage in New York City construction projects.

With respect to specific BAT determinations, MECA would like to remind the Department that retrofit emission technology options are being offered directly by engine manufacturers and by other companies that do not produce engines, including manufacturers of emission controls. Vehicle owners may have the option of purchasing functionally equivalent retrofit options (e.g., a diesel oxidation catalyst or a diesel particulate filter) from an engine manufacturer or another supplier. It is important for owners and the Department of Environmental Protection to know that engine manufacturers do not have the legal authority to “approve” the use of specific retrofit technologies for use on their in-use engines. MECA would recommend that specific BAT determinations specify the technology type and its performance capabilities without indicating whether the technology has been approved by a given engine manufacturer. Lists of vendors for BAT options should be developed as a part of the BAT determination process in order to facilitate contacts between equipment owners and technology providers.

Vehicle maintenance is also an important aspect of any successful retrofit program. Proper engine/equipment maintenance helps to ensure that retrofit emission control technologies can operate at its peak performance levels over extended years of operation. MECA would ask the Department to consider appropriate measures to encourage equipment owners and operators to perform required maintenance on their equipment.

In conclusion, MECA again would like to congratulate the Mayor, the New York City Council, and the New York City Department of Environmental Protection for their leadership in enacting Local Rule 77. Through this rule the City has made a firm commitment to public health for its citizens and established a model program for other jurisdictions to emulate. MECA supports the mandatory use of ultra-low sulfur diesel fuel in city construction projects. MECA also supports frequent BAT determination reviews and expansion of specific and general BAT options to provide equipment owners with maximum flexibility in using the cleanest available equipment in construction projects throughout New York City. Our industry stands ready to develop and deliver best available retrofit technology for achieving significant reductions in particulate matter and NOx emissions from existing non-road vehicles.