

**Comments of the Manufacturers of Emission Controls Association
on the California Air Resources Board's Proposed Amendments to the Airborne Toxic
Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRUs)
and TRU Generator Sets, and Facilities where TRUs Operate**

November 17, 2010

The Manufacturers of Emission Controls Association (MECA) is pleased to provide comments in response to the California Air Resources Board's (ARB) proposed amendments to the Airborne Toxic Control Measure (ATCM) for transport refrigeration units (TRUs). We commend the agency for its continuing efforts to implement effective emission control measures for major sources of air pollution such as this category of engines.

MECA is a non-profit association made up of the world's leading manufacturers of emission control technology for mobile source applications and stationary internal combustion engines. A number of our members have extensive experience in the development, manufacture, and commercial application of emission control technologies for diesel engines, including in-use diesel engines used in TRU applications.

Discussion

MECA generally supports ARB's proposed amendments to the TRU ATCM in regards to changing the in-use performance standards for model year (MY) 2003 and certain 2004 TRU engines. We agree that the proposed amendments will reduce the cost of complying with the ATCM while still providing health protective emission limits for this subset of TRU engines. As noted by ARB in its Staff Report, the proposed amendments would add an interim retrofit option for this subset of TRU engines due to the current limited availability of verified Level 3 retrofit devices for these engines. Specifically, owners could retrofit MY 2003 and some 2004 TRUs with Level 2 (50% PM control) filters now for compliance with the December 2010 Low-Emission TRU requirements (December 2011 for some 2004 TRUs). TRUs that comply by using Level 2 retrofit devices would need to be upgraded to meet 85% emission control (Ultra-Low Emission TRU requirements) via retrofit or replacement in seven years.

In discussions with MECA member companies, we believe there is a sufficient supply of Level 2 filters, plus capacity at dealers and installers, to meet the demand for these devices over the next few months. One MECA member said they currently have over 1,500 LETRU units in their inventory available for immediate delivery. And, based on the expectation of accelerated ordering, they have increased their collective production capacity to 1,000 units per month. This company has over 3,500 units in the field, which have accumulated an estimated one million operating hours, and has developed a network of at least 40 dealers in California who sell, install, and service LETRU retrofit devices. Overall, since 2008, LETRU retrofits have been introduced into the California marketplace in a timely manner with minimal disruption to fleet schedules and the transport of goods.

In addition to the supply of LETRU VDECS, retrofit manufacturers have also been developing new ULETRU products. Currently, there is only one Level 3 VDECS available for TRU engines (conditionally verified). The same MECA member noted above currently has a retrofit device that can meet ULTETRU requirements available for immediate field trial and will complete verification once they have determined that the proposed ARB TRU regulation is stable and will be enforced. These units are extensions of the current LETRU designs, with only the density of the filter media changing in order to achieve the higher efficiency required for

ULETRU performance. They will incorporate all of the durability improvements identified during the LETRU program. In addition, there will be an upgrade program available that will allow LETRU operators to return units for remanufacture to the ULETRU level at approximately 50% of the cost of a new unit.

In supporting the proposed amendments, MECA believes any further delays would be unnecessary and counterproductive to ARB's mission of reducing particulate matter emissions to protect public health and the environment. MECA member companies have invested and continue to invest significant resources in developing and commercializing emission control technologies for the whole range of in-use diesel engines currently operating in California and the rest of the U.S. Similar to the situation of the aforementioned MECA member regarding their development of a Level 3 VDECS for TRU engines, technology providers rely on regulatory stability in order to continue making the necessary investments to meet the commercial needs in time for implementation. However, delays in the implementation of emission control requirements will only cause retrofit manufacturers to be extremely cautious in making these investments. Furthermore, market adoption by fleets is heavily influenced by the regulatory deadlines and few if any operators elect to comply early. As related to MECA by the aforementioned MECA member, LETRU systems were available in mid-2008; however, minimal compliance activity was experienced until 60 days prior to the actual compliance date.

MECA member companies are committed to developing and commercializing diesel retrofit technologies that cover a broad range of in-use engines and applications, including in-use diesel engines used in TRU applications. The success of ARB's efforts, however, to clean up these existing diesel vehicles and equipment operating within the state depends on the agency having adequate staff and support to manage its verification program for diesel emission control strategies. Going forward, we urge the ARB Board to continue to provide sufficient resources to the verification program to enable the agency to maintain a retrofit technology portfolio that provides end-users with a variety of proven, cost-effective retrofit options from a number of suppliers.

Given the effectiveness of diesel particulate filter systems in reducing PM emissions, ARB should consider maximizing the use of these technologies wherever possible to help the agency meet its regulatory obligations (e.g., the ATCMs under ARB's Diesel Risk Reduction Plan, as well as ARB's State Strategy for meeting California's State Implementation Plan).

(Note: In response to the recent proposed amendments to ARB's truck and bus regulation and off-road regulation, as well as to other ATCMs such as the TRU regulation, MECA intends to make recommendations to ARB seeking changes to the agency's current verification and in-use compliance program to provide economic relief to retrofit device manufacturers.)

Conclusion

MECA generally supports ARB's proposed amendments to the Airborne Toxic Control Measure for transport refrigeration units. However, MECA advises ARB to fully take into consideration the feasibility, costs, and emission impacts of the changes to this ATCM, as well as changes to other ATCMs. MECA and its member companies look forward to continuing to work with ARB and its stakeholders in implementing the control measures under the agency's Diesel Risk Reduction Plan.

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