



October 19, 2011

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento CA 95814
Submitted electronically to: <http://www.arb.ca.gov/lispub/comm/bclist.php>

RE: 2011 Amendments for the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU)

Dear Chairman Nichols and Members of the Board:

The American Trucking Associations (ATA) is pleased to submit the following comments on the California Air Resources Board's (CARB) 2011 Amendments for the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU).¹

ATA members support the goal of clean air and continue to help improve the nation's air quality by investing in new equipment which complies with stringent engine emissions standards. These investments, which include trucks and refrigerated trailers, help to lower emissions at a time when capital is limited and revenues are low.

While the amendments proposed by staff seek to improve compliance, restore fairness and clarify existing requirements; the use of a TRU emissions inventory that is based on operating modes that TRUs never use raises serious concerns about the validity of CARB's analysis. This issue was mentioned in the October 2003 staff report and, more recently, again brought to CARB's attention by Sierra Research.² Based on the 2003 staff report and the limited data currently available to Sierra Research, it appears the TRU PM inventory is overstated by as much as 60%.

¹ ATA is a united federation of motor carriers, state trucking associations, and national trucking conferences created to promote and protect the interests of the trucking industry. Its membership includes more than 2,000 trucking companies and industry suppliers of equipment and services. Directly and through its affiliated organizations, ATA encompasses over 37,000 companies and every type and class of motor carrier operation.

² California Air Resources Board, ATCM for In-Use Diesel-Fueled TRUs, p. VII-6 (Revised, October 28, 2003); Sierra Research, TRU inventory analysis (October 2011).

Using emission factors reflecting operating modes TRUs never use not only affects the emissions inventory but also the health assessments. It appears the data needed to make this adjustment to the inventory is available as part of CARB's engine certification process. Given the magnitude of this issue, ATA urges the Board to direct staff to adjust the emissions inventory to be more representative of the way TRUs actually operate. ATA also requests a minimum two-year extension to the compliance requirements to allow time for new TRU engines meeting the ULETRU standard to become available in 2013.

The following discussion points should be considered when evaluating this request.

(1) The emissions inventory needs to be adjusted

As detailed in the analysis prepared by Sierra Research, the PM emissions inventory is overstated and needs to be adjusted to more accurately reflect TRU operations. The necessary corrections include:

- Adjusting the emission factors to reflect the 4-mode test cycle which is more representative of the way TRU engines actually operate than the currently used 8-mode test cycle, which includes modes of operation that TRUs never use (e.g. idle at no-load, 10 percent and 100 percent of rated torque at rate speed, and 100 percent of rated torque at intermediate speed).³ The amount of PM emission factor reduction ranges from 25 percent to 60 percent, depending on engine model.
- Revising the deterioration calculations to account for engine rebuilds at roughly 3,000 hours for less than 25 horsepower engines and 5,000 hours for 25 – 50 horsepower engines.
- Collecting actual activity data rather than the 2006 facility surveys which are not publicly available for review, do not have data for individual TRUs, and do not differentiate between truck and trailer TRUs.

(2) Compliance costs are significantly higher than projected.

The revised compliance cost estimate of \$638 million is 4 to 7 times higher than the of \$87 - \$156 million figure used when the regulation was initially adopted.⁴ This is mainly attributed to the combined effects of higher costs in meeting the compliance requirements and greater numbers of TRUs affected. A two-year extension to the compliance requirements will still meet the emission reduction targets of the regulation while a three-year extension, because of the issues associated with the emissions inventory, is likely to as well.⁵ According to the staff report, a two-year extension of the compliance requirements is estimated to reduce compliance cost by \$430 million while a three-year extension reduces these costs by \$530 million.⁶

³ California Air Resources Board, ATCM for In-Use Diesel-Fueled TRUs, p. VIII-1 (Revised, October 28, 2003).

⁴ Ibid., p. VII-6.

⁵ California Air Resources Board, 2011 Amendments for the ATCM for In-Use Diesel-Fueled TRUs, p. C-84 (August 2011).

⁶ Ibid., p. V-11.

(3) Cost-effectiveness is higher than other regulations.

The revised PM cost-effectiveness of the TRU regulation is roughly double what was approved for either the Truck and Bus or Off-Road regulations. In other words, for each dollar spent on TRU compliance you get half the PM emissions reductions of these other regulations. Once the adjustments are made to the emission inventory, the regulation becomes even less cost effective.

(4) Compliance solutions are limited.

For the vast majority of TRU operators, there is currently no “one and done” compliance solution. Retrofits, which were previously touted as the most likely in-use compliance approach, have, for the most part, not been able to meet operational demands.⁷ With new ULETRU compliance requirements scheduled to take effect this year, retrofit options are currently limited to one system which requires the refrigeration system to shutdown during filter regeneration (which can be an issue when transporting perishable goods). Carriers have expressed dissatisfaction with retrofits due to maintenance and operational issues as well as increased fuel costs. As a result, compliance is being achieved primarily through engine repowers or TRU replacements. Both of these options have result in significantly higher compliance costs which are expected to increase even more when TRU engines meeting the Tier 4 final emissions standards (or ULETRU compliant) become available in 2013.

ATA appreciates the opportunity to comment on the proposed TRU amendments and urges the Board to adjust the emissions inventory and provide a minimum two-year extension of the compliance requirements to allow time for new TRU engines meeting the ULETRU standard to become available. If you have questions regarding these comments, please contact me at either (916) 300-3161 or at mtunnell@trucking.org.

Sincerely,



Michael Tunnell
Director, Environmental Affairs
American Trucking Associations

⁷ California Air Resources Board, ATCM for In-Use Diesel-Fueled TRUs, p. VIII-14 (Revised, October 28, 2003).