California Environmental Protection Agency

Air Resources Board

Final Statement of Reasons for Rulemaking

Including Summary of Comments and Agency Responses

PROPOSED AMENDMENTS TO THE AIRBORNE TOXIC CONTROL MEASURE FOR IN-USE DIESEL-FUELED TRANSPORT REFRIGERATION UNITS (TRU) AND TRU GENERATOR SETS, AND FACILITIES WHERE TRUs OPERATE

Public Hearing Date: November 18, 2010
Agenda Item No.: 10-10-6

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State of California
AIR RESOURCES BOARD

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I. GENERAL

In this rulemaking, the Air Resources Board (ARB or Board) adopted amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate (TRU ATCM), title 13 California Code of Regulations (CCR), section 2477. These changes are needed because they address compliance requirements that, per the originally-adopted TRU ATCM, became effective at the end of 2010. There are additional issues related to the TRU ATCM that will be addressed during a later rulemaking.

On September 29, 2010, ARB published a Notice for a November 18, 2010, public hearing to consider the amendments to the TRU ATCM. The Initial Statement of Reasons (Staff Report) for the proposed amendments to the TRU ATCM was also made available for public review and comment starting on September 29, 2010. The Staff Report contains a description of the purpose and necessity for the amendments to the regulation. The text of the amendments was included as Appendix A of the Staff Report. These documents were posted on ARB's Internet website for the rulemaking at: http://www.arb.ca.gov/regact/2010/tru2010/tru2010.htm. The Notice and Staff Report are incorporated by reference herein.

Three amendments were considered and adopted by the Board:

1. The in-use performance standard for model year (MY) 2003 TRU engines in the 25 hp and greater category and MY 2003 and MY 2004 TRU engines in the less than 25 hp category were changed to allow TRU owners to comply by either meeting the ultra-low-emission TRU (ULETRU) in-use performance standard or, as an option, the less stringent low-emission TRU (LETRU) in-use standard. The

initial compliance deadlines for MYs 2003 and 2004 TRU engines are December 31, 2010 and December 31, 2011, respectively. The proposed amendments would also require that all MY 2003 and MY 2004 engines that initially comply by meeting the LETRU in-use standard must subsequently meet the ULETRU standard seven years after the initial LETRU compliance date (i.e., 2017 or 2018).

2. Requirements for "flexibility" engines used in TRUs by original equipment manufacturers (OEM) under the federal Transitional Program for Equipment Manufacturers and California's equipment manufacturer flexibility program (title 13 CCR, section 2423(d)) were clarified. Flexibility engines are new engines that are allowed under State and federal law to be certified to a lower emission standard than is otherwise in effect for new engines at the time of manufacture.[1] The amendments clarify that the operational life of flexibility engines installed before the effective date of these amendments is seven years from the year of engine manufacture. Flexibility engines installed after the effective date of the amendments would have a shorter operational life under the amendments, based on the effective model year, the last year that a flexibility engine's prior-tier emission standard was in effect.

3. New reporting requirements for TRU original equipment manufacturers were added, which require the filing of periodic reports that include unit and engine data for coming production periods and sales information for previous years and reporting periods going forward.

On November 18, 2010, the Board conducted a public hearing and received oral and written comments. At the conclusion of the hearing, the Board adopted Resolution 10-39 which approved the proposed amendments without modification.

Fiscal Impacts. The Executive Officer has determined that this regulatory action will not impose a mandate on local agencies or school districts or otherwise create costs to any federal, state, or local agencies. Rather, the regulation will result in cost savings for those public agencies that own affected TRU engines. The Executive Officer also has determined that the amendments will have no adverse impact on business competiveness, employment, business creation, elimination, or expansion. The proposed regulatory action may result in the creation of jobs or businesses, or expansion of businesses that manufacture, market, install or maintain the diesel emissions control strategies needed to comply with the LETRU in-use performance standard. Further discussion of the economic impacts of the amendments can be found in Chapter V of the Staff Report.

Consideration of Alternatives. The regulatory amendments in this rulemaking were the result of extensive discussions involving ARB, engine manufacturers, TRU manufacturers, and key stakeholders. A discussion of alternatives to the amendments

[1] Title 40 Code of Federal Regulations (CFR) § 89.102, 40 CFR §1039.625, 40 CFR §1068.265, and title 13 CCR § 2423(d) (CFR, 2010a; CFR, 2010b; CFR, 2010c; CCR, 2010)).

as proposed is found in Chapter II of the Staff Report. These included retaining the existing provisions (a "no action" alternative); delaying the in-use compliance date for MY 2003 engines by one year; and only allowing a one-year adjustment for "flexibility" engines.

For the reasons set forth in the Staff Report, in staff's comments and responses at the hearings, and in the FSOR, the Board has determined that none of the alternatives considered by the agency or that have otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board.

II. SUMMARY OF PUBLIC COMMENTS AND AGENCY RESPONSES

A. Written Comments Received During the 45-Day Public Comment Period and the Public Hearing

The Board received written comments during the formal 45-day rulemaking comment period, which began with the notice publication on September 29, 2010, and ended with written comments submitted at the Board hearing on November 18, 2010. Persons submitting written comments during the 45-day public comment period and at the public hearing are listed in Table 1. Following the list are summaries of each comment made regarding the specific regulatory action proposed as well as agency responses. Each response includes an explanation of either any changes made to accommodate the comment or the reasons for making no change.

Table 1. List of Individuals and Businesses Submitting Written Comments Received During the 45-day Comment Period and at the Public Hearing

Commenter Reference Code	Name and Affiliation	Date Comment Received
CARR	Rodney Carr, Sr.; Carr Transport	11-08-2010
TKC	Erich Lucht; Thermo King Corporation	11-15-2010
RYPOS	Peter Bransfield; Rypos, Inc.	11-16-2010
ET	Vicki Carne; C. W. Ennis Trucking	11-17-2010
JCT	Vicki Carne; John Carne Trucking	11-17-2010
MECA	Antonio Santos; Manufacturers of Emission Controls Association	11-17-2010
CTA	Matt Schrap; California Trucking Association	11-17-2010
ATA	Michael Tunnell; American Trucking Associations	11-17-2010
PF	Tom Sem; Proventia Filters	11-18-2010
SRP	Senator Richard Polanco (retired); Rypos, Inc.	11-18-2010
AP-20SD	Alex Padilla; 20th Senate District	11-18-2010
JBT	Oralia Ornelas; Juarez Bros. Trucking, Inc.	11-18-2010

Availability and Reliability of Retrofits

1. **Comment**: The amendments are needed because there is a lack of available ULETRU retrofits. (CTA, ATA)

Agency Response: This is consistent with the Staff Report's evaluation of the need for the amendment.

2. **Comment:** There are plenty of LETRU retrofits available, they are proven and reliable (some free reliability upgrades have been made), and ULETRU retrofits are ready for trials now. There are more than 50 small business dealerships in California providing retrofit emissions controls. The Board should not send mixed signals to those that have spent resources to meet the standards. Millions of dollars have been invested to bring this technology to the market. Delays in implementing emission control requirements will only cause retrofit manufacturers to be extremely cautious in making future investments. It would be foolish in the current economic environment to drive away private investment in clean technology. (RYPOS, PF, MECA, AP-20SD)

Agency Response: As discussed in the Staff Report, these points were considered in staff's evaluation of the need for and feasibility of these amendments. Staff will continue to consider these points in future rulemaking efforts.

3. **Comment:** ULETRU retrofits have a limited track record which means that buyers will be reluctant to purchase unproven ULETRU retrofit technology. (ATA)

Agency Response: Staff agrees that ULETRU retrofits have not been widely used as of today. This was a key reason for the decision to allow either ULETRU or LETRU as compliance options. Staff encourages TRU owners to begin working with retrofit manufacturers as early as possible in trial testing ULETRU devices in order to gain operating experience and familiarity with the devices so that improvements, if necessary, can be made in a timely manner.

4. **Comment:** Diesel particulate filters are effective at reducing PM emissions; therefore, ARB should consider maximizing the use of these technologies wherever possible to meet regulatory obligations. (RYPOS, MECA)

Agency Response: Staff recognizes that diesel particulate filters are an effective control technology for reducing diesel particulate matter. Staff is also aware that the use of cleaner engines also reduces diesel PM emissions and public health risk. The TRU ATCM allows both options and the amendments do nothing to change this.

Enforcement

5. **Comment**: Less than 50 percent of the TRUs operating in California are compliant and the Board should provide the resources to adequately and diligently enforce and implement the regulation to maintain a level economic playing field. (RYPOS, SRP, AP-20SD)

Agency Response: This comment is related to the ongoing implementation and enforcement of the regulation and not specifically to the proposed amendments. However, staff agrees that enforcement efforts need to be adequate to ensure compliance and maintain a level playing field, and that ARB is fully committed to effective enforcement of the TRU ATCM.

6. **Comment**: CTA members are willing to assist ARB in the enforcement of the regulation and to help educate carriers nationwide. (CTA)

Agency Response: Enforcement cooperation and coordination are appreciated. Staff is interested in working with CTA on outreach to their members so that they are informed about this regulation.

Economic Issues

7. **Comment**: The recession has severely impacted refrigerated carriers' ability to manage their assets. In the midst of the largest freight recession in 40 years (a 16.5 percent decrease in volumes from 2007 to 2009), TRU owners have spent significant amounts of money to comply. With the proposed amendments, all of the oldest and dirtiest engines will have been retrofitted, scrapped, or replaced, so steps already taken have resulted in public health protections. Given the economic conditions facing businesses today, some type of economic relief is warranted. (CTA, ATA)

Agency Response: This comment is not specific to the proposed amendments. As discussed in the Staff Report, staff estimates that cost savings will result from the amendment to allow MY 2003 engines to comply by optionally meeting the less costly LETRU in-use standard instead of the more stringent ULETRU standard. The 16.5 percent decrease in freight volumes cited by the commenters is close to what was cited for revenue reductions for <u>all</u> trucking sectors in the July 19, 2010 issue of ATA's trade journal, <u>Transport Topics</u>, at pages A20 to A23 (emphasis added). Staff is also aware of trade journal articles that clearly indicate the refrigerated trucking sector has weathered the recession much better than other trucking sectors. The amendments do not impede the refrigerated trucking sector's ability to weather the recession and in fact provide some economic relief.

8. **Comment**: The Board should not allow the recession to be blamed or used as a means to delay, defer, extend, or stop rules and regulations from being enforced.

The defeat of Proposition 23 showed that California voters don't support suspending the law. Changing the compliance schedule would bring into question the regulatory reliability and stability of regulations and the certainty of enforcement. (SRP)

Agency Response: These amendments were not made to provide regulatory relief due to the economic recession. The primary reason for amending the in-use standard for MY 2003 TRU engines was the lack of available Level 3 (ULETRU) control technology in sufficient numbers to meet the demand expected from the TRU ATCM as initially adopted. The primary reason for the amendments for flexibility engines and manufacturer reporting requirements were to address issues arising from the unexpected high number of flexibility engines installed in TRU.

9. **Comment:** There is an unfair financial burden on small operators who are not able to qualify for financial assistance. (CARR, ET)

Agency Response: As discussed in the Staff Report, staff estimates that cost savings will result from the amendment to allow MY 2003 engines to comply by optionally meeting the LETRU in-use standard instead of the more stringent and more expensive ULETRU standard. Staff believes the TRU ATCM is structured to be fair for all TRU owners, whether they are a small or large operator. A company's ability to get financing is typically based on their credit rating and other factors that are beyond the control of ARB.

10. **Comment:** There is an unfair financial burden on larger companies who cannot compete with smaller companies that get financial help. (JBT)

Agency Response: See response to Comment 9.

Financial Assistance

11. **Comment**: ARB should allocate money to pay for compliance. There are no grants available for TRUs. (JBT)

Agency Response: As mentioned, at pages I-5 through I-6, of the Revised 2003 Staff Report for the TRU ATCM, which can be found at http://www.arb.ca.gov/regact/trude03/isor.pdf, several voluntary grant programs, including the Carl Moyer Program, exist for funding TRU upgrades. The Carl Moyer Program provides funding for projects that achieve surplus emissions reductions, meaning the emissions reductions occur sometime before a regulatory deadline or are reduced beyond what is required by regulation. For example, partial funding may be available for zero emission TRU systems because emissions are reduced beyond TRU ATCM requirements. Potential applicants should contact their local air district to determine eligibility and if TRU

funding applications are being accepted. A list of local air district contacts is available at: http://www.arb.ca.gov/capcoa/roster.htm.

TRU Manufacturer Reporting

12. **Comment:** OEM reporting is not immediately feasible. The timeline and work required to automate this process has not yet been determined. It is estimated to take at least 18 months after the effective date of the amendments. (TKC)

Agency Response: If an internal automated process is not in use, TRU OEM may elect to gather data manually. However, the proposed amendments include a provision for OEMs to request alternative reporting systems. Staff is committed to working with TRU OEMs to explore and develop reporting systems and processes that are equivalent to and at least as effective as those proposed in the amendments.

13. **Comment**: The OEM reporting amendment needs to include language protecting the equipment and engine manufacturers from liability for unintentionally distributing inaccurate information to the end-user. (TKC)

Agency Response: Like all stakeholders subject to ARB regulations, TRU OEMs and engine manufacturers may be subject to penalties for noncompliance. However, ARB considers noncompliance on a case-by-case basis and will use its enforcement discretion in determining whether violations have been committed and if penalties are appropriate. One factor that ARB always considers is whether the stakeholder has acted in good faith in attempting to comply with the regulation's requirements. In the case of TRU OEMs and engine manufacturers, ARB will consider the OEM and manufacturers good faith in providing complete and accurate information to ARB and end-users. ARB is aware that the information required to be provided by TRU OEMs and engine manufacturers is detailed, and it is not the intent of the regulation to penalize inadvertent or minor technical errors. Rather, in an effort to gather the information necessary to make the TRU ATCM effective, the emphasis by ARB staff will be to evaluate data gaps and inaccuracies and work with the TRU OEMs and engine manufacturers to resolve deficiencies so that the best and most accurate information is provided to ensure full compliance by all stakeholders (i.e, TRU OEMs, engine manufacturers, TRU owners and operators). While ARB may not initiate enforcement against an OEM or engine manufacture, who while acting to comply in good faith has made unintentional, inadvertent errors in its reporting, ARB cannot shield the OEM or manufacturer from third party actions (TRU owners and operators) who may be adversely affected by the errors committed.

14. **Comment**: OEM reporting amendments need to include language protecting against the misuse of proprietary data submitted to ARB by the manufacturer. (TKC)

Agency Response: The proposed amendments include a provision for confidential information or data submitted by TRU OEMs [see subparagraph (f)(3)(C)]. Staff is committed to ensuring data that is identified as confidential is handled in accordance with regulations for disclosure of public records, title 17 CCR, section 91000.

General Comments

15. **Comment**: Although we are in general support of the proposed amendments, there is no reasonable justification for delaying the compliance dates beyond what is being proposed in these amendments. Delays in enforcement result in delays in reductions and are detrimental to the goals of the regulation. No significant installations take place until 60 days prior to a compliance deadline, so delays cause compliance efforts to stop until then. The Board should not adopt the amendments that would provide for delays or extensions beyond the currently proposed amendments. (RYPOS, MECA, SRP, AP-20SD)

Agency Response: ARB staff is appreciative of the support for the proposed amendments, and their recognition that the amendments address the current limited availability of verified Level 3 retrofit devices and that the amendments will reduce the cost of complying with the TRU ATCM while providing increased emission reductions from the affected engines. Given the short timeframe between the Board hearing (November 18, 2010) and the December 31, 2010, compliance date for MY 2003 TRU engines, the Board directed staff to use its discretion in not immediately commencing enforcement during the first quarter of 2011 (see response to Comment 8 in Section B). This delay will not undermine the goals of the regulation. The Board has also directed staff to return with additional amendments to the TRU ATCM in 2011. In addressing future amendments, staff will fully consider the impact of enforcement delays on compliance actions as those amendments are developed.

16. **Comment:** The Board should not open the TRU ATCM to further discussion in 2011. (SRP)

Agency Response: This comment is not specific to the proposed amendments. During implementation of the original TRU ATCM, staff identified a number of outstanding issues that warrant further discussion with stakeholders. The Board agreed that at least several issues require further consideration and has directed staff to work with stakeholders to determine if these and other issues need to be resolved in a future rulemaking. The commenter is encouraged to participate in that process to provide its perspective and share its concerns.

17. **Comment:** Regulatory changes need to be made far in advance of implementation deadlines. TRU owners need as much advance notice of regulatory changes as possible. (ATA)

Agency Response: Staff understands the benefit to compliance planning provided by advanced notice of regulatory changes and will consider this, to the extent possible, in future rulemaking efforts.

18. **Comment:** The amendments are needed, but don't go far enough and do not consider other factors. For example, the Board needs to consider the following: the appropriateness of a 7-year operational life and the "two in seven years" compliance requirements; the need to align future compliance deadlines with the introduction of new engines that meet ULETRU standard; whether the regulation should provide a compliance-extension period for fleets that have expended resources to meet the first step in the current two-step process; whether there is a lack of compliant, reliable retrofit equipment; whether technology costs are much higher than originally projected; whether overall economic impacts have been under-estimated; and whether the estimates of the TRU population operating in California and TRU emissions inventory need to be improved. (CTA, ATA)

Agency Response: Staff has been directed by the Board to work with stakeholders on these issues to determine which of them need to be resolved through rulemaking. The Board also directed staff to return with additional proposed amendments in 2011.

19. **Comment:** A better way to control diesel emissions would be for ARB to set up an inspection system that would identify those units that are polluting and smoking and bad for the environment and would require that those units be upgraded; those that are in good condition would get a compliance certificate. (JCT)

Agency Response: This comment is not specific to the proposed amendments. The proposed amendments did not change the process for determining compliance with the in-use standards. However, the approach recommended by the commenter is likely to impose a significant economic burden on the industry given the emission testing costs to each TRU owner. Additionally, there are significant state costs for implementing such a program.

20. **Comment:** ARB should take into consideration the feasibility, costs, emissions impacts of changes to this ATCM as well as changes to other ATCMs. (MECA)

Agency Response: The Staff Report chapters II, II, IV, and V fully considered feasibility, costs, and emissions impacts associated with the proposed amendments to the TRU ATCM. ARB has similarly fully considered the listed factors in proposing amendments for other in-use diesel regulations. See staff

reports for in-use truck and bus and drayage regulations and in-use off-road and large spark-ignition engine regulations, which respectively can be found at http://www.arb.ca.gov/regact/2010/truckbus10/truckbus10.htm, and http://www.arb.ca.gov/regact/2010/offroadlsi10/offroadlsi10.htm.

21. **Comment:** The OEM, not the equipment owner, should be responsible for reducing emissions. This approach would be preferred over ARB creating a new retrofit industry. (JBT)

Agency Response: This comment is not specific to the proposed amendments. The proposed amendments did not change the applicability or party responsible for compliance. Compliance responsibility for in-use TRUs must be with the equipment owner. The goal of the Diesel Risk Reduction Plan that the Board approved in 2000 is to reduce diesel PM emissions and associated potential cancer risk by 75 percent by 2010 and 85 percent by 2020. Natural turnover to cleaner equipment is not fast enough to meet California's public health and State Implementation Plan needs. The accelerated upgrade and replacement of TRUs will ensure that the majority of the TRU fleet will be comprised of ultra-low emission TRUs by 2020.

Support Comments

22. **Comment**: Several commenters indicated support for diesel emissions control measures and cleaner, healthier, better quality air. (RYPOS, ET, MECA, ATA, SRP, AP-20SD, JBT)

Comment: The proposed amendments are needed and should be adopted. (RYPOS, MECA, CTA, ATA, AP-20SD, JBT)

Agency Response: ARB staff agrees with these comments. They are consistent with staff's finding presented in the Staff Report and presentation.

B. Oral Comments Provided During the ARB Public Hearing

The general public presented comments to the Board during the ARB public hearing held on November 18, 2010, in Sacramento, California. Persons that made oral statements on the proposed amendments are listed in Table 2. Written comments submitted the day of the hearing are addressed in Table 1 and subsequent responses. Following the list are summaries of each oral comment made regarding the specific regulatory action proposed as well as agency responses. Each response includes an explanation of either any changes made to accommodate the comment or the reasons for making no change.

Table 2. List of Individuals and Businesses Presenting Oral Comments During the ARB Public Hearing

Commenter Reference Code	Name and Affiliation	Written Comments Provided
MECA	Joe Kubsh; Manufacturers of Emission Controls Association	Yes
PF	Tom Sem; Proventia Filters	Yes
HR	Pat Smith; Harris Ranch	No
SAVMART	Dan Miller; Save Mart	No
CVTR	Michael Shuemake; Central Valley Trailer Repair	No
21EAGLE1	Larry Milton; 21 Eagle	No
SRP	Senator Richard Polanco; Rypos	Yes
RYPOS	Peter Bransfield; Rypos, Inc.	Yes
LA	Mik Skvarla; Lukas Advocates	No
CTA	Matt Schrap; California Trucking Association	Yes
21EAGLE2	Ralph Shulhe; 21 Eagle	No
ATA	Mike Tunnell; American Trucking Associations	Yes

Availability and Reliability of Retrofits

1. **Comment:** LETRU (Level 2) control technologies are available and reliable. Retrofit manufacturers have the inventory and production capability to meet customer demand for Level 2 VDECS compliance technology and have established distribution channels and excellent geographic coverage for sales, service, and support in California and across the country. Over 4,600 diesel particulate filters have been delivered to the marketplace. Combined, the retrofit systems have completed over 11 million hours of operation and captured over 85 tons of particulate matter. (MECA, PF, RYPOS)

   Agency Response: This is consistent with the Staff Report and justification for the proposed amendments.

2. **Comment:** ULETRU (Level 3) control technologies are being expanded and will be more readily available. These technologies are ready for trial testing. One manufacturer has a goal to complete verification of two Level 3 VDECS in early 2011 after completing thousands of hours of testing. (MECA, RYPOS)

   Agency Response: Staff encourages expedited trial testing and will monitor the verification progress. If verification is delayed, staff may need to evaluate the impact on future compliance dates in the TRU ATCM.

3. **Comment:** We have tried ULETRU (Level 3) compliance technology and the results were disastrous. More field testing is needed prior to verification of these devices. (HR)

Agency Response: Staff has been closely monitoring the introduction of Level 3 VDECS in the marketplace and understands that TRUs are a very challenging application for VDECS retrofits. Staff recognizes that more testing may be needed during the verification process. However, staff believes that the VDECS manufacturers have been very proactive in addressing issues that have arisen for retrofits deployed in the field. Operators may also need to adjust historic operation and maintenance procedures for engines using exhaust after-treatment systems. Heightened monitoring of engine operation and periodic maintenance of fuel injectors and other components are very important to successfully using diesel particulate filters.

4. **Comment:** Warranties on VDECS have been said to be four years or 2,600 hours, whichever comes first. However, for most carriers that relates to only two years and some may be as low as one year of warranty. (CVTR)

Agency Response: This comment is not specific to the proposed amendments. The warranty duration is stipulated by the Verification Procedure (title 13, CCR, section 2707). Staff understands that the annual usage of a TRU varies greatly from one type of use to another. Low-use TRUs may operate for four years before the warranty expires and unusually high-use TRUs may operate 2,600 hours in a single year. Increasing warranty duration would have a direct effect on the cost of VDECS. VDECS manufacturers report the actual life of VDECS is much longer than the warranty.

5. **Comment:** Even though LETRU (Level 2) VDECS have been verified, there have been some reliability problems. However, manufacturers are proactively fixing these problems. More field testing is needed to provide a good comfort level for industry. Reliability is something this industry relies on because food safety and liability would otherwise be a problem. A pragmatic approach to produce a sustainable regulation that protects the end user is needed. (HR, CVTR, CTA)

Agency Response: Staff agrees that reliability and food safety are major concerns. Over 4,600 Level 2 VDECS have been installed on TRUs and have been operated over 11 million hours with very few issues reported. Staff closely monitors reports of problems with Level 2 VDECS. As recognized by the commenters, manufacturers have been proactively addressing problems that have been identified, and we have found that manufacturers have been quick to provide reliability upgrades and replacements at no charge and with minimal disruption of service. It has been reported that some VDEC malfunctions have occurred because of inappropriate service and maintenance by end-users. It is the end-users responsibility to follow the owner's manual requirements for operation and maintenance, which means some changes to operation and maintenance procedures may be required to ensure reliable operation of VDECS.

6. **Comment:** There is only one Level 2 VDECS manufacturer providing product for each of the TRU manufacturers. Owners are forced to use only one vendor, so it's a bit monopolistic. (CVTR)

   Agency Response: At this time, there are two VDECS manufacturers that have verified Level 2 devices that can be used on trailer TRUs manufactured by both of the major TRU OEMs. As to commenter's claim that owners are forced to use the products of only one vendor and the practice is monopolistic, ARB has no authority over how VDECS manufacturers market their products. Moreover, retrofitting with a VDECS is not the only compliance option available to end-users; repowering with a new or rebuilt replacement engine, replacing the entire unit, or using an Alternative Technology are also compliance options. See comment 7.

7. **Comment:** Engine replacement, rebuild, and exhaust retrofits are all available compliance options. There is and will continue to be competition between compliance technology providers. The refrigerated trucking industry has thrived with only two TRU manufacturers for the last 30 years. VDECS prices have been held constant in spite of increasing costs over time. (RYPOS)

   Agency Response: Staff agrees with this comment. See also the response to Comment 6.

Enforcement

8. **Comment:** The compliance deadline for MY 2003 engines should be pushed out 90 days, to March 31, 2011, due to the November 18, 2010, Board decision being so close to the December 31, 2010 compliance date. (SAVEMART, CVTR, CTA)

   Agency Response: As presently written, the TRU ATCM requires that all MY 2003 TRU engines comply with the regulation by December 31, 2010. This compliance date was not changed. The amendment for MY 2003 compliance instead provides owners with an alternative path for compliance that provides owners with greater compliance flexibility. While not amending the date for compliance, staff recognized that in some cases deliveries and installations of Level 2 (LETRU) VDECS, the new compliance pathway, may not occur by the end of the year. To address this, ARB has informed stakeholders that it will use its enforcement discretion not to enforce compliance for MY 2003 engines that have a December 31, 2010 deadline until March 31, 2011.

9. **Comment:** Certainty of enforcement is critical to achieving compliance. We need robust enforcement. (SRP, CTA)

   Agency Response: Staff agrees with the commenter. ARB enforcement staff has been actively enforcing the TRU ATCM and will continue to do so.

Economic Issues

10. **Comment:** Retrofit compliance costs are roughly two and a half to three times greater than originally projected. Also, engine repowers are the primary compliance strategy used by nearly two-thirds of affected units. The regulation should be further modified to eliminate the current two- and seven-year compliance requirement and instead align future compliance with the introduction of new engines meeting the ULETRU standard for the 25 to 50 horsepower category. (ATA)

Agency Response: The Staff Report showed that the proposed amendments actually result in cost savings. The second compliance step may not be necessary for high-use units that would normally be scheduled for retirement. Staff has been directed by the Board to work with stakeholders on this and other issues, and to return to the Board in 2011 with proposed amendments for Board consideration. In working through these issues, staff will use the best information that is available at the time to update the estimates, modeling, and evaluations of TRU populations, emissions, exposure, health risk, costs, cost-effectiveness, and other required considerations.

11. **Comment:** There should be an extended compliance period for fleets that have expended financial resources complying with step one of the current two-step process. (ATA)

Agency Response: This comment is not specific to the proposed amendments. A single compliance step that stops at LETRU would only reduce PM emissions by 50 percent and would not meet the emission reduction goals of the Diesel Risk Reduction Plan (DRRP). Meeting the ULETRU standard is necessary to meet the goals of the DRRP, which is to reduce diesel PM emissions by 85 percent by 2020. However, staff has been directed by the Board to work with stakeholders and to propose changes for consideration by the board in 2011.

12. **Comment:** The Board should not allow the recession to be blamed or used as a means to delay, defer, extend, or stop rules and regulations from being enforced. The defeat of Proposition 23 showed that California voters don't support suspending the law. Changing the compliance schedule would bring into question the regulatory reliability and stability of regulations and the certainty of enforcement. (SRP)

Agency Response: These amendments were not made to provide regulatory relief due to the economic recession. The primary reason for amending the In-use standard for MY 2003 TRU engines was the lack of available Level 3 control technology in sufficient numbers to meet the demand. The primary reason for the amendments for flexibility engines and manufacturer reporting requirements were to address issues arising from the unexpected high number of flexibility engines installed in TRUs.

TRU Manufacturer Reporting

13. **Comment:** We have been working with ARB staff to address the concern over the confidentiality of competitively sensitive data that is required in the reporting requirements. We believe that the optional reporting mechanisms that have been included in the current update will provide the possibility of working with ARB staff to achieve compliance. (LA)

Agency Response: Staff is committed to working with TRU OEMs in exploring and developing reporting systems and processes that are equivalent to and at least as effective as those proposed in the amendments, and will at the same time work to address manufacturers' confidentiality and data availability issues. There are provisions in the rule that allow for these situations like these to be resolved.

General Comments

14. **Comment :** Several commenters indicated support for or no opposition to the proposed amendments, or acknowledged that the proposed amendments are needed. (MECA, HR, SAVMART, CVTR, SRP, RYPOS, CTA, ATA)

Agency Response: No response necessary.

15. **Comment:** Regulatory certainty is important and needed to get compliance and to protect investments in the development and verification of control technology. These clean technologies are creating jobs in California. Over $100 million has been invested in research and development of control technologies. (MECA, SRP, RYPOS)

Agency Response: Staff understands the need for regulatory certainty and encourages these stakeholders to participate in the rulemaking process for the subsequent amendments to ensure their concerns are considered.

16. **Comment:** The Board should consider a 10-year operational life for TRUs instead of the seven-year life currently in the ATCM. (HR, CVTR, CTA)

Agency Response: This comment is not specific to the proposed amendments. Staff will look at the feasibility of extending the operational life to up to 10 years, in consideration of risk and cost, in a subsequent rulemaking, as directed by the Board.

17. **Comment:** Future amendments should not go beyond what is being proposed today. (SRP)

Agency Response: This comment is not specific to the proposed amendments. During implementation of the original TRU ATCM, staff identified a number of

outstanding issues that warrant further discussion with stakeholders. The Board has directed staff to work with stakeholders to determine if these issues need to be resolved through rulemaking. The commenter is encouraged to participate in that process to provide his perspective.

18. **Comment:** Any future changes to the regulation need to be made as soon as possible to provide certainty to those facing compliance decisions. There has been an estimated 83 to 133 million dollars already spent on repowers and retrofits, so there has been a significant financial commitment made to this regulation. The Board should direct staff to keep working on the regulation to work the bugs out. (ATA)

Agency Response: See response to Comment 17 in Section A.

19. **Comment:** Several commenters from a single company promoted their fuel additive as a compliance option; but first, it needed to be verified. These commenters requested an expedited verification so that it could be used to comply as soon as possible. (21EAGLE1, 21EAGLE2)

Agency Response: This comment is not specific to the proposed amendments. These commenters were directed by the Board to contact appropriate staff for verification of control technologies. Staff have been in contact with these suppliers and have explained the verification process to them.