

State of California
AIR RESOURCES BOARD

Resolution 11-35

October 21, 2011

Agenda Item No.: 11-8-4

WHEREAS, on February 26, 2004, the Air Resources Board (ARB or Board) approved 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 or TRU regulation), which are codified at title 13, California Code of Regulation (CCR) section 2477, pursuant to the authority and rationale set forth in Resolution 03-37;

WHEREAS, the TRU ATCM was approved by the Office of Administrative Law (OAL) on November 10, 2004, and became effective under California law on December 10, 2004;

WHEREAS, in March 2005, ARB requested the U.S. Environmental Protection Agency (U.S. EPA) to grant California authorization to adopt and enforce the TRU ATCM pursuant to Clean Air Act (CAA) section 209(e)(2), and U.S. EPA granted this authorization on January 16, 2009;

WHEREAS, since the adoption and receipt of U.S. EPA's authorization of the TRU ATCM, ARB staff has been engaged in implementing the ATCM and working closely with affected stakeholders in addressing implementation issues;

WHEREAS, based on this ongoing evaluation, ARB staff proposed additional amendments to the TRU ATCM in December 2010 that provided additional compliance options for owners and operators of model year (MY) 2003 and certain MY 2004 TRUs, clarified the compliance schedule for flexibility engines, and required TRU equipment manufacturers to report certain information to ARB in order to implement the proposed amendments and streamline the TRU registration process (2010 TRU Amendments);

WHEREAS, on February 2, 2011, the Board adopted the 2010 TRU Amendments pursuant to its authority and rationale set forth in Resolution 10-39;

WHEREAS, the 2010 TRU Amendments were approved by OAL on March 7, 2011, and became effective under California law on March 7, 2011;

WHEREAS, since the Board's adoption of the 2010 TRU Amendments, ARB staff has continued to work with affected stakeholders in addressing implementation issues, and has conducted three workshops in March, May, and June of 2011, in which additional proposed concepts and draft amendments were shared with interested stakeholders;

WHEREAS, as summarized below, the staff is proposing to further amend the TRU ATCM to extend the compliance dates when specified categories of TRUs and TRU gen sets are required to meet the Ultra-Low-Emission TRU (ULETRU) In-Use Performance Standards, clarify existing requirements, and enhance ARB's ability to enforce the regulation by specifically extending the regulation's requirements to motor carriers, brokers, California-based shippers, and California-based receivers;

WHEREAS, as initially adopted, the TRU ATCM required MY 2001 and older TRUs to meet the Low-Emission TRU (LETRU) in-use standard by December 31, 2008;

WHEREAS, ARB delayed the enforcement of the TRU ATCM's in-use performance standards until January 2010 because U.S. EPA's authorization was granted after the TRU ATCM's first compliance date, which created uncertainty for the regulated community;

WHEREAS, some businesses elected to bring their MY 2001 and older TRUs into compliance with the LETRU in-use standard by the applicable December 31, 2008, compliance date, even though U.S. EPA had not yet approved ARB's authorization request and although other businesses opted to defer their compliance efforts for MY 2001 and older TRUs due to the uncertainty created by U.S. EPA's delayed approval;

WHEREAS, those businesses that elected to comply by December 31, 2008, have expressed that their early compliance efforts and ARB's delayed enforcement created unfair competition because they made capital investments to comply with the law in effect at the time, while their competitors avoided significant capital expenditures and gained a competitive advantage, and have requested ARB to enact provisions to help restore competitive fairness;

WHEREAS, the proposed amendments would extend the ULETRU compliance date by one year for those MY 2001 and older TRU engines that complied with the LETRU in-use standard by December 31, 2008, and would serve to restore competitive fairness to those businesses that elected to comply with the original TRU regulation during 2008, and would accordingly extend the current ULETRU compliance deadline for qualifying TRU engines from December 31, 2015, until December 31, 2016;

WHEREAS, as initially adopted, the TRU ATCM required MY 2001 TRUs to meet the LETRU in-use standard by December 31, 2008; MY 2002 TRUs to meet the LETRU in-use standard by December 31, 2009; and, MY 2003 TRUs to meet the LETRU in-use standard by December 31, 2010;

WHEREAS, the proposed amendments would extend the ULETRU compliance date by one year for MY 2003 and older TRU engines that complied with the LETRU in-use performance standard by specified dates (December 31, 2009 for MY 2001 and MY 2002 TRU engines; December 31, 2010 for MY 2003 TRU engines), and these proposed amendments would operate in conjunction with the other proposed amendments so that MY 2001 and older engines that complied with the LETRU standard by December 31, 2008 could qualify for a total of a two-year extension from the ULETRU standard compliance date;

WHEREAS, the proposed amendments would provide economic relief to owners who had to take action during the height of the recession;

WHEREAS, the proposed amendments would only have a minimal emissions impact, since most of the affected in-use TRU engines would already be controlled to LETRU levels, and the near-source public health risk impacts associated with those emissions would be minimal, as the delayed diesel PM emissions reductions resulting from the proposed amendments would be 0.042 tons per day (tpd) for MY 2001 and older TRU engines in 2016, 0.004 tpd for MY 2002 TRU engines in 2017, and 0.012 tpd for MY 2003 TRU engines in 2017, and those delayed reductions would only occur for that single year;

WHEREAS, the proposed amendments would provide economic fairness to those fleets that keep their units longer, which is typically due to lower annual TRU activity, and therefore make a smaller contribution to statewide emissions and near-source risks, and would restore competitive fairness to businesses that elected to comply with the regulation during 2008 through 2010, although other businesses opted to defer their compliance efforts in light of the U.S. EPA's delay in issuing ARB an authorization to enforce the regulation;

WHEREAS, the TRU ATCM presently applies to owners and operators of TRUs that are operated in the State of California;

WHEREAS, data from ARB's Equipment Registration (ARBER) database indicates that the compliance rates of TRUs have declined from over 80 percent for MY 2001 and older TRUs to 31 percent for MY 2003 TRUs, and the overall compliance rate for MY 2003 and older units is 66 percent, meaning that emissions reductions are 33 percent less than expected from the TRU ATCM;

WHEREAS, shippers and receivers that hire carriers that have non-compliant equipment contribute to the low compliance rates, and such carriers are able to offer lower refrigerated truck rates and, consequently, create an unfair competitive advantage compared to compliant carriers that need to charge higher rates to pay their in-use compliance costs;

WHEREAS, compliant carriers have expressed their frustration to staff about such unfair competition and about observing many non-compliant TRUs at loading docks, and have requested that staff amend the TRU ATCM to require brokers, freight forwarders, shippers, and receivers to only hire or contract with compliant carriers, which requirements are consistent with similar provisions in ARB's On-Road Truck and Bus Regulation and the Tractor-Trailer Greenhouse Gas (GHG) Regulation (also known as California's "SmartWay" regulation) that requires brokers and shippers to be responsible for ensuring that compliant equipment is used;

WHEREAS, the proposed amendments would require a business entity that arranges, hires, contracts for, or dispatches the transport of perishable goods in TRU-equipped trucks, trailers, shipping containers, or railcars to require the carriers they hire or contract with to only dispatch equipment with TRUs that comply with the TRU ATCM's in-use standards if they travel on California highways or railways, and that a business entity would also be required to provide the driver with their company contact information and a bill of lading that includes shipper, carrier, and receiver information;

WHEREAS, staff has discussed these potential requirements with freight brokers, freight forwarders, shippers, and receivers and heard their concerns regarding needing to inspect TRUs and turn them away from the loading dock if they are not compliant;

WHEREAS, staff does not intend to require brokers, forwarders, shippers, and receivers to inspect TRUs to determine compliance or turn away non-compliant TRUs, but staff believes that freight brokers, freight forwarders, shippers, and receivers should use due diligence to ensure that only compliant equipment is dispatched on California highways;

WHEREAS, staff is committed to working with brokers, forwarders, shippers and receivers in developing tools and guidance that could facilitate the implementation of these proposed amendments;

WHEREAS, other provisions of the proposed amendments would:

- Specify information required to be provided in manual records by owners/operators that elect to use hybrid electric TRUs, electric standby-equipped (E/S) TRUs, and hybrid cryogenic temperature controlled TRUs to qualify with the TRU ATCM's Alternative Technology provision;
- Clarify that to qualify as an Alternative Technology, facilities in California where E/S-equipped TRUs are based must have electric power plugs located where TRU equipped trucks are parked for the initial van chill-down and while awaiting dispatch and at the loading spaces, and that such power plug requirements apply to any non-retail facility in California where an E/S-equipped TRU truck picks up or delivers goods if the van load includes perishable goods, and that at retail delivery and pick-up points, including but not limited to restaurants, grocery stores, convenience stores, and cafeterias, TRU engine run time is allowed, but limited to no more than 30 minutes per delivery/pick-up point, and that electric

power plugs are required at retail delivery and pick-up points if more than 30 minutes of TRU engine run time is necessary;

- Clarify that Alternative Technology compliant TRUs are allowed to operate under diesel engine power from the time they enter the facility fence line or property line until they are parked, from a parking spot to the gate upon leaving the facility, and while being moved to and from loading docks to parking spots by yard hostlers. Engine run time within a facility fence line would be limited to no more than five minutes each time the unit moves within the facility fence line or property boundary;
- Require hybrid electric or E/S TRUs to be equipped with non-resettable hour meters that record both engine and shore-powered electric motor run time (separately). This will facilitate hour meter reading records that are required;
- Require out-of-state owners that elect to use the E/S compliance option to register those TRUs in ARBER to facilitate reporting, demonstrate compliance, and to ensure that ARB has E/S-equipped TRU owner contact information when E/S-specific communications and notices are necessary;
- Require, in accordance with a phase-in schedule, electronic recordkeeping requirements for hybrid electric and E/S TRUs; such electronic tracking systems must provide automated Global Positioning System (GPS) tracking, engine run time monitoring, recordkeeping and reporting;
- Clarify how repowering a TRU with a new replacement engine or rebuilt engine can maintain compliance with the in-use standards;
- Clarify requirements applicable to rebuilt replacement engines, and that when a rebuilt engine meets a prior tier new engine emissions standard, the effective model year is used, which is the last year that the tier standard was in effect, but if a rebuilt engine meets a tier standard for new engines that is currently in effect, then the model year, for the purposes of the TRU ATCM would be the year that the engine was rebuilt;
- Allow dealers doing business in California to purchase, receive, or acquire and possess non-compliant TRUs in California under specific and limited circumstances, and to require dealers that sell new units or replacement engines, to pass a registration information document to the ultimate purchaser at point of sale (the registration document would come with the new unit or new replacement engine from the TRU original equipment manufacturer (OEM), or from the rebuilt engine supplier). If a new replacement engine is not supplied with a registration information document, then the dealer must provide a registration information document, which would include all of the engine information needed to register the unit in ARBER;

- Provide for up to a one year compliance extension if owners can demonstrate that no suitable control technologies for a specific TRU exists, and identify the specific units for which an extension is being requested. This extension would not be available to fleets that have other equipment that is not compliant with the TRU ATCM's in-use requirements. Owners would need to be able to demonstrate that the rest of their fleet is in compliance;
- Clarify that obviously non-operational TRUs are exempt from certain subsections of the TRU ATCM, and that TRUs that are not driven by an integral diesel internal combustion engine are exempt from the TRU ATCM;
- Provide a limited exemption until January 2025 for mobile catering company TRUs that are used during emergencies, such as TRUs on refrigerated trucks and trailers that are used to store food for emergency responders, such as firefighters suppressing wildfires;
- Extend the prohibition of selling non-compliant TRUs to any person selling such non-complaint units, expressly including auctioneers and motor carriers, and require a seller of a non-compliant unit to disclose to a potential buyer located outside of California that the unit is not compliant with the in-use requirements and cannot be legally operated in California, and prohibiting an owner of a TRU equipped with an Alternative Technology, such as electric standby, from selling it, without disclosing in writing that it must be used in a way that qualifies it as an Alternative Technology;
- Clarify and streamline requirements for lessors and lessees regarding issues related to the ARBER registration requirements, operator reports, and the in-use standards;
- Allow the year that a TRU was manufactured, instead of the TRU engine model year, to be used in determining the applicable in-use performance standards and the related compliance deadline, provided that the difference between the unit manufacture year and the engine model year is no more than one year;
- Allow the use of Bureau International des Containers (BIC) codes, or reporting marks in place of ARB Identification Numbers (IDN);
- Provide Extensions When Compliance Technology is Not Available or Based on Delays Due to Private Financing, Equipment Manufacture Delays, or Installer Delays;

- Require TRU OEMS that plan to equip TRUs with flexibility engines to: notify ARB before they install such engines in production, provide supplemental engine emissions labels, and provide a written disclosure to prospective buyers; for prior-tier replacement engines, provide supplemental engine emissions labels, written disclosures that would be passed on to interested buyers, and a registration information document that would be passed on to the end-user; and for current-tier replacement engines and new TRUs and TRU Gen Sets, provide a registration information document that would be passed on to the end-user;
- Require dealers and repair shops to pass the registration information documents, which are supplied with new units, new replacement engines, and rebuilt engines, to the end-user. If a registration information document was not included with a replacement engine, the dealer or repair shop would have to provide it;
- Require engine rebuilders to follow federal and State engine rebuild practices of 40 CFR sections 89.130 and 1068.120, and title 13, CCR section 2423(l); provide supplemental rebuilt engine labels, documentation (upon request) demonstrating they have complied with the engine rebuilding practices of 40 CFR sections 89.130 and 1068.120, and title 13 CCR section 2423(l), and provide a registration information document with each rebuilt engine; and
- Clarify registration information requirements to be consistent with current ARBER registration screens.

WHEREAS, ARB staff prepared a Staff Report: Initial Statement of Reasons (ISOR) entitled "2011 Amendments for the Airborne Toxic Control Measure for In-Use Diesel Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate" (2011 Staff Report) that presents the rationale for the proposed amendments;

WHEREAS, the 2011 Staff Report and proposed regulatory language were made available to the public for at least 45 days prior to the October 21, 2011, public hearing to consider the proposed amendments to the TRU ATCM;

WHEREAS, ARB staff has updated the TRU emissions inventory that was completed in 2003 to support the original TRU ATCM; the updated inventory is based on previously unavailable data for population, activity, engine load, turnover practices, and emission factors;

WHEREAS, ARB staff's methodology in updating the emissions inventory inputs and in calculating their impact on the emissions inventory are described in detail in Appendix C to the 2011 Staff Report;

WHEREAS, staff utilized such updated data to improve both the baseline emissions inventory (the emissions from the activity of TRUs within California in the absence of any rule, including the 2004 ATCM), and the with-rule emissions inventory (the emissions after the impact of the ATCM adopted in 2004), and also estimated the specific emissions impact for each of the proposed amendments;

WHEREAS, overall, the additive emissions impact from all proposed amendments is estimated to be 0.21 tons/day of diesel PM and 0.98 tons/day of oxides of nitrogen (NO_x) in 2009 through 2018;

WHEREAS, as part of the Initial Statement of Reasons, staff performed a health risk assessment to determine the 70-year potential cancer risks associated with exposures to diesel PM emissions from TRU engines at a distribution center, and staff's methodology and assumptions used to estimate the health risks are presented in Appendix D of the 2011 Staff Report;

WHEREAS, the California Environmental Quality Act, section 21000 et seq. of the Public Resources Code, and Board regulations at California Code of Regulations, title 17, section 60006 require that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the State and the potential for adverse economic impacts on California business enterprises and individuals;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, in consideration of the information in the public record, including the ISOR, written comments, and testimony provided at the hearing, the Board finds that:

The proposed amendments were developed in an open public process, in consultation with affected parties through numerous public workshops, individual meetings, and other outreach efforts;

The proposed amendments are necessary for the successful implementation of the requirements in the existing TRU ATCM;

The reporting requirements applicable to businesses in the proposed amendments are necessary for the health, safety, and welfare of the people of the State;

Compliance cost savings for TRU owners and operators of approximately \$27 million from 2009 through 2029 will be generated by the proposed amendments that extend the ULETRU in-use standard for MY 2003 and older engines which met LETRU by their respective compliance dates, require the use of electronic recordkeeping for electric standby units, exempt TRUs used in emergencies, and use the TRU model year rather than the engine model year to determine compliance dates;

The proposed amendments that require brokers, shippers or receivers to ensure that the carriers they contract with will dispatch only compliant TRUs will impose costs of approximately \$11 million over the years 2011 through 2029;

The proposed amendments that require OEMs, dealers, installers, and rebuilders to provide supplemental engine labeling and registration information documentation would impose costs of approximately \$1.6 million from 2011 to 2020;

Overall, the proposed amendments will produce a net cost savings of approximately \$14 million (2011 dollars) from 2009 through 2029; and

No reasonable alternative considered, or that has otherwise been identified and brought to the attention of ARB, would be more effective at carrying out the purpose for which the amendments are proposed, or would be as effective and less burdensome to affected private persons and businesses than the proposed amendments.

WHEREAS, pursuant to the requirements of the California Environmental Quality Act (CEQA) and the Board's regulations under its certified regulatory program, the Board further finds that:

ARB staff has prepared an environmental analysis for the proposed amendments, which is contained in Chapter IV of the ISOR;

The total emissions impact from the proposed amendments for the ten-year period that emission deferrals are expected is estimated as 77 tons of diesel PM and 358 tons of NOx, and the total emissions resulting from industry's early compliance with the original TRU ATCM's LETRU standard is estimated as 205 tons of diesel PM and 539 tons of NOx;

Although the proposed amendments will delay the emission reductions anticipated from the implementation of the original TRU ATCM, those delayed emission reductions do not impact California's 2014 PM 2.5 State Implementation Plan (SIP) commitments;

Staff's environmental analysis determined that industry's proposal to extend the operational life of MY 2004 and newer TRU engines by one, two, or three years would increase the potential health risks by over 11, 23, and 42 percent, respectively, compared to the original ATCM's in-use requirements at seven-year operational life, would likely exacerbate concerns regarding elevated cancer risk levels in nearby communities, and could cause California to not achieve its 2014 PM SIP commitments;

The health impact associated with staff's proposed amendments would result in a negligible change to the maximum potential cancer risk for an individual living near a large distribution center that was exposed to the maximum increment of higher emissions for a full 70 years; and

The proposed amendments will defer a small amount of the diesel PM and NOx emissions reductions attributable to the original TRU ATCM into the 2009 to 2018 time period, but the effects of diesel PM and NOx on global warming are not completely understood and staff expects these small emission deferrals in that ten-year period will have a negligible effect on global warming;

Staff's proposed amendments are consistent with the Board's Environmental Justice policy to reduce health risk in all communities, including those with low-income and ethnically diverse populations, regardless of location;

The Executive Officer is the decision maker for the purposes of title 17, California Code of Regulations, section 60007, and no final decision will be made until comments on the environmental analysis are fully considered and addressed by the decision maker.

WHEREAS, California is not preempted under section 209(e)(1) of the federal Clean Air Act (CAA) from adopting emission standards and other requirements related to the control of emissions from TRU engines; and

WHEREAS section 209(e)(2) of the CAA requires that California seek authorization from U.S. EPA prior to enforcing emission standards or other requirements relating to the control of emissions from new and in-use non-road engines (of which diesel TRU engines are a subcategory) not otherwise preempted by section 209 (e)(1) and not within the scope of previously granted authorizations.

NOW, THEREFORE, BE IT RESOLVED that the Board directs the Executive Officer to take the following actions:

Evaluate all comments received during the public comment periods, including comments raising significant environmental issues, and prepare and approve written responses as required by Government Code section 11346.9, Public Resource Code section 21080.5(d)(2)(D), and title 17, Cal. Code Regs. Section 60007;

Determine whether there are feasible alternatives or mitigation measures that could be implemented to reduce or eliminate any potential adverse environmental impacts;

Make findings as required by Public Resources Code § 21081 if the proposed amendments would result in one or more significant adverse environmental impacts; and

Determine if additional modifications to the proposed amendments as set forth in Attachments A and B, along with any additional conforming modifications that may be appropriate, and any modifications that are necessary to ensure that all feasible mitigation measures or feasible alternatives that would substantially reduce any significant adverse environmental impacts have been incorporated into the final action, or return the proposed amendments and findings to the Board for further consideration before taking final action, if he determines that this is warranted.

BE IT FURTHER RESOLVED that if the Executive Officer determines that additional modifications are appropriate as specified above, the Board directs the Executive Officer to make the modified regulatory language available for public comment for a period of 15-days prior to taking final action to adopt the amendments, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulation to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board hereby determines that the regulations adopted herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of the public health and welfare than applicable federal standards.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to begin outreach efforts as soon as possible with the affected industry to ensure that all regulated entities are aware of the requirements of the TRU ATCM and the proposed amendments.

BE IT FURTHER RESOLVED that the Board directs staff to conduct outreach with freight brokers and forwarders, shippers, and receivers to resolve issues related to compiling a list of fully compliant carriers, to clarify which actions will meet a due diligence test for efforts to hire or contract for compliant equipment, and to develop other tools and guidance to facilitate the implementation of these requirements.

BE IT FURTHER RESOLVED that the Board directs staff to continue to work with electronic tracking system suppliers to ensure these systems are ready when they will be phased in, starting in 2013.

BE IT FURTHER RESOLVED that the Board directs staff to evaluate alternatives to enable TRUs rated at less than 25 horsepower to comply with ULETRU standards.

BE IT FURTHER RESOLVED that the Board directs staff to monitor the implementation of the TRU ATCM and propose amendments for the Board's consideration when warranted to resolve any implementation issues that may arise.

BE IT FURTHER RESOLVED that the Board hereby determines that pursuant to Title II, section 209(e)(2) of the federal Clean Air Act, as amended in 1990, that the emission standards and other requirements related to the control of emissions adopted as part of the amendments to the TRU ATCM are, in the aggregate, at least as protective of public health and welfare as applicable federal standards, that California needs the adopted standards to meet compelling and extraordinary conditions, and that the adopted standards and accompanying enforcement procedures are consistent with the provisions of section 209.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulations to the U.S. Environmental Protection Agency with a request that it confirm that the regulations are within the scope of the existing authorization of federal preemption that it has granted for TRU engines pursuant to section 209(e)(2) of the Clean Air Act, or that it grant California a new authorization for the regulations pursuant to section 209(e)(2) of the Clean Air Act.

I hereby certify that the above is a true and correct copy of Resolution 11-35, as adopted by the Air Resources Board.



Mary Alice Morency, Clerk of the Board

Resolution 11-35

October 21, 2011

Identification of Attachments to the Board Resolution

Attachment A: Proposed Amendment of Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate, as set forth in Appendix A to the Initial Statement of Reasons, released August 31, 2011

Attachment B: Staff's Suggested Modifications to the Original Proposed Amendments