

Final Regulation Order

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.

NOTE: This version of the Final Regulation Order complies with California Code of Regulations, title 1, section 8, subdivision (b). The amendments are shown in underline to indicate additions and strikethrough to indicate deletions from the existing regulatory text. For ease of readability, CARB has also provided a version of the amendments that can toggle between amendments in strikeout/underline and a "clean" version with amendments incorporated into the regulatory text, which can be found in the Word document titled, "Final Regulation Order, Alternate/Accessible Format".

Final Regulation Order

Amend Division 3, Chapter 9, Article 8, Sections 2477, 2477.1, 2477.2, 2477.3, 2477.4, 2477.5, 2477.6, 2477.7, 2477.8, 2477.9, 2477.10, 2477.11, 2477.12, 2477.13, 2477.14, 2477.15, 2477.16, 2477.17, 2477.18, 2477.19, 2477.20, and 2477.21, and Adopt Division 3, Chapter 9, Article 8, Sections 2477.22, 2477.23 and 2477.24, Title 13, California Code of Regulations.

[NOTE: The amendments to existing regulatory language are shown in ~~striketrough~~ to indicate deletions and underline to indicate additions]

§ 2477. Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate.

Sections 2477 through 2477.24 shall be known as the Transport Refrigeration Unit Regulation, or TRU Regulation.

NOTE: Authority cited: Sections 38597, 39600, 39601, 39618, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 38597, 39611, 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.1. Purpose

Diesel particulate matter (PM) was identified in 1998 as a toxic air contaminant. This TRU Regulation implements provisions of the Diesel Risk Reduction Plan, adopted by the California Air Resources Board in October 2000, as mandated by the Health and Safety Code Sections 39650-39675, to reduce emissions of substances that have been determined to be toxic air contaminants. Specifically, this TRU Regulation uses a phased approach to reduce diesel PM, oxides of nitrogen (NOx), and greenhouse gas (GHG) emissions from transport refrigeration units (TRUs) and TRU generator (gen) set equipment used to power electrically driven refrigerated shipping containers and trailers that are operated in California.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.2. Applicability.

Except as provided in section 2477.3, this TRU Regulation applies to the following entities:

- (a) Owners and operators: Section 2477.5 of this TRU Regulation applies to owners and operators of diesel-fueled TRUs and TRU gen sets that operate in the State of California, regardless of where the vehicle is based. This specifically includes California-based and non-California-based TRUs and TRU gen sets that are installed on trucks, trailers, shipping containers, and railcars.
- (b) Vehicle Owners: Section 2477.6 applies to vehicle owners of trucks or tractor-trailers that use TRUs or TRU gen sets on California highways.
- (c) Drivers: Section 2477.7 applies to drivers that drive trucks or tractor-trailers that use TRUs or TRU gen sets on California highways.
- (d) Freight brokers and freight forwarders: Section 2477.8 applies to freight brokers and freight forwarders that arrange, hire, tender contracts for, or dispatch the transport of perishable goods on California highways or railways in trucks, trailers, shipping containers, or railcars that are equipped with TRUs or TRU gen sets.
- (e) Carriers: Section 2477.9 applies to motor carriers that use, cause to be used, or dispatch TRU-equipped trucks, trailers, or railcars, or trailer chassis or shipping containers with TRU gen sets that are driven on California highways or railways.
- (f) Shippers: Section 2477.10 applies to shippers that arrange, tender contracts for, or dispatch the transport of perishable goods that requires the operation of TRU-equipped or TRU gen set-equipped trucks, trailers, shipping containers, or railcars in California.
- (g) Receivers: Section 2477.11 applies to receivers that arrange, tender contracts for, or dispatch the transport of perishable goods that requires the operation of TRU-equipped or TRU gen set-equipped trucks, trailers, shipping containers, or railcars in California.
- (h) Lessors and Lessees: Section 2477.12 applies to any person that rents or leases (lessor) TRUs or TRU gen sets and those persons renting (renter) or leasing (lessee) such equipment that is operated in California or that is based in California.
- (i) TRU, TRU gen set, and ZE truck TRU original equipment manufacturers: Section 2477.13 applies to original equipment manufacturers that direct TRU, TRU gen set, or ZE truck TRU sales to the California market.

- (j) TRU, TRU gen set, and TRU-equipped truck and trailer dealers located in California: Section 2477.14 applies to TRU, TRU gen set, and TRU-equipped truck and trailer dealers that maintain a business location in California and sell, maintain, or repair new or in-use TRUs, TRU gen sets, or TRU-equipped trucks or trailers.
- (k) Repair shops located in California that work on TRUs or TRU gen sets: Section 2477.15 applies to repair shops that maintain a business located in California and install replacement engines in TRUs or TRU gen sets, or retrofit TRUs or TRU gen sets with verified diesel emissions control strategies to comply with this subarticle.
- (l) Engine rebuilders: Section 2477.16 applies to TRU or TRU gen set engine rebuilders that sell to the California market.
- (m) Applicable facility owners and operators: Section 2477.17 applies to owners and operators of applicable facilities located in California.
- (n) To the extent not already covered under subsections (a) through (m), above, section 2477.18 of this TRU Regulation shall apply to any person in this State selling to an ultimate purchaser, or renting or leasing new or used TRUs or TRU gen sets, including, but not limited to, manufacturers, distributors, dealers, auctioneers, carriers, private fleets, independent owner-operators, and rental and leasing companies.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.3. Exemptions.

- (a) This TRU Regulation does not apply to military tactical support equipment.
- (b) Non-operational TRUs or TRU gen sets are exempt, except that the prohibitions in section 2477.18 apply with respect to selling, renting, or leasing to a person that could be reasonably expected to operate the TRU in California.
- (c) Transport refrigeration systems that are not driven by an integral diesel internal combustion engine are exempt from the requirements of this subarticle, except for units used to comply with the ZE truck TRU requirements in section 2477.5(b). Examples of exempt equipment include, but are not limited to:
 - (1) Transport refrigeration systems that are driven by gasoline-fueled internal combustion engines;

- (2) Transport refrigeration systems that are driven by electric motors with no integral diesel engine providing power; or
 - (3) Pure cryogenic temperature control systems with no diesel engine driven refrigeration system integration.
- (d) TRUs used during an emergency are exempt from the requirements of sections 2477.5(a), (b), (c), and (d) of this subarticle, provided the requirements of section 2477.5(l) are met. TRUs operating in California are not exempt from the TRU reporting requirements in section 2477.5(g).
- (e) Noncompliant TRUs on refrigerated railcars that are not operated while traveling through California shall be exempted provided the Executive Officer has previously approved a written compliance plan submitted by the railway carrier, as follows:
- (1) The written compliance plan shall clearly identify the monitoring, recordkeeping, and reporting procedures that the railway carrier will implement and utilize to ensure that noncompliant TRUs on refrigerated railcars will not operate while in California.
 - (2) The compliance plan shall establish monitoring, recordkeeping, and reporting procedural requirements that the Executive Officer finds are sufficient to identify non-compliant TRUs being moved on railways in California and to ensure that such TRUs will not operate at any time while they are present within California.
 - (A) The compliance plan shall include, without limitation: the procedure for tracking and recording routes and dates of travel within California of each noncompliant TRU, information identifying each noncompliant TRU (e.g. the railway carrier's reporting mark followed by the one-to-six-digit number which together uniquely identifies the railcar), a description of the automated monitoring and recordkeeping system for reporting the TRU "engine on" or "engine off" status, and the procedure for expeditiously reporting violations observed or discovered by the railway carrier.
 - (B) The compliance plan shall include a statement, signed by an authorized railroad representative, declaring that the railway carrier agrees to be bound by the compliance plan.

- (3) Within 30 days of the submission of a complete compliance plan, the Executive Officer shall approve or disapprove the compliance plan based on the information submitted by a railway carrier as specified in sections 2477.3(e)(1) and (2) above, and based on good engineering judgment. If the compliance plan is disapproved, the Executive Officer shall inform the railway carrier of the reasons for the disapproval. The railway carrier may revise the compliance plan to address the basis for disapproval and resubmit the compliance plan for EO approval or disapproval.
 - (4) The railway carrier shall maintain records collected pursuant to the approved compliance plan for a period of at least three (3) years and make these records available to CARB upon request.
- (f) Railway carriers are exempt from the owner or owner/operator requirements of section 2477.5 for any TRU or TRU gen set that is not owned by the railway carrier, provided:
- (1) The TRU or TRU gen set is not leased by the railway carrier, in which case, section 2477.12 applies; or
 - (2) The railway carrier or its agent is only fueling, monitoring to assure proper operation, keeping in operation, arranging repairs at the request of the owner, or restarting the TRU or TRU gen set engine after an unscheduled shut-down or repair, and is not performing any of the other activities listed under the definition of "operate".

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.4. Definitions.

- (a) For purposes of this TRU Regulation, the following definitions apply:
- "Alternative Diesel Fuel" means any fuel used in diesel engines that is not commonly or commercially known, sold or represented as No. 1-D or No. 2-D, pursuant to the specification for Diesel Fuel Oils D975-81, and does not require engine or fuel system modifications for the engine to operate, although minor modifications (e.g., recalibration of the engine fuel control) may enhance performance. Examples of alternative diesel fuels include, but are not limited to, biodiesel, Fischer Tropsch fuels, and emulsions of water in diesel fuel. Natural gas is not an alternative diesel fuel. An emission control strategy using a fuel additive will be treated as an alternative diesel fuel based strategy unless:

- (1) The additive is supplied to the vehicle or engine fuel by an on-board dosing mechanism, or
- (2) The additive is directly mixed into the base fuel inside the fuel tank of the vehicle or engine, or
- (3) The additive and base fuel are not mixed until vehicle or engine fueling commences, and no more additive plus base fuel combination is mixed than required for a single fueling of a single engine or vehicle.

"Alternative Fuel" means natural gas, propane, ethanol, methanol, or advanced technologies that do not rely on diesel fuel, except as a pilot ignition source at an average ratio of less than 1 part diesel fuel to 10 parts total fuel on an energy equivalent basis. Alternative fuels also mean any of these fuels used in combination with each other or in combination with other non-diesel fuels. Alternative-fueled engines shall not have the capability of idling or operating solely on diesel fuel at any time.

"Alternative-Fueled Engine" means an engine that is fueled with a fuel meeting the definition of alternative fuel.

"Applicable Facility" is any of the following facilities if one or more TRUs operate within the facility fence line or legal property boundary:

- (1) A Refrigerated Warehouse or Distribution Center, with a building size greater than or equal to 20,000 square feet; or
- (2) A Grocery Store, with a building size greater than or equal to 15,000 square feet; or
- (3) A Seaport Facility; or
- (4) An Intermodal Railyard.

"Applicable Facility Operator" means any person who leases, operates, controls, or supervises an applicable facility. An applicable facility may have more than one applicable facility operator.

"Applicable Facility Owner" means the person legally holding title (or its equivalent) to an applicable facility. An applicable facility may have more than one applicable facility owner. An applicable facility owner who leases or rents the applicable facility to another party may delegate the responsibilities in this TRU Regulation to the applicable facility operator (e.g., the lessee). The applicable facility owner shall notify CARB and the applicable facility operator in writing of this delegation.

"Applicable Facility Owner/Operator" means a requirement applies to the owner or operator of an applicable facility, as determined by agreement or contract between the parties if the two are separate business entities.

"B100 Biodiesel Fuel" means 100% biodiesel fuel derived from vegetable oil or animal fat and complying with American Society for Testing Materials (ASTM) D 6751-02 and commonly or commercially known, sold, or represented as "neat" biodiesel or B100. B100 biodiesel fuel is an alternative diesel fuel.

"B100 Biodiesel-Fueled" (compression-ignition engine) means a compression-ignition engine that is fueled by B100 biodiesel fuel.

"Broker" means a person, other than a motor carrier or an employee or agent of a motor carrier, that as a principal or agent sells, offers for sale, negotiates for, or holds itself out by solicitation, advertisement, or otherwise as selling, providing, or arranging for, transportation by motor carrier for compensation.

"Business" means an entity organized for profit including, but not limited to, an individual, sole proprietorship, partnership, limited liability partnership, corporation, limited liability company, joint venture, association or cooperative; or solely for purposes of the Prompt Payment Act (Government Code 927 et seq.), a duly authorized nonprofit corporation.

"California" means the State of California and does not include Indian Country in California under Indian or federal jurisdiction.

"California-Based TRUs and TRU Gen Sets" means TRUs and TRU gen sets equipped on trucks, trailers, shipping containers, or railcars that a reasonable person would find to be regularly assigned to terminals within California.

"CARB" means the California Air Resources Board.

"CARB Diesel Fuel" means any diesel fuel that is commonly or commercially known, sold, or represented as diesel fuel No. 1-D or No. 2-D, pursuant to the specification for Diesel Fuel Oils D975-81 and meets the specifications defined in 13 CCR 2281, 13 CCR 2282, and 13 CCR 2284.

"CARB Online System" means a CARB online system that TRU and applicable facility owners or owner/operators shall report information to for the purposes of this TRU Regulation. The CARB online system may be found at: <https://arber.arb.ca.gov>.

"Carbon Monoxide (CO)" means a colorless, odorless gas resulting from the incomplete combustion of hydrocarbon fuels.

"Carrier" means "motor carrier".

"Certification" means the obtaining of an Executive Order for a new off-road compression-ignition engine family that complies with the off-road compression-ignition emission standards and requirements specified in title 13 California Code of Regulations, section 2423. A "certified engine" is an engine that belongs to an engine family that has received a certification Executive Order.

"Certification Data" means the CARB Executive Order number and related exhaust emission data for each test cycle mode used to certify the engine family and obtain the certification level shown in the certification Executive Order. Such data includes modal exhaust emissions data for nitrogen oxides, nonmethane hydrocarbons, carbon monoxide, and particulate matter includes, as a minimum, torque, engine speed, weighting factor, power, mass emission rate (grams per hour), and certification test fuel.

"Class I Railroad" is a railroad that is defined as Class I by the Surface Transportation Board, which is incorporated by reference in Title 49 of the Code of Federal Regulations (CFR) Part 1201 (April 5, 2021).

"Compression Ignition (CI) Engine" means an internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a compression ignition engine.

"Consignee" (see receiver).

"Consignor" (see shipper).

"Cryogenic Temperature Control System" means a heating and cooling system that uses a cryogen, such as liquid carbon dioxide or liquid nitrogen that is routed through an evaporator coil that cools air blown over the coil. The cryogenic system uses a vapor motor to drive a fan and alternator, and a propane-fired heater superheats the carbon dioxide for heating and defrosting. Electrically driven fans may be used instead of a vapor motor and heating and defrost needs may be met by using electric heaters or vehicle engine coolant.

"Delegation" means entrusting by contract another party to act on the owner's behalf without forfeiture of any rights or property.

"Deterioration Factor (DF)" means a factor that is applied to the certification emission test data to represent emissions at the end of the useful life of the engine. Separate DFs apply to each measured pollutant, except that a combined NMHC+NO_x DF applies to engines that do not use aftertreatment devices. Decreasing emissions over time would not be allowed to offset increasing emissions of the other pollutant in this combined DF.

“Diesel Fuel” means any fuel that is commonly or commercially known, sold, or represented as diesel fuel, including any mixture of primarily liquid hydrocarbons - organic compounds consisting exclusively of the elements carbon and hydrogen - that is sold or represented as suitable for use in an internal combustion, compression-ignition engine.

“Diesel-Fueled” means fueled by diesel fuel or CARB diesel fuel in whole or in part, except as allowed for a pilot ignition source under the definition for “alternative fuel”.

“Diesel Oxidation Catalyst (DOC)” means the use of a catalyst to promote the oxidation processes in diesel exhaust. Usually refers to an emission control device that includes a flow-through substrate where the surfaces that contact the exhaust flow have been catalyzed to reduce emissions of the organic fraction of diesel particulates, gas-phase hydrocarbons, and carbon monoxide.

“Diesel Particulate Filter (DPF)” means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate. Periodically the collected particles are either physically removed or oxidized (burned off) in a process called regeneration.

“Diesel Particulate Matter” means the particles found in the exhaust of diesel-fueled CI engines. Diesel PM may agglomerate and adsorb other species to form structures of complex physical and chemical properties.

“Dispatch” means to coordinate delivery, pickup, and drop-off schedules of vehicles; and monitor the delivery of freight from these vehicles.

“Dispatched driver” means the driver of a truck or tractor-trailer combination that has been dispatched by a motor carrier, freight broker or forwarder, shipper, or receiver.

“Driver” means a person who physically operates a truck or tractor. Drivers may also be an owner or an operator. Drivers are not railroad engineers.

“Dual-Fuel Engine” means an engine designed to operate on a combination of alternative fuel, such as compressed natural gas (CNG) or liquefied petroleum gas (LPG), and conventional fuel, such as diesel or gasoline. These engines have two separate fuel systems, which either inject both fuels simultaneously into the engine combustion chamber or fumigate the gaseous fuel with the intake air and inject the liquid fuel into the combustion chamber.

“Effective model year” or “effective engine model year” is an alternative model-year designation (see definition of “model year”) for a new replacement engine, rebuilt replacement engine, or flexibility engine when the engine does not meet, at the time of manufacture, the most stringent emission tier standard for a new engine in effect for the horsepower rating of the engine. When an

engine is manufactured to meet a less stringent prior-tier emissions standard than is currently in effect, the effective model year is the last year that the prior-tier emission standard was in effect. Table 1 lists the tier standards that apply to TRUs and TRU gen sets and the corresponding effective model years.

Table 1: Effective Model Year

Prior-Tier Engine Emissions Standard	Tier Standard Effective Years	Effective Model Year
Tier 1, 25-50 Hp (trailer)	1999-2003	2003
Tier 1, under 25 Hp (truck)	2000-2004	2004
Tier 2, 25-50 Hp (trailer)	2004-2007	2007
Tier 2, under 25 Hp (truck)	2005-2007	2007
Tier 4i, 25-50 hp (trailer)	2008-2012	2012 ¹

“Electric-Standby-Equipped TRU” means a TRU that is equipped with an integral diesel-fueled internal combustion engine and electric-powered motor and the refrigeration system may be driven by either the diesel-fueled internal combustion engine or the integral electric motor.

“Electronic Tracking System” means a system that meets the following criteria:

- (1) The tracking device shall acquire, at a minimum, date, time, TRU engine hour meter reading, and location data at a rate of at least one reading per minute, with no more than 10 minutes data gap.
- (2) The tracking device shall be capable of determining if the TRU or TRU gen set location is within California and determining the TRU engine run time in California for each day.
- (3) The tracking records shall be collected by an independent entity with no business relationship to the owner or operator of the TRU or TRU gen set being tracked, other than to provide the tracking service. The data shall be stored on a server that is secure from tampering and inaccessible to the TRU or TRU gen set owner or operator, other than to download reports over the Internet. An inspector shall have free access to download reports from this website over the Internet that show the TRU or TRU gen set engine operation in California for each day.

“Emergency” means any of the following times:

- (1) A failure or loss of normal power service that is not part of an “interruptible service contract.”

¹ Effective model year applies for this tier only after Tier 4f becomes effective in 2013 for 25 to less than 50 hp engines.

- (2) A failure of a facility's internal power distribution system, provided the failure is beyond the reasonable control of the operator.
- (3) When an affected facility is placed under an involuntary "rotating outage."
- (4) When the President of the United States or the Governor of the State of California declares a state of emergency related to any type of disaster where TRU-equipped trucks or trailers provide foodservice to incident responders, including but not limited to, forest fires and earthquakes.
- (5) When the National Interagency Fire Center dispatches mobile catering service businesses with TRU-equipped trucks or trailers to provide foodservice to incident responders located in California.
- (6) When the Executive Officer has determined that an emergency event arising from sudden and reasonably unforeseen natural disaster such as earthquake, flood, fire, or other unforeseen events that threaten public health and safety has occurred that requires the immediate temporary operation TRUs or TRU gen sets.

"Emissions Control Group" has the same meaning as defined in title 13 CCR, section 2701

"Emission Control Strategy" means any device, system, or strategy employed with a diesel-fueled CI engine that is intended to reduce emissions. Examples of emission control strategies include, but are not limited to, particulate filters, diesel oxidation catalysts, selective catalytic reduction systems, alternative fuels, fuel additives used in combination with particulate filters, alternative diesel fuels, and combinations of the above.

"Emissions Rate" means the weight of a pollutant emitted per unit of time (e.g., grams per second).

"Executive Officer" means the Executive Officer of the California Air Resources Board or his or her delegate.

"Fischer-Tropsch Diesel Fuel" See "ultra-low-aromatic synthetic diesel fuel".

"Fleet" means one or more TRUs or TRU gen sets, owned by a person, business, military installation, or government agency operating in California and subject to this TRU Regulation. A fleet does not include TRUs that do not operate in California.

"Freight Broker" means "broker", as defined herein.

“Freight Forwarder” means a person holding itself out to the general public (other than as a pipeline, rail, motor, or water carrier) to provide transportation of property for compensation and in the ordinary course of its business does the following:

- (1) Assembles and consolidates, or provides for assembling and consolidating, shipments and performs or provides for break-bulk and distribution operations of the shipments;
- (2) Assumes responsibility for the transportation from the place of receipt to the place of destination; and
- (3) Uses for any part of the transportation a motor carrier or rail carrier.

“Fuel Additive” means any substance designed to be added to fuel or fuel systems or other engine-related engine systems such that it is present in-cylinder during combustion and has any of the following effects: decreased emissions, improved fuel economy, increased performance of the engine; or assists diesel emission control strategies in decreasing emissions, or improving fuel economy or increasing performance of the engine.

“Generator Set (gen set)” means a CI engine coupled to a generator used as a source of electricity.

“Global Warming Potential (GWP)” means the 100-year GWP value first published by the Intergovernmental Panel on Climate Change (IPCC) in its Fourth Assessment Working Group 1 Report (AR4) (IPCC, 2007, Forster, P., V. Ramaswamy, P. Artaxo, T. Berntsen, R. Betts, D.W. Fahey, J. Haywood, J. Lean, D.C. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz and R. Van Dorland, 2007: Changes in Atmospheric Constituents and in Radiative Forcing. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.), incorporated by reference herein; and if not contained in AR4, then the GWP Value means the 100-year GWP value published by the IPCC in its Fifth Assessment Working Group 1 Report (AR5) (IPCC, 2013, Myhre, G., D. Shindell, F.-M. Bréon, W. Collins, J. Fuglestad, J. Huang, D. Koch, J.-F. Lamarque, D. Lee, B. Mendoza, T. Nakajima, A. Robock, G. Stephens, T. Takemura and H. Zhang, 2013: Anthropogenic and Natural Radiative Forcing. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.), incorporated by reference herein.

"Grocery Store" means a retail facility that sells food products. This includes, but is not limited to establishments commonly known as supermarkets, food stores, grocery stores, food warehouses, and any other food merchandising stores.

"Highway" has the same meaning as defined in California Vehicle Code section 360.

"Hybrid Cryogenic Temperature Control System" means a temperature control system that uses a cryogenic temperature control system in conjunction with a conventional TRU.

"Hybrid electric TRU" means a TRU that is powered by an integral diesel-fueled internal combustion engine coupled to an electric generator that provides electric power to an electric motor-driven refrigeration system and fans within the same housing and is designed to control the environment of temperature sensitive products that are transported in trucks and refrigerated trailers. Hybrid electric TRUs may be capable of both cooling and heating.

"Intermodal Facility" means a facility involved in the movement of goods in one and the same loading unit or vehicle which uses successively several modes of transport without handling of the goods themselves in changing modes. Such a facility is typically involved in the transfer of refrigerated shipping containers and trailers to and from railcars, trucks, and ocean-going ships.

"Intermodal Railyard" means an intermodal facility owned or operated by a Class I Railroad.

"Interruptible Service Contract" means any arrangement in which a nonresidential electrical customer agrees to reduce or consider reducing its electrical consumption during periods of peak demand or at the request of the System Operator in exchange for compensation, or assurances not to be blacked out or other similar non-monetary assurances.

"In-Use TRU, TRU gen set, or engine" means a TRU, TRU gen set, or engine that is not a "new" TRU, TRU gen set, or engine.

"Manufacturer" means a business as defined in Government Code §14837(c).

"Military Installation" has the same meaning as defined in title 10 United States Code § 2801(c)(4).

"Military tactical support equipment (TSE)" means equipment or vehicles that meet military specifications, are owned or operated by the U.S. Department of Defense or the U.S. military services, and are used in combat, combat support, combat service support, tactical or relief operations, or training for such operations.

"Model Year (MY)" means the following:

- (1) The designation used for engines manufactured to meet the emissions tier standard in effect for new engines at time of manufacture (see alternative designation, "effective model year, defined above); and
- (2) The diesel-fueled engine manufacturer's annual production period, which includes January 1st of a calendar year, or if the manufacturer has no annual production period, the calendar year.

"Motor Carrier" means a person providing motor vehicle transportation for compensation.

"New TRU, TRU Gen Set, or Engine" means any TRU, TRU gen set, or engine that has never been subject to a retail sale or lease to an "ultimate purchaser."

"Nitrogen Oxide (NO_x)" means compounds of nitric oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition.

"Non-California-Based TRUs and TRU Gen Sets" means TRUs and TRU gen sets that are equipped on or used in trucks, trailers, shipping containers, or railcars that a reasonable person would find to be regularly assigned to terminals outside of California and operate in California from time to time for the purpose of transporting perishable goods into or out of the state.

"Non-methane Hydrocarbons (NMHC)" means the sum of all hydrocarbon air pollutants except methane. NMHCs are precursors to ozone formation.

"Non-operational" means one of the following:

- (1) Any TRU that is removed or separated from the truck, trailer, shipping container, or railcar on which it was originally mounted. This does not include TRU gen sets that are not attached to a shipping container or trailer chassis.
- (2) Any trailer TRU housing that remains attached to a trailer, but the fuel tank and battery have been removed and a label with the word "NONOPERATIONAL" has been affixed or attached to the housing in letters that contrast sharply with the color of the TRU housing and may be seen from 50 feet during daylight hours when the vehicle is stationary.
- (3) Any truck TRU housing that remains attached to a truck, but the positive and negative battery cables, fuel supply and return lines, and condensate drain line have been removed so that there are no visible ancillary connections to the TRU housing and a label with the word

"NONOPERATIONAL" has been affixed or attached to the housing in letters that contrast sharply with the color of the TRU housing and may be seen from 50 feet during daylight hours when the vehicle is stationary.

- (4) Any TRU that has no engine or fuel injection system installed, making the engine incapable of being started and a label with the word "NONOPERATIONAL" has been affixed or attached to the housing in letters that contrast sharply with the color of the TRU housing and may be seen from 50 feet during daylight hours when the vehicle is stationary.
- (5) TRU gen sets that have been quarantined in a designated area that is separated from compliant TRU gen sets by a cordon or barrier with signs that read "NONCOMPLIANT – DO NOT OPERATE IN CALIFORNIA". Bright red tags shall be affixed to the TRU gen set control panel at all times while in California that read: "NONCOMPLIANT – DO NOT OPERATE IN CALIFORNIA". TRU gen sets may be stored in a shipping container in lieu of being quarantined in a cordoned area.

"Nonretail Delivery or Pick-up Point" means wholesale perishable goods distribution facilities or businesses in the supply chain prior to retail facilities or businesses. This includes, but is not limited to, food manufacturing facilities, shipper warehouses, transfer points, distribution centers, cold storage warehouses, and intermodal facilities where perishable goods are loaded or unloaded.

"Operate" means to start, cause to function, program the temperature controller, select an operating program or otherwise control, fuel, monitor to assure proper operation, or keep in operation. A TRU that is operational (e.g., capable of being operated) shall be considered to operate if it is in California.

"Operator" means any person, party or entity that operates a TRU or TRU gen set for the purposes of transporting perishable goods, excluding an employee driver and third party maintenance and repair service, and including but not limited to a manufacturer, producer, supplier, carrier, shipper, consignor, consignee, receiver, distribution center, or warehouse of perishable goods. An operator may also be the driver if it is also the owner (e.g., independent owner-operator).

"Original equipment manufacturer (OEM)" means any person that originally manufactured new equipment for sale in commerce. This does not include a dealer who receives new equipment for sale in commerce.

"Owner" means, except as modified by paragraphs (1), (2) or (3) below, the person legally holding title (or its equivalent) to the TRU or TRU gen set, or either the person registered as the owner or lessee of a vehicle by the California Department of Motor Vehicles or its equivalent in another state, province, or

country, as evidenced on the vehicle registration document carried in the vehicle to which the TRU is attached. An owner may also be a driver or operator.

- (1) Banks, other financial lending institutions, or other entities engaged in the act of financing TRUs are not owners, for the purposes of this subarticle unless they otherwise have an obligation to comply with this TRU Regulation (e.g., contractually responsible for the maintenance of a TRU under a sales or lease agreement).
- (2) For a TRU-equipped truck or trailer, or TRU gen set owned by the federal government and not registered in any state or local jurisdiction, the owner means the department, agency, branch, or other entity of the United States, including the United States Postal Service, to which the vehicles in the fleet are assigned or which have responsibility for maintenance of the vehicles.
- (3) For a TRU-equipped truck or trailer, or TRU gen set that is rented or leased:
 - (A) The owner shall be presumed to be the rental or leasing entity for purposes of compliance with section 2477.5, if:
 1. The rental or lease agreement is for a period of less than one year; or
 2. The rental or lease agreement is for a period of one year or longer, unless the terms of the rental or lease agreement or other equally reliable evidence identifies the party responsible for compliance with State laws that apply to TRUs to be the renting operator or lessee.

“Owner/Operator” means a requirement applies to the owner or operator of a TRU or TRU gen set, as determined by agreement or contract between the parties if the two are separate business entities.

“Particulate Matter (PM)” means the particles found in the exhaust of CI engines, which may agglomerate and adsorb other species to form structures of complex physical and chemical properties.

“Person” means an individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, government, governmental subdivision, agency, or instrumentality, public corporation, or any other legal or commercial entity.

“Prior-Tier Replacement Engine” means a new replacement engine manufactured under title 40 CFR, section 89.1003 and 1068.240, and title 13

CCR, section 2423(j), as those sections existed on August 31, 2012, that meets a prior tier of the new engine emissions standards than the tier of standards currently in effect at the time of manufacture.

"Rail Carrier" means a person providing common carrier railroad transportation for compensation, but does not include street, suburban, or interurban electric railways not operated as part of the general system of rail transportation.

"Railcar TRU" means a TRU designed to control the environment of temperature sensitive products in a railcar.

"Rated Brake Horsepower" means the power delivered, according to the statement of the engine manufacturer, at the rated speed.

"Receiver" means the person that receives shipped goods, cargo, or commodities.

"Refrigerated Trailer" means a trailer van, railcar, or shipping container equipped with a TRU or TRU gen set. Pursuant to Health and Safety Code section 39618, refrigerated trailers are mobile sources and shall be regulated by CARB on a statewide basis.

"Refrigerated Warehouse or Distribution Center (WHDC)" means a facility with cold storage used for the reception and storage of products. This includes but is not limited to cold storage warehouses, packing houses, cross-dock facilities, and 3rd Party Logistic centers.

"Retail Delivery Point" means facilities or businesses where perishable goods are delivered to retail businesses that sell these goods to end users. This includes, but is not limited to, grocery stores, convenience stores, drug stores, restaurants, and prison or school cafeterias.

"Rotating Outage" means a controlled involuntary curtailment of electrical power service to consumers as ordered by the system operator.

"Seaport Facility" means any non-military independent marine terminal or operational seaport where the seaport functions as a marine terminal operator.

"Semitrailer" means a "Semitrailer" as defined in section 550 of the California Vehicle Code.

"Shipper" means the person, party, or entity who usually owns or supplies the commodities transported by a carrier, or that has possession of freight prior to its transportation. This may include, but is not limited to, food manufacturers, processors, packing plants, temporary cold storage facilities, and distribution centers.

"Square Footage" means for properties owned and operated by one business entity, the total square footage of all buildings on that property, as calculated from the building floor plan(s) or blueprint(s) archived by the local permitting agency or records office. For businesses leasing all or part of a building, the square footage shall be the usable area, as specified in the lease agreement.

"System Operator" means one of the several organizations that control energy in California. System operators include, but are not limited to, the California Independent System Operator, the Los Angeles Department of Water and Power, the Imperial Irrigation District, the Sacramento Municipal Utility District.

"Terminal" means any place where a TRU or TRU gen set equipped truck, trailer, shipping container, railcar or TRU gen set is regularly garaged, maintained, operated, or dispatched from, including a dispatch office, cross-dock facility, maintenance shop, business, or private residence.

"Third Party Agreement Confirmation Information" means the information used to notify CARB that responsibility for reporting a TRU or TRU gen set to CARB has been delegated to the lessee or to a consultant.

"Tier 4 Nonroad/Off-road Emission Standards" means the emission standards and associated procedures promulgated by U.S. Environmental Protection Agency in "Control of Emissions of Air Pollution from Nonroad Diesel Engines and Fuel; Final Rule" (Vol. 69, No. 124 Fed. Reg. pp. 38957-39273 (June 29, 2004)).

"Trailer" means a semitrailer.

"Trailer TRU" means a TRU that is mounted on or in a trailer or domestic shipping container (DSC) that can be attached and detached to a tractor, commonly referenced together as a "tractor-trailer."

"Transport Refrigeration Unit (TRU)" means refrigeration systems powered by integral internal combustion engines designed to control the environment of temperature sensitive products that are transported in trucks and refrigerated trailers. TRUs may be capable of both cooling and heating.

"Truck TRU" means a TRU that is mounted on or in a truck cargo box that is permanently attached to a truck, in contrast to a detachable trailer.

"TRU Generator Set (TRU gen set)" means a generator set that is designed and used to provide electric power to electrically driven refrigeration units of any kind. This includes, but is not limited to gen sets that provide electricity to electrically powered refrigeration systems for semi-trailer vans and shipping containers.

“Ultimate Purchaser” means with respect to a new TRU, TRU gen set, or engine, the first person who in good faith purchases a new TRU, TRU gen set, or engine for purposes other than resale.

“Ultra-Low-Aromatic Synthetic Diesel Fuel” means fuel produced from natural gas, coal, or biomass by the Fischer-Tropsch gas-to-liquid chemical conversion process, or similar process that meets the following properties:

Table 2

<i>Property</i>	<i>ASTM</i>	<i>Value</i>
Sulfur Content (ppmw)	D5453-93	<1
Total Aromatic Content (wt %)	D5186-96	<1.5%
Polynuclear Aromatic Content (wt %)	D5186-96	<0.5%
Natural Cetane Number	D613-84	>74

“Ultra-Low Emission TRU (ULETRU or U)” means a TRU or TRU gen set that meets the performance standards described under subparagraphs 2477.5(c)(1) and 2477.5(c)(2) or that uses an “alternative technology” in accordance with subparagraph 2477.5(c)(3).

“Vehicle Owner” means the person registered as the owner or lessee of a vehicle by the California Department of Motor Vehicles or its equivalent in another state, province, or as evidenced on the vehicle registration document carried in the vehicle to which the TRU is attached. For example, the owner of the truck or tractor pulling a TRU equipped trailer or container.

“Verification Classification Level” means the classification assigned to a Diesel Emission Control Strategy by the Executive Officer as defined in the *Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emission from Diesel Engines (13 CCR Sections 2700-2710)*. PM reductions correspond as follows: Level 1: $\geq 25\%$; Level 2: $\geq 50\%$; Level 3: $\geq 85\%$ or 0.01 g/hp-hr.

“Verified Diesel Emission Control Strategy” (VDECS) means an emission control strategy designed primarily for the reduction of diesel particulate matter emissions that has been verified per the *Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines (13 CCR Sections 2700-2710)*. Examples of diesel retrofit systems that may be verified include, but are not limited to, diesel particulate filters, diesel oxidation catalysts, fuel additives (e.g., fuel-borne catalysts), alternative fuels (e.g., dual fuel), alternative diesel fuels, and combinations of the above.

“Zero-Emission Fueling Infrastructure” means a fueling system that provides the appropriate fuel type to power a ZE truck TRU (e.g., electric charging infrastructure or cryogenic fueling tank and dispenser).

"Zero-Emission Truck TRU" (ZE truck TRU) means a truck refrigeration system whose operation results in zero exhaust emissions of any criteria pollutant (or precursor pollutant) or GHG under any possible operational modes or conditions. The ZE truck TRU may draw power from the truck or stored energy source that is recharged by the truck only if the truck produces zero exhaust emissions while operating. The stored energy source may not be recharged by a CI engine coupled to a generator as a source of electricity. Weight of the stored energy source does not alone qualify as "a decrease in fuel efficiency." For example, a ZE truck TRU on a diesel-powered truck may draw power from a battery that in turn is charged by a solar cell so long as the ZE truck TRU does not also draw power from the truck's internal combustion engine.

- (b) The terms "lease," "leased," "lessor," and "lessee" mean the same as "rental agreement," "rented," "owner of rented vehicle," and "renter," respectively.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43109.1, Health and Safety Code.

§ 2477.5. Requirements for Owners or Owner/Operators.

- (a) Refrigerant Requirements. The term TRU as used in this subsection (a) refers only to truck TRUs, ZE truck TRUs, trailer TRUs, and DSC TRUs. Railcar TRUs and TRU gen sets are exempt from the requirements of this subsection (a).
- (1) Beginning December 31, 2022, no owner or owner/operator shall operate or cause to be operated in California, a TRU with a manufacture date after December 31, 2022, unless the TRU uses a refrigerant with a GWP value less than or equal to 2,200, or uses no refrigerant at all.
 - (2) Beginning December 31, 2022, no owner or owner/operator shall operate or cause to be operated in California, a TRU with a manufacture date after December 31, 2022, with an unreadable or inadequately maintained TRU OEM supplied refrigerant label.
- (b) Zero-Emission Truck TRU Requirements. The term TRU as used in this subsection (b) refers only to truck TRUs. Trailer TRUs, DSC TRUs, railcar TRUs, and TRU gen sets are exempt from the requirements of this subsection (b).
- (1) Beginning December 31, 2023, no owner or owner/operator shall operate or cause to be operated in California, any truck TRU in the owner's truck TRU fleet, unless the fleet meets or exceeds the required ZE truck TRU fleet percentages specified in Table 3.

TRU owners shall replace their diesel-powered truck TRUs with ZE truck TRUs in accordance with the fleet percentages and phase-in compliance schedule specified in Table 3. The required number of ZE truck TRUs is based on the truck TRU fleet size reported to CARB on December 31, 2023 or December 31 of each year, whichever reported truck TRU fleet size is greater. A TRU owner may downsize their truck TRU fleet size only if the TRU owner has not purchased additional direct-drive refrigeration units, in which the compressor is powered from the truck's diesel engine, to replace the original diesel-powered units being sold or retired. The required number of ZE truck TRUs for a given year shall be calculated using the following formula:

"Minimum Number of ZE Truck TRUs = Required ZE Truck TRU Fleet % × Total Truck TRU Fleet"; Where:

Minimum Number of ZE Truck TRUs is the required minimum number of ZE truck TRUs in an owner's fleet as of the specified Compliance Date in Table 3.

Required ZE Truck TRU Fleet percentage (%) is listed in the second column of Table 3.

Total Truck TRU Fleet is the maximum of the December 31, 2023 Fleet Size or the Total Current Fleet Size; Where:

Number of Truck TRUs is the sum of all diesel-fueled truck TRUs plus all ZE truck TRUs in the owner's truck TRU fleet.

December 31, 2023 Fleet Size is the number of truck TRUs reported to CARB as of December 31, 2023.

Total Current Fleet Size is the Number of Truck TRUs in the owner's truck TRU fleet as of the applicable Compliance Date in Table 3.

Table 3: Phase-in Compliance Schedule for ZE Truck TRU Fleets

Compliance Date as of December 31	Required ZE Truck TRU Fleet Percentage
2023	15%
2024	30%
2025	45%
2026	60%
2027	75%

2028	90%
2029 and thereafter	100%

- (2) Downsizing a fleet. A TRU owner may have a smaller “Total Truck TRU Fleet” than otherwise required for a given Compliance Date if, between January 1 and December 31, inclusive, of the prior Compliance year, the TRU owner has not purchased any additional direct-drive refrigeration units in which the compressor is powered from the truck’s diesel engine, to replace the original diesel-powered units being sold or retired.
 - (A) Prior to the Compliance Date, the TRU owner shall report to CARB their intent to downsize their fleet, the proposed Number of Truck TRUs in the fleet, any TRUs acquired or sold in the prior Compliance Year, and all information required by section 2477.20(f).
 - (B) The downsized Number of Truck TRUs shall replace the Total Truck TRU Fleet number going forward.
- (3) If the calculated ‘number of ZE Truck TRUs’ is not equal to a whole number, the owner shall round up to a whole number when the fractional part of the required number of ZE truck TRUs is equal to or greater than 0.5, and round down if less than 0.5. For example:
 - (A) A fleet consisting of one truck TRU that operates in California shall contain one ZE truck TRU by December 31, 2026.
 - (B) A fleet consisting of two truck TRUs that operate in California shall contain one ZE truck TRU by December 31, 2024 and two ZE truck TRUs by December 31, 2027.
- (c) In-Use Performance Standards for MY 2022 and Older TRU and TRU Gen Set Engines. The term TRU as used in this subsection (c) refers only to trailer TRUs, DSC TRUs, railcar TRUs, and TRU gen sets. Truck TRUs are exempt from the requirements of this subsection (c). In accordance with the schedule set forth below in paragraph (c)(4), no owner or owner/operator shall operate or cause to be operated in California, a MY 2022 and older TRU or TRU gen set engine, unless it meets one of the in-use emission category performance standards set forth in (1) to (3) below.

- (1) Use a certified engine that meets the Ultra-Low Emission TRU (ULETRU or U) in-use PM performance standard of 0.02 g/hp-hr² or less. The engine shall meet the applicable nonroad/off-road emissions standards for all regulated pollutants and the in-use PM performance standard. Only engines for which certification data and deterioration factors have been provided to CARB shall be considered when determining compliance. The Executive Officer shall consider such submittals, publish, and make available a list of qualifying engines.
- (2) Equipping the engine with a Level 3 VDECS.
- (3) As an alternative to meeting the ULETRU in-use performance standard in section 2477.5(c)(1) or (2), an owner/operator may operate a MY 2022 and older TRU or TRU gen set in California meeting one of the *Alternative Technology* options listed below. Alternative Technologies qualify to meet the ULETRU in-use performance standard only if the TRU or TRU gen set is operated under the conditions included in the description listed below.
 - (A) Hybrid Electric TRU or electric standby-equipped TRU shall qualify as an Alternative Technology, provided all of the following conditions are met:
 1. The TRU shall not operate under diesel engine power while at a nonretail facility, except during:
 - a. An emergency;
 - b. Normal ingress, egress, and yard maneuvering, limited to 5 minutes per movement inside the facility fence line or property boundary; or
 - c. Unit/engine pre-trip inspections, troubleshooting diagnostics, and post-repair check-out (however, this exception does not apply to the initial van chill-down before loading);

² The Engine Certification value for the Ultra-Low Emission TRU category corresponds to the Tier 4 "final" Nonroad/Off-road Emission Standards for greater than 25 horsepower engines.

2. The facility or facilities that a TRU is normally based or frequents to load or unload perishable goods shall be equipped with electric power plugs located in the parking areas and loading spaces and the TRU shall be plugged into these power plugs during initial chill-down and whenever the refrigerated van or container contains perishable products;
3. All nonretail delivery and pick-up points that the E/S-equipped TRU frequents to load or unload goods shall be equipped with electric power plugs if the van load includes perishable goods. Electric power plugs shall be located in the parking areas and loading spaces and the TRU shall be plugged into these power plugs during initial chill-down and whenever the refrigerated van or container contain perishable goods and may need to operate;
4. The TRU engine run time at retail delivery points shall not exceed 30 minutes, otherwise electric power plugs are also required at those retail delivery points and shall be used to prevent engine operations that exceed 30 minutes at the delivery point;
5. The TRU shall be equipped with non-resettable engine hour meters and electric power use hour meters;
6. 100 percent of an owner's hybrid electric or electric standby-equipped TRUs shall be equipped with electronic tracking systems by December 31, 2013; and
7. The TRU shall be reported to CARB in accordance with section 2477.5(g).

(B) Hybrid cryogenic temperature control systems shall qualify as an Alternative Technology, provided all of the following conditions are met:

1. The TRU does not operate under diesel engine power while at a nonretail facility, except during:
 - a. An emergency;
 - b. Normal ingress and egress yard maneuvering; or
 - c. Unit/engine pre-trip inspections, diagnostics, and repair operations;

2. The TRU engine run time at retail delivery points shall not exceed 30 minutes, otherwise purely cryogenic temperature control shall be used at those retail delivery points to prevent engine operations that exceed 30 minutes at the delivery point;
3. The TRU shall be equipped with non-resettable engine hour meter and cryogenic system use hour meter;
4. The TRU shall be equipped with an electronic tracking system; and
5. The TRU shall be reported to CARB in accordance with section 2477.5(g).

(C) Alternative-fueled engines. If the engine is a CI engine, a VDECS is required.

NOTE: If the engine is not a compression ignition diesel fueled engine, this TRU Regulation would not apply, but the engine may have to meet other emission standards (e.g., large spark-ignited engine standards if >25 hp).

(D) Fuel exclusively with an alternative diesel fuel that has been verified as a VDECS, provided it is used in accordance with the requirements of section 2477.5(j)(1) and the alternative diesel fuel contains no conventional diesel or CARB diesel fuel, except in trace amounts.

(E) Power by fuel cells. If a reformer is used with diesel fuel as the source of hydrocarbons, then emissions shall be evaluated and verified through the *Verification Procedure Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines* (13CCR section 2700 - 2710).

(F) Equip with any other system approved by the Executive Officer to not emit diesel PM or increase public health risk while at a facility.

(4) In-Use Compliance Dates for MY 2022 and Older TRU and TRU Gen Set Engines. In-use compliance dates are based upon the engine model year. Compliance dates may also be extended if the requirements of subparagraphs 2477.5(m) or (n) are met.

- (A) Beginning December 31, 2022, no owner or owner/operator shall operate or cause to be operated in California, a MY 2022 and older TRU or TRU gen set engine, unless it meets the in-use performance criteria set forth in section 2477.5(c) for ULETRU on or before December 31st of the seventh year past the engine's model year. For example:
 - 1. No owner or owner/operator shall operate or cause to be operated in California, a MY 2020 TRU or TRU gen set engine, unless it meets ULETRU on or before December 31, 2027.
- (B) The manufacture year of the TRU unit may be used instead of the TRU engine model year to determine the TRU ATCM in-use performance standards that must be met and the related compliance dates; however, this exception only applies if the unit manufacture year shown on the TRU unit label is no more than one year later than the engine model year shown on the TRU engine emissions label. If the difference between the engine model year on the engine emissions label and the unit manufacture year is greater than one year, then the engine model year shall be used in accordance with subsection 2477.5(c)(4)(A).
 - 1. If the owner complies with the TRU ATCM in-use performance standard by retrofitting with a VDECS, the engine model year shown on the engine emissions label shall be used to determine engine compatibility with the VDECS, in accordance with the Executive Order for that VDECS.
 - 2. If the owner of a TRU is required to report the TRU to CARB, in accordance with section 2477.5(g), the engine model year that is shown on the engine emissions label shall be provided as the engine model year.
- (d) PM Emission Standard for MY 2023 and Newer TRU and TRU Gen Set Engines. The term TRU as used in this subsection (d) refers only to trailer TRUs, DSC TRUs, railcar TRUs, and TRU gen sets. Truck TRUs are exempt from the requirements of this subsection (d). Beginning December 31, 2022, no owner or owner/operator shall operate or cause to be operated in California, a MY 2023 and newer TRU or TRU gen set engine, unless it meets a PM emission standard of 0.02 g/hp-hr or lower.

- (1) For TRU and TRU gen set engines with rated brake horsepower <25 hp, compliance with the PM emission standard shall be achieved by using a certified engine meeting the PM emission standard. Only engines for which certification data and deterioration factors have been provided to CARB shall be considered when determining compliance. The Executive Officer shall consider such submittals, publish, and make available a list of qualifying engines.
 - (2) For TRU and TRU gen set engines with rated brake horsepower \geq 25 hp, compliance with the PM emission standard shall be achieved by using a certified engine meeting the applicable nonroad/off-road emissions standards for all regulated pollutants and the PM emission standard. Only engines for which certification data and deterioration factors have been provided to CARB shall be considered when determining compliance. The Executive Officer shall consider such submittals, publish, and make available a list of qualifying engines.
- (e) VDECS Requirements.
- (1) VDECS Installation. Before installing a VDECS on a TRU or TRU gen set, the owner or owner/operator shall ensure that:
 - (A) The VDECS is verified for use on the TRU or TRU gen set engine, as described in the Executive Order for the VDECS.
 - (B) Use of the TRU or TRU gen set is consistent with the conditions of the Executive Order for the VDECS.
 - (C) The VDECS is installed in a verified configuration.
 - (D) The engine to be retrofitted shall be in its original certified configuration, free of excess oil consumption, shall not have malfunctioning fuel delivery systems, or any other mechanical condition that may impair the proper functioning of the VDECS.
 - (E) The VDECS label is visible after installation.
 - (2) VDECS Maintenance. If an owner or owner/operator installs a VDECS to meet the requirements of section 2477.5(c), the VDECS shall remain installed until the VDECS fails, is damaged, or is replaced with a similar or higher level VDECS. The owner or owner/operator shall ensure that the VDECS and TRU or TRU gen set engine are properly maintained as recommended by the respective manufacturers.
 - (3) Failure or Damage of a VDECS. In the event of a failure or damage of a VDECS, the following conditions shall apply:

- (A) If a VDECS fails within its warranty period, the owner/operator of the TRU or TRU gen set must replace it with the same VDECS or a higher verification classification level, if available.
 - (B) If a VDECS fails outside its warranty period and a higher verification classification level VDECS is available, then the owner/operator of the TRU or TRU gen set shall upgrade to the highest level VDECS required under paragraphs 2477.5(c) that is determined to be cost-effective by the Executive Officer.
- (f) In-Use Recordkeeping and Reporting. In-use recordkeeping and reporting shall be completed by the owner or operator in accordance with the following:
 - (1) An owner that has elected to comply by using a verified alternative diesel fuel in accordance with section 2477.5(c)(3)(D), shall comply with the recordkeeping requirements in section 2477.5(j)(1).
 - (2) An owner that has elected to comply by using a hybrid electric TRU or electric standby-equipped TRU in accordance with section 2477.5(c)(3)(A) or a hybrid cryogenic temperature control system in accordance with section 2477.5(c)(3)(B), shall use an electronic tracking system that meets the recordkeeping requirements of section 2477.20(d).
- (g) TRU Reporting Requirements. The term TRU as used in this subsection (g) refers to TRUs and TRU gen sets, as well as ZE truck TRUs used to comply with section 2477.5(b).
 - (1) Owners or owner/operators shall report all California-based TRUs operated by the owner or owner/operator to CARB by providing the information listed in section 2477.20(f) for each TRU.
 - (2) On or before December 31, 2023, owners or owner/operators shall report all non-California-based TRUs operated in California by the owner or owner/operator to CARB by providing the information listed in section 2477.20(f) for each TRU.
 - (3) California-based TRUs added to an owner's or owner/operator's operations after January 31, 2009 and non-California based TRUs added to an owner's or owner/operator's operations after December 31, 2023 shall be brought into compliance with section 2477.5(g)(1) and (2) within 30 days of the unit entering the owner or owner/operator's control or beginning operations in California. The owner or owner/operator shall request:
 - (A) A CARB IDN for a new TRU that was not previously numbered, or

- (B) A change in owner or owner/operator for a TRU that already has a CARB IDN number.
- (4) If reported information for any TRU changes, then the owner or owner/operator shall update the information within 30 days of those changes.
- (5) The Executive Officer shall issue identification numbers for each TRU reported to CARB. The number shall include a 2-digit prefix for model year (e.g., 2001 model year would have a prefix 01); a 6-digit serial number and a check digit.
- (6) Within 30 days of receipt of the CARB IDN, the owner or owner/operator shall permanently affix or paint the CARB IDN on the TRU chassis housing in clear view according to the specifications in section 2477.20(e). Beginning December 31, 2023, the requirements of this subsection 2477.5(g)(6) shall be superseded by the TRU compliance label requirements in section 2477.5(i).
- (h) TRU Operating Fees. The term TRU as used in this subsection (h) refers to TRUs and TRU gen sets, as well as ZE truck TRUs used to comply with section 2477.5(b).
 - (1) ~~Beginning December 31, 2023, the~~ The Executive Officer shall assess and collect fees from owners or owner/operators of TRUs that operate in California to recover the costs to the Executive Officer administering the TRU ATCM as specified under section 2477.21(a).
- (i) TRU Compliance Labels. The term TRU as used in this subsection (i) refers to TRUs and TRU gen sets, as well as ZE truck TRUs used to comply with section 2477.5(b).
 - (1) Beginning December 31, 2023, the TRU compliance label requirements in this subsection (i) shall supersede the IDN labeling requirements in section 2477.5(g)(6).
 - (2) Beginning December 31, 2023, upon verifying the information reported under section 2477.5(g) and all TRU operating fees have been received in accordance with section 2477.5(h), the Executive Officer shall issue two compliance labels for each TRU.
 - (3) Within 30 days of receipt of the CARB compliance labels, owners or owner/operators shall affix the labels in clear view, correct side up, un-obstructed; and kept and maintained in a manner that retains legibility. The location of the label shall be as follows:
 - (A) Truck and trailer TRUs - both sides of TRU chassis housing.

- (B) Rail car and shipping container TRUs - both sides of the TRU.
- (C) TRU gen sets - both sides of gen set housing.
- (4) TRU compliance labels shall be valid for three (3) years from date of issuance.
- (5) TRUs with pending enforcement actions shall not be issued a new compliance label until they are settled.
- (6) Owners or owner/operators may use alternative unique equipment identification markings instead of affixing the CARB compliance label, provided the requirements of section 2477.20(e)(6) are met.
- (j) Fuel Requirements.
 - (1) Owners or Owner/Operators Choosing to Use Alternative Diesel Fuels. Owners or owner/operators choosing to use alternative diesel fuels in compression ignition TRU and TRU gen set engines to meet the requirements of section 2477.5(c) shall:
 - (A) Maintain records that document exclusive use of the chosen fuel or additive for each affected engine and hours of engine operation. Appropriate records would be copies of receipts or invoices of appropriate fuel or fuel additive and engine hour meter logs.
 - 1. Records shall be kept available for a minimum of three (3) years and shall be compiled and made available to CARB upon request.
 - (B) Use only fuel that is a VDECS alternative diesel fuel that contains no conventional diesel or CARB diesel fuel in TRUs or TRU gen sets operated in California.
 - (C) Permanently affix a label in clear view near the fill spout that identifies the proper fuel that is required to be in compliance.
 - (D) In the event that the owner or owner/operator decides to revert to using conventional diesel or CARB diesel fuel, the owner or owner/operator shall comply with the requirements of section 2477.5(c) within 10 days of discontinuation of alternative diesel fuel use. Within 10 days of discontinuation, the owner or owner/operator shall notify the Executive Officer in writing of this change in fuel use and shall include an update to the compliance information submitted to CARB to comply with section 2477.5(g).

- (2) Owners or Owner/Operators that Retrofit TRUs or TRU Gen Sets with a VDECS. Owners or owner/operators that retrofit TRUs or TRU gen sets with a VDECS that requires certain fuel properties to be met in order to achieve the required PM reduction or PM emissions shall only fuel the subject TRU or TRU gen set with fuel that meets these specifications when operating in the state of California. In addition, owners or owner/operators that choose a VDECS that requires certain fuel properties to be met in order to prevent damage to the VDECS or an increase in toxic air contaminants, other harmful compounds, or in the nature of the emitted PM shall only fuel the subject TRU or TRU gen set with fuel that meets these specifications.

(k) Compliance by Replacing Engines.

A new or rebuilt replacement engine shall meet more stringent emissions standards than the original engine. The new or rebuilt replacement engine must subsequently meet the in-use performance standard requirements of section 2477.5(c) by the compliance dates of section 2477.5(c)(4), which are based on the new or rebuilt replacement engine's model year or effective model year.

- (1) Current tier new replacement engines. Current tier new replacement engines shall use the engine model year to determine requirements and compliance dates. The engine model year is shown on the engine emissions label if the engine is manufactured when an emissions standard tier is in effect. Emissions label language examples include, but are not limited to:
 - (A) "THIS ENGINE MEETS 2008 INT. TIER 4 EMISSION REGULATIONS FOR U.S. EPA AND CALIFORNIA NONROAD CI ENGINES." This label language indicates the engine is a current-tier 2008 model year engine for the purposes of in-use requirements and registration.
 - (B) "THIS ENGINE COMPLIES WITH U.S. EPA AND CALIFORNIA REGULATIONS FOR 2009 M.Y. NONROAD AND STATIONARY/OFF-ROAD DIESEL ENGINES." This label language indicates the engine is a current-tier 2009 model year engine for the purposes of in-use requirements and registration.

- (2) Prior tier new replacement engines. Prior-tier new replacement engines shall use the effective model year (see definition) to determine requirements and compliance dates. The manufacture year and the installation year of a prior tier replacement engine shall not be used to determine the in-use requirements and the compliance dates. Prior-tier new replacement engine emissions labels typically do not clearly show the effective model year, but provide dates that indicate the prior-tier emissions standard that the engine meets. The year in the first sentence of the replacement engine emission label is the first year of the tier met. The date in the second sentence of the replacement engine label is the first day of the next tier standard. Table 1 in section 2477.4 and the following example of replacement engine emissions label language show how these labels shall be interpreted for this subarticle:
- (A) "THIS ENGINE COMPLIES WITH CALIFORNIA OFF-ROAD AND U.S. EPA NONROAD EMISSION REQUIREMENTS FOR 2004 ENGINES UNDER 13 CCR 2423(j) AND 40 CFR 89.1003(b)(7). SELLING OR INSTALLING THIS ENGINE FOR ANY PURPOSE OTHER THAN TO REPLACE AN OFF-ROAD ENGINE BUILT BEFORE JANUARY 1, 2008 MAY BE A VIOLATION OF CALIFORNIA AND FEDERAL LAW SUBJECT TO CIVIL PENALTY." The first sentence includes the year 2004 (the first year of the tier). The second sentence indicates the next tier started on January 1, 2008, so the last year of the tier the engine met would be 2007. The center column of Table 1 shows the effective years 2004 to 2007 matches a Tier 2 engine in the 25-50 hp (trailer) category.
- (3) Rebuilt replacement engines. Rebuilt replacement engines must meet the requirements of section 2477.16.
- (A) Prior tier rebuilt replacement engines. If the rebuilt engine meets a prior tier emissions standard, then the effective model year (see definition) shall be used to determine the requirements and compliance dates. The rebuild year and the installation year of a prior tier replacement engine shall not be used to determine the in-use requirements and the compliance dates.
- (B) Current tier rebuilt replacement engines. If the rebuilt engine meets the tier standard that is currently in effect, then the model year is the year that the rebuild is completed and this year shall be used to determine the requirements and compliance dates.
- (l) Mobile Catering Company Exemption Requirements.

- (1) The Executive Officer shall grant a one-year exemption to mobile catering companies for TRUs that are not compliant with the requirements under sections 2477.5(a), (b), (c), or (d) if the following conditions are met:
- (A) The mobile catering company shall be under contract with the National Interagency Fire Center to provide mobile catering food service to emergency incidents for the year that the exemption would apply.
 - (B) All TRUs shall comply with the TRU reporting requirements under section 2477.5(g) and have a CARB Identification Number (IDN) affixed to both sides of the TRU housing. All TRUs owned or leased by the mobile catering company that are based outside of California that the owner wants included in the mobile catering company exemption shall be reported to CARB in accordance with section 2477.5(g).
 - (C) The mobile catering company shall submit an application for the Mobile Catering Service Exemption with the information required under section 2477.20(g).
 - (D) The owner shall update the application information within 30 days of any changes to the information submitted. For example, if the owner buys, sells, or leases TRUs, the IDN and unit serial number list required under section 2477.20(g)(7) shall be amended.
 - (E) The owner shall provide the driver with a copy of the current Mobile Catering Service Exemption that has been approved by the Executive Officer and the Mobile Food and Shower Service Request Form issued by the National Interagency Fire Center for the incident they are traveling to or from.
 - (F) During transit on California highways, the driver shall, upon request:
 - 1. Present to the CARB inspector the Mobile Catering Service Exemption that has been approved by the Executive Officer and the Mobile Food and Shower Service Request Form issued by the National Interagency Fire Center, and
 - 2. Allow the CARB inspector to inspect the TRU to confirm the Mobile Catering Service exemption applies to the equipment.

- (G) All circumstances at the time of inspection shall be consistent with the Mobile Catering Service Exemption that has been approved by the Executive Officer and the Mobile Food and Shower Service Request Form issued by the National Interagency Fire Center.
 - (H) Mobile Catering Company Exemptions shall expire on December 31st of each year. Mobile catering companies shall re-apply for this exemption annually.
- (m) Compliance Extension Based on Unavailability of Compliance Technology.
- (1) If there is no compliance technology available for a specific TRU or TRU gen set within six months of a compliance date, the Executive Officer may grant a one-year extension to the normal compliance date set forth in sections 2477.5 (a), (b), (c), and (d), provided the following conditions are met:
 - (A) The owner demonstrates the absence of any suitable compliance option that can be used on the specific equipment and the owner cannot otherwise meet the requirements of section 2477.5(a), (b), (c), and (d) by the compliance dates.
 - (B) The TRU or TRU gen set is reported to CARB as required under section 2477.5(g).
 - (C) The owner shall submit an application to CARB as required under section 2477.20(h).
 - (D) The Executive Officer may grant additional one-year extensions provided the same procedures are followed for each extension.
- (n) Compliance Extension Based on Delays Due to Private Financing, Equipment Manufacture Delays, or Installer Delays.
- (1) The Executive Officer shall grant a one-time, maximum six-month extension to the normal compliance date set forth in sections 2477.5(a), (b), (c), and (d), provided the following conditions are met:
 - (A) The owner shall have ordered the compliance technology from the manufacturer no later than two months before the compliance date for VDECS retrofit compliance technologies and no later than four months before the compliance date for engine replacements, unit replacements, and trailer replacements, and the purchase order must be consistent with these limits.
 - (B) The TRU or TRU gen set is reported to CARB as required under section 2477.5(g).

- (C) The owner shall submit an application as required under 2477.20(i) prior to the compliance deadline.
- (o) Compliance Extension Based on Delays Due to Installation of Zero-Emission Fueling Infrastructure.
 - (1) The Executive Officer shall grant an annual extension in compliance, up to a maximum of two years, to an owner for the ZE truck TRU requirements specified in section 2477.5(b) due to unforeseen, temporary, or extenuating circumstances outside of the owner's or owner/operator's control that prevents the installation of zero emission fueling Infrastructure at the facility at which the truck TRU fleet is domiciled.
 - (2) For the purposes of this subsection (o), circumstances beyond the truck TRU owner's control may include:
 - (A) A delay in the manufacture and shipment of zero-emission fueling infrastructure equipment
 - (B) A delay in obtaining construction permit(s)
 - (C) A delay in obtaining power from a utility
 - (D) A delay due to private financing
 - (E) A delay in the installation of zero-emission fueling infrastructure
 - (F) A natural disaster
 - (G) The discovery of archeological, historical, or tribal cultural resources under the California Environmental Quality Act
 - (3) The owner shall submit an application as required under section 2477.20(i)(5) at least 12 months prior to the compliance deadline in section 2477.5(b) if the delay is due to a utility infrastructure upgrade, and at least 3 months prior for all other delay types.
 - (4) The owner may, 60 days prior to the expiration of the extension, apply for an additional one-year extension. In such a case, the truck TRU owner shall once again be required to demonstrate that the conditions set forth in section 2477.20(i)(5) have been met.

- (5) The owner may, 60 days prior to the expiration of the second extension, apply for an additional compliance extension beyond the first two annual extensions due to a delay in obtaining power from a utility. In such a case, the owner shall once again be required to demonstrate that the conditions set forth in section 2477.20(i)(5) have been met.
 - (6) Within 45 days of the submission of a complete application, the Executive Officer shall approve, modify, or disapprove the application and notify the applicant accordingly. If the application is modified or disapproved, the Executive Officer shall state the reasons for the modification or disapproval in the notification. The notification to the applicant and approved plan, if applicable, shall be made available to the public on CARB's website.
- (p) Safe Passage for Noncompliant Equipment Traveling in California.
- (1) The Executive Officer shall grant a safe passage permit to a TRU or TRU gen set owner to travel on California highways with a specific noncompliant TRU or TRU gen set, provided the following conditions are met:
 - (A) The purpose of traveling on California highways is to take the noncompliant equipment to a dealer or installer to bring the equipment into compliance.
 - (B) Only one permit shall be allowed for each TRU or TRU gen set.
 - (C) The TRU or TRU gen set shall not operate (with the engine running) while in a noncompliant state in California.
 - (D) Temperature-sensitive products shall not be transported in a vehicle with a noncompliant TRU or TRU gen set.
 - (E) The owner shall submit an application for a safe passage permit to the Executive Officer, as required under section 2477.20(j).
 - (F) The Executive Officer shall provide a decision within 15 days of the application submittal.
 - (G) The owner shall provide the driver with a copy of the safe passage permit that has been approved by the Executive Officer.
 - (H) During transit on California highways, the driver shall, upon request:
 - 1. Show an inspector that no temperature-sensitive products are being transported;

2. Present to the inspector the safe passage permit for the noncompliant TRU or TRU gen set that has been approved by the Executive Officer; and
 3. Allow the inspector to inspect the TRU or TRU gen set to confirm the permit applies to the noncompliant equipment.
- (l) All circumstances at the time of inspection shall be consistent with the safe passage permit.

NOTE: Authority cited: Sections 38597, 39600, 39601, 39611, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 38597, 39611, 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.6. Requirements for Vehicle Owners.

- (a) Beginning December 31, 2022, a vehicle owner shall not operate or cause to be operated in California, a TRU-equipped truck or tractor-trailer equipped with a TRU or TRU gen set, unless the TRU or TRU gen set complies with sections 2477.5(a), (b), (c), and (d).
- (b) Beginning December 31, 2022, a vehicle owner of a TRU-equipped truck or tractor-trailer equipped with a TRU or TRU gen set shall, upon request by CARB enforcement personnel, provide the following:
 - (1) Driver's license
 - (2) Truck or tractor registration
 - (3) Trailer registration
 - (4) Bill of lading or freight bill with origin and destination of freight being transported, the consignor (shipper) and consignee (receiver);
 - (5) The company name and contact information of the carrier that dispatched the driver; and
 - (6) The company name and contact information of the business entity (e.g., shipper, freight broker, freight forwarder, or receiver) that arranged, hired, or contracted for the transport of the perishable goods being hauled, subject to the requirements in sections 2477.8, 2477.9, 2477.10, and 2477.11.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618,

39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.7. Requirements for Drivers.

- (a) A driver shall not operate a TRU-equipped truck or tractor-trailer equipped with a TRU or TRU gen set on a California highway unless the TRU or TRU gen set complies with sections 2477.5(a), (b), (c), and (d).
- (b) A driver shall, upon request by CARB enforcement personnel, provide the following:
 - (1) Driver's license;
 - (2) Truck or tractor registration;
 - (3) Trailer registration;
 - (4) Bill of lading or freight bill with origin and destination of freight being transported, the consignor (shipper) and consignee (receiver);
 - (5) The company name and contact information of the carrier that dispatched the driver; and
 - (6) The company name and contact information of the business entity (e.g., shipper, freight broker, freight forwarder, or receiver) that arranged, hired, or contracted for the transport of the perishable goods being hauled, subject to the requirements in sections 2477.8, 2477.9, 2477.10, and 2477.11.
- (c) A driver shall allow CARB personnel to conduct a visual inspection of TRU or TRU gen sets to determine whether emission control components have been tampered with, inadequately maintained, or are defective. The driver shall do the following:
 - (1) Temporarily turn off the TRU or TRU gen set engine
 - (2) Allow access to the TRU or TRU gen set engine compartment

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43109.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.8. Requirements for Freight Brokers and Freight Forwarders.

- (a) Freight brokers and freight forwarders that arrange, hire, contract for, or dispatch the transport of perishable goods in TRU-equipped or TRU gen set-equipped trucks, tractor-trailers, shipping containers, or railcars on California highways or railways shall:
 - (1) Require the carriers they hire or contract with for transport of perishable goods, to only dispatch TRU-equipped trucks, trailers, shipping containers, and railcars or TRU gen sets that comply with sections 2477.5(a), (b), (c), and (d), if they travel on California highways or railways.
 - (2) Provide the following information to the carrier for their dispatched driver who will be traveling on a California highway or railway:
 - (A) Freight broker's or freight forwarder's business name;
 - (B) Freight broker's or freight forwarder's street address, state, zip code;
 - (C) Freight broker's or freight forwarder's contact person's name; and
 - (D) Freight broker or freight forwarder contact person's business phone number.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43109.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.9. Requirements for Motor Carriers.

- (a) Beginning January 1, 2013, motor carriers that dispatch TRU-equipped trucks, trailers, or shipping containers equipped with a TRU or TRU gen set that travel on a highway within California shall:
 - (1) Only dispatch TRUs or TRU gen sets that comply with section 2477.5.
 - (2) Provide the following information to a dispatched driver who will be traveling on a highway within California:
 - (A) Carrier's business name;
 - (B) Carrier's street address, state, zip code;
 - (C) Carrier contact person's name; and

- (D) Carrier contact person's business phone number.
- (3) Provide the dispatched driver with the business name, address, contact person, and phone number of the business entity (e.g., freight broker, freight forwarder, shipper or receiver) that arranged, hired, contracted for, or dispatched the transport of the perishable goods being hauled.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.10. Requirements for Shippers.

- (a) Shippers that arrange, hire, contract for, or dispatch the transport of perishable goods in TRU-equipped trucks, trailers, shipping containers, or railcars, or TRU gen sets on California highways or railways shall:
 - (1) Dispatch TRUs or TRU gen sets that comply with sections 2477.5(a), (b), (c), and (d) if they travel on California highways or railways; or
 - (2) Require the carriers they hire or contract with for transport of perishable goods, to only dispatch TRUs or TRU gen sets that comply with sections 2477.5(a), (b), (c), and (d) if they travel on California highways or railways; and
 - (3) Provide the following information to the carrier or a dispatched driver who will be traveling on a highway within California:
 - (A) Shipper's business name and address;
 - (B) Receiver's business name and address;
 - (C) Freight broker or forwarder business name and address (if any); and
 - (D) Contact person's name, and phone number at the shipper, broker, or receiver with knowledge of the transport arrangements.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.11. Requirements for Receivers.

- (a) Receivers that arrange, hire, contract for, or dispatch the transport of perishable goods in TRU-equipped trucks, trailers, shipping containers, or railcars; or TRU gen sets on California highways or railways shall:
 - (1) Dispatch TRUs or TRU gen sets that comply with sections 2477.5(a), (b), (c), and (d) if they travel on California highways or railways; or
 - (2) Require the carriers they hire or contract with for transport of perishable goods, to only dispatch TRUs or TRU gen sets that comply with sections 2477.5(a), (b), (c), and (d) if they travel on California highways or railways; and
 - (3) Provide the following information to the carrier or a dispatched driver who will be traveling on a highway within California:
 - (A) Shipper's business name, address;
 - (B) Receiver's business name, address;
 - (C) Freight broker or forwarder business name and address (if any); and
 - (D) Contact person's name, and phone number at the shipper, broker, or receiver with knowledge of the transport arrangements.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.12. Requirements for Lessors and Lessees.

- (a) Lessors shall be subject to all of the following:
 - (1) The lessor is responsible for the owner requirements set forth in section 2477.5. See the definition of "owner" in section 2477.4 for clarification related to banks and financial institutions.
 - (A) The lessor may delegate the responsibilities under section 2477.5, if the following conditions are met:
 - 1. The lease contract shall show clear delegation of the TRU requirements to the lessee;

2. The lessor shall submit third party agreement confirmation information as required under section 2477.20(k) for leased units to CARB at least 10 days prior to the lessee reporting the TRU or TRU gen set to CARB.
3. The lessor shall notify the lessee in writing of this delegation.

(b) Lessees shall be subject to all of the following:

- (1) If delegated by contract and the lessor has submitted third party agreement confirmation information for leased units to CARB under section 2477.12(a)(1)(A) and notified the lessee of delegation under section 2477.12(a)(1)(A)3., the lessee is responsible for the TRU reporting, operating fee, and compliance label requirements of sections 2477.5(g), (h), and (i) and shall complete all of the following:
 - (A) Report the TRU or TRU gen set to CARB and pay applicable TRU operating fees after at least 10 days of the lessor submitting the third party agreement confirmation information for leased units to CARB, but no more than 30 days after the lessor's notice;
 - (B) Submit a copy of the TRU Certification to the lessor within 30 days after reporting the TRU or TRU gen set to CARB and a TRU Certification is issued; and
 - (C) Affix (attach) the IDN to the TRU or TRU gen set housing within 30 days in accordance with subparagraph 2477.5(g)(6).

NOTE: Authority cited: Sections 38597, 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 38597, 39611, 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.13. Requirements for TRU, TRU Gen Set, and ZE Truck TRU Original Equipment Manufacturers.

- (a) Beginning December 31, 2022, TRU OEMs shall not manufacture for sale or use in California, a truck TRU, ZE truck TRU, trailer TRU, or DSC TRU, unless that TRU uses a refrigerant with a GWP value less than or equal to 2,200, or uses no refrigerant at all.

- (1) The TRU shall include a refrigerant label that is readily visible and legible, and include the following statement, or its equivalent: "THIS UNIT CONTAINS REFRIGERANT WITH A GWP LESS THAN OR EQUAL TO 2,200 AND IS COMPLIANT FOR USE IN THE STATE OF CALIFORNIA."
 - (A) Readily visible to the average person means that a label is readable from a distance of 46 centimeters (18 inches) without any obstructions from the TRU or engine parts, except for flexible parts that may be moved out of the way without disconnection.
- (b) Beginning December 31, 2023, TRU OEMs shall not manufacture for sale or use in California, a truck TRU, unless it is a ZE truck TRU.
 - (1) TRU OEMs shall warrant to the ultimate purchaser and each subsequent purchaser that the ZE truck TRU is free from defects in materials and workmanship which cause the failure of any warranted part.
 - (A) The warranty shall be comprehensive and cover all parts of the ZE truck TRU. Any warranted ZE truck TRU part which is not scheduled for replacement as required maintenance in the written manufacturer instructions shall be warranted for the warranty period. If any such part fails during the warranty period, it shall be repaired or replaced by the TRU OEM at no additional charge to the purchaser, at an authorized service-and-repair facility. Any such part repaired or replaced under warranty shall be warranted for the remaining warranty period.
 - (B) The warranty period shall cover a period of three years from the date of purchase or 5,000 hours of compressor run time, whichever occurs first.
 - (2) TRU OEMs shall have an authorized service-and-repair facility located in California to perform warranty repairs on ZE truck TRUs.
- (c) Beginning May 31, 2023, TRU OEMs shall not manufacture for sale or use in California, a trailer TRU, DSC TRU, railcar TRU, or TRU gen set, unless it is equipped with an engine that meets or outperforms the performance standard set forth in section 2477.5 (d).
- (d) Original Equipment Manufacturer Reporting
 - (1) Monthly production reports. TRU OEM shall provide by the end of the second business day of each calendar month, a monthly production report to CARB with the information listed in section 2477.20(l) for the previous calendar month for each TRU, TRU gen set, or ZE truck TRU produced for sale in California, North America, Canada, and Mexico.

- (2) Confidentiality of production reports. TRU and TRU gen set original equipment manufacturers may designate specific production report information as confidential or trade secret, and CARB shall handle designated information in accordance with title 17 CCR, section 91000.
- (e) TRU and TRU gen set original equipment manufacturers (OEM) that sell TRUs, TRU gen sets, ZE truck TRUs, or replacement engines in California shall:
 - (1) Provide a supplemental label with all new and rebuilt replacement engines that provides the information that is required to report the unit to CARB under section 2477.5(g), if the engine manufacturer's emissions label does not provide this information. If a prior-tier replacement engine is used, the effective model year shall be listed on the supplemental label.
 - (A) The supplemental label shall be permanently affixed to the replacement engine in an easily accessible place, in accordance with 40 CFR 89.110 (for Tier 1 or Tier 2 engines) or 40 CFR 1039.135 (for Tier 4 engines). Alternative supplemental label locations and font sizes may be necessary if accessible engine surface space is not available, subject to Executive Officer approval.
 - (2) Provide a registration information document with each new TRU, TRU gen set, and ZE truck TRU that includes:
 - (A) All of the TRU, TRU gen set, or ZE truck TRU unit information that is needed to report the TRU, TRU gen set to CARB under section 2477.5(g). This information shall be the same as the information on the unit label that is attached to the unit.
 - (B) All of the TRU or TRU gen set engine information needed to report to CARB under section 2477.5(g). This information shall be the same as the information on the engine labels that are attached to the engine.
 - (C) The registration information document shall include a certification statement by the TRU OEM stating that the unit registration information provided is exactly the same as listed on the TRU, TRU gen set, or ZE truck TRU unit label and the engine registration information provided is exactly the same as listed on the engine labels.

- (D) As an alternative to providing the registration information document, the TRU or TRU gen set original equipment manufacturer may provide a web-based, on-line lookup system for registration information that is at least as effective as section 2477.13(e)(2)(A), (B), and (C), subject to advance Executive Officer approval. In determining whether a specific web-based, on-line lookup system for registration information is at least as effective as section 2477.13(e)(2)(A), (B), and (C), the Executive Officer shall consider information submitted by the manufacturer and shall exercise good scientific and engineering judgment.
- (3) Provide a registration information document with each new and rebuilt replacement engine supplied by the OEM that includes:
- (A) All of the engine information needed to report to CARB under section 2477.5(g). This information shall be the same as the information on the new replacement engine labels or rebuilt replacement engine supplemental labels (see section 2477.16(b) that are attached to the engine or an alternative location approved by the Executive Officer.
 - (B) The registration information document shall include a certification statement by the TRU OEM stating that the engine registration information provided is exactly the same as listed on the replacement engine labels.
 - (C) Include entry spaces and instructions for the dealer or installer to fill in the unit information that is needed to report the unit to CARB pursuant to section 2477.20(f)(4). Include a certification statement for the dealer or installer to sign under, stating that the unit information entered is exactly the same as listed on the unit label that the replacement engine is installed into.
 - (D) As an alternative to providing the registration document, the TRU or TRU gen set original equipment manufacturer may provide a web-based, on-line lookup system for registration information that is at least as effective as section 2477.13(e)(3)(A), (B), and (C), subject to advance Executive Officer approval. In determining whether a specific web-based, on-line lookup system for registration information is at least as effective as section 2477.13(e)(3)(A), (B), and (C), the Executive Officer shall consider information submitted by the manufacturer and shall exercise good scientific and engineering judgment.

- (f) Beginning November 14, 2012, OEMs shall provide written disclosure with each prior-tier replacement engine they supply that shall be passed on to interested buyers prior to sale of a prior-tier replacement engine notifying them that the engine was manufactured to meet less stringent emissions standards than are currently required. This notification must also provide the effective model year of the prior-tier replacement engine and the ULETRU compliance deadline.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.14. Requirements for TRU, TRU Gen Set, and TRU-Equipped Truck and Trailer Dealers.

- (a) Dealers that sell or install TRUs, TRU gen sets, ZE truck TRUs, or replacement engines in California shall:
- (1) Pass the registration information document provided by the TRU or TRU gen set OEM (under section 2477.13) or print-out from the OEM's web-based look-up system (under section 2477.13(e)(2)(D) or 2477.13(e)(3)(D)) to the ultimate purchaser upon sale of a new TRU, TRU gen set, or ZE truck TRU that includes the TRU, TRU gen set, or ZE truck TRU unit information and the TRU engine information required for registration under section 2477.5(g).
 - (2) Pass the registration information document provided by the TRU or TRU gen set OEM under (section 2477.13) or print-out from the OEM's web-based look-up system (under section 2477.13(e)(2)(D) or 2477.13(e)(3)(D)), or engine rebuilder (under section 2477.16) to the ultimate purchaser upon sale of a new replacement engine, or rebuilt replacement engine that includes the engine information required for registration under section 2477.5(g).
 - (3) If an engine is not supplied by a TRU OEM, the dealer shall provide a registration information document that lists all of the TRU or TRU gen set engine information needed to report to CARB under section 2477.20(f)(7). This information shall be exactly the same as the information on the engine emissions label that is attached to the engine. The registration information document shall include a certification statement by the dealer stating that the engine information provided is exactly the same as listed on the engine emissions label.

- (b) Dealers that sell TRUs or TRU gen sets from businesses located in California may purchase, receive, or otherwise acquire and have in their possession, TRUs or TRU gen sets that are noncompliant with the requirements of section 2477.5(a), (b), (c), (d), and (g) if the following conditions are met:
- (1) The noncompliant TRUs or TRU gen sets are not sold for use in California prior to being brought into compliance with the requirements;
 - (2) The noncompliant TRU or TRU gen set is sold to a person that would not be reasonably expected to do business in California and a written disclosure to the buyer in the bill of sale is required in accordance with section 2477.18(b)(1);
 - (3) The noncompliant TRUs or TRU gen sets are not rented or leased prior to being brought into compliance with these requirements;
 - (4) The noncompliant TRUs or TRU gen sets are not operated at the dealer's place of business or on California highways for the purposes of controlling the environment of temperature sensitive products while in California. This condition applies to TRU or TRU gen sets under the dealer's control. This condition does not apply to TRUs or TRU gen sets owned by others that are being repaired by the dealer; and
 - (5) If a noncompliant TRU or TRU gen set is in transit on California highways:
 - (A) The TRU or TRU gen set shall not be operating;
 - (B) The dealer shall be responsible for ensuring that no temperature-sensitive products are transported in the vehicle;
 - (C) The dealer shall provide the driver with written evidence that the noncompliant TRU or TRU gen set is under the control of the dealer, including the following information:
 1. Dealer's business name;
 2. Dealer's street address, state, zip code;
 3. Dealer contact person's name;
 4. Dealer contact person's business phone number;
 5. Date(s) transport will take place;
 6. Statement of the reason for transporting the noncompliant equipment
 7. TRU or TRU gen set serial number

8. Physical address of starting location;
 9. Physical address of ending location; and
 10. Dealer owner's or responsible official's signature, after the statement: "I certify under penalty of perjury under the laws of the State of California that the information provided is true, accurate, and complete."
- (D) During transit on California highways, the driver, upon request, must show an inspector that no temperature-sensitive products are being transported and shall present written evidence provided by the dealer that the noncompliant TRU or TRU gen set is under the control of a dealer; and
- (E) All circumstances at the time of inspection shall be consistent with the requirements under section 2477.14(b)(5).

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.15. Requirements for Repair Shops Located in California that Work on TRUs or TRU Gen Sets.

- (a) Repair shops located in California that sell or install new or rebuilt replacement engines into TRUs or TRU gen sets shall:
- (1) Pass the registration information document provided by the TRU or TRU gen set OEM (under section 2477.13) or engine rebuilder (under section 2477.16) to the ultimate purchaser upon sale of a new or rebuilt replacement engine that includes the engine information needed to report to CARB, as listed in section 2477.20(f)(7).
 - (2) Beginning February 12, 2013, if an engine is not supplied by a TRU OEM, the installer shall provide a registration information document that lists all of the TRU or TRU gen set engine information needed to report to CARB, as listed in section 2477.20(f)(7).
 - (A) This information shall be exactly the same as the information on the engine emissions label that is attached to the engine.

- (B) The registration information document shall provide a certification statement by the repair shop responsible official stating that the engine information provided is exactly the same as listed on the engine emissions label.
- (3) Beginning February 12, 2013, provide the unit information on the registration information document that is needed to report the unit to CARB for TRU or TRU gen set that the new or rebuilt replacement engine is installed into. The unit information that is required is listed in section 2477.20(f)(4).
 - (A) The repair shop responsible official shall provide a certification statement on the registration information document stating that the unit information provided is exactly the same as listed on the unit label.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.16. Requirements for Engine Rebuilders.

- (a) If a TRU engine is being rebuilt to remain in compliance with the in-use standards of section 2477.5(c), it must be rebuilt in accordance with the 40 CFR, sections 89.130 and 1068.120, and 13 CCR, section 2423(l), as these sections existed on August 31, 2012, and shall meet the following requirements:
 - (1) To remain in compliance with the in-use performance standards, the engine must be rebuilt to a configuration of a more stringent emissions standard tier than the original engine;
 - (2) The engine must be rebuilt to a certified configuration of matched components. "Matched components" means a complete set of components corresponding to the certified emissions configuration (tier) of the engine that is being used as the reference for the rebuilt engine.
- (b) Beginning November 14, 2012, engine rebuilders shall provide a supplemental label with each rebuilt engine that includes the following information:
 - (1) Name of the engine rebuilder;
 - (2) Engine manufacturer of the original engine
 - (3) Engine model;

- (4) Engine model year:
 - (A) Prior tier engines. If the rebuilt engine meets a prior-tier emissions standard, then the effective model year is required;
 - (B) Current tier engines. If the rebuilt engine meets the tier standard that is currently in effect, then the model year is the year that the rebuild is completed.
 - (5) Horsepower rating of the certified configuration of the rebuilt engine;
 - (6) Emissions standard tier met by the certified configuration (e.g., Tier 4i); and
 - (7) Calendar year that the rebuild was completed.
- (c) Supplemental labels shall be permanently affixed to the rebuilt engine in an easily accessible place, in accordance with 40 CFR, section 89.110 (for Tier 1 or Tier 2) or 40 CFR, section 1039.135 (for Tier 4). Alternative supplemental label locations and font sizes may be necessary if surface space is not available, subject to Executive Officer approval.
 - (d) Beginning January 13, 2013, engine rebuilders shall provide the following documentation, within 30 days of request, that demonstrates they have complied with the engine rebuilding practices of 40 CFR, sections 89.130 and 1068.120, and 13 CCR, section 2423(l):
 - (1) Information that demonstrates there is a reasonable technical basis for knowing that the rebuilt engine is equivalent, from an emissions standpoint, to an engine that complies with the certification standards applicable to the emissions tier standard of the rebuilt engine (i.e., tolerances, calibrations, specifications). Such equivalency would exist if the following two conditions are met:
 - (A) Parts installed (whether the parts are new, used, or rebuilt) are such that a person familiar with the design and function of engines would reasonably believe that the parts perform the same function with respect to emission control as the original parts; and
 - (B) Any parameter adjustment or design element change is made only in accordance with the original engine manufacturer's instructions or where data or other reasonable technical basis exists that such parameter adjustment or design element change, when performed on the rebuilt engine, is not expected to adversely affect in-use emissions.

- (2) The technical demonstration must be signed and stamped by a licensed professional mechanical engineer.
- (e) Beginning February 12, 2013, engine rebuilders shall provide a registration information document with the rebuilt engine that includes:
 - (1) All of the TRU or TRU gen set engine information needed to report to CARB pursuant to subparagraph 2477.20(f)(7) except that engine family may be omitted for rebuilt engines. This information must be the same as the information on the rebuilt engine's re-label and supplemental emissions label that is attached to the engine. The registration information document would include a certification statement by the engine rebuilder, or third party installer stating that the engine information provided is exactly the same as listed on the engine emissions label.
 - (2) A separate section of the registration information document shall include entry spaces for all of the TRU or TRU gen set unit information that is required to report the unit to CARB pursuant to subparagraphs 2477.20(f)(4) and (5). The registration information document would include a certification statement, with a signature space for the third party installer, stating that the unit information provided is exactly the same as listed on the unit label.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.17. Requirements for Applicable Facility Owners or Applicable Facility Owner/Operators.

- (a) Facility Registration. On or before December 31, 2023, applicable facility owners or applicable facility owner/operators shall register their facility by reporting the following information to CARB:
 - (1) Company Information
 - (A) Company/business name, address, and contact information for the responsible official (e.g., title, phone number, email address).
 - (2) Indicate who is registering the applicable facility, either:
 - (A) The applicable facility owner (or an employee of owner), or
 - (B) The applicable facility operator

- (3) Applicable facility type (specify)
 - (A) Refrigerated Warehouse or Distribution Center
 - (B) Grocery Store
 - (C) Seaport Facility
 - (D) Intermodal Railyard
- (4) Refrigerated Warehouse or Distribution Center or Grocery Store building size in square feet
- (5) Rental or lease status. Indicate if the applicable facility is a rental unit (no contract term) or a lease unit (under contract term, typically more than one year).
- (6) The number of loading dock doors serving refrigerated storage space.
- (7) The number of square feet of refrigerated storage space.
- (8) The average total number of hours per week that outbound TRU or TRU gen set engines operate while at the facility during 2022. Average TRU or TRU gen set engine operating time at facility for outbound refrigerated loads may be used if the result is representative of the outbound TRU or TRU gen set operations at facilities, as determined by the Executive Officer. Average values would be determined for outbound loads and applied to the total annual number of refrigerated outbound loads, and then weekly averages calculated as follows: Average TRU or TRU gen set engine operating time per outbound refrigerated load multiplied by the total annual number of outbound loads, divided by 52 weeks equals the average total number of hours per week that outbound TRU or TRU gen set engines operate while at the facility.
- (9) The average total number of hours per week that inbound TRU or TRU gen set engines operate while at the facility during 2022. Average TRU or TRU gen set engine operating time at facility for inbound refrigerated loads may be used if the result is representative of the inbound TRU or TRU gen set operations at facilities, as determined by the Executive Officer. Average values would be determined for inbound loads and applied to the total annual number of refrigerated inbound loads, and then weekly averages calculated as follows: Average TRU or TRU gen set engine operating time per inbound refrigerated load multiplied by the total annual number of inbound loads, divided by 52 weeks equals the average total number of hours per week that inbound TRU or TRU gen set engines operate while at the facility.

- (10) The number of refrigerated trailers that are used at the facility for cold storage, the total annual number of hours of TRU engine operation associated with these refrigerated trailers, and the total annual number of hours of operation using electric standby associated with these refrigerated trailers.
- (11) Zero-emission fuel provided (if any).
 - (A) If electricity is provided:
 - 1. Location of connectors (e.g., dock door, parking lot, staging area)
 - 2. Number of connectors
 - 3. Type of connectors
- (b) If reported information for any applicable facility changes, then the applicable facility owner shall update the information within 30 days of the changes.
- (c) If an applicable facility begins operations after December 31, 2023, then the applicable facility owner shall report the information in section 2477.17(a) to CARB within 30 days of the applicable facility beginning operations
- (d) Facility Registration Fees. ~~Beginning December 31, 2023, the~~ The Executive Officer shall assess and collect fees from owners or owner/operators of applicable facilities in California to recover the costs to the Executive Officer administering the TRU ATCM as specified in section 2477.21(b).
- (e) Facility Reporting. On or before December 31, 2023, applicable facility owners or applicable facility owner/operators shall select the requirements in either section 2477.17(e)(1) or section 2477.17(e)(2). If neither option is selected, the applicable facility owner or applicable facility owner/operator shall automatically be required to comply with section 2477.17(e)(2). An applicable facility owner or applicable facility owner/operator may change the option selected for the following calendar year by notifying CARB by September 30 of the preceding calendar year.
- (1) Report all TRU Activity at Facility.
 - (A) Beginning December 31, 2023, applicable facility owners or applicable facility owner/operators shall collect the information required under section 2477.20(m) for any TRU that operates inside the facility fence line or property boundary.

- (B) Beginning April 15, 2024, applicable facility owners or applicable facility owner/operators shall report information required under section 2477.20(m) to CARB quarterly in accordance with the schedule shown in Table 4.

Table 4: Applicable Facility Reporting Schedule

TRU Entry Date	Date by which information is to be reported to CARB
January 1 – March 31	April 15
April 1 – June 30	July 15
July 1 – September 30	October 15
October 1 – December 31	January 15

- (C) If CARB finds non-reported TRUs operating inside the facility fence line or property boundary, the applicable facility owner or applicable facility owner/operator may be subject to a penalty pursuant to Health and Safety Code sections 39674, 39675, 42400 et seq., 42402 et seq., and 42410 for each non-reported TRU. An applicable facility owner or applicable facility owner/operator may be subject to increased penalties for each additional non-reported TRU.
- (D) An applicable facility owner or applicable facility owner/operator may designate specific report information as confidential or trade secret. CARB shall handle designated information in accordance with Title 17 CCR, section 91000.
- (2) Declaration of TRU Compliance.
- (A) Applicable facility owners or applicable facility owner/operators shall provide a declaration to CARB, under penalty of perjury, that beginning December 31, 2023, non-compliant TRUs subject to this TRU Regulation shall not be permitted to operate inside the facility fence line or property boundary.
1. An applicable facility owner or applicable facility owner/operator may check if a given TRU is compliant by verifying that the TRU has a valid CARB compliance label or by checking identifiable information through CARB's online system.

- (B) If CARB finds a non-compliant TRU operating inside the facility fence line or property boundary, the applicable facility owner or applicable facility owner/operator may be subject to a penalty pursuant to Health and Safety Code sections 39674, 39675, 42400 et seq., 42402 et seq., and 42410 for each non-compliant TRU. An applicable facility owner or applicable facility owner/operator may be subject to increased penalties for each additional non-compliant TRU operating within an applicable facility's fence line or property boundary.

(f) Recordkeeping.

- (1) The Executive Officer may approve alternative recordkeeping and calculation procedures for determining the average weekly hours of TRU engine operation at a facility for inbound and outbound refrigerated loads, provided the Executive Officer finds that the alternative procedures meet the intent of section 2477.17.

NOTE: Authority cited: Sections 38597, 39600, 39601, 39611, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 38597, 39611, 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.18. Prohibitions.

- (a) Except as allowed under section 2477.14(b), no person, including, but not limited to, manufacturers, distributors, dealers, auctioneers, and motor carriers shall intentionally or negligently import, deliver, purchase, receive, or otherwise acquire a new or used TRU or TRU gen set engine that does not meet the requirements or alternatives set forth in sections 2477.5(a), (b), (c), and (d) above.
- (b) Except as allowed under section 2477.14(b), no person in this State, including, but not limited to, manufacturers, distributors, dealers, auctioneers, and motor carriers shall sell, or offer to sell, to an ultimate purchaser who is a resident of this State or a person that could reasonably be expected to do business in this State a new or used TRU or TRU gen set engine that does not meet the requirements or alternatives set forth in sections 2477.5(a), (b), (c), and (d) above.

- (1) If a noncompliant TRU or TRU gen set is sold to a person who is a resident outside this State, then the bill of sale shall disclose to the buyer that the TRU or TRU gen set is not compliant for use in California and the TRU or TRU gen set shall meet the requirements of section 2477.5 before operating in the State, and must be reported to CARB. The following statement shall be included in the bill of sale of any noncompliant TRU or TRU gen set: "This TRU does not currently meet California's requirements under title 13, California Code of Regulations, section 2477.5, and is therefore not compliant for use in California."
- (2) No owner of a TRU that is equipped with an Alternative Technology under section 2477.5(c)(3) (e.g., hybrid electric or electric standby) shall sell the TRU or TRU gen set, without disclosing in writing that it shall be used in a way that qualifies it as an Alternative Technology in accordance with section 2477.5(c)(3) in order to be compliant.
- (c) No person in this State, including, but not limited to, manufacturers, distributors, dealers, and carriers shall lease, offer to lease, rent, or offer to rent, in this state any new or used TRU or TRU gen set engine that does not meet the requirements or alternatives set forth in sections 2477.5(a), (b), (c), and (d) above.
- (d) Operators of affected facilities and operators of affected TRUs and TRU gen sets are prohibited from taking action to divert affected TRUs to alternative staging areas in order to circumvent the requirements of this section.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.19. Non-compliance and Penalties.

- (a) Failure to submit any information, report, or statement accurately and correctly as required by this TRU Regulation, or submitting any false statement or representation in any application, report, statement, or other document filed, maintained, or used for the purposes of compliance with this TRU Regulation is a violation of this TRU Regulation.
- (b) Any person or entity who fails to comply with the requirements of this TRU Regulation may be cited and is subject to the penalty provisions set forth in Health and Safety Code sections 39674, 39675, 42400 et seq., 42402 et seq., and 42410.

- (c) For purposes of enforcement, if a TRU or TRU gen set is cited for non-compliance with this TRU Regulation and neither the owner nor the operator can produce evidence of the party responsible for compliance with State laws, then the owner of the TRU or TRU gen set in violation shall be liable for any non-compliance.
- (d) For purposes of enforcement, if an applicable facility is cited for non-compliance with this TRU Regulation and neither the owner nor the operator can produce evidence of the party responsible for compliance with State laws, then the owner of the applicable facility in violation shall be liable for any non-compliance.
- (e) Failure to keep records, failure to report, and submittal of false information are each separate violations of this TRU Regulation subject to penalty.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.20. Reporting

- (a) Reporting Method. Submission of information to CARB required under this TRU Regulation, including registration, reporting, and submission of applications, shall be by one of the following methods:
 - (1) Mail or deliver to CARB at the address listed immediately below:

California Air Resources Board
Transportation and Toxics Division (TRU)
P.O. Box 2815
Sacramento, CA 95812
 - (2) Electronically submit by email to: arber@arb.ca.gov; or
 - (3) Electronically submit through CARB's online system.
- (b) Recordkeeping. All records required under this TRU Regulation shall be kept for a minimum of three (3) years and shall be compiled and made available to CARB upon request.
- (c) Reporting Penalties. Failure to ensure that the reported data is accurate and correct may result in penalties as outlined in section 2477.19.

- (d) Automated monitoring for electronic tracking systems. For a unit that uses an electronic tracking system, the information collected from that system shall include all of the following for each stationary location lasting more than 300 seconds (5 minutes):
 - (1) CARB IDN of the unit.
 - (2) Date.
 - (3) Address of the stationary location. This record may be the GPS coordinates and a location code for each stationary location, provided the owner or operator also provides a cross-reference of location codes with the corresponding physical addresses.
 - (4) Time of arrival and departure, and the elapsed time calculated from those readings to show the duration of the stationary position.
 - (5) Engine hour meter readings taken at arrival and departure and the elapsed time calculated from those readings to show the TRU engine run time while the vehicle is at the stationary location.
 - (6) Zero-emission system, such as electric motor or cryogenic system, hour meter readings taken at arrival and departure and the elapsed time that the zero-emission system is powering the refrigeration system while the vehicle is at the stationary location.
 - (7) A report that lists all stationary locations lasting more than 5 minutes where the TRU engine operated for more than 30 minutes, resulting in a violation.
- (e) Placement of the CARB IDN. A CARB IDN shall be permanently affixed or painted on the TRU chassis in clear view according to the following specifications:
 - (1) The CARB IDN shall be preceded by the letters "ARB".
 - (2) Letters and numbers shall contrast sharply in color with the color of the background surface on which the letters are placed.
 - (3) The location of the I.D. number shall be as follows:
 - (A) Truck and trailer TRUs - both sides of TRU chassis housing.
 - (B) Rail car and shipping container TRUs - both sides of the TRU.
 - (C) TRU gen sets - both sides of gen set housing.

- (4) Letters and numbers shall be readily legible during daylight hours, from a distance of 50 feet (15.24 meters) while unit is stationary.
- (5) Markings shall be kept maintained in a manner that retains the legibility required by the subparagraph immediately above.
- (6) Owners or owner/operators may use alternative unique equipment identification markings instead of affixing a CARB IDN, provided the following conditions are met:
 - (A) The owner or owner/operator shall report the TRU to CARB as required in section 2477.5(g) and provide the unique equipment number.
 - (B) The alternative identification number shall be truly unique. Examples of unique identification numbers include the Reporting Marks that are issued by the American Association of Railroads' contractor, RailInc, for their UMLER system and the BIC Codes issued by Bureau International de Containers. Company equipment numbers that are not truly unique on a worldwide basis do not qualify.
 - (C) Alternative identification numbers shall be affixed or attached to both sides of the TRU gen set, shipping container (if the TRU is permanently attached), semitrailer, or railcar and meet all of the requirements of subparagraph 2477.20(e).
- (f) TRU Reporting Information. For each TRU, the owner or owner/operator shall report to CARB all of the following information:
 - (1) Company Information
 - (A) Company/business name, address, and contact information for the responsible official (e.g., title, phone number, email address).
 - (B) Company/business tax identification number/federal employer identification number (EIN) or equivalent for other country (e.g., Canadian Business Number).
 - (2) Rental or lease status. Indicate if the unit is a rental unit (no contract term) or a lease unit (under contract term, typically more than one year).
 - (3) Reporting identity indication. Indicate who is reporting the TRU, either:
 - (A) The owner (or an employee of owner), or

- (B) A third party reporting the TRU under a third party agreement between the owner or lessor and a consultant or lessee.
- (4) TRU, TRU gen set, or ZE truck TRU unit information:
 - (A) Unit Type:
 - 1. Truck TRU;
 - 2. Trailer TRU;
 - 3. Refrigerated railcar TRU;
 - 4. Refrigerated domestic shipping container TRU; or
 - 5. TRU generator set.
 - (B) Indicate if the unit is ZE
 - (C) Unit manufacturer,
 - (D) Unit model,
 - (E) Unit model year, and
 - (F) Unit serial number.
 - (G) Date TRU was purchased, rented, or leased.
- (5) Other TRU identifying numbers. Provide all that apply:
 - (A) If unit is installed on a truck or trailer, provide:
 - 1. Vehicle Identification Number (VIN), and
 - 2. Vehicle license number, country of issuance, and state or province of issuance;
 - 3. Unique Bureau International de Container (BIC) Code, if trailer is multimodal
 - (B) If unit is installed on refrigerated railcar, provide railcar reporting mark;
 - (C) If unit is installed on domestic refrigerated shipping container, provide unique BIC Code;
 - (D) If unit is a TRU gen set, provide unique BIC Code;

- (E) Provide company equipment number if company has labeled the equipment.
- (6) TRU status information. Indicate if the unit is:
 - (A) Active (unit is operational);
 - (B) Removed from service (unit is scrapped or inactive for foreseeable future); or
 - (C) Sold. If last reported owner sold unit, then they shall provide:
 - 1. Date of sale, and
 - 2. New owner's company name, address, and contact information
- (7) TRU engine information. Provide the following:
 - (A) Engine manufacturer;
 - (B) Engine model;
 - (C) Engine model year, or "MY";
 - (D) Engine serial number;
 - (E) Engine power rating. Indicate either:
 - 1. Under 25 hp (under 19 kW), or
 - 2. 25 hp or greater (19 Kw or greater);
 - (F) Engine family; and
 - (G) Emissions standard tier that engine meets.
- (8) Compliance information.
 - (A) Refrigerant type
 - 1. Indicate if the TRU has a TRU OEM supplied refrigerant label.
 - (B) If the unit is a ZE truck TRU used to comply with section 2477.5(b), then:
 - 1. Provide the technology type:

- a. Battery-electric;
 - b. Cryogenic temperature controlled system;
 - c. Cold plate system;
 - d. Powered by fuel cells; or
 - e. Other
2. Provide information on zero emission fueling Infrastructure:
- a. Physical address of zero-emission fueling infrastructure installed or to be installed.
 - b. Specify the number of ZE fuel connections, and types of connectors.
 - c. If storing fuel on site, specify the number of storage tanks and the tank storage capacity.
 - d. If storing electricity on site, specify the number of batteries and battery capacity, in kilowatt-hours (kWh).
 - e. If generating fuel on site, specify the quantity of generators and expected power output.
 - f. For solar generation, specify the number of panels and kilowatt-hour (kWh) rating per panel, as well as expected annual power generation.
 - g. For hydrogen fuel cells, specify the number of cells and the rated kilowatt (kW) per cells, as well as the expected annual power generation.

(C) If the unit has a VDECS retrofit, then:

- 1. Provide the following from the VDECS label:
 - a. VDECS manufacturer name;
 - b. VDECS family name;
 - c. VDECS serial number;
 - d. VDECS manufacture year; and

2. Provide the VDECS installation date.
 3. Provide the VDECS installer name
 4. Provide the VDECS installer address
 5. Provide the VDECS installer phone number
- (D) If the engine currently in the unit is a rebuilt replacement engine, then:
1. Provide the emissions standard tier that the engine meets;
 2. Provide the rebuild year; and
 3. Provide the installation date.
- (E) If the engine currently in the unit is a new replacement engine, then:
1. Provide the emissions standard tier that the engine meets; and
 2. Provide the installation date.
- (F) If the unit uses an Alternative Technology option under section 2477.5(c)(3), then provide:
1. The type used:
 - a. Electric standby-equipped TRU or hybrid electric TRU;
 - b. Hybrid cryogenic temperature controlled system;
 - c. Alternative-fueled engine;
 - d. Fueled exclusively with pure alternative diesel fuel;
 - e. Powered by fuel cells; or
 - f. Other system approved by the Executive Officer.
 2. The date the technology was installed or employed.
- (9) Indicate what state or province that the TRU is based in:
- (A) California; or

- (B) Outside of California. If based outside of California identify:
 - 1. U.S. state;
 - 2. Mexican state; or
 - 3. Canadian province.
 - (10) Certification that the TRU operator is appraised of their obligations under this TRU Regulation.
- (g) Application for Mobile Catering Service Exemption. Applications for Mobile Catering Service Exemption shall include all of the following information:
 - (1) Business name.
 - (2) Business street address, state, zip code.
 - (3) Business phone number.
 - (4) Responsible official's name.
 - (5) Responsible official's mobile phone number.
 - (6) Federal Tax Identification Number (EIN) and Owner-Operator Number (OON) issued to the owner by CARB.
 - (7) A list of CARB IDNs issued by CARB for all TRUs that are to be included under the exemption. For TRUs that are not in compliance with the requirements under section 2477(a), (b), (c), or (d) that do not have CARB IDNs, provide the unit serial number instead of the IDN on this list.
 - (8) A copy of the mobile catering company's contract with the National Interagency Fire Center shall be provided with the application.
- (h) Application for Compliance Extension Based on Unavailability of Compliance Technology. An application for a compliance extension based on the unavailability of compliance technology shall do all of the following:
 - (1) Identify each unit and engine for which the extension is requested.
 - (2) For each engine identified in (1), provide a detailed description of the reasons and factors that serve as the basis for the applicant's claim that no suitable control technologies are available. The description shall include, without limitation, detailed engineering diagrams and calculations that support the applicant's claim that there are no suitable control technologies available.

- (3) Demonstrate that all other units covered by this TRU Regulation and subject to the applicant's direct control meet the requirements of this TRU Regulation.
- (i) Application for Compliance Extension Based on Delays. An application for a compliance extension based on delays shall:
- (1) Explain in detail why a compliance extension is needed and how much additional time is required to comply.
 - (2) If delivery is the cause for delay, explain the status, and provide documentation from the manufacturer to demonstrate this is true, along with an updated delivery schedule.
 - (3) If installation is the cause for delay, report the date that compliance technology was delivered, explain the installation status and provide documentation from the installer to demonstrate the facts, along with an updated installation schedule.
 - (4) If there are other circumstances causing the delay, such as financing, explain the status and provide documentation from the financier or other relevant entity to demonstrate this is true, along with an updated schedule.
 - (5) If the delay is related to installation of zero-emission fueling infrastructure:
 - (A) Documentation that the owner ordered the zero-emission fueling infrastructure no later than 3 months before the compliance date.
 - (B) If requesting an extension for the entire truck TRU fleet, documentation why partial infrastructure installation is not viable.
 - (C) If an electric service upgrade is needed, a statement from the Utility is required that specifies the type of upgrade (distribution line extensions, new distribution circuits, substation upgrade, new substation, or new subtransmission line) and the estimated number of days for the utility to complete the work.
 - (D) Efforts taken to mitigate future need for the extension.
- (j) Application for a Safe Passage Permit. An application for safe passage shall include all of the following information:
- (1) Owner's name.
 - (2) Business name (if different).

- (3) Owner's street address, state, zip code.
 - (4) Contact person's name.
 - (5) Contact person's business phone number.
 - (6) Date(s) transport will take place.
 - (7) Statement that the reason for transporting the noncompliant equipment on California highways is strictly to take the noncompliant equipment to a dealer or installer to bring the equipment into compliance.
 - (8) TRU or TRU gen set serial number.
 - (9) Vehicle Identification Number (VIN), BIC Code (for TRU gen sets and domestic shipping containers), or railcar reporting mark.
 - (10) Physical address of starting location or point of entry into California.
 - (11) Dealer's or installer's business name and physical address where compliance technology will be installed.
- (k) Third-party Agreement Confirmation Information. For each leased unit, the lessor shall submit all of the following information to CARB:
- (1) Unit serial numbers for each TRU or TRU gen set;
 - (2) Unique company equipment number;
 - (3) Vehicle license number;
 - (4) Vehicle Identification Number (VIN);
 - (5) Lessor company name, address, federal tax ID (EIN), contact person, and contact information;
 - (6) Lessee company name, address, federal tax I.D (EIN), contact person, and contact information;
 - (7) Copy of the contract pages of the lease contract with the language highlighted that identifies the lessee as the responsible party for compliance with this TRU Regulation; and
- (l) Original Equipment Manufacturer Monthly Production Reports. A TRU OEM production report shall include, for the previous calendar month for each TRU or TRU gen set produced for sale in California, North America, Canada, or Mexico:

- (1) Unit model name, as it appears on the unit label;
 - (2) Unit serial number;
 - (3) Engine manufacturer;
 - (4) Engine model, as it appears on the engine emissions label;
 - (5) Engine model, as it appears on the serial number label, if different;
 - (6) Engine family;
 - (7) Engine serial number;
 - (8) Rated horsepower and rated speed; and
 - (9) Engine emission tier standard met.
 - (10) If the unit is equipped an OEM VDECS, then provide the following:
 - (A) VDECS manufacturer name
 - (B) VDECS family name
 - (C) VDECS serial number
 - (11) Indicate if the unit is ZE
 - (12) Indicate if the unit is electric-standby equipped or hybrid electric
 - (13) Refrigerant type
- (m) TRU Activity at a Facility. A report of TRU activity at a facility shall include all of the following information for each TRU that operates inside the facility fence line or property boundary:
- (1) Truck TRU information.
 - (A) CARB IDN
 - (B) Entry date and time
 - (C) TRU operator's (or truck driver's) name
 - (D) TRU operator's (or truck driver's) driver's license number
 - (E) Truck license plate number
 - (2) Trailer TRU or DSC TRU information.

- (A) CARB IDN (or an alternative unique equipment identification number as defined in section 2477.20(e)(6))
 - (B) Entry date and time
 - (C) Trailer or container owner's company name
 - (D) If unit is a trailer TRU, provide the trailer license plate number
 - (E) If trailer TRU or DSC TRU entered facility by truck, provide:
 - 1. TRU operator's (or truck driver/tractor driver's) name
 - 2. TRU operator's (or truck driver/tractor driver's) driver's license number
 - 3. Truck owner/tractor owner's company name, motor carrier number, United States Department of Transportation number (USDOT number), or carrier identification number (CA number)
 - 4. Truck/tractor license plate number
- (3) Railcar TRU information (not required for railcar TRUs that pass through and do not stop at a railyard)
- (A) CARB IDN (or an alternative unique equipment identification number as defined in section 2477.20(e)(6))
 - (B) Entry date and time
- (4) TRU gen set information.
- (A) CARB IDN (or an alternative unique equipment identification number as defined in section 2477.20(e)(6))
 - (B) Entry date and time
 - (C) TRU gen set owner's company name
 - (D) If TRU gen set entered facility by truck, provide:
 - 1. TRU operator's (or truck driver/tractor driver's) name
 - 2. TRU operator's (or truck driver/tractor driver's) driver's license number

3. Truck owner/tractor owner's company name, motor carrier number, USDOT number, or CA number
4. Truck/tractor license plate number

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.21. Fees

- (a) TRU Operating Fees. The term TRU as used in this subsection (a) refers to TRUs and TRU gen sets, as well as ZE truck TRUs used to comply with section 2477.5(b).

- (1) ~~Beginning December 31, 2023, t~~The Executive Officer shall assess and collect fees from owners or owner/operators of TRUs that operate in California to recover the costs to the Executive Officer administering the TRU ATCM.
- (2) Fees shall be due and payable to the Executive Officer upon reporting a TRU in accordance with section 2477.5 (g) and every three (3) years from the date the TRU was originally reported to CARB.
- (3) A TRU owner or owner/operator shall submit fees to the Executive Officer in accordance with the fee schedule in Table 5.

Table 5: TRU Operating Fee Schedule

Fee Type	Fee Amount (Per TRU)
TRU Operating Fee, paid once every three years	\$45
Zero-Emission TRU Operating Fee, paid once every three years	\$23

- (b) Applicable Facility Registration Fees.

- (1) ~~Beginning December 31, 2023, the~~ Executive Officer shall assess and collect fees from owners or owner/operators of applicable facilities in California to recover the costs to the Executive Officer administering the TRU ATCM.
- (2) Fees shall be due and payable to the Executive Officer upon registering an applicable facility in accordance with section 2477.17(a) and every three (3) years from the date of original registration.
- (3) An applicable facility owner or owner/operator shall submit fees to the Executive Officer in accordance with the fee schedule in Table 6.

Table 6: Applicable Facility Registration Fee Schedule

Fee Type	Fee Amount (Per Facility)
Facility Registration Fee, paid once every three years	\$45

- (c) If any part of this section is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction as to any party, the Executive Officer shall continue to assess and collect payments from unaffected parties pursuant to this section. If such holding applies to all parties, such holding shall not affect the validity of the remaining portions of this TRU Regulation.

NOTE: Authority cited: Sections 38597, 39600, 39601, 39611, 39618, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 38597, 39611, 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.22. Relationship to Other Law

Nothing in this section allows TRUs or TRU gen sets to operate in violation of other applicable law, including, but not limited to:

- (a) California Vehicle Code.
- (b) California Health and Safety Code.
- (c) Any applicable ordinance, rule, or requirement as stringent as, or more stringent than, the requirements of this TRU Regulation.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.23. Authority to Request Additional Information.

The Executive Officer may request that additional information be submitted as part of the review of any extension application, exemption, or other action that delays or defers a compliance date or action.

NOTE: Authority cited: Sections 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1, Health and Safety Code. Reference: Sections 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.

§ 2477.24. Severability.

If any subsection, paragraph, subparagraph, sentence, clause, phrase, or portion of this TRU Regulation is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of the regulation.

NOTE: Authority cited: Sections 38597, 39600, 39601, 39618, 39658, 39659, 39666, 39667, 43013, 43018 and 43019.1 Health and Safety Code. Reference: Sections 38597, 39611, 39618, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.2, 42410, 43013, 43018 and 43019.1, Health and Safety Code.