

State of California Air Resources Board

Board Item Summary

Item # 21-9-5: Public Hearing to Consider Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate

Staff Recommendation:

This is the first of two hearings on this item. While no Board action is required at this hearing, staff recommend that the California Air Resources Board (CARB or Board) adopt a resolution instructing staff, among other things, to bring final proposed amendments back to the Board in the first quarter of 2022.

Discussion:

CARB adopted the Airborne Toxic Control Measure (ATCM) for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate (TRU ATCM) in 2004 and amended it in 2010 and 2011. CARB adopted the TRU ATCM to reduce diesel particulate matter (PM) emissions and resulting health risks from diesel-powered TRUs used to control the environment of temperature-sensitive products transported in insulated trucks, trailers, shipping containers, or railcars, as well as diesel-powered TRU generator sets (gen set) that provide electric power to electrically-powered refrigeration units of any kind. The TRU ATCM requires TRU engines that operate in California to meet specific in-use performance standards that require diesel PM emissions to be reduced in accordance with a phased compliance schedule. The phased compliance schedule is based on the model year of the TRU engine, in which compliance with the in-use performance standard is required seven years after the engine model year. The TRU ATCM included two levels of stringency that were phased in over time. The first phase, beginning in 2008, is the low emission TRU performance standard. The second phase, beginning in 2010, is the ultra-low emission TRU performance standard. Ultimately, all TRU engines are required to meet the ultra-low emission TRU performance standard and have 85 percent PM control (compared to an uncontrolled Tier 0 engine) to be fully compliant with the TRU ATCM.

Despite the progress made, the emission reductions achieved under the TRU ATCM are not sufficient to meet the State's multiple risk reduction, air quality, and climate goals. Staff are proposing amendments to the TRU ATCM (Proposed Amendments) to achieve additional emission reductions from diesel-powered TRUs and increase the use of zero-emission technology. The Proposed Amendments are needed to help meet these complementary goals, as well as the directive of Executive Order N-79-20, which set a goal for 100 percent

off-road vehicles and equipment in the State by 2035. The Proposed Amendments are also needed to address the emergence and growth in the number of trailer TRUs, domestic shipping container TRUs, railcar TRUs, and TRU gen sets equipped with engines less than 25 horsepower, which have less stringent emission standards; strengthen the regulation by including requirements for owners and operators of facilities where TRUs operate and vehicle owners, expanded TRU reporting and labeling to monitor compliance; and collect fees from TRU and applicable facility owners to cover CARB's reasonable costs associated with the certification, audit, and compliance of TRUs, as allowed by Senate Bill 854.

The Proposed Amendments are the result of an extensive public process. Staff conducted eight public workshops and three work group meetings to discuss regulatory concepts, methodology and data used to develop the emission inventory and conduct a health risk assessment, infrastructure considerations, compliance, and enforcement mechanisms, as well as solicit stakeholder feedback. As of June 2021, staff have conducted more than 160 informal meetings, phone calls, and site visits with a broad group of stakeholders to discuss the Proposed Amendments and gather input and information. This includes members of impacted communities, environmental justice advocates, air districts, TRU owners and operators, trade associations, TRU manufacturers, TRU dealers and service centers, truck and trailer dealers, truck and trailer leasing companies, freight brokers, forwarders, shippers, receivers, freight facility owners and operators, and other interested parties.

Summary and Impacts:

The primary benefits of the Proposed Amendments are emission reductions of fine particulate matter (PM_{2.5}), oxides of nitrogen (NO_x), and greenhouse gas (GHG) from diesel-powered TRUs that operate in California. Staff estimate that cumulatively, from 2022 to 2034, the Proposed Amendments will reduce statewide TRU emissions by approximately 1,258 tons of PM_{2.5}, 3,515 tons of NO_x, and 1.42 million metric tons of GHGs, relative to the baseline. These emission reductions will benefit California residents in the following ways:

- Reducing cancer risk to individual residents and off-site workers near facilities where TRUs operate, including those located in and near disadvantaged communities.
- Improving air quality and resulting ozone exposure from reductions in NO_x.
- Providing GHG emission reductions (including the powerful short-lived climate pollutants hydrofluorocarbons and black carbon) needed to combat climate change.
- Reducing non-cancer health impacts such as premature deaths, hospital visits for cardiovascular and respiratory illnesses, and emergency room visits for asthma, especially in sensitive receptors including children, the elderly, and people with chronic heart or lung disease.

The total statewide valuation of avoided adverse health impacts as a result of the Proposed Amendments from 2022 to 2034 is approximately \$1.75 billion. Emission reductions will also reduce occupational exposure and benefit on-site workers, including, but not limited to TRU operators, drivers, and other individuals who work at facilities where TRUs operate. The total net cost of the Proposed Amendments from 2022 to 2034 is estimated to be \$1.04 billion.

The Draft Supplemental EA concluded implementation of the Proposed Amendments, could result in: beneficial impacts to air quality, energy demand, GHG emissions and climate change; less than significant impacts to energy demand, hazards and hazardous materials, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire; and potentially significant adverse impacts to aesthetics, agriculture and forest resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, transportation, and utilities and service systems.

If CARB had the authority to require mitigation for project-specific impacts from anticipated compliance responses, many of these potentially significant impacts could be feasibly avoided or mitigated to a less-than-significant level. However, such mitigation is beyond CARB's authority and, thus, the suggested mitigation measures in the Draft Supplemental EA are considered legally infeasible for CARB to implement and enforce. Therefore, the Draft Supplemental EA takes the conservative approach in its post mitigation significance conclusions and discloses, for CEQA compliance purposes, that potentially significant environmental impacts may be unavoidable since other lead agencies are tasked with implementing the suggested mitigation measures and they may not be sufficient to mitigate an impact to less than significant and/or the lead agencies may not impose the full extent of the suggested mitigation measures in a future project approval.