State of California

CALIFORNIA AIR RESOURCES BOARD

EXECUTIVE ORDER G-25-093

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorizes the California Air Resources Board (CARB or Board) to adopt standards, rules, and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, section 39003 of the Health and Safety Code charges the Board with coordinating efforts to attain and maintain ambient air quality standards, to conduct research into the causes of and solution to air pollution, and to systematically attack the serious problem caused by motor vehicles, which is the major source of air pollution in many areas of the State;

WHEREAS, sections 39666 and 39667 of the Health and Safety Code authorize the Board to adopt regulations and measures to reduce emissions of toxic air contaminants from vehicular and non-vehicular sources;

WHEREAS, Chapter 3.2 commencing with section 39625 of the Health and Safety Code established the Proposition 1B: Goods Movement Emission Reduction Program (Program) to implement the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, also known as Proposition 1B, which authorizes one billion dollars ($1,000,000,000) in bond-funded incentives for CARB to reduce emissions associated with the movement of freight along California's trade corridors;

WHEREAS, section 39625.5(b)(1) of the Health and Safety Code requires the Board to allocate funds to local agencies in a manner that gives priority to emissions reduction projects that achieve the earliest possible reduction of health risk in communities with the highest health risks from goods movement facilities;

WHEREAS, in Resolution 08-12 adopted on February 28, 2008, the Board adopted the Proposition 1B: Goods Movement Emission Reduction Program Guidelines for Implementation;

WHEREAS, in Resolution 15-20 adopted on June 25, 2015, the Board adopted updated Final 2015 Guidelines for Implementation (Program Guidelines);

WHEREAS, in Resolution 10-18, adopted on March 25, 2010, the Board delegated to the Executive Officer, or his or her designee, the authority to recapture funds previously awarded by the Board to a local or State agency for reallocation and expenditure, according to the terms and conditions stated in the Program Guidelines (recapture provisions). The CARB Executive Officer, or his or her designee, may amend or modify an impacted grant or interagency agreement or establish a new grant or interagency agreement to implement this policy, consistent with the Program Guidelines;

WHEREAS, in Resolution 10-27 adopted on June 24, 2010, the Board delegated authority to the Executive Officer, and his or her designee, to select the projects to be funded from any recaptured funds to Board-approved primary or backup projects consistent with Program funding priorities and to enter into grant agreements with the local agencies;

WHEREAS, in Resolution 13-34 adopted on July 25, 2013, the Board directed CARB staff to closely monitor local agency implementation of grant agreements to ensure funds are being used effectively and expeditiously, and to implement the recapture provisions stated in the Program Guidelines if CARB staff believes that the grants cannot be fully utilized by the specified deadlines;

WHEREAS, in Resolution 10-18, the Board affirmed the existing authority of CARB staff to interpret or clarify the Program Guidelines and delegated to the Executive Officer, or his or her designee, the authority to adopt changes to the Program Guidelines that he or she deems necessary to enable effective implementation of the Program, provided that such changes are consistent with statute and the goals established by the Board, and such modifications are identified in Attachments B, C, and D;

WHEREAS, the local agencies solicited applications for equipment projects for all source categories, during multiple solicitations, pursuant to the procedures stated in the Program Guidelines, and funds remain available for additional projects;

WHEREAS, CARB staff worked with the local agencies to modify existing project specifications and requirements to provide additional opportunities for funding for the locomotives, cargo handling equipment, and transport refrigeration units as identified in Attachments B, C, and D;

WHEREAS, CARB staff have considered that ZE or near-zero locomotives would achieve substantially more emission reductions compared to replacement with a Tier 4 locomotive over a given period, and therefore the project life can be decreased to 10 years from 15 for projects that achieve better than Tier 4 emission standards. Additionally, due to the greater emission reductions achieved if replacing with a ZE locomotive, the existing locomotive can be a Tier 3 locomotive rather than a Tier 0-2.

WHEREAS, hydrogen fuel cell technology in the cargo handling equipment sector has been accelerating in recent years, and therefore a fuel cell option to repower yard trucks as well as provide hydrogen fueling stations should be added to the Guidelines to provide potential applicants with other zero emission options.

WHEREAS, equipment costs have risen significantly since the inception of these Guidelines, and therefore the funding caps should be increased to make the Program more appealing to potential applicants.

NOW, THEREFORE, IT IS ORDERED that pursuant to the delegation of authority by the Board in Resolution 10-18, the Executive Officer, or his or her designee, hereby adopts the modifications to the Program Guidelines shown in Attachment A.

Executed at Sacramento, California this 21st day of April 2025.

Richard Boyd, Chief, Transportation and Toxics Division

ATTACHMENT A

Changes to Proposition 1B: Goods Movement Emission Reduction Program Guidelines

I. LIMITED CHANGES TO THE PROGRAM GUIDELINES FOR SOLICITATIONS OPENED AFTER EXECUTION OF EXECUTIVE ORDER G-25-093

A. Specifications

1. Locomotives – See Appendix B
   - Equipment Eligibility. Expand eligibility to include replacing an existing Tier 3 locomotive with a zero emission locomotive. Previously, only uncontrolled or Tier 0-2 locomotives were eligible.
   - Equipment Funding.
     i. Increase funding caps from 75% to 85% of eligible costs to align with other incentive programs such as Carl Moyer.
     ii. Remove dollar-amount caps and leave funding caps as a percentage of total eligible costs. Percentages vary by project option.
   - Minimum Project Life. Reduce project life from 15 to 10 years for alternative technology replacements or retrofits achieving cleaner than Tier 4 emission standards.

2. Cargo Handling Equipment – See Appendix E
   - Equipment Project Options.
     i. Amend Option (2) to include hydrogen fuel cell yard truck conversions in addition to electric conversions.
     ii. Amend Option (5) to include hydrogen fueling stations in addition to battery chargers.
   - Equipment Funding. Remove dollar-amount caps and leave funding caps as a percentage of total eligible costs. Percentages vary by project option.

3. Transport Refrigeration Units – See Appendix F
   - Equipment Funding. Increase maximum funding to replace a diesel TRU with a zero emission TRU from $50,000 to $100,000.

Attachment B

April 2025 and Later Locomotives and Railyard Solicitations

Appendix B: Locomotives and Railyards

APPENDIX B: Locomotives and Railyards

A. Equipment Project Specifications

Locomotive Projects	
Eligible Equipment	Diesel-powered freight locomotives with no or minimal emissions control technology (i.e., uncontrolled, or meeting Tier 0 through Tier 2 standards). Existing Tier 3 locomotives may be eligible if replaced with a zero emission locomotive.
General Requirements (applicable to all project options).	Equipment owner must demonstrate: • Operation or equivalent locomotive horsepower operation in California for the past 2 years. • For switchers and medium horsepower locomotives: at least 50% operation or equivalent locomotive horsepower operation within the four California trade corridors for the past 2 years. • For line haul locomotives: a majority of the minimum percentage operation or equivalent locomotive horsepower operation within the four California trade corridors for the past 2 years. • Estimated diesel fuel usage of 20,000 gallons or equivalent per year or greater for Class I or Class II railroads. • Estimated diesel fuel usage of 5,000 gallons or equivalent per year or greater for Class III railroads. Locomotive emissions capture and control system projects Existing freight railyards within the four California trade corridors Equipment owner shall: • Commit to the project life specified by the applicable equipment project option. • Adhere to all Program requirements during the project life. • Agree to equipment inspections. • Comply with record-keeping, reporting, and Program review or fiscal audit requirements. • Sign a legally binding contract with the local agency including project milestones and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and insurance on upgraded equipment.

Locomotive Projects	
	• Certify that there are no outstanding CARB violations or non-compliance with CARB regulations associated with the equipment or the owner. • Exclude any Program-funded equipment from the compliance calculations for the 1998 agreement for locomotives operating in the South Coast Air Basin for the duration of the project life (applicable to Union Pacific and BNSF Railway only).

Locomotives and Railyards (cont.)

Option (1): **Switcher Locomotive (1,006 hp 2,300 hp) Funding Options**	Partial funding (see options below) to replace or retrofit (retrofit Includes rebuild, repower, remanufacture, filter installation, and all other modifications other than replacement) an uncontrolled, or Tier 0 through Tier 2 switcher locomotive with a new engine or alternative technology that meets U.S. EPA Tier 4 or lower emission standards (1.30 grams per brake horsepower-hour (g/bhp-hr) or lower NOx and 0.03 g/bhp-hr or lower PM). For Class I, Class II, and Class III Railroads with minimum usage of 20,000 gallons/year, partial funding up to 85% of eligible costs to replace or retrofit a switcher locomotive with a new engine or alternative technology. For Class III Railroads with minimum usage of 5,000 to 19,999, partial funding up to 42.5% of eligible costs to replace or retrofit a switcher locomotive. *If the equipment is banned from California operation instead of scrapped, the funding amount is reduced by 20%. Eligible costs may include a new chassis, freshly manufactured or retrofitted engine(s), new generator set(s), filter and diesel oxidation catalyst for PM control, exhaust gas recirculation and selective catalytic reduction device for NOx control, other emission control equipment, and new or upgraded mechanical/electrical/control system components necessary for safe operation. Ineligible costs include auto start/stop devices required by regulation or agreements, GPS devices and associated monitoring and reporting costs, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and repair.
Requirements	The new or upgraded equipment must meet the required emission levels or standards as evidenced by a U.S. EPA Certificate of Conformity (if available) and a CARB Verification Letter of the emission levels achieved. In addition to the General Requirements, equipment owner shall: • Commit to 90% or 100% California-only operation for the duration of the project life equipment is permitted to temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner. • Commit to at least 50% of operation within the four California trade corridors for duration of the project life. • Commit to a project life of 15 years for Tier 4 diesel replacements or retrofits. • Commit to a project life of 10 years for alternative technology replacements or retrofits with lower than Tier 4 emission standards.

	• Commit to the funded locomotive using California CARB diesel fuel unless CARB approves an exemption and it is included in the contract between the local agency and equipment owner. • Scrap the old engine/locomotive, or ban old engine/locomotive from California operation (replacements and retrofits involving engine replacement). • Install an active GPS device on both the old equipment (if not scrapped) and the new equipment, fund and commit to data collection, and report location data.

Locomotives and Railyards (cont.)

Option (2): **Zero Emission Switcher Locomotive (1,006 hp 2,300 hp) Funding Options**	Partial funding (see options below) to replace or retrofit (retrofit Includes rebuild, repower, remanufacture, and all other modifications other than replacement) an uncontrolled, or Tier 0 through Tier 3 switcher locomotive with a zero emission locomotive. For Class I, Class II, and Class III Railroads with minimum usage of 20,000 gallons/year, partial funding up to 85% of eligible costs* to replace or retrofit a switcher locomotive with a zero emission locomotive. For Class III Railroads with minimum usage of 5,000 to 19,999, partial funding up to 42.5% of eligible cost* to replace or retrofit a switcher locomotive with a zero emission locomotive. *If the equipment is banned from California operation instead of scrapped, the funding amount is reduced by 20%. Eligible costs may include a new chassis, freshly manufactured or retrofitted battery system, hydrogen fuel cell system, other zero-emission system, energy storage devices (battery packs and tenders, hydrogen tank and tenders, and other energy storage components critical to the zero emission system), energy and power management system, thermal management system, traction motors, and new or upgraded mechanical/electrical/control system components necessary for safe operation. Ineligible costs include auto start/stop devices required by regulation or agreements, GPS devices and associated monitoring and reporting costs, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and repair.

Requirements	The new or upgraded zero emission equipment must be certified, verified, or approved by CARB as applicable. In addition to the General Requirements, equipment owner shall: • Commit to 90% or 100% California-only operation for the duration of the project life equipment is permitted to temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner. • Commit to at least 50% of operation within the four California trade corridors for duration of the project life. • Commit to a project life of 10 years. • Scrap the old engine/locomotive, or ban old engine/locomotive from California operation (replacements and retrofits involving engine replacement). • Install an active GPS device on both the old equipment (if not scrapped) and the new equipment, fund and commit to data collection, and report location data.

Option (3): **Tier 4 or Zero Emission Rail Car Mover For Class III Railroads Only Funding Options**	Partial funding (see options below) to replace an uncontrolled, or Tier 0 through Tier 2 switcher locomotive with a new Tier 4 or Zero emission rail car mover. Note: Zero emission rail car movers or similar rail vehicle used for rail switching operations must be able to satisfy current operational needs being performed by the existing equipment that is being replaced. Equipment — Funding Amount Tier 4 rail car mover — 60% of eligible cost Zero emission rail car mover — 85% of eligible cost Eligible costs may include the purchase of a new rail car mover. Ineligible costs include auto start/stop devices required by regulation or agreements, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and repair. *If the equipment is banned from California operation instead of scrapped, the funding amount is reduced by 20%.

Requirements	For diesel equipment, the new equipment must be certified or verified and meet the U.S. EPA Tier 4 emission level standard. For zero emission equipment, the new equipment must be certified, verified, or approved by CARB as applicable. The rail car mover must perform the same work and meet the operation needs of the existing locomotive. Metrics for determining "work" include, but are not limited to, duty cycle, tractive effort or pulling force (drawbar force). In addition to the General Requirements, equipment owner shall: • Commit to 90% or 100% California-only operation for the duration of the project life; equipment is permitted to temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner. • Commit to at least 50% of operation within the four California trade corridors for duration of the project life. • Commit to a project life of 15 years. • Scrap the old engine and any other parts or components that produces emissions, or ban old engine/locomotive from California operation (replacements and retrofits involving engine replacement). • Install an active GPS device on both the old equipment (if not scrapped) and the new equipment, fund and commit to data collection, and report location data.

Locomotives and Railyards (cont.)

Option (4): **(Medium Horsepower) Locomotive (2,301 hp 4,000 hp)) Funding Options**	Partial funding (see options below) to replace or retrofit (retrofit Includes rebuild, repower, remanufacture, filter installation, and all other modifications other than replacement) an uncontrolled, Tier 0 through Tier 2 medium horsepower locomotive with a new engine or alternative technology that meets U.S. EPA Tier 4 or lower emission standards (1.30 g/bhp-hr or lower NOx and 0.03 g/bhp-hr or lower PM). For Class I, Class II, and Class III Railroads with minimum usage of 20,000 gallons/year, partial funding up to 85% of eligible costs to replace or retrofit a medium horsepower locomotive with a new engine or alternative technology. For Class III Railroads with minimum usage of 5,000 to 19,999, partial funding up to 42.5% of eligible costs to replace or retrofit a medium horsepower locomotive. *If the equipment is banned from California operation instead of scrapped, the funding amount is reduced by 20%. Eligible costs may include a new chassis, freshly manufactured or retrofitted engine(s) new generator set(s), filter and diesel oxidation catalyst for PM control, exhaust gas recirculation and selective catalytic reduction device for NOx control, other emission control equipment, and new or upgraded mechanical/electrical/control system components necessary for safe operation. Ineligible costs include auto start/stop devices required by regulation or agreements, GPS devices and associated monitoring and reporting costs, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and repair.
Requirements	The new or upgraded equipment must meet the required emission levels or standards as evidenced by a U.S. EPA Certificate of Conformity (if available) and a CARB Verification Letter of the emission levels achieved. In addition to the General Requirements listed previously, equipment owner shall: • Commit to 90% California or 100% California-only operation for the duration of the project life; equipment is permitted to temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner. • Commit to at least 50% of operation within the four California trade corridors for the duration of the project life. • Commit to a project life of 15 years for Tier 4 diesel replacements or retrofits.

	• Commit to a project life of 10 years for alternative technology replacements or retrofits with lower than Tier 4 emission standards. • Commit to the funded locomotive using California CARB diesel fuel unless approves an exemption and it is included in the contract between the local agency and equipment owner. • Scrap or ban the old engine/locomotive from California operation (replacements and retrofits involving engine replacement). Install an active GPS device on both old (if not scrapped) and new equipment, fund and commit to data collection, and report location data.

Option (5): **(Medium Horsepower) Zero Emission Locomotive (2,301 hp 4,000 hp)) Funding Options**	Partial funding (see options below) to replace or retrofit (retrofit Includes rebuild, repower, remanufacture, and all other modifications other than replacement) an uncontrolled, Tier 0 through Tier 3 medium horsepower locomotive with a zero emission locomotive. For Class I, Class II, and Class III Railroads with minimum usage of 20,000 gallons/year, partial funding up to 85% of eligible costs* to replace or retrofit a medium horsepower locomotive with a zero emission locomotive. For Class III Railroads with minimum usage of 5,000 to 19,999, partial funding up to 42.5% of eligible cost* to replace or retrofit a medium horsepower locomotive with a zero emission locomotive. *If the equipment is banned from California operation instead of scrapped, the funding amount is reduced by 20%. Eligible costs may include a new chassis, freshly manufactured or retrofitted battery system, hydrogen fuel cell system, other zero-emission system, energy storage devices (battery packs and tenders, hydrogen tank and tenders, and other energy storage components critical to the zero emission system), energy and power management system, thermal management system, traction motors, and new or upgraded mechanical/electrical/control system components necessary for safe operation. Ineligible costs include auto start/stop devices required by regulation or agreements, GPS devices and associated monitoring and reporting costs, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and repair.

Requirements	The new or upgraded zero emission equipment must be certified, verified, or approved by CARB as applicable. In addition to the General Requirements listed previously, equipment owner shall: • Commit to 90% California or 100% California-only operation for the duration of the project life; equipment is permitted to temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner. • Commit to at least 50% of operation within the four California trade corridors for the duration of the project life. • Commit to a project life of 10 years. • Commit to the funded locomotive using California CARB diesel fuel unless approves an exemption and it is included in the contract between the local agency and equipment owner. • Scrap or ban the old engine/locomotive from California operation (replacements and retrofits involving engine replacement). Install an active GPS device on both old (if not scrapped) and new equipment, fund and commit to data collection, and report location data.

Locomotives and Railyards (cont.)

Option (6): **Line-Haul Locomotive (4,001 hp or higher) Funding Options**	Partial funding (see options below) to replace or retrofit (retrofit includes rebuild, repower, remanufacture, filter installation, and all other modifications other than replacement) an uncontrolled, Tier 0 through Tier 2 line-haul locomotive with a new engine or alternative technology that meets U.S. EPA Tier 4 or lower emission standards (1.30 g/bhp-hr or lower NOx and 0.03 g/bhp-hr or lower PM). California Operation — Funding Amount* 90% to 100% — 85% 75% — 70% 50% — 45% 30% — 25% *If the equipment is banned from California operation instead of scrapped, the funding amount is reduced by 20%. Eligible costs may include a new chassis, freshly manufactured or retrofitted engine(s), new generator set(s), filter and diesel oxidation catalyst for PM control, exhaust gas recirculation, and selective catalytic reduction device for NOx control, other emission control equipment, and new or upgraded mechanical/electrical/control system components necessary for safe operation. Ineligible costs include auto start/stop devices required by regulation or agreements, GPS devices and associated monitoring and reporting costs, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and, and repair.

Requirements	The new or upgraded equipment must meet the required emission standards as evidenced by a U.S. EPA Certificate of Conformity (if available) and a CARB Verification Letter of the emission levels achieved. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a minimum percentage of California operation per the appropriate funding level for the duration of the project life. Equipment is permitted to temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner. • Commit to at least a majority of the percentage California operation being within the four California trade corridors for the duration of the project life. • Commit to a project life of 15 years for Tier 4 diesel replacements or retrofits. • Commit to a project life of 10 years for alternative technology replacements or retrofits with lower than Tier 4 emission standards. • Commit to the funded locomotive only using California CARB diesel fuel unless CARB approves an exemption and it is included in the contract between the local agency and equipment owner. • Scrap or ban the old (uncontrolled through Tier 1+) engine/locomotive from California operation for (replacements or retrofits involving engine replacement) If upgrading a Tier 2 engine/locomotive, the Tier 2 equipment may remain in California and a Tier 0 through Tier 1+ engine/locomotive must be scrapped or banned from California operation (replacements and retrofits involving engine replacement). Install an active GPS device on both the old (if not scrapped) and the new equipment, fund and commit to data collection, and report location data

Locomotives and Railyards (cont.)

Option (7): **Locomotive Emissions Capture and Control System**	Partial funding for the lower of 80% of eligible costs or a level commensurate with a cost effectiveness of at least 0.10 pounds of weighted emissions reduced per State dollar invested for the purchase and installation of a CARB-approved locomotive emission capture and control system (a.k.a. hood or bonnet) to reduce diesel PM and NOx emissions from freight locomotives. Eligible costs include the purchase and installation of the emission treatment system and ducting, and hoods/bonnets necessary to connect to locomotives. Ineligible costs include those associated with increasing the capacity of electrical power transmission to the facility, locomotive modifications to accept capture and control system, locomotive or other acquisition and modification for a portable system, design, engineering, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, utility construction or metered costs, insurance: operation, maintenance, and repair.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Commit to 100% operation within the four California trade corridors for the duration of the project life • Commit to a project life of 10 years. • Document the system is commercially available and achieves an overall capture and control efficiency rate of at least 80% for the removal of NOx and PM. • Demonstrate system performance and efficiency with source testing prior to funding and annually thereafter by capturing emissions from an operating locomotive undergoing diagnostic procedures. o Performance measures include: (i) no visible emissions after bonnet is connected to the locomotive (opacity <20%); and (ii) establish overall system efficiency rate is at least 80% using CARB approved methods for flow rate (Methods 1 to 4), NOx (CARB Method 100) and PM (CARB Method 5). Any alternative test methods must be approved by CARB • Obtain a 10-year manufacturer's warranty (including labor and materials) to repair and/or replace system component(s) as needed to correct any mechanical electrical or control system equipment or installation problems, which may cause significant loss of capture, treatment efficiency or usability. The manufacturer's warranty may exclude minor items that are subject to normal wear and tear if approved by CARB • Comply with all local permitting requirements.
Excluded Funding Components	• Electricity costs required to operate the hood control system. • Other operation and maintenance costs.

Locomotives and Railyards (cont.)

Option (8): **Electric Charging Stations or Hydrogen Fueling Units**	Partial funding of up to $250,000 for the purchase of electric charging or hydrogen fueling units for a switcher or medium horsepower locomotive. Funding is in addition to the funding for the replacement or retrofit of a switcher or medium horsepower locomotive; see Options 2 or 5 (pages B-5 and B-11) for eligibility, funding options, and requirements for the locomotive replacement or retrofit. This funding option is only available if the equipment owner replaces or retrofits a minimum of one locomotive through the Program (Option 2 or 5 – pages B-5 and B-11).
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Replace or retrofit a minimum of one locomotive with a zero emission locomotive (Options 2 or 5). • Meet all requirements for project Options 2 or 5. • Demonstrate proof of equipment warranty of at least 3 years. • Comply with all local permitting requirements. • Commit to a 10 year project life.

A. Major Milestones for Project Completion

- Equipment order.
- Equipment acquisition/installation.
- Submittal of invoice to local agency for reimbursement.

B. Application Information

- Equipment owners shall provide the following information and documentation in addition to the requirements described in Chapter VI., and other information CARB or local agencies may request on the equipment project applications.
- Union Pacific and BNSF Railway must certify that any locomotive that would operate in the South Coast Air Basin will be excluded from the railroads fleet average emissions calculations under the 1998 agreement.

1. General information

This section applies to all equipment project options.

- Organization/agency/company name.
- Railroad Class (1, 2, or 3).
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner).
- Proof of identity of equipment owner.
- Business information.
    - Number of locomotives.
    - Number of employees.

2. Current equipment and activity information

a) Switcher, medium horsepower, and line-haul locomotive

- Existing locomotive information.
    - Locomotive type (diesel/electric, alternative technology).
    - Build number and build date.
    - Builder.
    - Locomotive make, model, and serial number.

  - Engine data (per engine).
    - Engine configurations (roots blown, turbo-charged, other).
    - Emission control level (uncontrolled, Tier 0 through Tier 2).
    - Engine family, make and type, model and engine year.
    - Serial number.
    - Horsepower.
    - Number of cylinders.
    - Fuel type.
  - Electronic monitoring unit device type and model (if equipped).
- Ownership.
  - Documentation of current ownership.
- Activity data for the past 2 years (for existing unit or units of comparable horsepower and function).
  - Annual fuel consumption (gallons of fuel) or annual megawatt hours of operation.
  - Name and location of home railyard.
- Activity documentation for past 2 years (for existing unit or units of comparable horsepower and function).
  - Documentation of percentage of operation within the four California trade corridors.
  - Identify in which of the four California trade corridors the equipment is routinely operated.
  - Documentation of fuel consumption.
  - Documentation of megawatt hours of operation.
  - CARB staff may post on the program website additional instructions for applicants demonstrating eligibility based on units of comparable horsepower and function.

b) Locomotive emissions and capture control system

- Facility location.
  - Address of railyard where technology will be installed.

- Description and area map of railyard facility where system is proposed for installation.

- Railyard activity.
  - Quantification of current annual locomotive maintenance and diagnostic operations at the area within facility where infrastructure is proposed.
  - Number and type of units being serviced.
    - For each type of unit being serviced, provide average time spent in idling and on each notch level while being serviced or in diagnostics.

- Baseline emissions (without the project in place) for the 10 years of operation of the system. This baseline should reflect the benefits of all adopted regulations, MOU agreements, and any other enforceable agreements.

Additional documentation may be requested by the local agency.

3. Proposed equipment project information

a) Switcher locomotive and rail car mover

- New switcher or rail car data.
  - Locomotive/rail car type (diesel-electric, gen-set, alternative technology, zero emission).
  - Builder name.
  - Locomotive or rail car mover make.
  - Locomotive or rail car mover family name.
  - For locomotive, U.S. EPA Certificate of Conformity (if available) and/or a CARB Verification Letter of the emission levels achieved.
  - For Tier 4 rail car mover, U.S. EPA Certificate of Conformity, or CARB certification and /or CARB Verification of the emission levels achieved.
  - For zero emission switcher or rail car mover, CARB certification, verification or approval.
  - Equipment Identification number (EIN), if applicable.
  - Engine data (per engine).
    - Engine configurations (roots blown, turbo-charged, other).
    - Engine family, make, and engine year.
    - Horsepower.
    - Number of cylinders.

        - For new switcher gen-sets, provide the number of engines, and each engine horsepower and kilowatts-hour.
        - Fuel type.
    - Zero emission switcher or rail car mover engine data.
        - Fuel type.
        - Engine family, make, model and engine year.
        - Serial number.
        - Horsepower or kilowatt-hours.
        - Rated output (voltage and amperage) of battery packs, fuel-cell stacks, and electric motors, as applicable.
        - Estimated operating time (or other work metric) per complete charge (as applicable).
    - Emission control equipment installed, if applicable (i.e., diesel PM filter, diesel oxidation catalyst, exhaust gas recirculation, selective catalytic reduction, etc.).
    - Electronic monitoring device unit type and a description or sample of the type/format of reportable data.
    - Zero emission switcher or rail car mover duty cycle and/or tractive effort or pulling force (drawbar force).
- Itemized cost information for eligible expenses.
    - Locomotive, engine, or generator set (as applicable) or cost of rail car mover.
    - Emission control equipment (as applicable).
    - Other equipment/materials.
- Predicted activity data with new equipment.
    - Specify the percentage of future operation in California (90% or 100%).
    - Specify the percentage of future operation in the four California trade corridors.
    - Estimated annual fuel consumption (gallons of fuel) or estimated annual megawatt hours of operation (as applicable).
    - Name and location of home railyard.
- Equipment project funding demonstration.

- Program funds requested.
- Funding sources and amounts of other funding (private, local, other State, federal).
- Total project cost (Program funds requested plus other match funding).
- Documentation of match funding availability, if requested by the local agency at the time of application.

b) Medium horsepower and line-haul locomotive

- New locomotive or engine data.
  - Locomotive type (diesel-electric, gen-set, alternative technology).
  - Builder name.
  - Locomotive make.
  - U.S. EPA Certificate of Conformity (if available) and a CARB Verification Letter of the emission levels achieved.
  - For zero emission locomotive, CARB certification, verification or approval.
  - Engine data (per engine).
    - Engine configurations (roots blown, turbo-charged, other).
    - Engine family, make, and engine year.
    - Horsepower.
    - Number of cylinders.
    - For new gen-sets, provide the number of engines and each engine horsepower and kilowatts-hour.
    - Fuel type.
  - Zero emission locomotive engine data.
    - Fuel type.
    - Engine family, make, model and engine year.
    - Serial number.
    - Horsepower or kilowatt-hours.
    - Rated output (voltage and amperage) of battery packs, fuel-cell stacks, and electric motors, as applicable.
  - Estimated operating time (or other work metric) per complete charge (as applicable).Emission control equipment installed, if applicable (diesel PM

filter, diesel oxidation catalyst, exhaust gas recirculation, selective catalytic reduction, etc.).

- Electronic monitoring device unit type and a description or sample of the type/format of reportable data.
- Zero emission locomotive duty cycle and/or tractive effort or pulling force (drawbar force).

- Itemized cost information for eligible expenses.
  - Locomotive or engine (as applicable).
  - Emission control equipment (as applicable).
  - Other equipment/materials.
- Predicted activity data with new equipment.
  - Specify the percentage of future operation in California (90 or 100 percent for medium horsepower locomotives and 30 to 100 percent for line-haul locomotives).
  - Estimated annual fuel consumption (gallons of fuel) or estimated annual megawatt hours of operation (as applicable).
  - Name and location of home railyard.
- Equipment project funding demonstration.
  - Funding sources and amounts of other funding (private, local, other State, federal).
  - Total project cost (Program funds requested plus other match funding).
  - Documentation of match funding availability, if requested by the local agency at the time of application.

c) Locomotive emissions capture and control system

- Project description and design, including:
  - Number of emissions capture systems (bonnets) per unit.
  - Number of emissions treatment systems.
  - Support structure.
  - Emissions overhead manifold.
- Emission control equipment data.
  - Equipment vendor(s).

  - Documentation of percent PM and NOx emission reductions.

- Itemized cost for each eligible expense.
- Predicted locomotive activity data with new system over project life.
  - Number and type of locomotive units using the hood.
  - Average time locomotives will spend under the hood idling and in notches 1-8 for each unit type identified above.
  - Power usage to run the system and source of power (grid- vs. non-grid-based).
  - Natural gas usage (if any) for heating selective catalytic reduction duct burner.
- Projected emissions and benefits with the project.
  - Emissions with the project over 10 years of operation.
  - Emission reductions attributable to the project (beyond those required by any law, regulation, or enforceable agreements) for 10 years.
  - Demonstration that the weighted emission reductions are equal to or higher than 0.10 pounds per State dollar invested.
- Equipment project funding demonstration.
  - Total project cost.
  - Program funds requested.
  - Funding sources and amounts of other funding (private, local, other State, federal).
  - Documentation of match funding availability, if requested by the local agency at the time of application.

d) Electric charging stations/Hydrogen fueling units

- Charging/fueling unit
  - New equipment information to calculate emission reductions, as determined by ARB.
  - Equipment manufacturer.
  - Equipment power rating for electric charger only (voltage, amperage, wattage, efficiency).
  - Equipment serial number.
  - Equipment recharge rate for electric charger only.
  - Anticipated cost of eligible equipment.
  - Location of construction.

- Description of usage monitoring system.
- Predicted activity rate with new equipment.
- Estimated annual truck connections to charging/fueling units and average connection time.

D. Scrap Requirements

In addition to the general scrappage requirements described in Chapter IV.A.14., specific requirements for locomotive repower and replacement projects are shown in Table B.1 below.

Table B.1 Locomotive Equipment Project Scrap Requirements

Source Category	Equipment Project Option	Additional Requirements
Locomotives	Project Options (1), (2), (3), (4), (5) and (6) Repower or Replacement	• The local agency shall verify the impound and transport of the old engine(s) to the dismantler up to 30 days after the new engine(s) being placed into operation (if applicable). • The dismantler must dismantle and destroy the old engine(s) within 60 days of receipt. The engine destruction must be done in accordance with these Guidelines. • The engine block shall be punctured and destroyed in such a manner to eliminate the possibility of future operation. • The dismantler shall provide proof of scrappage to the local agency within 10 days of the destruction of the engine. • The local agency or its designee must provide digital photographs, described below, showing the destruction of the old engine. The local agency must receive these photos within 10 days of the destruction of the engine. • The following digital photos must be taken and labeled for the project file: 1. Engine serial number either stamped on the block or on the tag. 2. Destroyed engine block.

E. Alternative to Scrapping

If the equipment owner has elected to ban the old locomotive or locomotive engine from future operation in California, the equipment owner shall demonstrate to the local agency's satisfaction that the following requirements are met for the duration of the contract:

- An active GPS device has been installed in the old equipment.
- The GPS device is fully operational and can be easily tracked.
- Provide local agency the GPS manufacturer's name, date of manufacture, and serial number of device.
- If old engine or old locomotive is remanufactured, equipment owner must provide remanufacturing date, remanufacturer's name, and sufficient information to identify remanufactured engine and (if applicable) remanufactured locomotive, including changes to emissions levels.
- If old equipment is sold, new owner must assume GPS tracking and reporting responsibilities.
- Data collection is fully funded by equipment owner.
- Report old unit future locations to local agency in the manner indicated in contract.

The old equipment, equipped with the GPS device, shall be removed from California within 60 days of receiving the fully operational upgraded equipment.

F. Post-Inspection

In addition to the general post-inspection requirements described in Chapter IV.A.16., specific requirements for locomotive post-inspections are shown in Table B.2 below.

For locomotive projects, the post-inspection shall occur within 60 days of owner receipt of fully operational equipment.

Table B.2 Locomotive Equipment Post-Inspection Requirements

Source Category	Equipment Project Option	Additional Requirements
Locomotives	Option (1), (2), (3), (4), (5) and (6) Switcher, Rail Car Mover, Medium Horsepower, and Line-Haul	• Locomotive engine or rail car mover must be operated under its own power under loaded conditions. • Engine make, model, engine year, and serial number for repower and replacement projects. • Start and end dates of when locomotive was repowered. • Name and address of company that repowered the locomotive engine.
	Option (7) Locomotive Emissions Capture and Control System	• Verify that source testing demonstrates the required capture and control efficiency. • The fully operational system must be connected to an operating locomotive and complying with performance measures stated in the specification. • Verification that the project serves the intended location.

Source Category	Equipment Project Option	Additional Requirements
	Option (8) Electric Charging Station or Hydrogen Fueling Unit	• Name of power system manufacturer. • Serial number and date of manufacture. • Rate amperage/voltage (electric equipment only). • Equipment recharge rate (electric equipment only). • Verification that each project's power system is operational. • Inspection shall include verification of operation by connecting locomotive to the charging/fueling unit. • Inspection shall be completed within 60 calendar days of installation of equipment.

G. Recordkeeping Requirements

Equipment owners shall retain, at a minimum, all documents, invoices, and correspondence associated with the application, award, contract, purchase, installation, equipment operation (and if applicable, registration, insurance, and warranty), and reporting for at least 2 years after the end of the equipment project contact term or 3 years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, CARB, or CARB designee upon request for the purposes of ongoing evaluations, Program reviews, or fiscal audits.

H. Annual Reporting Requirements

Equipment owners shall be responsible for annual reporting to the local agency that includes, but is not limited to:

1. Switcher, rail car mover, medium horsepower, and line-haul locomotive

- Contact information (owner name, company, address, and phone).
- Build number, date, builder, builder model.
- Date of equipment installation.
- Locomotive/rail car mover type.
- Name and location of home railyard.

- Annual megawatt-hours of operation, notch profile and fuel consumed since last report.
- Representative profile data to determine engine duty cycle.
- Certification and documentation of 90% or 100% California-only operation for switchers and medium horsepower locomotives.
- Certification and documentation of percentage of operation in the four California trade corridors for switcher and medium horsepower locomotives.
- Certification and documentation of percentage of California operation for line-haul locomotives.
- Certification and documentation of percentage of operation in the four California trade corridors for line-haul locomotives.
- Summary of maintenance performed (including location) and inspections conducted.
- GPS data in a usable format.
- The percentage of annual travel in each of the four California trade corridors:
    - Bay Area trade corridor.
    - Central Valley trade corridor.
    - Los Angeles/Inland Empire trade corridor.
    - San Diego trade corridor.
- Certification that the bond-funded project was used in accordance with the signed contract and that all information submitted is true and accurate.
- Other information as requested by CARB or the local agency.

2. Locomotive emissions capture and control system

- Contact information (owner name, company, address, and phone).
- Description of locomotive emissions capture and control system.
- Railyard name/identifier.
- Date and location of equipment installation.
- Total hours the equipment operated while connected to an operating locomotive over the reporting period.
- Total number of locomotives connected to the system over the reporting period.
- Estimated average locomotive engine size (in horsepower) connected to the system.
- Power usage to run the hood and source of power (grid or generator).
- Natural gas usage (if any) for heating selective catalytic reduction duct burner.
- Summary of maintenance, source testing and inspections conducted.
- Signed certification statement that the bond-funded project was operated in accordance with signed contract and that all information submitted is true and accurate.
- Other information as requested by the local agency or CARB.

3. Electric charging stations/hydrogen fueling units

- An estimate of the annual hours of operation.
- Description of any equipment failure or other event that prevented locomotives from using the charging/fueling units more than one week.

Attachment C

April 2025 and Later Cargo Handling Equipment Solicitations

Appendix E: Cargo Handling Equipment Project Solicitations

APPENDIX E Cargo Handling Equipment

A. Equipment Project Specifications

Eligible Equipment	Existing diesel-powered rubber-tired gantry (RTG) crane or existing diesel yard truck, lift (forklift, side handler top pick or reach stacker) operating at a seaport (port), intermodal railyard, or freight facility in the four California trade corridors.
General Requirements (applicable to all project options)	• Agree to equipment inspections. • Comply with record-keeping, reporting, and Program review or fiscal audit requirements. • Sign a legally binding contract with the local agency including project milestones and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and insurance on upgraded equipment that covers the replacement of the equipment. • Certify that there are no outstanding ARB violations or non-compliance with ARB regulations associated with the equipment or the owner.
Option (1) RTG Crane Conversion/ Replacement	Partial funding of up to the lower of 50% of the eligible cost to upgrade existing diesel powered RTG cranes with a zero emission power system. Eligible costs may include the purchase of a new crane or installation of a zero emission engine, necessary parts for an existing RTG crane including directly related vehicle modifications, and infrastructure to supply electrical power, utility construction, and costs associated with increasing the capacity of electrical power to the crane. Ineligible costs include design, engineering, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair. Projects utilizing regulatory extensions are not eligible for funding.
Requirements	Equipment owner shall: • Commit to 15 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Be permitted to keep the existing diesel engine installed and operational for a limited number of hours each year and do the following at their own expense: (1) install an hour meter on the existing diesel engine and (2) provide activity reports when requested by the local agency or ARB, in a format defined by ARB staff.

	• Commit to a maximum limit of diesel engine usage to 30 hours annually based on a rolling 3 year average. • Comply with all local permitting requirements. • Demonstrate proof of equipment warranty for 5 years.

Cargo Handling Equipment (cont.)

Option (2) Yard Truck Conversion **Requirements**	Partial funding up to the lower of 80% of the eligible cost for conversion of an existing diesel powered yard truck to a zero emission powered yard truck. Eligible costs may include the purchase of the vehicle drive train and control system. Ineligible costs include license, registration, taxes (other than federal excise and sales tax), insurance, operation, maintenance, and repair. Equipment owner shall: • Agree to accept an on-board electronic monitoring unit at any time during the project life. • Commit to 5 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Demonstrate proof of equipment warranty for the project life and insurance on upgraded equipment.
Option (3) Yard Truck Replacement Electric **Requirements**	Partial funding of up to the lower of 80% of the eligible cost to replace an existing diesel powered yard truck with an electric powered yard truck. Eligible costs may include the purchase of an electric yard truck. Ineligible costs include license, registration, taxes (other than federal excise and sales tax), insurance, operation, maintenance, and repair. Equipment owner shall: • Agree to accept an on-board electronic monitoring unit at any time during the project life. • Commit to 5 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Demonstrate proof of equipment warranty for the project life and insurance on upgraded equipment.

Option (4) Yard Truck Replacement Fuel Cell	Partial funding up to the lower of 80% of eligible cost to replace an existing diesel powered yard truck with a fuel cell powered yard truck. Eligible costs may include the purchase of a fuel cell yard truck Ineligible costs include license, registration, taxes (other than federal excise and sales tax), insurance, operation, maintenance, and repair.
Requirements	Equipment owner shall: • Agree to accept an on-board electronic monitoring unit at any time during the project life. • Commit to 5 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Demonstrate proof of equipment warranty for the project life and insurance on upgraded equipment that covers the replacement of the equipment.

Cargo Handling Equipment (cont.)

Option (5) Battery Charger or Hydrogen Fueling Station	Partial funding up to 50% for a battery charger or hydrogen fueling station when equipment owner replaces or converts existing yard truck(s). Funding is in addition to the funding of one or more yard truck conversion(s) or replacement(s). See Option 2, 3, and 4 (page E-2) for eligibility, funding options, and requirements. This funding option is only available if the equipment owner replaces or converts a yard truck(s) through the Program (Options 2, 3, or 4). The number of charging or fueling units cannot exceed the number of yard trucks replaced or converted. For multi-unit chargers or fueling stations, the unit must charge multiple equipment simultaneously. For hydrogen fueling stations, the total grant amount may not exceed 50% of the grant amount provided for Options 2, 3, or 4.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Commit to 5 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Demonstrate proof of equipment warranty of at least 3 years for the charger and 5 years for the trucks. • Convert a minimum of 1 diesel yard truck to electric or fuel cell powered yard truck (Option 2), replace a minimum of 1 electric powered yard truck (Option 3), or replace a minimum of 1 fuel cell yard truck (Option 4) • Meet all requirements for project Option 2, 3, or 4.
Option (6) Forklift Replacement Electric	**Lift capacity of 3,000 lbs to 8,000 lbs:** Partial funding up to the lower of 50% to replace an existing diesel forklift with a Class I electric powered forklift including battery and charger. **Lift capacity of 8,001 lbs to 12,000 lbs:** Partial funding up to the lower of 50% to replace an existing diesel forklift with a Class I electric powered forklift including battery and charger. Eligible equipment must include the purchase of an electric powered forklift, one battery for each forklift purchased, and one California Energy Commission (CEC) compliant charger. Single unit or multi-unit chargers may be purchased given the number of available charging units does not exceed the number of newly purchased forklifts. Equipment owner shall:

Requirements	• Not replace existing zero emission equipment with new electric powered equipment. • Commit to 5 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Demonstrate proof of equipment warranty for one year or 1,600 hours, whichever comes first. • The replacement equipment must serve the same function as the existing equipment. • The equipment engine must be greater than 25 horsepower.

Cargo Handling Equipment (cont.)

Option (7) Forklift Replacement Fuel Cell	**Lift capacity of 3,000 lbs to 8,000 lbs** Partial funding up to the lower of 50% to replace an existing diesel powered, forklift with a Class I fuel cell powered forklift. **Lift capacity of 8,001 lbs to 12,000 lbs** Partial funding up to the lower of 50% to replace an existing diesel forklifts with a Class I fuel cell powered forklift.
Requirements	Equipment owner shall: • Not replace existing zero emission forklift with new fuel cell powered equipment. • Commit to 5 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Demonstrate proof of equipment warranty for one year or 1,600 hours, whichever comes first, and insurance that covers the replacement of the equipment. The replacement equipment must serve the same function as the existing equipment. The equipment engine must be greater than 25 horsepower.
Option (8) Lift Replacement* Electric	**Lift capacity greater than 12,000 lbs** Partial funding up to the lower of 50% to replace an existing diesel powered lift with a Class I electric lift. * *Lift includes top pick, side handler, reach stacker, or forklift.

	Eligible cost must include the purchase of electric powered lift, battery, and CEC compliant charger.
Requirements	Equipment owner shall: • Not replace existing zero emission equipment with new electric powered equipment. • Commit to 5 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Demonstrate proof of equipment warranty for one year or 1,600 hours, whichever comes first and insurance that covers the replacement of the equipment. The replacement equipment must serve the same function as the existing equipment.
Option (9) Lift Replacement* Fuel cell **Requirements**	**Lift capacity greater than 12,000 lbs** Partial funding up to the lower of 50% to replace an existing diesel powered lift with a fuel cell powered lift.* *Lift includes top pick, side handler, reach stacker, or forklift. Equipment owner shall: • Not replace existing zero emission equipment with new fuel cell powered equipment • Commit to 5 years of 100% California operation in a port, or intermodal railyard, or freight facility service in the four trade corridors. • Demonstrate proof of equipment warranty for one year or 1,600 hours, whichever comes first and insurance that covers the replacement of the equipment. • The replacement equipment must serve the same function as the existing equipment.

Cargo Handling Equipment (cont.)

Project Cost Assumptions	• Total estimated cost of converting an existing RTG crane with a zero emission power system and modification of the port space to electrify the crane is approximately $600,000/crane. • Total estimated cost of a zero emission powered RTG crane is approximately $1.5 million. • Total estimated cost of a zero emission power system for yard trucks is approximately $250,000. • Total estimated cost for a single through multi-unit battery charger for yard trucks is approximately $30,000 to $70,000. • Total estimated cost of a 5,000 lb capacity electric forklift with a battery and charger is approximately $40,000. • Total estimated cost of a zero emission forklift is approximately $20,000 to $275,000. • Total estimated cost of a zero emission lift (except for forklift), greater than 12,000 lb. capacity is approximately $340,000 to $660,000.

B. Major Milestones for Project Completion

- Equipment order.
- Equipment acquisition/installation.
- Submittal of invoice to local agency for reimbursement.
- Scrappage of old yard truck/equipment, when applicable.

C. Application Information

Equipment owners shall provide the following information and documentation in addition to the requirements described in these guidelines, and other information ARB or local agencies may request on the equipment project applications.
The following sections apply to all equipment project options.

1. General information

- Name of applicant.
- Organization/agency/company name.
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner) for companies with multiple employees.
- Proof of identity of equipment owner.

- Number of pieces of diesel cargo handling equipment.
- Submit documentation with application showing compliance with ARB regulations .
- Business information.
    - Fleet size.
    - Number of employees.

2. Current equipment and activity information

a) Rubber-tired gantry crane

- Rubber-tired gantry crane (RTG) data.
  - Port, railyard or freight facility center where RTG crane operates.
  - Specific location.
  - Equipment make, model, model year.
  - RTG crane identification number or vehicle identification number (VIN).
  - Engine data (per engine).
    - Engine make, model, engine year, type (off-road or on-road).
    - Serial number.
    - Horsepower and fuel type.
- Activity data for the past 2 years.
  - Annual hours of operation.

Additional documentation may be requested by the local agency to verify information reported on the application.

b) Yard truck

- Yard truck data.
  - Port, railyard, or freight facility where yard truck operates.
  - Truck make, model, model year.
  - Yard truck identification number or vehicle identification number (VIN).
  - Diesel engine data (per engine).
    - Engine make, model, engine year, type (off-road or on-road).
    - Serial number.
    - Horsepower and fuel type.
- Activity data for the past 2 years.
  - Annual hours of operation.
  - Identify the trade corridors in which the equipment is routinely operated.

c) Forklift, top pick, side handler, or reach stacker

- Forklift, top pick, side handler, or reach stacker data.
  - Port, railyard, or freight facility where yard truck operates.
  - Equipment make, model, model year.
  - Identification number or serial number.
  - Equipment lift capacity.
  - Diesel engine data.
    - Engine make, model, engine year.

    - Serial number.
    - Horsepower and fuel type.
    - Engine emission certification standard or retrofit verification level (include Emission Control Group name).
    - Engine Family Name.
- Activity data for the past 2 years.
    - Annual hours of operation.
    - Identify the trade corridors in which the equipment is routinely operated.

Additional documentation may be requested by the local agency to verify information reported on the application.

3. Proposed equipment project information

a) Rubber-tired gantry crane

- Zero emission RTG data.
    - Equipment make, model, model year.
    - Equipment power rating.
- Estimated cost information for eligible expenses.
- New equipment information to calculate emission reductions, as determined by ARB.
- Equipment project funding demonstration.
    - Program funds requested.
    - Funding sources and amounts of other funding (private, local, other State, federal).
    - Total project cost (Program funds requested plus other match funding).
    - Documentation of match funding availability, if requested by the local agency.

b) Yard truck

- Zero emission yard truck data.
    - Truck make, model, model year.
    - Equipment power rating.
- Estimated cost information for eligible expenses.
- New equipment information to calculate emission reductions, if needed.
- Equipment project funding demonstration.
    - Total project cost.
    - Program funds requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Total project cost (Program funds requested plus other match funding).

- Documentation of match funding availability, if requested by the local agency.

c) Battery charger or hydrogen fueling station

Battery charger or hydrogen fueling station.

- Equipment manufacturer
- Equipment power rating (voltage, amperage, wattage, efficiency).
- Equipment Serial Number.
- Number of charging ports.
- Equipment recharge rate.
- Anticipated cost of eligible equipment.
- Location of equipment.
- Predicted activity rate with new equipment.
  - Estimated annual truck connections to charger and average connection time.
  - Estimated annual hydrogen consumption per truck/ fueling station.

Plus information for yard trucks.

- Zero emission yard truck data.
  - Truck make, model, model year.
  - Equipment power rating.
- Estimated cost information for eligible expenses.
- New equipment information to calculate emission reductions, as determined by ARB.
- Equipment project funding demonstration.
  - Program funds requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Total project cost (Program funds requested plus other match funding).
  - Documentation of match funding availability, if requested by the local agency.

d) Forklift, top pick, side handler, or reach stacker

- Forklift, top pick side handler or reach stacker data.
  - Port, railyard, or freight facility where yard truck operates.
  - Equipment make, model, model year.
  - Identification number or vehicle identification number (VIN).
  - Equipment lift capacity.
  - Diesel engine data.
    - Engine make, model, engine year.
    - New equipment information to calculate emission reductions, as determined by ARB.

        - Serial number.
        - Horsepower and fuel type.
        - Engine emission certification standard or retrofit verification level (include Emission Control Group name).
        - Engine Family Name.
    - Estimated cost for each eligible expense.
- Equipment project funding demonstration.
    - Program funds requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Total project cost (Program funds requested plus other match funding).
    - Documentation of match funding availability, if requested by the local agency.

Battery Charger.

- Equipment manufacturer.
- Equipment power rating (voltage, amperage, wattage, efficiency).
- Equipment serial number.
- Number of charging ports.
- Equipment recharge rate.
- Anticipated cost of eligible equipment.
- Location of equipment.
- Predicted activity data.
    - Estimated annual equipment connections to electric power and average connection time.

D. Scrap Requirements

In addition to the general scrappage requirements listed in Chapter IV.A.14., specific requirement for conversion and replacement projects are shown in Table E.1 below.

Table E.1 Cargo Handling Equipment Project Scrap Requirements

Source Category	Equipment Project Option	Additional Requirements
Cargo Handling Equipment	Option (1), (2) and (5) Conversion	• The local agency shall ensure the impound and transport of the old engine to the licensed dismantler (yard truck) or dismantler (all other equipment) up to 30 days after the new power system or equipment is placed into operation. • The licensed dismantler (yard trucks) or dismantler (all other equipment) must puncture and destroy the old engine within 90 days for RTGs or 60 days for all other equipment in accordance with these Guidelines to eliminate the possibility of future operation. • The licensed dismantler (yard trucks) or dismantler (all other equipment) shall provide proof of scrappage to the local agency within 10 days of the destruction of the engine. • The local agency or its designee must provide digital photographs, described below, showing the destruction of the old engine. The local agency must receive these photos within 10 days of the destruction of the engine. • The following digital photos must be taken and labeled for the project file: 1. View of existing equipment from front and side angle. 2. Engine serial number either stamped on the block or on the tag. 3. Destroyed engine block.

Table E.1 Cargo Handling Equipment Project Scrap Requirements (cont.)

Cargo Handling Equipment (cont.)	Additional Requirements for Option (1), (3), (4), (5), (6), (7), (8) and (9) Replacement	In addition to the requirements listed above for conversion projects: • The local agency shall ensure the impound and transport of the old equipment to the dismantler up to 30 days after the new equipment is placed into service. • The licensed dismantler (yard truck) or dismantler (all other equipment) must dismantle and destroy the equipment within 90 days after the replacing the old equipment and placing the new equipment is in operation. The destruction must be done in accordance with these Guidelines. • The equipment shall be physically destroyed in such a manner to eliminate the possibility of future operation. • For yard trucks, sever the old vehicle frame rails to ensure that the vehicle is rendered useless and to prevent further use. • Include at least one digital photo which documents the destruction of the equipment along with the photos described above. • The dismantler shall provide proof of scrappage to the local agency within 10 days of the destruction of the old equipment.

E. Post-Inspection

For cargo handling equipment projects, the post-inspection shall occur within 60 days of owner receipt of fully operational equipment.

Table E.2 Cargo Handling Equipment Post-Inspection Requirements

Source Category	Equipment Project Option	Additional Requirements
Cargo Handling Equipment	Option (1) RTG Crane Conversion/ Replacement	• Name of power system manufacturer. • Serial number and month/year of power system manufacturer.

Source Category	Equipment Project Option	Additional Requirements
	Option (2), (3), and (4) Yard Truck Conversion/ Replacement	• Vehicle type. • Yard truck identification number or vehicle identification number (VIN) or serial number. • Vehicle make, model, model year. • Gross vehicle weight rating (GVWR). • Fuel type.

Table E.2 Cargo Handling Equipment Post-Inspection Requirements (cont.)

	Option (5) Battery charger or hydrogen fueling station with replacement or conversion of yard trucks.	Vehicle Information • Vehicle type. • Yard truck identification number or vehicle identification number (VIN) or serial number. Vehicle make, model, model year. • Gross vehicle weight rating (GVWR). • Fuel type. Charger/ fueling station Information • Equipment manufacturer. • Equipment power rating (voltage, amperage, wattage, efficiency). • Serial number and month/year manufactured. • Number of charging ports. • Equipment recharge rate. Inspection shall include verification of operation by connecting equipment to a charger.
	Option (6), (7), (8), and (9) Forklift, side handler, top pick, reach stacker	Equipment Information • Type of equipment. • Equipment serial number. • Equipment make, model, model year. • Equipment lift capacity. Charger Information • Equipment manufacturer. • Equipment power rating (voltage, amperage, wattage, efficiency). • Serial number and month/year manufactured. • Number of charging ports. • Equipment recharge rate. • Photo of CEC compliance label. Inspection shall include verification of operation by connecting equipment to a charger.

F. Recordkeeping Requirements

Equipment owners shall retain, at a minimum, all documents, invoices, and correspondence associated with the application, award, contract, purchase, installation, equipment operation (and if applicable, registration, insurance, and warranty), and reporting for at least 2 years after the end of the equipment project contact term or 3 years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or ARB designee upon request for the purposes of ongoing evaluations, Program reviews, or fiscal audits.

G. Annual Reporting Requirements

Equipment owners shall be responsible for annual reporting to the local agency for the project life. The equipment owner annual report shall include, but is not limited to:

- Contact information (owner name, company, address, phone).
- Date and location of installation of equipment.
- Equipment type and name of home port, railyard or freight facility.
- RTG crane, side pick, top pick, reach stacker and yard truck or yard truck and battery charging station, make, model, year, serial number, and power rating.
- Annual hours of operation.
- Summary of maintenance and inspections conducted.
- Signed certification statement that the bond-funded technology was installed on the equipment for which it was approved, and that all information submitted to the local agency is true and accurate.
- Other information as requested by the local agency.

Attachment D

April 2025 and Later Transport Refrigeration Unit Solicitations

Appendix F: Transport Refrigeration Unit Project Specifications

APPENDIX F Transport Refrigeration Units (TRUs)

A. Equipment Project Specifications

Eligible Equipment	Existing trucks or trailers equipped with diesel TRUs that are used to move goods (a majority of the time) for the past 2 years (Options 1 and 3); existing freight facilities within one of California's four trade corridors where trucks or trailers equipped with TRUs congregate (Options 2 and 4); and existing insulated trailers that are at least 10 years old and are used for cold storage at grocery stores or retail stores that sell groceries (i.e. big box retailers) in the four trade corridors (Option 5). Equipment owner must demonstrate: • 100% Compliant Carrier status within ARB's Equipment Registration (ARBER) system.
General Requirements (applicable to all project options)	Equipment owner shall: • Commit to the project life specified with the applicable equipment project option. • Sign a legally binding contract with the local agency including project milestones and completion deadlines. • Demonstrate proof of equipment warranty on the Program-funded equipment. • Certify that there are no outstanding ARB violations or non-compliance with ARB regulations associated with the equipment or the owner. For the duration of the project life, the equipment owner shall: • Adhere to all Program requirements. • Agree to equipment inspections. • Comply with record-keeping, reporting, and Program review or fiscal audit requirements. • Properly maintain new or upgraded equipment in good operating condition and according to manufacturer's recommendations.
Option (1) Replacement with Zero Emission Transport Refrigerator	Partial funding of up to the lower of 80% or $100,000 to replace an existing diesel TRU with an all-electric or fuel cell zero emission transport refrigerator (TR) equipped with various range extender strategies to maintain cargo temperature and zero emission operation while at the freight facility and on the road. Eligible costs include the transport refrigerator.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years or 10,000 hours, whichever comes first.

	• Scrap the old diesel TRU(s).

Transport Refrigeration Units (cont.)

Option (2) **Electric Power Plug** **Requirements**	Partial funding of up to the lower of 50% or $3,000 per electric power plug that is compatible with electric powered TRUs (e.g. all-electric, hybrid electric, or electric standby-equipped TRUs) at loading docks or parking areas of freight facilities. Eligible costs include purchase and installation of an electric power plug. Ineligible costs include design, engineering, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair. In addition to the General Requirements, equipment owner shall: • Install an electric plug capable of providing 460V 3 Phase power (may be capable of other voltages in addition to meeting the 460V requirement). • Commit to a project life of 5 years. • Ensure usage of the power plugs. • Comply with all local permitting requirements.
Option (3) Replacement with Cryogenic Transport Refrigerator **Requirements**	Partial funding of up to the lower of 80% or $100,000 to replace 5 existing TRUs with 5 cryogenic transport refrigerators. Additional cryogenic transport refrigerators may be funded at the lower of 80% or $20,000 per additional TR. In addition to the General Requirements, equipment owner shall: • Commit to a project life of 5 years or 10,000 hours, whichever comes first. • Scrap the old diesel TRU(s).
Option (4) Install Cryogenic Infrastructure and Equipment **Requirements**	Partial funding of up to the lower of 50% or $100,000 to install infrastructure and equipment for a cryogenic refrigeration fueling station at a freight facility. Eligible costs include purchase and installation of cryogenic infrastructure or equipment. Ineligible costs include design, engineering, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair. In addition to the General Requirements, equipment owner shall: • Commit to a project life of 5 years. • Ensure usage of the fueling station. • Comply with all local permitting requirements.

Transport Refrigeration Units (cont.)

Option (5) Insulated Trailer and Electric Power Plug **Requirements**	Partial funding of up to the lower of 50% or $40,000 for the purchase of an insulated trailer and one electric power plug. Eligible costs include the insulated trailer and the purchase and installation of an electric power plug. Ineligible costs include design, engineering, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years. • Scrap or destroy the old diesel TRU(s) from the existing trailer. • Purchase an electric-standby capable TR and install it on the new trailer. • Install an electric plug capable of providing 460V 3 Phase power (may be capable of other voltages in addition to meeting the 460V requirement). • Ensure usage of the equipment cold storage at grocery stores or retail stores that sell groceries (i.e. big box retailers) in the four trade corridors. • Comply with all local permitting requirements.
Project Cost Assumptions	• Option (1): Total projected cost of a fuel cell or all electric zero emission TR is expected to be ~$30,000-$60,000. • Option (2): Total cost for freight facilities is $1,500-$7,000/plug at dock; $2,500-$9,000/plug in parking areas; $500-$2,000/adapter for trailers and TRUs. • Option (3): Total cost of a cryogenic transport refrigerator is expected to be ~$20,000-$35,000. • Option (4): Total cost of cryogenic fueling infrastructure is $20,000-$250,000. • Option (5): Total cost of new trailer and plug is $70,000-$90,000.

B. Major Milestones for Project Completion

1. Options (1) and (3): Replacement with zero emission or cryogenic transport refrigerator

- Equipment order.
- Equipment acquisition.
- Project completion.
- Post-inspection by local agency.
- Submittal of invoice to local agency for reimbursement.

2. Options (2) and (4): Electric or cryogenic infrastructure and equipment

- Bid solicitation, evaluation and award, and construction contract.
- Acquisition of any local permits, or other requirements.
- Electrification or cryogenic system design, unit acquisition, and delivery.
- Project completion.
- Post-inspection by local agency.
- Submittal of invoice to local agency for reimbursement.

3. Option (5): Insulated trailer and installation of electric power plug

- Equipment order.
- Equipment acquisition.
- Project completion.
- Post-inspection by local agency.
- Submittal of invoice to local agency for reimbursement.

C. Application Information

Equipment owners shall provide the following information and documentation in addition to the requirements described in Chapter VI., and other information ARB or local agencies may request on the equipment project applications.

1. General Information

a) Options (1) and (3): Replacement with zero emission or cryogenic transport refrigerator

- Name of applicant.
- Organization/agency/business name.
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner) for companies and partnerships with multiple employees.
- Proof of identity of equipment owner.
- Number of trucks and trailers equipped with TRUs.
- Fleet size.

- A statement signed and dated by the current equipment owner acknowledging all application items are true/correct and all outstanding violations of ARB regulations associated with the equipment or the owner will be corrected.

b) Options (2) and (4): Electric or cryogenic infrastructure and equipment

- Name of applicant.
- Organization/agency/business name.
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner) for companies and partnerships with multiple employees.
- Proof of identity of equipment owner.
- Fleet size (if applicant also owns trucks with TRUs).
- Number of trucks and trailers equipped with TRUs that visit the freight facility and are capable of utilizing the infrastructure and equipment.
- A statement signed and dated by the current equipment owner acknowledging all application items are true/correct and all outstanding violations of ARB regulations associated with the equipment or the owner will be corrected.

c) Option (5): Insulated trailer and installation of electric power plug

- Name of applicant.
- Organization/agency/business name.
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner) for companies and partnerships with multiple employees.
- Proof of identity of equipment owner.
- A statement signed and dated by the current equipment owner acknowledging all application items are true/correct and all outstanding violations of ARB regulations associated with the equipment or the owner will be corrected.

2. Current equipment and activity information

a) Options (1) and (3): Replacement with zero emission or cryogenic transport refrigerator

- TRU data.
    - TRU make and model.

    - TRU model year.
    - TRU horsepower.
    - ARBER identification number.
    - Truck engine data (for truck TRUs only).
        - Manufacturer
        - Model
        - Model Year
        - Engine Family
        - Horsepower
- Documentation of TRU ownership.
- Vocation and activity data for the past 2 years (local agency may require documentation to substantiate vocation or activity data).
    - Vocation(s).
    - Estimated average number of operating hours per TRU while parked at freight facility loading dock.
    - Estimated average number of operating hours per TRU while parked at freight facility parking spot.
    - Annual hours of TRU operation.
- If purchasing an electric plug, written project acknowledgement from the site owner (if the applicant does not own the site where the equipment will be installed) which acknowledges/agrees to the following, at a minimum, for the duration of the project life:
    - The equipment owner will be allowed to install and operate the Program-funded equipment at the site address.
    - Program-funded equipment will be the property of the applicant listed in the equipment project application.
    - The local agency, ARB, or their designees will be allowed to access the site, equipment, and associated records for inspections, Program reviews, or fiscal audits.

Additional documentation may be requested by the local agency.

b) Options (2) and (4): Electric or cryogenic infrastructure and equipment

- Location and description of facility where electrification or cryogenic infrastructure is proposed for installation.
- Number of loading docks and parking spots at freight facility.
- Estimated daily number of trucks equipped with TRUs operating at freight facility.
- Activity data for the past 2 years (local agency may require documentation to substantiate vocation or activity data).
    - Estimated average number of operating hours per TRU while parked at freight facility loading dock.

  - Estimated average number of operating hours per TRU while parked at freight facility parking spot.
- Written project acknowledgement from the site owner (if the applicant does not own the site where the equipment will be installed) which acknowledges/agrees to the following, at a minimum, for the duration of the project life:
  - The equipment owner will be allowed to install and operate the Program-funded equipment at the site address.
  - Program-funded equipment will be the property of the applicant listed in the equipment project application.
  - The local agency, ARB, or their designees will be allowed to access the site, equipment, and associated records for inspections, Program reviews, or fiscal audits.

c) Option (5): Insulated trailer and installation of electric power plug

- TRU data.
  - TRU make and model.
  - TRU model year.
  - TRU horsepower.
  - ARBER identification number.
  - Truck engine data (for truck TRUs only).
    - Manufacturer
    - Model
    - Model Year
    - Engine Family
    - Horsepower
- Documentation of TRU ownership.
- Location and description of facility where electric power plug is proposed for installation.
- Vocation and activity data for the past 2 years (local agency may require documentation to substantiate vocation or activity data).
  - Vocation(s).
  - Annual hours of TRU operation at facility.
- Written project acknowledgement from the site owner (if the applicant does not own the site where the equipment will be installed) which acknowledges/agrees to the following, at a minimum, for the duration of the project life:
  - The equipment owner will be allowed to install and operate the Program-funded equipment at the site address.
  - Program-funded equipment will be the property of the applicant listed in the equipment project application.
  - The local agency, ARB, or their designees will be allowed to access the site, equipment, and associated records for inspections, Program reviews, or fiscal audits.

Additional documentation may be requested by the local agency.

3. Proposed equipment project information

a) Option (1): Replacement with zero emission transport refrigerator

- Transport refrigerator make and model.
- Transport refrigerator model year.
- Estimated cost for each transport refrigerator.
- Equipment project funding demonstration.
    - Program funds requested.
    - Replacement type (all electric, fuel cell, etc.).
    - Source and amounts of other funding (private, local, other State, federal).
    - Total project cost (Program funds requested plus other match funding).
    - Documentation of match funding availability.
- Predicted activity data with new equipment.
- If purchasing an electric plug, written project acknowledgement from the site owner (if the applicant does not own the site where the equipment will be installed) which acknowledges/agrees to the following, at a minimum, for the duration of the project life:
    - The equipment owner will be allowed to install and operate the Program-funded equipment at the site address.
    - Program-funded equipment will be the property of the applicant listed in the equipment project application.
    - The local agency, ARB, or their designees will be allowed to access the site, equipment, and associated records for inspections, Program reviews, or fiscal audits.

b) Option (2): Electric equipment (power plug)

- Electric equipment information.
    - Project description and design, including number and location of electrification units to be installed, with individual and total power requirements.
    - Equipment vendor(s).
    - Itemized cost information by phase (design, environmental, construction)
    - Estimated cost of each plug.
- Predicted activity data with new equipment.
    - Estimated annual TRU connections to electrical power and average connection time.
- Description of usage monitoring system.
- Projected emissions and benefits of the project.

  - Emissions with the project over a 5-year period.
  - Emission reductions attributable to the project (beyond those required by law or regulation) for a 5-year period beginning in the first year of operation.
- Equipment project funding demonstration.
  - Program funds requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Total project cost (Program funds requested plus other match funding).
  - Documentation of match funding availability. Equipment owner can provide match funding documentation after the time of application, if requested to do so by the local agency.

- Written project acknowledgement from the site owner (if the applicant does not own the site where the equipment will be installed) which acknowledges/agrees to the following, at a minimum, for the duration of the project life:
  - The equipment owner will be allowed to install and operate the Program-funded equipment at the site address.
  - Program-funded equipment will be the property of the applicant listed in the equipment project application.
  - The local agency, ARB, or their designees will be allowed to access the site, equipment, and associated records for inspections, Program reviews, or fiscal audits.

c) Option (3): Replacement with cryogenic transport refrigerator

- Transport refrigerator make and model.
- Transport refrigerator model year.
- Estimated cost for each transport refrigerator.
- Equipment project funding demonstration.
  - Program funds requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Total project cost (Program funds requested plus other match funding).
  - Documentation of match funding availability.
- Predicted activity data with new equipment.

d) Option (4): Cryogenic infrastructure and equipment

- Cryogenic infrastructure information.
  - Project description and design, including location and size of cryogenic fueling unit to be installed.
  - Equipment vendor(s).
  - Fueling provider information.
  - Itemized cost information by phase (design, environmental, construction).

- Predicted activity data with new equipment.
    - Estimated annual cryogenic fuel used.
    - Estimated number of TRs utilizing new equipment.
- Description of usage monitoring system.
- Projected emissions and benefits of the project.
    - Emissions with the project over a 5-year period.
    - Emission reductions attributable to the project (beyond those required by law or regulation) for a 5-year period beginning in the first year of operation.
- Equipment project funding demonstration.
    - Program funds requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Total project cost (Program funds requested plus other match funding).
    - Documentation of match funding availability. Equipment owner can provide match funding documentation after the time of application, if requested to do so by the local agency.
    - Written project acknowledgement from the site owner (if the applicant does not own the site where the equipment will be installed) which acknowledges/agrees to the following, at a minimum, for the duration of the project life:
    - The equipment owner will be allowed to install and operate the Program-funded equipment at the site address.
    - Program-funded equipment will be the property of the applicant listed in the equipment project application.
    - The local agency, ARB, or their designees will be allowed to access the site, equipment, and associated records for inspections, Program reviews, or fiscal audits.

e) Option (5): Insulated trailer and installation of electric power plug

- Trailer make and model.
- Trailer model year.
- Transport refrigerator make and model.
- Transport refrigerator model year.
- Estimated cost for trailer.
- Electrification information.
    - Location of electrification unit to be installed, with total power requirements.
    - Equipment vendor(s).
    - Itemized cost information.
- Predicted activity data with new equipment.
    - Estimated annual TRU connections to electrical power and average connection time.

- Description of usage monitoring system.
- Projected emissions and benefits of the project.
    - Emissions with the project over a 5-year period.
- Emission reductions attributable to the project (beyond those required by law or regulation) for a 5-year period beginning in the first year of operation.
- Equipment project funding demonstration.
    - Program funds requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Total project cost (Program funds requested plus other match funding).
    - Documentation of match funding availability.
- Written project acknowledgement from the site owner (if the applicant does not own the site where the equipment will be installed) which acknowledges/agrees to the following, at a minimum, for the duration of the project life:
    - The equipment owner will be allowed to install and operate the Program-funded equipment at the site address.
    - Program-funded equipment will be the property of the applicant listed in the equipment project application.
    - The local agency, ARB, or their designees will be allowed to access the site, equipment, and associated records for inspections, Program reviews, or fiscal audits.

D. Scrap Requirements

In addition to the general scrappage requirements listed in Chapter IV.A.14., specific requirement for replacement projects are shown in Table F.1 below.

Table F.1 Transport Refrigeration Units Project Scrap Requirements

Source Category	Equipment Project Option	Additional Requirements
Transport Refrigeration Units	Options (1), (3), and (5) Replacement	• The local agency shall ensure the impound and transport of the old TRU to the licensed dismantler up to 30 days after the new power system is placed into operation. • The licensed dismantler must dismantle and destroy the old TRU within 60 days of receipt. The TRU engine destruction must be done in accordance with these Guidelines. • The licensed dismantler must ensure safe and disposal in accordance to refrigerant recycling requirements of Section 608 of the Clean Air Act of 1990. • The licensed dismantler shall provide proof of scrappage to the local agency within 10 days of the destruction of the engine. • The local agency or its designee must provide digital photographs, described below, showing the destruction of the old engine. The local agency must receive these photos within 10 days of the destruction of the engine. • The following digital photos must be taken and labeled for the project file: 1. Existing TRU (as applicable) view from front angle. 2. Engine serial number stamped either on the block or on the tag.

E. Post-Inspection

For all transport refrigeration unit projects, the post-inspection shall occur within 60 days of owner receipt of fully operational equipment.

Table E.1 Transport Refrigeration Unit Post-Inspection Requirements

Source Category	Equipment Project Option	Additional Requirements
Transport Refrigeration Unit	Options (1) and (3) Replacement	• Name of TR manufacturer. • Serial number and month/year of TR manufacturer. • Fuel type.
	Options (2) and (4) Electric Power Plug, and Cryogenic Infrastructure	• Name of infrastructure manufacturer. • Serial number and date of manufacture of power plug. • Rated amperage/voltage (if applicable). • Fuel type. • Verification that each project's power or fueling system is operational. • Inspection shall include verification of operation by connecting TRU/TR to applicable infrastructure. o An inspection shall be completed within 60 calendar days of installed and fully operational equipment.

	Option (5) Insulated Trailer and Installation of Electric Power Plug	• Trailer and TR information.
		  o Name of trailer manufacturer.
		  o Serial number and month/year of trailer manufacturer.
		  o Name of TR manufacturer.
		  o Serial number and month/year of TR manufacturer.
		• Power plug information.
		  o Name of power plug manufacturer.
		  o Rated amperage/voltage.
		  o Verification that project's power system is operational.
		  o Inspection shall include verification of operation by connecting TRU/TR to applicable infrastructure.
		  ▪ An inspection shall be completed within 60 calendar days of installed and fully operational equipment.

F. Recordkeeping Requirements

Equipment owners shall retain, at a minimum, all documents, invoices, and correspondence associated with the application, award, contract, purchase, installation, equipment operation (and if applicable, registration, insurance, and warranty), and reporting for at least 2 years after the end of the equipment project contact term or 3 years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or ARB designee upon request for the purposes of ongoing evaluations, Program reviews, or fiscal audits.