BOARD MEETING DATE: September 4, 2026 AGENDA NO. 5

PROPOSAL: Issue Program Announcement and Execute Contracts for Proposition 1B – Goods Movement Emission Reduction Program

SYNOPSIS: In 2008, $1 billion in bond funding was authorized under the Proposition 1B – Goods Movement Emission Reduction Program (Prop 1B). The majority of funding under Prop 1B has been allocated; however, funds remain from withdrawn Prop 1B projects. A Program Announcement (PA) is needed to award remaining Prop 1B funds towards locomotive, cargo handling equipment, transport refrigeration unit, and ships at-berth projects. These actions are to: 1) issue and, if necessary, reissue, a PA for locomotive, cargo handling equipment, transport refrigeration unit, and ships at-berth projects under Prop 1B; and 2) authorize the Executive Officer to execute contracts for eligible projects resulting from the PA until all funds are exhausted from the Prop 1B Fund (81) and funds from At-Berth Regulation Remediation Special Revenue Fund (88).

COMMITTEE: Technology, August 21, 2026; Recommended for Approval

RECOMMENDED ACTIONS:

1. Issue, and if necessary, reissue Program Announcement (PA) #PA2027-02 for Locomotive, Cargo Handling Equipment, Transportation Refrigeration Unit (TRU), and Ships at-berth projects under Proposition 1B – Goods Movement Emission Reduction Program (Prop 1B); and
2. Authorize the Executive Officer to execute contracts for eligible projects resulting from the Program Announcement until all funds are exhausted from the Prop 1B Fund (81), which is estimated to be $50,000,000, and up to $20,000,000 of the At-Berth Regulation Remediation Special Revenue Fund (88).

Wayne Nastri
Executive Officer

AK:MW:TL:KM:AW

Background

Prop 1B authorizes a total of $1 billion to CARB for the Goods Movement Emission Reduction Program (Goods Movement Program). The Goods Movement Program is intended to reduce emissions from goods movement operations in four priority trade corridors: Los Angeles/Inland Empire, Central Valley, Bay Area and San Diego/Border. CARB has granted more than $480 million in Prop 1B funds to South Coast AQMD since the program's inception in 2008 to reduce emissions from the goods movement sector. Funded projects have included the replacement of heavy-duty diesel trucks, TRUs, locomotives, and cargo-handling equipment with cleaner technologies, as well as the installation of shore power systems for ships at berth.

In September 2015, CARB awarded South Coast AQMD the fifth funding cycle of Prop 1B funding, for $117,500,000. In August 2020, CARB awarded an additional $6,406,088, which was an allocation from the unspent CARB Diesel Particulate Filter substrate program funds, to fund additional projects under Prop 1B. South Coast AQMD has issued ten solicitations under the final funding cycle, including six for trucks, two for cargo handling equipment, and two for the locomotive category under the Goods Movement Program. Although the heavy-duty truck solicitations were initially oversubscribed, many award recipients decided not to proceed with the award due to the pandemic and economic hardships associated with the rising cost of the equipment. As a result, approximately $50,000,000 of the Prop 1B Program funds remain. In April of 2025, in an effort to keep pace with rising equipment costs, CARB released Executive Orders under the Prop 1B Program to increase the incentive amounts for the locomotive, cargo handling equipment, and TRU categories. Staff also proposes to expand the solicitation project categories to reduce emissions from ships at-berth through shore power projects to encourage participation.

The CARB At-Berth Remediation Fund is a compliance mechanism under California's Ocean-Going Vessels At-Berth Regulation. It allows vessel and terminal operators to pay a fee to remediate uncontrolled emissions when they are unable to use a CARB Approved Emission Control Strategy due to specific, limited circumstances. South Coast AQMD was selected as the Remediation Fund Administrator to manage funds and remediate excess emissions from the vessels calling the Ports of Los Angeles and Long Beach by implementing emission-reduction projects. Staff recommends utilizing $20,000,000 from the at-Berth Remediation Fund (88) to fund eligible shore power and cargo handling equipment projects at and/or near the San Pedro Bay ports.

Proposal

This action is to issue #PA2027-02 to solicit Locomotive, Cargo Handling Equipment, TRU, and Ships at-Berth projects under the Prop 1B-Goods Movement Program and authorize the Executive Officer to execute contracts for eligible projects under the Prop 1B Program and with funds from the At-Berth Regulation Remediation Special Revenue Fund.

Potentially up to $70,000,000 in funds, including funds from the At-Berth Regulation Remediation Special Revenue Fund, are available for eligible projects under this solicitation. Funding is available for the following project categories: replacement or retrofit of medium and line-haul locomotives, supporting infrastructure for locomotives, replacement or conversion of cargo handling equipment with zero-emission technologies, battery charging units for the zero-emission yard trucks and lifts, TRU, transport refrigeration unit supporting infrastructure, ships at-berth grid-based infrastructure, and ships at-berth non-grid-based power projects. The cargo handling equipment category also includes rubber-tired gantry cranes, yard trucks, forklifts and lifts.

Up to $20,000,000 of the At-Berth Remediation Funds will also be used to support eligible zero-emission cargo handling equipment and shore power projects that support the deployment of zero-emission commercial harbor craft to mitigate the impacts on communities from excess emissions from port operation and vessel visits to the Ports of Los Angeles and Long Beach.

Outreach

In accordance with South Coast AQMD’s Procurement Policy and Procedure, a Public Notice advertising the PA and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County’s Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Air Basin. Additionally, potential bidders may be notified by utilizing South Coast AQMD’s electronic listing of certified minority vendors. Notice of the PAs will be emailed to the Legislative Caucuses and various minority chambers of commerce and business associations and placed on South Coast AQMD’s website (http://www.aqmd.gov) under “Grants & Bids.”

Benefits to South Coast AQMD

The South Coast Air Basin is designated by U.S. EPA as extreme nonattainment for ozone. NOx and VOC emissions are ozone precursors and the rate of ozone formation within the South Coast Air Basin is controlled by reducing NOx emissions. Mobile sources, as shown in the South Coast AQMD’s 2022 AQMP, are the most significant sources of NOx emissions. Incentives directed toward replacing older, higher-emitting mobile source vehicles and equipment with newer, cleaner technological alternatives help advance progress toward meeting air quality goals for the region. The implementation of Prop 1B incentive programs will help replace higher polluting locomotives, cargo handling equipment and TRUs with cleaner alternatives. Since the program's inception, more than 7,200 vehicles/equipment have been deployed, providing approximately 7,600 tons of NOx and 226 tons of PM emission reduction benefits to the region.

Resource Impacts

Remaining funds from withdrawn projects and the interest accrued, potentially up to $50,000,000, and funds generated under the At-Berth Regulation Remediation Special Revenue Fund will be awarded to eligible projects with CARB’s approval from the Prop 1B Program Fund (81) until all funds are exhausted. Additional eligible projects may be awarded through At-Berth Remediation Funds (88) of up to $20,000,000 and sufficient funds are available.

Attachments
Prop 1B Program #PA2027-02 for Locomotive, Cargo Handling Equipment, TRUs, and Ships at-berth Projects

South Coast AQMD Program Announcement For
Cargo Handling Equipment, Locomotives, Ships at Berth Emissions Capture and Control Systems, and Transport Refrigeration Units
Proposition 1B - Goods Movement Emission Reduction Program
PA2027-02

The South Coast Air Quality Management District (South Coast AQMD) is pleased to announce the availability of funds from the Proposition 1B - Goods Movement Emission Reduction Program (hereafter "Program"). The Program is administered by a partnership between the California Air Resources Board (CARB) and local agencies to quickly reduce air pollution emissions and health risk from freight movement along California's trade corridors. Projects funded under this Program must achieve early or extra emission reductions not otherwise required by law or regulation. Approximately $70 million in Program funding is expected to be available to South Coast AQMD to solicit projects for Locomotives, Cargo Handling Equipment, Transport Refrigeration Units (TRUs), Ships at berth emission capture & control systems and shore power systems used in freight movement to upgrade to cleaner technologies.

WHO: The following may apply for funding through this solicitation

1. <u>Locomotive projects:</u> Owners of existing diesel-powered freight locomotives with no or minimal emission 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.
2. <u>Cargo Handling Equipment projects</u>: Owners of existing diesel-powered yard trucks, lifts (as defined below), or rubber-tired gantry cranes (RTGs) operating at a seaport (port), intermodal railyard, or freight facility in the four California trade corridors.
3. <u>Transport Refrigeration Units (TRU)</u>: Owners of existing diesel TRUs that are used to move goods (a majority of the time) for the past 2 years, existing freight facilities within one of California's four trade corridors where TRUs congregate, and existing insulated trailers that are used for cold storage at grocery stores or retail stores that sell groceries in the four trade corridors.
4. <u>Ships at Berth</u>: Owners of existing cargo ship berth, existing cargo ship terminals, or barge-based systems at a seaport located within the four California trade corridors that receives visits solely by vessels not subject to the control requirements of ARB's Ships at Berth Rule.

WHAT: Project options available as part of this solicitation:

For Locomotive projects:
1. Replace or Retrofit switcher locomotive (1,006 hp – 2,300 hp)
2. Replace or Retrofit medium horsepower locomotive (2,301 hp - 4,000 hp)
3. Replace or Retrofit line-haul locomotive (4,001 hp or higher)
4. Electric Charging or Hydrogen Fueling station

For Cargo Handling Equipment projects:
1. RTG Crane Conversion/Replacement
2. Yard Truck Conversion to Electric
3. Yard Truck Replacement – Electric or Fuel Cell
4. Yard Truck Battery Charger or Hydrogen Fueling Station (Supporting Infrastructure)
5. Forklift Replacement – Electric or Fuel Cell
6. Lift Replacement – Electric or Fuel Cell

For Transport Refrigeration Units (refrigeration units only):
1. Transport Refrigeration Unit (TRU) Replacement - Electric or Fuel Cell
2. TRU Power Plug Installation (supporting infrastructure)
3. Cryogenic Transport Refrigerator Replacement
4. Cryogenic Refrigeration Fueling Infrastructure Installation at Distribution Center

For Ships at Berth (Project must generate surplus reductions not required by At-Berth Regulation):
1. Grid-Based Power
2. Non-Grid-Based Power

Equipment specifications for each of these project options can be found in Appendix B, C, E, and F of the 2015 Program Guidelines at:
https://ww2.arb.ca.gov/resources/documents/proposition-1b-guidelines Board

HOW: Applications must be submitted through South Coast AQMD's Grant Management System (GMS), which can be found at: http://www.aqmd.gov/prop1b.

WHEN: Applications can be submitted starting September 8, 2026, at 12 PM PT and will be accepted until November 20, 2027, at 1 PM PT or until program funds are encumbered.

SCHEDULE:

Issue Program Announcement	September 4, 2026
Solicitation Opens	September 8, 2026
Application Deadline	November 20, 2026*

* Applications will be accepted through November 20, 2026, or until South Coast AQMD has exhausted all available funding with eligible applications, whichever occurs first.

SUMMARY

The purpose of this Program Announcement (PA) is to provide funding for projects under the State's Proposition 1B – Goods Movement Emission Reduction Program to reduce diesel emissions from freight transportation. This PA will include projects of the following equipment types:

- Locomotives
- RTG cranes
- Yard trucks
- Lifts (forklifts, side handler, top pick, or reach stacker)
- Transport Refrigeration Units (TRUs)
- Ships at Berth

And the supporting infrastructure:

- Battery Charger (Eligible only if applying for Battery Electric Yard Truck or Equipment)
- TRU electric charging stations
- TRU cryogenic refrigeration fueling stations in conjunction with TRU replacement
- Electric Charging or Hydrogen Fueling Station for Locomotive (need to replace/retrofit an existing locomotive to zero-emission technology)
- Shore power grid-based and non-grid-based power

I. BACKGROUND

The diesel engines in trucks, locomotives, ships, harbor craft, and cargo handling equipment are major contributors to the State's air pollution challenges. These sources account for nearly half of the statewide particulate matter (PM) emissions. Diesel PM is both a toxic air contaminant and a contributor to black carbon, a powerful short-lived climate pollutant. Near-source exposure to emissions of this particular matter is associated with health risks, especially near distribution centers, railyards, and seaports, many of which impact disadvantaged communities. Emissions from freight transport also account for over one-third of the statewide nitrogen oxides (NOx) that form fine particles.

To date, CARB has granted approximately $486 million in Prop 1B funds to the South Coast AQMD to reduce emissions from the goods movement sector, including the replacement of heavy-duty diesel trucks, locomotives, cargo handling equipment, and shore power installation for ships at berth. The vast majority of this equipment is currently operational, providing significant emission reduction benefits to the region. Due to the cancellation of several projects, a new solicitation is needed for the remaining funds.

This solicitation is intended to obtain "surplus" emission reductions of NOx and PM from goods movement equipment operating in California trade corridors. It provides financial incentives to equipment owners to replace in-use equipment with cleaner-than-required engine and equipment technologies that will achieve emission reductions that are real, surplus, and quantifiable. It also allows equipment owners to achieve early emissions reductions before they are required by applicable rules, regulations or enforceable agreements. The Program supplements existing regulations and may be combined with Federal or Local funding programs to cut diesel emissions.

II. DEFINITIONS

a. **Cryogenic Refrigeration:** An "alternative technology" that eliminates TRU diesel engine operation (and emissions) while at a facility. These systems commonly utilize either liquid nitrogen or CO_2.
b. **Forklift** An off-road industrial truck used to hoist and transport materials by means of steel fork(s) under the load.
c. **"Goods":** Defined as having the same meaning in Commercial Code section 2105, which essentially requires that: A. The goods must be movable. B. The goods being moved must be part of a transaction that involves a contract for the sale of the goods. C. Rental equipment does not qualify as "Goods".
d. **Lift:** Includes top pick, side handler, reach stacker, or forklift.
e. **Locomotive Retrofit:** Includes rebuild, repower remanufacture, filter installation, and modifications other than replacement, and meet one or more of the following, pursuant to Code of Federal Regulations Title 40, Part 1033.901:
    - To replace, or inspect and qualify, each and every power assembly of a locomotive or locomotive engine, whether during a single maintenance event or cumulatively within a five-year period;
    - To upgrade a locomotive or locomotive engine;
    - To convert a locomotive or locomotive engine to enable it to operate using a fuel other than it was originally manufactured to use; or
    - To install a remanufactured engine or a freshly manufactured engine into a previously used locomotive. Or pursuant to Code of Federal Regulations Title 40, Part 92.2,
    - Replacement of the engine in a previously used locomotive with a freshly manufactured locomotive engine.
f. **Reach Stacker:** An off-road truck-like cargo container handler that uses an overhead telescopic boom that can reach across two or more stacks of cargo containers and lift the containers from the top.
g. **Rubber-Tired Gantry Crane or RTG Crane:** An off-road overhead cargo container crane with the lifting mechanism mounted on a crossbeam supported on vertical legs which run on rubber tires. RTG cranes do not include gantry cranes that operate on steel wheels and rails.
h. **Side Handler or Side Pick:** An off-road truck-like cargo container handler that uses an overhead telescopic boom to lift empty or loaded cargo containers by grabbing either two top corners on the longest side of a container, both arms of one side of a container, or both top and bottom sides of a container.
i. **Transport Refrigeration Unit (TRU):** Refrigeration systems powered by integral internal combustion engines designed to control the environment of temperature sensitive products that are transported in trucks and refrigerated trailers. TRUs may be capable of both cooling and heating.
j. **Top Handler or Top Pick:** An off-road truck-like cargo container handler that uses an overhead telescopic boom to lift empty or loaded cargo containers by grabbing the top of the containers.

k. **Yard Truck:** An off-road mobile utility vehicle used to carry cargo containers with or without chassis; also known as utility tractor rig (UTR), yard tractor, yard goat, yard hostler, yard hustler, or prime mover.

III. OWNERSHIP REQUIREMENTS

Applications shall be signed and submitted by the current legal owner of the existing equipment that will be upgraded or replaced. For infrastructure projects, if there is no existing equipment, the application must be signed and submitted by the future owner of the Program-funded equipment.

Non-owner applications are not eligible for funding. Third party applications are not allowed. Individuals or companies that operate the existing equipment under a lease agreement with the equipment owner are prohibited from applying for bond funding.

Ownership of the existing equipment shall not change from the time an equipment project application is submitted through receiving Program funding.

IV. FUNDING REQUIREMENTS

Table 1: Locomotives and Railyards

Eligible Equipment	Equipment Upgrade (Replace or Retrofit)	Proposed Program Funding	Project Life
Switcher Locomotive (1,006 hp – 2,300 hp)	Tier 0, 1, 2 to Tier 4	Partial funding up to 85% for Class I-III railroads with minimum usage of 20,000 gallons/yr Partial funding up to 42.5% for Class I-III railroads with minimum usage of 5,000 – 19,999 gallons/yr If equipment is banned from CA operation instead of scrapped, funding amount is reduced to 20% of eligible cost.	15 Years

Zero Emission Switcher Locomotive (1,006 hp – 2,300 hp)	Tier 0, 1, 2, 3 to ZE	Partial funding up to 85% for Class I-III railroads with minimum usage of 20,000 gallons/yr Partial funding up to 42.5% for Class I-III railroads with minimum usage of 5,000 – 19,999 gallons/yr If equipment is banned from CA operation instead of scrapped, funding amount is reduced to 20% of eligible cost.	10 Years
Medium Horsepower Locomotive (2,301 hp – 4,000 hp)	Tier 0, 1, 2 to Tier 4	Partial funding up to 85% for Class I-III railroads with minimum usage of 20,000 gallons/yr Partial funding up to 42.5% for Class I-III railroads with minimum usage of 5,000 – 19,999 gallons/yr If equipment is banned from CA operation instead of scrapped, funding amount is reduced to 20% of eligible cost.	15 Years
Medium Horsepower Zero Emission Locomotive (2,301 hp – 4,000 hp)	Tier 0, 1, 2, 3 to ZE	Partial funding up to 85% for Class I-III railroads with minimum usage of 20,000 gallons/yr Partial funding up to 42.5% for Class I-III railroads with minimum usage of 5,000 – 19,999 gallons/yr If equipment is banned from CA operation instead of scrapped, funding amount is reduced to 20% of eligible cost.	10 Years

Line-Haul Locomotive (4,001 hp or higher)	Tier 0, 1, 2 to Tier 4 or ZE	Partial funding based on CA Operation: 85% of eligible cost for 90-100% operation; 70% of eligible cost for 75% operation, 45% of eligible cost for 50% operation, 25% of eligible cost for 30% operation If equipment is banned from CA operation instead of scrapped, funding amount is reduced to 20% of eligible cost.	15 Years (diesel) OR 10 years (ZE)
Electric Charging or Hydrogen Fueling Station*	N/A	Partial Funding up to $250,000 for the purchase of electric charging or hydrogen fueling station for a medium horsepower locomotive.	10 years

*****This option is only available if equipment owner replace/retrofits minimum of one (1) locomotive through the Program. Funding for this option will be an addition to the funding for the replacement/retrofit.

Table 2: Cargo Handling Equipment

Eligible Equipment	Project Description	Proposed Program Funding	Project Life
Existing diesel engine rubber-tired gantry crane	Convert or replace with a zero-emission powered system	Partial funding of up to 50% of eligible costs	15 Years
Existing diesel-powered yard truck	Conversion or Replace with a zero-emission yard truck	Partial funding of up to 80% of eligible costs	5 years
Battery Charger or Hydrogen fueling station	Installation of a battery or hydrogen fueling station when equipment owner replaces or converts existing yard tractors	Partial funding up to 50% of eligible costs	5 years
Forklift *Lift capacity 3,000 lbs to 12,000 lbs*	Replace an existing diesel forklift with a Class 1 electric powered forklift including battery and charger	Partial funding up to 50 percent of eligible costs	5 Years
Forklift *Lift capacity of 3,000 lbs to 12,000 lbs*	Replace an existing diesel forklift with a Class 1 fuel cell powered forklift	Partial funding up to 50 percent of eligible costs	5 Years
Lift* *Lift capacity greater than 12,000 lbs*	Replace an existing diesel forklift with a Class 1 electric or fuel cell lift	Partial funding up to 50 percent of eligible costs	5 Years

*Lift includes top pick, side handler, reach stacker, or forklift

Table 3: Transport Refrigeration Units (TRUs)

Project Type	Project Description	Maximum Funding Amounts	Project Life
TRU Replacement	Replace existing diesel TRU with zero emission TRU (e.g. all-electric or fuel cell). Eligible costs include the transport refrigerator and an electric power plug	80% of eligible costs or $150,000, whichever is lower*	5 Years or 10,000 hours
	Replace 5 existing TRUs with 5 zero emission cryogenic transport refrigerators	80% of eligible costs or $100,000 for 5 units, whichever is lower	5 Years or 10,000 hours
TRU Power Plug Installation	Install electric power plugs that are compatible with electrically powered TRUs (e.g. all-electric, hybrid electric, or electric standby-equipped TRUs) at loading docks or a freight facility	50% of eligible costs or $65,000 whichever is lower*	5 Years
Cryogenic Refrigeration Fueling Infrastructure at Freight Facilities	Install infrastructure and equipment for cryogenic refrigeration fueling station at a freight facility	50% of eligible costs or $100,000, whichever is lower	5 Years
Insulated trailer and Electric Plug	For the purchase of an insulated trailer and one electric plug	50% of eligible costs or $40,000, whichever is lower	5 Years

*Pending CARB approval

Table 4: Ships at Berth

Project Type	Project Description	Maximum Funding Amounts	Project Life
Grid-Based Power	Partial Funding to install permanent, grid-based electrical power at a cargo ship berth that receives visits **solely** by vessels not subject to ARB's Ships-at-Berth Rule	50% of eligible cost OR $2,500,000 if CE is at least 0.1 lbs of weighted ER per state dollar; 60% of eligible cost or $3,500,000 if CE is at least 0.2 lbs of weighted ER per state dollar	10 years
Non-Grid-Based Power	Partial funding to install an electricity generating unit that provides power at a cargo ship berth or multiple berths that receive visits **solely** by vessels not subject to ARB's Ships-at-Berth Rule. The unit can be portable or fixed on the terminal. Only ZE units or natural gas engines equipped with selective catalytic reduction to control NOx emissions are eligible.	Up to $200,000 per megawatt of the eligible costs	5 years

V. ELIGIBILITY AND GENERAL REQUIREMENTS

Project eligibility will be based on the Program Guidelines and Executive Orders which can be found at: https://ww2.arb.ca.gov/prop-1b-program.

Additional consideration will be placed on the completeness of application as well as project readiness and timeline to deploy projects should the application be awarded funding.

General Requirements for Locomotive Projects

Selected applicants must sign a contract with South Coast AQMD including project milestones and completion deadlines and commit to the following:

- 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 that covers the replacement of the equipment.
- 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)

Switcher Locomotive (1,006 hp – 2,300 hp) Projects

- 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 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 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.

<u>Zero Emission Switcher Locomotive (1,006 hp – 2,300 hp) Projects</u>

- 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 the 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.

<u>Medium Horsepower (2,301 hp – 4,000 hp) Locomotive Projects</u>

- Commit to 90% - 100% California 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 the funded locomotive using California CARB diesel fuel unless approved for 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 or 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.

<u>Medium Horsepower (2,301 hp – 4,000 hp) Zero-Emission Locomotive Projects</u>

- Commit to 90% - 100% California 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 approved for 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 or 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.

Line-Haul (4,001 hp or higher) Locomotive Projects

- 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 using California CARB diesel fuel unless approved for 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 old (if not scrapped) and new equipment, fund and commit to data collection, and report location data.

Electric Charging or Hydrogen Fueling Station Projects

- Replace or retrofit a minimum of one locomotive with a zero-emission locomotive.
- Meet all requirements for the zero-emission locomotive replacement project.
- Demonstrate proof of equipment warranty of at least 3 years.
- Comply with all local permitting requirements.
- Commit to a project life of 10 years.

General Requirements for All Cargo Handling Equipment Projects

Selected applicants must sign a contract with South Coast AQMD including project milestones and completion deadlines and commit to the following:

- Certify that there are no outstanding CARB violations or non-compliance with CARB regulations associated with the equipment or the owner.
- Agree to equipment inspections.
- Comply with record-keeping, reporting, and Program review or fiscal audit requirements.
- 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.

Program Requirements for RTG Crane Projects:

- 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 CARB, in a format defined by CARB 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.

Program Requirements for Yard Truck Projects:
- 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.
- Insurance on upgraded equipment shall cover the replacement of the equipment for fuel cell projects.

Program Requirements for Battery Charger or Hydrogen Fueling Station Projects:
- 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 (Yard truck Conversion Option), replace a minimum of 1 electric powered yard truck (Yard Truck Replacement Option), or replace a minimum of 1 fuel cell yard truck (Yard Truck Replacement Option).
- Meet all requirements for project Options.

Program Requirements for Forklift (Lift Capacities of 3,000 lbs to 12,000 lbs) Projects:
- Equipment owner shall not replace existing zero emission equipment with new electric or 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.
- The replacement equipment must serve the same function as the existing equipment.
- The equipment engine must be greater than 25 horsepower.

Program Requirements for Lift (Lift Capacities Greater Than 12,000 lbs) Projects:
- Equipment owner shall not replace existing zero emission equipment with new electric or 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.

General Requirements for All TRU Projects

Selected applicants must sign a contract with South Coast AQMD including project milestones and completion deadlines and commit to the following:

- 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 CARB violations or non-compliance with CARB regulations associated with the equipment or the owner.
- 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.

<u>TRU Replacement Projects</u>

- Commit to a project life of 5 years or 10,000 hours, whichever comes first.
- Scrap the old diesel TRU(s).

<u>Electric Power Plug and Cryogenic Refrigeration Fueling Infrastructure at Freight Facilities Projects</u>

- 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 and fueling station.
- Comply with all local permitting requirements

<u>Insulated trailer and Electric Plug Projects</u>

- 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.

General Requirements for all Ships at Berth Projects

Selected applicants must sign a contract with South Coast AQMD including project milestones and completion deadlines and commit to the following:

- Commit to the project life specified with the applicable equipment project option

- Have written commitments from the tenant shipping line(s) to:
  - Meet the minimum number of ship visits or hours
  - Sign the equipment project contract (or other written agreement as approved by CARB)
- Adhere to all Program requirements during the project life
- Comply with record keeping reporting and Program review or fiscal audit requirements
- Owners of barge-based systems must sign a legally binding contract with the local agency including project milestones and completion deadlines.
- Owners of stationary equipment, which is attached to real property, must sign a legally binding contract with the port and the local agency (if the local agency is not a port) including project milestones and completion deadlines.
- If the equipment owner is also the local agency administering the grant, the local agency must sign a legally binding contract with CARB including project milestone and completion deadlines.
- Properly maintain all equipment in good operating condition and according to manufacturer's recommendations.
- Demonstrate proof of equipment warranty and insurance on new equipment.
- Comply with local permitting requirements.
- Comply with the Supplemental Procedures available on the Program website.
- Certify that there are no outstanding CARB violations or non-compliance with CARB regulations associated with the equipment or the owner.

<u>Grid-Based Power Projects</u>

- Commit to a project life of 10 years.
- Demonstrate operability with a cargo ship fully powered by shore-based electrical power supplied by the grid-based equipment.

<u>Non Grid-Based Power Projects</u>

- Commit to a project life of 5 years of 100% California operation at the following levels or greater:
  - Port of Los Angeles and Port of Long Beach
    - 1,500 hours per year
  - All other ports within the four California Trade Corridors:
    - 1,000 hours per year
- Demonstrate operability with a cargo ship fully powered by shore-based electrical power supplied by the electricity generating unit.
- Obtain a five year manufacturer's warranty which includes 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 resulting in significant loss of usability. The manufacturer's warranty may exclude minor items that are subject to normal wear and tear if approved by CARB.
- Perform source testing to measure emissions from the unit every 1,000 hours of operation, according to the source test requirements contained in CARB's Ships At Berth Rule.

VI. APPLICATION SUBMITTAL REQUIREMENTS

A complete online application must be submitted to South Coast AQMD by no later than the application deadline to be considered for Program funding. It is the applicant's responsibility to ensure the application contains all the required information at the time of submittal to the South Coast AQMD. The South Coast AQMD is not required to contact the applicant to obtain the required information that is missing from the application.

Below is a list of all application forms and attachments for the Prop 1B Program:

- Applicant Information
- Category application specific to your category (one per unit)
- Business Information Forms:
  - Attachment 1 – Business Information Request
  - Attachment 2 – Business Status Certification
  - Attachment 3 – W-9 – Requested for Taxpayer Identification Number and Certification
  - Attachment 4 – Withholding Exemption Certificate
  - Attachment 5 – Campaign Contribution Disclosure

Note: Each Attachment (1-5) should be completed and submitted with each set of projects. If your application is approved, an updated Attachment 5 may be requested by your assigned Project Officer at a later date.

VII. EQUIPMENT PROJECT PURCHASE RESTRICTIONS

Grantee may <u>**not purchase**</u>, receive, install, pay for, or place into operation any engines, equipment, or vehicles, nor may work begin on a repower project or a project to install electrical infrastructure, until the project contract is fully executed. Grantee may preorder prior to contract execution at the equipment owner's risk but can only be purchased once the existing equipment has been pre-inspected and the contract is signed between the grantee and South Coast AQMD. The South Coast AQMD <u>**will not**</u> reimburse grantees for orders or any payments on a new engine, piece of equipment, or vehicle that takes place prior to South Coast AQMD approval of the project through contract execution.

VIII. PAYMENT PROCESS

For all projects payment will be made after the satisfactory completion of a post-inspection by South Coast AQMD and receipt of invoice. Payment will be by reimbursement to grantee or through a direct payment to vendor upon written request of grantee. Reimbursement cannot exceed the amount directly paid by the grantee.

An invoice shall be itemized to include enough detail to ensure that the local agency provides reimbursement only for the eligible project costs yet clear and concise enough to be understandable. Grantee shall not request or receive payment for engines, equipment or infrastructure that are non-operational, taxes, consulting services, license, permit, fees, registration, insurance, or any other cost not eligible for Program funds. Labor expenses are not eligible for payment with Program funds. However, labor expenses shall be included in the itemized invoice with the detailed number of hours charged and hourly wage. Grantee may submit a single itemized invoice for multiple, completed equipment projects under this Program. The invoice shall itemize the charges for each equipment project.

Equipment certification or verification may still be pending at the time of application or contract execution, however, equipment must be verified or certified prior to the payment.

IX. ANNUAL REPORTING REQUIREMENTS

Locomotives

Equipment owners who are awarded funding will be responsible for annual reporting to the South Coast AQMD for the project life. The equipment owner's annual reports shall include, but not be limited to:

- Contact information (owner name, company, address, phone).
- Date and location of locomotives.
- Build number, date, builder, builder model.
- Date of equipment installation.
- Locomotive 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 90-100% California-only operation (for medium horsepower locomotives).
- Certification and documentation of percentage of operation in the four California trade corridors for medium horsepower 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 useable format.
- The percentage of annual travel in each of the four California trade corridors.
    - Bay Area
    - Central Valley
    - Los Angeles/Inland Valley
    - San Diego
- 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.

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 for more than one week.

Cargo Handling Equipment

Equipment owners who are awarded funding will be responsible for annual reporting to the South Coast AQMD for the project life. The equipment owner's annual reports shall include, but not be 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 South Coast AQMD.

Zero Emission TRUs or Cryogenic TR

Equipment owners who are awarded funding will be responsible for annual reporting to the South Coast AQMD for the project life. The equipment owner's annual reports shall include, but not be limited to:

- Contact information (owner name, company, address, phone number).
- Project completion date.
- Equipment type.
- Infrastructure and/or equipment utilization.
- Annual hours of operation.
- Description of any equipment failure or other event that prevented TRs from operating for more than one week.
- Certification of insurance.
- 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 South Coast AQMD.

Electric or Cryogenic Infrastructure and Equipment

Equipment owners that are awarded funding will be responsible for annual reporting to the South Coast AQMD for the project life. The equipment owner's annual reports shall include, but not be limited to:

- Contact information (owner name, company, address, phone number).

- Facility location.
- Project completion date.
- Actual number and duration of TRU/TR connections to equipment per unit in the reporting period.
- Electricity/fuel annual usage documentation.
- Summary of maintenance and inspections conducted.
- Description of any equipment failure or other event that prevented TRU/TRs from using the system for more than one week.
- Certification of insurance.
- Signed certification statement that the bond-funded project was installed and is operating as it was approved in the post-inspection and that all information submitted to the South Coast AQMD is true and accurate.
- Other information as requested by South Coast AQMD.

Ships at Berth Projects

Equipment owners shall be responsible for annual reporting to the South Coast AQMD for the equipment project life. The equipment owner annual report shall include, but not be limited to:

- Contact information (owner name, company, address, phone).
- Description of shore power system (if applicable).
- Port and berth name(s)/identifier(s).
- Date and location of equipment installation.
- Vessel type, name, and Lloyd's number of vessels utilizing the system.
- Total ship visits utilizing the system by berth.
- Signed certification statement that the bond-funded project was operated in accordance with signed contract and that all information submitted is true and accurate.
- Project records must be retained for at least 2 years after contract execution or 3 years after final project payment, whichever is later.
- Other information as requested by South Coast AQMD.

X.USEFUL RESOURCES

CARB Goods Movement Emission Reduction Program:
http://www.arb.ca.gov/bonds/gmbond/gmbond.htm

CARB Executive Order G-25-093
Executive Order G-25-093

CARB Cargo Handling Equipment Website:
http://www.arb.ca.gov/ports/cargo/cargo.htm

Transport Refrigeration Units Website:
https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit

South Coast AQMD Prop. 1B Website (where a copy of the solicitation can be found)
http://www.aqmd.gov/prop1b

CONTACT FOR ADDITIONAL INFORMATION:
Questions regarding the content or intent of this PA or procedural matters can be found at the South Coast AQMD Proposition 1B website (www.aqmd.gov/prop1b) or can be addressed via e-mail at prop1b@aqmd.gov. Inquiries can also be addressed to:

Technology Advancement Office
South Coast AQMD
21865 Copley Drive
Diamond Bar, CA 91764

Alan Wang
Phone: (909) 396-2854
awang@aqmd.gov

Andrew Yoon
Phone: (909) 396-3043
Ayoon@aqmd.gov

Justin Joe
Phone: (909) 396-2054
Jjoe@aqmd.gov

Krystle Martinez
Phone: (909) 396-3021
kmartinez@aqmd.gov

MAP OF TRADE CORRIDORS