PROPOSITION 1B:
GOODS MOVEMENT EMISSION REDUCTION PROGRAM

FINAL 2013
GUIDELINES FOR IMPLEMENTATION

California Environmental Protection Agency
Air Resources Board

DOCUMENT AVAILABILITY

Electronic copies of this document and related materials can be found at: http://www.arb.ca.gov/gmbond. Alternatively, paper copies may be obtained from the Air Resources Board's (ARB) Public Information Office, 1001 I Street, 1st Floor, Visitors and Environmental Services Center, Sacramento, California, 95814, (916) 322-2990.

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ONGOING CLARIFICATION OF PROGRAM REQUIREMENTS

ARB staff clarifications regarding specific issues that may arise after publication of the final Guidelines will be made available on the Program website to assist agencies with implementation.

DISCLAIMER

This report has been reviewed by ARB staff and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of ARB the, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

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I. Overview

A. Introduction

Emissions from the diesel engines in trucks, locomotives, ships, harbor craft, and cargo handling equipment contribute to local, regional, and global air pollution. The diesel pollution from goods movement/freight transport operations greatly impacts the health of community residents near ports, railyards, distribution centers, and roads with high truck traffic. Diesel emissions are also a major cause of the high regional ozone and fine particle levels that harm millions of Californians today.

Goods movement sources contribute to California's air pollution challenges. The Los Angeles/Inland Empire region has the largest concentration of goods movement/ freight transport facilities (e.g., ports and railyards), with high near-source health risks and high levels of regional ozone and fine particulate matter (PM2.5) pollution. In the Central Valley, the facilities are less concentrated, but there is relatively more through truck and rail traffic that contribute to the region's harmful ozone and PM2.5 levels. In the Bay Area, regional ozone and PM2.5 levels are much lower, but truck, port, and railyard activity adjacent to neighborhoods contributes to high localized health risks. In the San Diego/Border region, trucks and operations at the port contribute to regional ozone and PM2.5 pollution above the State of California (State) standards.

Proposition 1B authorized the Legislature to appropriate $1 billion in bond funding to the Air Resources Board (ARB or Board) to quickly reduce air pollution emissions and health risks from freight movement along California's priority trade corridors. The State Fiscal Year (FY) 2007-08 budget included implementing legislation, via Senate Bill 88 (SB 88) (Chapter 181, Statutes of 2007), that created the Goods Movement Emission Reduction Program (Program). Assembly Bill 201 (AB 201) (Chapter 187, Statutes of 2007) included a minor clarification. These bills are codified in the Health and Safety Code, section 39625 et seq. SB 88 required ARB to adopt Guidelines to ensure the Program achieves the statutory objectives.

The implementing statutes directed ARB to maximize the emission reduction benefits and achieve the earliest possible health risk reduction in communities heavily impacted by goods movement. This Program supplements regulatory actions and other incentives to cut diesel emissions. By statute, the Program can only fund emission reductions "not otherwise required by law or regulation." Key pollutants targeted by the Program include diesel particulate matter (diesel PM), a toxic air contaminant, and nitrogen oxides (NOx) that contribute to the formation of both PM2.5 and ozone. The projects funded under the Program also provide co-benefits by reducing greenhouse gases and black carbon emissions that contribute to climate change.

While the State budget appropriates funding for the Program, ARB must receive cash from the sale of bonds or a loan from the Pooled Money Investment Board to implement grants or loan programs. ARB awards grants to fund projects proposed by local agencies that are involved in freight movement or air quality improvements associated with goods movement activities. Examples of local agencies include air pollution control and air quality management districts (air districts), ports, and regional transportation agencies in the trade corridors. The local agencies are responsible for providing financial incentives to owners of equipment used in freight movement to upgrade to cleaner technologies, consistent with the Guidelines adopted by ARB. Bond funds flow via grant agreements from ARB to local agencies, then to equipment owners via contracts or other binding agreements with those local agencies. Throughout the Program, there is competition based on the projected emission reductions and reductions per State dollar invested to ensure the most beneficial projects are funded. ARB may also award funds to any State agency (including ARB itself) for the purpose of administering a loan or loan guarantee program via an interagency agreement.

ARB staff developed the initial *Proposition 1B: Goods Movement Emission Reduction Program Guidelines for Implementation* (Guidelines) in consultation with stakeholders, including: air districts, metropolitan planning organizations, port authorities, shipping lines, railroad companies, trucking companies, harbor craft owners, freight distributors, terminal operators, local port community advisory groups, community interest groups, and airports. The Guidelines were designed to fund qualifying projects that reduce emissions and health risks, incorporate simplicity and efficiency, ensure cost-effectiveness, leverage other funding sources, and provide transparency and accountability.

When the Board adopted the initial Guidelines on February 28, 2008, the Board directed ARB to reassess those Guidelines and bring appropriate updates to the Board following each appropriation of funding. Development of updates to the Guidelines are based on evaluating advances in technology, changes in equipment costs, regulatory actions, demand for Program funds, and other new information that influences the design of project specifications. The process involves the release of a concept paper and workshops to obtain feedback from stakeholders.

The first update, approved on March 25, 2010, incorporated interim changes made via Board Resolution, Executive Orders, and ARB staff clarifications for projects receiving FY2007-08 (Year 1) funds. It also revised the project specifications for FY2008-09 (Year 2) and FY2011-12 (Year 3) funds. The updated 2010 Guidelines superseded the February 28, 2008 Guidelines, except for the limited provisions identified for Year 1 funds (see Chapter II.A.2.).

This proposed update to the 2010 Guidelines includes changes to project specifications, which acknowledges fewer opportunities for conventional, cleaner diesel equipment replacing older diesel equipment due to in-use regulations. The nature of eligible projects has changed, due to the effect of the regulations on the Program. There are fewer projects that are "early" to the regulations; therefore in this proposed update, the Program is moving towards funding eligible projects with emission reductions that are "extra." Additionally, ARB staff is proposing to provide additional funding for zero-emission technologies to encourage equipment owners to purchase the cleanest equipment. This proposed update also incorporates interim changes made via Board Resolution, Executive Orders, and ARB staff clarifications for projects receiving Year 2 and Year 3 funds. The updated 2013 Guidelines will supersede the March 25, 2010 Guidelines, except for the limited provisions identified for Year 1 through Year 3 funds (see Chapter II.A.2.).

B. Authority

The legal authority for the Program is found in the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, also known as Proposition 1B, pursuant to the implementing statutes discussed below. Executive Order S-02-07 provided additional direction on bond accountability and the 2007-08 budget bill – Senate Bill 77 (Chapter 171, Statutes of 2007) (SB 77).

1. Proposition 1B

In November 2006, California voters approved Proposition 1B, which among other things, authorized $1 billion dollars to reduce emissions from goods movement in California's trade corridors.

> *"One billion dollars ($1,000,000,000) shall be made available, upon appropriation by the Legislature and subject to such conditions and criteria contained in a statute enacted by the Legislature, to the State Air Resources Board for emission reductions, not otherwise required by law or regulation, from activities related to the movement of freight along California's trade corridors. Funds made available by this paragraph are intended to supplement existing funds used to finance strategies and public benefit projects that reduce emissions and improve air quality in trade corridors commencing at the state's airports, seaports, and land ports of entry." (Government Code, Title 2, Division 1, Section 1, Chapter 12.49, Article 2, Section 8879.23(c)(2)).*

2. Senate Bill 88 and Assembly Bill 201

SB 88 and AB 201 set forth the implementing legislation for the Program in Health and Safety (H&S) Code, section (§) 39625 et seq. SB 88 broadly requires ARB to adopt Guidelines, establish funding criteria and procedures, and provide periodic reports.

Under SB 88, ARB must adopt Guidelines that include, at a minimum, all of the following:

- An application process for the funds, and any limits on administration costs.
- Requirements that local agencies identify the useful life of the project and project delivery milestones as part of the application process.
- Criteria for selection of local agency projects and equipment projects.
- Requirements for match funding.
- The method by which ARB will consider an air basin's status in achieving State and federal air quality standards.
- Requirements that grant agreements between ARB and local agencies identify project milestones and remedies for failure to meet project milestones.
- Accountability and auditing requirements, including provisions for Program reviews by ARB staff or its designees (Program reviews) and fiscal compliance audits by the Department of Finance (DOF) or its designees (fiscal audits) of project expenditures and outcomes.

SB 88 and AB 201 detail more than 15 factors that ARB is directed to consider when allocating funds and selecting local agency projects. Some of these criteria are most effectively applied by targeting levels of funding to trade corridors and emission source categories, while others lend themselves to selecting among competing local agency projects or equipment projects. The steps ARB takes to allocate funds include:

- Identifying funding targets for the overall Program, plus setting funding priorities and defining the equipment project options for each appropriation.
- Competitively ranking and selecting local agency projects for funding in each appropriation cycle.
- Establishing the procedures that local agencies will use to competitively rank and select equipment projects for funding.

Tables I.1 - I.3 detail these steps and link each related provision of these Guidelines to the statutory requirements in the Health and Safety Code related to funding projects.

SB 88 also establishes basic reporting requirements for ARB and local agencies (all references are to the Health and Safety Code):

- ARB shall submit an annual report to the Legislature summarizing its activities related to the administration of this Program on January 10 [§39627.5].
- The local agency shall complete semi-annual reports on progress made toward implementation of the project [§39625.02(f)(1)].
- The local agency shall submit a final report on project completion within 6 months of the project becoming operable [§39625.02(f)(2)].

Table I.1 ARB Funding Priorities/Equipment Project Options and Statutory Funding Requirements

ARB Action ***Guidelines reference***	**Provisions**	**Statutory Requirements** [references to Health and Safety Code]
1. Recommend trade corridor funding targets *(corridors in §39625.1(e))* *Chapter II.B.1.*	Population relative to other trade corridors	The combination of population and goods movement emissions: considers the public health risk associated with goods movement-related emissions and air toxics [§39626(a)(1)(D)] and the public health benefits of the emission reduction from funded projects [§39625.5(b)(2)(B)]; allocates funds in a manner that gives priority to funding for emission reduction projects that achieve the earliest possible reduction of health risk in communities with the highest health risks from goods movement facilities [§39625.5(b)(1)]; and reflects whether reductions from funded projects are likely to occur in locations with elevated emissions and exposure [§39625.5(b)(2)(K)].
	Percent of emissions from goods movement relative to other trade corridors	
	State Implementation Plan (SIP) needs relative to other trade corridors	Considers an air basin's status in maintaining and achieving State and federal ambient air quality standards [§39626(a)(1)(D)], and SIP requirements [§39625.5(b)(2)(E)] in evaluating what level of funding should be administered by local agencies in each trade corridor.
2. Recommend category funding targets *(categories in §39625.1(c))* *Chapter II.B.2.*	Emissions from each category	Considers the severity and magnitude of the source category's contribution to goods movement emissions [§39625.5(b)(2)(D)], including greenhouse gas emissions [§39625.5(b)(2)(F)].
	Health impact of category	Allocates funds in a manner that gives priority to emission reduction projects that achieve the earliest possible reduction of health risk in communities with the highest health risks from goods movement facilities [§39625.5(b)(1)].
	Funding category	Requires competition for funding between local agency projects in four funding categories that represent a single source category or combination of categories (i.e., heavy duty diesel trucks are combined with truck electrification infrastructure and shore power is combined with cargo equipment). Expends funds in a manner that reduces the health risk associated with freight movement along California's trade corridors [§39625(d)], maximizes the emission reduction benefits [§39625(e)], and provides incentives to control emission sources that contribute to increased health risk in the future [§39625(e)].

Table I.1 ARB Funding Priorities/Equipment Project Options and Statutory Funding Requirements (cont.)

ARB Action **Guidelines reference**	**Provisions**	**Statutory Requirements** [references to Health and Safety Code]
3. Recommend funding priorities for each appropriation *Chapters II.B.3., II.B.4., and II.B.5.*	Projects that can be quickly implemented: <u>Year 1</u> Truck retrofits with diesel PM filters and Los Angeles/Inland Empire port truck replacements <u>Year 2 and later</u> Truck, locomotive, and ships at berth projects	Allocates funds in a manner that gives priority to projects that achieve the earliest possible reduction of health risk in communities with the highest health risks from goods movement facilities [§39625.5(b)(1)]. Retrofitting trucks with diesel PM filters is the fastest way to reduce health risk because those retrofits can be accomplished quickly. Communities around the Ports of Los Angeles and Long Beach, and along the drayage truck routes to intermodal railyards or distribution centers, have elevated emissions and exposure from these truck operations [§39625.5(b)(2)(K)]. Truck upgrade projects quickly reduce the health risk in communities near high truck-traffic freeways, warehouse/distribution centers, ports, and railyards [§39625.5(b)(1)]. Locomotive projects cut the elevated, excess cancer risks in neighborhoods near railyards, as identified in ARB's health risk assessments [§39625.5(b)(1)]. Ships at berth projects further reduce diesel pollution in port communities, and cut greenhouse gas emissions [§39625.5(b)(2)(F)].
4. List eligible equipment project options and project specifications for each appropriation *(project types identified in §39625.5(a)(2))* *Chapter II.C.1. and Appendices A-H.*	Equipment and/or emission level	Begins with list of projects eligible for funding [§39625.5(a)(2)]. List of equipment project options considers: the ability to reduce criteria and toxic emissions [§39625.5(b)(2)(I)], the magnitude of the emission reduction [§39625.5(b)(2)(A)], public health benefits of the emission reduction [§39625.5(b)(2)(B)], existing (and pending) regulatory requirements [§39625.5(b)(2)(E)], use of advanced emission reduction technologies [§39625.5(b)(2)(G)] where demonstrated and available, and reduction in greenhouse gas emissions [§39625.5(b)(2)(F)] via detailed specifications for equipment upgrades. For locomotives, establishes additional provisions for Class I railroads that have signed agreements with public agencies to allow ARB to ensure that the emission reductions from any locomotive projects for these railroads are not necessary to satisfy any mandated reduction requirement under any such agreement [§39625.5(a)(2)(B)]. Specifically prohibits funding for idle reduction devices required by the 2005 Memorandum of Understanding.
	Funding caps/match funding	Requires a specified contribution of funds leveraged from other sources or in-kind contributions to the project [§39626(a)(1)(B)], considers the cost-effectiveness of the reduction [§39625.5(b)(2)(C)] and helps leverage other funds [§39625.5(b)(2)(H)] via caps on State bond funds that can be requested for each equipment project option. State bond funding caps amount to roughly 1/3 to 1/2 of total project cost, with the remainder covered by private or public matching funds.

Table I.1 ARB Funding Priorities/Equipment Project Options and Statutory Funding Requirements (cont.)

ARB Action **Guidelines reference**	**Provisions**	**Statutory Requirements** [references to Health and Safety Code]
4. (cont.)	Project life	Considers sustainability of the emission reductions via minimum project life expressed as years of operation or activity levels for upgraded equipment [§39625.5(b)(2)(C)] and project life element of reductions over project lifetime per State dollar invested [§39625.5(b)(2)(J)].
	Project completion prior to regulatory requirement(s) or emission reductions beyond regulatory requirements	Considers the degree of surplus reductions [§39625.5(b)(2)(E)] and ensures funded projects achieve reductions not otherwise required by law or regulation [§39625.5(a)(1)] via requirements that equipment upgrades be operational a specified time period in advance of any regulatory requirement for such upgrade, or that upgrades achieve emission reductions greater than required by regulation.
	Conditions on future operations	Considers whether reductions are likely to occur in areas with elevated emissions and exposure [§39625.5(b)(2)(K)] via requirements for at least 90 percent California operation or home port, plus visitation frequency for trucks serving ports and intermodal railyards.

Table I.2 Selection Process for Local Agency Projects and Statutory Funding Requirements

ARB Action ***Guidelines reference***	**Based On**	**Statutory Requirements** [references to Health and Safety Code]
1. Issue notice of funding availability *Chapter II.E.1.*	Registration, application submittal and schedule, and requirement for community meeting	Starts local agency application process [§39626(b)]. Requires local agencies to share concepts for local agency projects, and solicit and consider community input prior to applying for Program funding – this helps ensure that local agency project proposals provide the earliest possible reduction of health risk in communities with the highest risk from goods movement [§39625.5(b)(1)].
2. Review local agency eligibility *Chapters II.E.2. and II.E.3.*	Basic qualification	Meets statutory definition of an applicant as a local public entity involved in freight movement or air quality improvements associated with goods movement [§39625.1(a)] and further requirements of these Guidelines.

Table I.2 Selection Process for Local Agency Projects and Statutory Funding Requirements (cont.)

ARB Action *Guidelines reference*	**Based On**	**Statutory Requirements** [references to Health and Safety Code]
3. Review local agency project eligibility *Chapter II.E.3.*	Completeness	Ensures presence of complete application and signed board/commission resolution needed to evaluate statutory requirements described below.
	Consistent with legal and project specifications	Ensures local agency project achieves emission reductions not otherwise required by law or regulation [§39625.5(a)(1)] and complies with all eligible equipment project options and equipment project specifications that encompass multiple statutory requirements (see above).
	Sponsored by an applicant and consistent with air quality plans	Local agency project is sponsored by an applicant as evidenced by project submittal [§39626.5(a)(1)] and project is consistent with any comprehensive local or regional plans or strategies to reduce emissions from goods movement [§39626.5(a)(2)].
	Availability of full funding	Requires project funding element to demonstrate that the funds are expected to be reasonably available and sufficient to complete the project [§39625.02(d)].
	Project schedule/milestones	Requires project applications to have project delivery milestones [§39625.02(e)(3)].
	Data for competitive ranking process	Requires project applications to reflect the useful life of the project specifications [§39625.02(e)(2)], as well as provide data on the emission reductions, total project cost, Program and match funds (other State, local, federal, and private) to support competitive ranking in Action 7 below.
4. Post eligible projects on Program website *Chapter II.E.3.*	Public access	Makes available preliminary list of projects being considered for funding for public input and comment [§39626(c)(1)].
5. Evaluate local agency capability to implement project scope *Chapter II.E.4.*	Resources to implement project scope within allowed time	Considers local agency's ability to implement equipment projects and emission reductions to achieve the earliest possible health risk reduction [§39625(e)] and [§39625.5(b)(1)].
6. Require match funding *Chapter II.E.5. and Appendices A-H.*	Identify sources of match funding	Ensures that State bond funds are supplemented and matched with funds from federal, local, and private sources to the maximum extent feasible [§39625.5(c) and §39625.5(b)(2)(H)].

Table I.2 Selection Process for Local Agency Projects and Statutory Funding Requirements (cont.)

ARB Action *Guidelines reference*	**Based On**	**Statutory Requirements** [references to Health and Safety Code]
7. Competitively rank local or State agency projects *Chapter II.E.6.*	Emission reductions score	Requires local agency projects to compete within a funding category based on greatest emission reductions [§39625.5(a)(1)] and magnitude of the emission reductions [§39625.5(b)(2)(A)]. Considers public health benefits of the reductions by weighting combustion PM (i.e., diesel PM) by a factor of 20 relative to criteria pollutant NOx to reflect the greater health impact of each ton of PM emissions [§39625.5(b)(2)(B)], sustainability of the reductions via project life [§39625.5(b)(2)(C)], and ability to reduce criteria and toxic pollutants by considering NOx and diesel PM [§39625.5(b)(2)(I)].
	Cost-effectiveness score	Considers cost-effectiveness of the emission reductions [§39625.5(b)(2)(C)] and ability to leverage funds from other sources [§39625.5(b)(2)(H)] by assessing total weighted emission reductions over project lifetime per State dollar invested [§39625.5(b)(2)(J)].
	Competitive ranking	Equally weights the above scores.
8. Hold workshops *Chapter II.E.7.*	Public input	Requires ARB staff to hold public workshops in northern, central, and southern California to discuss the preliminary list of local agency projects being considered for funding [§39626(c)(2)].
9. Recommend project funding *Chapter II.E.8.*	Local agency competitive ranking	Allocates funds on a competitive basis for projects that achieve the greatest emission reductions from each source category [§39625.5(a)(1)].
	Available funds and funding priorities	Limits selection or "programming" of local agency projects to funds appropriated by the Legislature [§39626(d)].
10. Hold hearing to adopt project list *Chapter II.E.9.*	Public hearing and Board adoption of funding awards to local or State agency projects	Requires consideration of projects at a regularly scheduled public hearing [§39626(c)(3)]. Requires adoption of a final list of projects for funding [§39626(c)(3)].
11. Execute local agency or interagency agreements *Chapters II.E.10. and II.E.11.*	ARB and local or State agency to sign	Implements grant funding via legal agreements between ARB and recipient local or State agencies [§39625.3]. Ensures statutory and Guideline requirements for local or State agency projects are met.

Table I.3 Selection Process for Equipment Projects and Statutory Funding Requirements

Local Agency Action ***Guidelines reference***	**Based On**	**Statutory Requirements** [references to Health and Safety Code]
1. Solicit equipment project applications *Chapters IV.A.2., IV.A.3., and IV.A.4.*	Marketing/outreach and application elements including data for competitive ranking process	Requires project applications to reflect the useful life of the project [§39625.02(e)(2)], as well as provide data on the equipment activity to estimate emissions, total project cost, and Program and match funds (other State, local, federal, and private) to support competitive ranking in Action 3 below. Also requires local agencies to promote truck efficiency upgrades to reduce greenhouse gases [§39625.5(b)(2)(F)]. For truck electrification infrastructure projects, requires local agencies to encourage the participation of small businesses in the construction of the State's infrastructure [Government Code Section 14838.1].
2. Require match funding *Chapter IV.A.6. and Appendices A-H.*	Identify sources of match funding	Ensures that State bond funds are supplemented and matched with funds from federal, local, and private sources to the maximum extent feasible [§39625.5(c) and §39625.5(b)(2)(H)].
3. Competitively rank equipment projects (each engine, vehicle, or piece of equipment competes separately) *Chapter IV.A.7.*	Emission reductions score	Requires equipment projects to compete within a source category and trade corridor based on greatest emission reductions [§39625.5(a)(1)] and magnitude of the emission reductions [§39625.5(b)(2)(A)]. Also considers: public health benefits of the reductions by weighting combustion PM (i.e., diesel PM) by a factor of 20 relative to criteria pollutant NOx to reflect the greater health impact of each ton of PM emissions [§39625.5(b)(2)(B)], sustainability of the reductions via project life [§39625.5(b)(2)(C)], and ability to reduce criteria and toxic pollutants by considering NOx and diesel PM [§39625.5(b)(2)(I)].
	Cost-effectiveness score	Considers cost-effectiveness of the emission reductions [§39625.5(b)(2)(C)] and ability to leverage funds from other sources [§39625.5(b)(2)(H)] by assessing total weighted emission reductions over project lifetime per State dollar invested [§39625.5(b)(2)(J)].
	Competitive ranking	Equally weighting the above scores.
4. Post ranked projects *Chapters IV.A.1. and IV.A.7.*	Public access	Provides public access to competitively ranked projects proposed for funding prior to signature of contracts with equipment owners [consistent with statutory provision for ARB to do the same in §39626(c)(1)].
5. Execute equipment project contracts *Chapter IV.A.11.*	Local agency and equipment owner (and any lessee) to sign	Ensures statutory and Guideline requirements for equipment projects are met.

3. Legislation

Assembly Bill 892 (Furutani, Statutes of 2009) authorizes local agencies to award unspent or returned funds from previously obligated contracts to new equipment projects. Local agencies may either award these funds to new equipment projects selected from the same competitively ranked list as was used in the original award or return the funds to ARB for reallocation as described in the Guidelines. Local agencies must disburse any unspent or returned funds on a new contract within 4 years of the date of the award of the original contract or the funds revert to the California Ports Infrastructure, Security, and Air Quality Improvement Account Highway Safety, Traffic Reduction, Air Quality and Port Security Fund of 2006.

Assembly Bill 672 (Bass, Statutes of 2009) allows local agencies implementing approved Proposition 1B projects to apply to the administering State agency for a “letter of no prejudice” to authorize future reimbursement for funds to be advanced by the local agency at its own risk. Although the legislation is primarily directed at transportation projects funded by Proposition 1B, it also applies to air quality projects. Projects covered by a letter of no prejudice would not gain an advantage or higher priority for funding. The ARB Executive Officer or his or her designee has the authority to specify the submittal process and ARB staff approval procedures for letters of no prejudice.

4. Directives

In January 2007, Executive Order S-02-07 highlighted the importance of transparency and accountability in administering the over $40 billion in bond funding approved by California voters in 2006. The Executive Order directs all State government entities responsible for expending bond proceeds to establish and document a three-part accountability structure that includes:

- Front-end accountability, which defines the criteria for expending bond funds as well as the outcomes that the funds are intended to achieve.
- In-progress accountability, which documents actions to ensure projects are staying within scope and cost, and requires semi-annual reports to DOF.
- Follow-up accountability, which requires Program reviews or fiscal audits to ensure expenditures achieved the intended outcomes and were consistent with legal requirements.

ARB submitted and DOF approved the three-part structure for this Program (based on the initial Guidelines) in February 2008. The approved structure is available on the Program website.

SB 77 also:

- Called on ARB to move quickly—without sacrificing accountability—to provide relief for the individuals who reside along California's busy trade corridors.
- Directed ARB to ensure funding is allocated consistent with the accountability safeguards in the Executive Order.
- Charged ARB to develop Guidelines that make sense, reduce bureaucratic red tape, simplify and expedite project application and award procedures, and ensure projects are completed in record time.
- Called on local agencies to work closely with ARB to be prepared to submit applications for funding as soon as possible.

C. Definitions

The following definitions apply for the purposes of these Guidelines.

Table I.4 Definitions

Term	Definition
Administrative Agency	"Administrative agency" (henceforth ARB or Board) is defined by SB 88 to be the Air Resources Board as the State agency responsible for programming Program funds.
Administration Funds	"Administration funds" are defined as the monies up to the limits defined in these Guidelines to cover expenses incurred for implementation of the Program by ARB or a local agency that is party to an executed grant agreement.
Allocation	"Allocation" is defined as the Board action to award grant funds to local agencies as documented in a Board resolution.
Applicant	"Applicant" is defined by SB 88 to mean a "local public entity involved in the movement of freight through trade corridors of the state or involved in air quality improvements associated with goods movement." For the purpose of administering a loan or loan guarantee program only, an applicant may be any State agency, including ARB. These Guidelines clarify how ARB will assess a local public entity's eligibility as a Program applicant.
Appropriation	"Appropriation" means an authorization by the Legislature in the annual Budget Act to make funds available from the California Ports Infrastructure, Security, and Air Quality Improvement Account Highway Safety, Traffic Reduction, Air Quality and Port Security Fund of 2006 to ARB for the purpose of implementing this Program.
ARB or Board	"ARB" or "Board" means the California Air Resources Board. The term "Board" is specifically used to refer to the governing board of the agency and is typically associated with formal actions to adopt Guidelines or projects for funding.
Authorized Local Agency Representative	"Authorized local agency representative" means the individual(s) from the local agency authorized to sign or act on behalf of the local agency.

Table I.4 Definitions (cont.)

Term	Definition
California Coastal Waters	"California Coastal Waters" means that area between the California Coastline and a line starting at the California-Oregon border at the Pacific Ocean and ending at the California-Mexico border at the Pacific Ocean, with a western boundary about 25 miles off the coast at the narrowest to just over 100 miles at the widest. (See Appendix K for map with approximate miles and exact coordinates.)
California Registration	"California Registration" means vehicle base-plated registration documentation issued by the California Department of Motor Vehicles (DMV) including apportioned DMV registration issued under the International Registration Plan (IRP) only if California is selected as the base jurisdiction (California IRP).
Class 6 Truck	"Class 6 Truck" means a heavy duty truck with a Gross Vehicle Weight Rating of 19,501 to 26,000 pounds, equipped with a medium-heavy duty engine.
Class 7 Truck	"Class 7 Truck" means a heavy duty truck with a Gross Vehicle Weight Rating of 26,001 to 33,000 pounds, equipped with either a medium-heavy duty engine or a heavy-heavy duty engine.
Class 8 Truck	"Class 8 Truck" means a heavy duty truck with a Gross Vehicle Weight Rating of 33,001 pounds or greater, equipped with a heavy-heavy duty engine.
Contract	"Contract" means the legally binding agreement between a local agency and equipment owner. (Also referred to as an Equipment Project Contract.)
Contract Term	"Contract term" means the combined time period for: • Equipment project completion; and • The equipment project life. (Also referred to as "equipment project contract term.")
Cost-Effectiveness	"Cost-effectiveness" means the total pollutant-weighted emission reductions over the project life, per dollar of State funding invested, except for State funds specifically excluded from this calculation by the Guidelines.
Days	"Days" means calendar days, unless otherwise noted.
Diesel Particulate Matter (Diesel PM)	"Diesel particulate matter (diesel PM)" means the particles found in the exhaust of diesel engines, which may agglomerate and adsorb other species to form structures of complex physical and chemical properties. Diesel PM is a subset of fine particulate matter 2.5 microns or less in diameter (PM2.5).
Drayage Truck Rule	"Drayage Truck Rule" means the Drayage Truck Regulation (California Code of Regulations, Article 4.5, Division 3, Title 13, § 2027). Drayage trucks are defined in Section C.15 of the Drayage Truck Regulation.
Earned Interest	"Earned interest" means accrued interest from Program funds being held by the local agency in interest-bearing accounts.
Elapsed Equipment Project Life	"Elapsed equipment project life" means the time elapsed since post-inspection of the completed project by the local agency.
Equipment Project	"Equipment project" means an upgrade of existing diesel equipment via retrofit, repower, replacement, installation of electrical infrastructure, or an emissions capture and control system, according to Program requirements. Each individual truck, locomotive, railyard, piece of cargo equipment, harbor craft, ship berth, truck stop, or distribution center proposed for upgrade is considered a separate equipment project.

Table I.4 Definitions (cont.)

Term	Definition
Equipment Project Alternative	"Equipment project alternative" means one or more choices that the local agency may propose to customize the local agency project proposal in its application.
Equipment Project Completion	"Equipment project completion" means the date the local agency determines that all equipment project requirements are completed with the exception of ongoing maintenance, operation, and annual reporting requirements for the new or upgraded equipment. For each equipment project, this includes the liquidation of Program funds and successful post-inspection (including scrappage, if required).
Equipment Project Cost	"Equipment project cost" means the total cost of the equipment project, including State and non-State funding, but excluding administration funds.
Equipment Project Life	"Equipment project life" for each project option in these Guidelines means the length of time an equipment owner is obligated (under an equipment project contract) to maintain and operate the bond-funded equipment according to the requirements of the Program.
Equipment Project Option	"Equipment project option" means the specific mechanism to retrofit, repower, or replace a diesel engine, or provide an alternative power source to reduce emissions of diesel PM and/or NOx. A source category may include multiple equipment project options (e.g., truck retrofit, repower, and replacement are each distinct project options as defined in these Guidelines). (Also referred to as "project option.")
Expenditure	"Expenditure" means payment of Program funds. "ARB expenditure" means ARB's payment of Program funds to a local agency, another State agency, or a contractor; or use of those funds for internal administration. "Local agency expenditure" means a local agency's payment of Program funds to an equipment owner or a contractor; or use of those funds for internal administration.
Fleet size	"Fleet size" means the number of diesel-fuel vehicles traveling in California that are registered to be driven on public highways and have a manufacturer's gross vehicle weight rating of 14,001 pounds or greater that are under common ownership or control [as defined in CCR section 2025 in title 13, article 4.5, chapter 1] by a person, business, or government agency.
Freshly Manufactured Locomotive Engine	"Freshly manufactured locomotive engine" means, pursuant to Code of Federal Regulations Title 40, Part 92.2, a new locomotive engine which has not been remanufactured.

Table I.4 Definitions (cont.)

Term	Definition
Funding Category	"Funding category" means the source category or combination of source categories for purposes of establishing funding targets and competition between equipment projects. For example, the shore power and cargo equipment source categories are combined into a single funding category with a recommended funding target.
Goods	"Goods" are defined as having the same meaning in Commercial Code section 2105, which essentially requires that: • The goods must be movable; and • The goods being moved must be part of a transaction that involves a contract for the sale of the goods.
Guidelines	"Guidelines" means the *Proposition 1B: Goods Movement Emission Reduction Program – Guidelines for Implementation* and accompanying Final Staff Report adopted February 28, 2008, and any subsequent amendments to those Guidelines adopted by the Board or enacted via ARB Executive Order.
Grant	"Grant" means the Program funding allocated by ARB to a local agency under a grant agreement (or alternate mechanism for State agencies). (Also referred to as "grant funds" and "grant award.")
Grant Agreement	"Grant agreement" means the legally binding agreement between ARB and a local agency.
Grant Agreement Term	"Grant agreement term" means the time period identified in a local agency project grant agreement within which a local agency is legally bound to fully implement the local agency project.
Grant Expenditure Request	"Grant Expenditure Request" means the form used by the local agency to request Program funds from ARB.
Independent Owner Operator	"Independent owner operator" means a person who both owns a single heavy-duty diesel truck and personally operates that truck to haul goods.
Interagency Agreement	"Interagency agreement" means the legally binding agreement between ARB and a State agency.
Liquidation	"Liquidation" means the full expenditure of all Program funds in an executed grant agreement or equipment project contract. "ARB liquidation" means the full expenditure of all Program funds identified in an executed grant agreement. "Local agency liquidation" means the full expenditure of all Program funds identified in an executed equipment project contract.
Loan or Loan Guarantee Program - State agency	"Loan or loan guarantee program" means a program established by a State agency to assist equipment owners to obtain financing to retrofit or replace heavy-duty trucks.
Local Agency	"Local agency" means an eligible applicant or recipient of Program funds from ARB. For the purpose of administering a loan or loan guarantee program, a State agency may be considered a local agency. A local agency that is administering Program funds under an executed grant agreement is also referred to as a recipient agency in SB 88.
Local Agency Board/ Commission	"Local agency board/commission" means the popularly elected or appointed governing body of a local public entity.

Table I.4 Definitions (cont.)

Term	Definition
Local Agency Project	"Local agency project" means the funding category-specific incentive program that the local agency proposes to implement with Program funding.
Local Agency Project Implementation Approach	"Local agency project implementation approach" means the mechanism(s) a local agency may propose to implement one or more equipment project options. For example, as part of a single local agency project, a port may propose to employ three contractors to run truck replacement programs – one focused on a lease-to-own program for diesel trucks, one on leasing natural gas trucks, and one on offering grants to truck owners for purchase of new trucks. Each of these mechanisms are implementation approaches.
Local Public Entity	"Local public entity" means a county, city, district, public authority created by statute, public agency, and any other political subdivision in the State. Local public entities do not include states or the federal government.
Locomotive Remanufacture	"Locomotive remanufacture" means one or more of the following, pursuant to Code of Federal Regulations Title 40, Part 92.2(1): • 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.
Locomotive Repower	"Locomotive repower" means, 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.
Match Funding	"Match funding" means the non-Program funds used in conjunction with Program funds to fully fund proposed local agency and equipment projects. These may include monies from private, local, other State, and federal sources, except as otherwise provided under these Guidelines or local, State, and federal law.
Middle-Aged Truck	For the purposes of a three-way truck transaction for projects receiving Year 1 through Year 3 funds, a "middle aged truck" means a truck with a MY1998-2006 engine. For the purposes of a three-way truck transaction for projects receiving Year 4 funds, a "middle aged truck" means a PM retrofitted truck with a MY1998-2006 engine.
Model Year (MY) 2007 Emissions	"MY2007 emissions" for trucks means emissions of 1.20 grams per brake horsepower-hour (g/bhp-hr) or less of NOx (FEL and CERT values), and 0.01 g/bhp-hr or less of PM (CERT value), as certified by the most recent ARB Executive Order for on-road use with an intended service of Heavy-Heavy Duty Diesel for diesel engines or Heavy Duty Otto for applicable alternative fuel vehicles.
Model Year (MY) 2007+ Emissions	"MY2007+ emissions" for trucks means emissions of 0.50 g/bhp-hr or less of NOx (FEL and CERT values), and 0.01 g/bhp-hr or less of PM (CERT value), as certified by the most recent ARB Executive Order for on-road use with an intended service of Heavy-Heavy Duty Diesel for diesel engines or Heavy Duty Otto for applicable alternative fuel vehicles.

Table I.4 Definitions (cont.)

Term	Definition
Model Year (MY) 2010 Emissions	"MY2010 emissions" for trucks means CERT and FEL emissions of 0.20 g/bhp-hr or less of NOx (FEL and CERT values), and 0.01 g/bhp-hr or less of PM (CERT value), certified by the most recent ARB Executive Order for on-road use with an intended service of Heavy-Heavy Duty Diesel for diesel engines or Heavy Duty Otto for applicable alternative fuel vehicles.
Non-performance	"Non-performance" means the act of not completing one or more components of an executed local agency project grant agreement or equipment project contract.
Not Otherwise Required by Law or Regulation	"Not otherwise required by law or regulation" means the emission reductions are not required pursuant to any local, State, or federal law, rule, or regulation; any requirements imposed by the California Environmental Quality Act (CEQA); or any requirements imposed by a legal instrument such as a legal settlement or consent decree (collectively referred to as "law or regulation"). For purposes of this Program only, "not otherwise required by law or regulation" does not apply to any tariff, ordinance, or other requirement imposed by a local agency based on that local agency's authority as a market participant or municipal proprietor or the local agency's authority to enter into contracts with equipment owners and operators.
Notice of Funding Availability	"Notice of Funding Availability (NOFA)" is defined by statute as ARB's public announcement to begin solicitation of local agency project applications.
Obligation	"ARB obligation" means the initial award of Program funds by the Board to specific local or State agency projects, followed by execution of a grant agreement between ARB and a local agency or an interagency agreement between ARB and another State agency. "Local agency obligation" means the execution of an equipment project contract between a local agency and equipment owner. "State agency obligation" means the commitment of specific Program funds for truck loan and guarantee programs. Board adoption of a resolution awarding funds via specific, named grant or interagency agreements to local or State agencies shall satisfy State requirements to encumber funds within 1 year of the date of appropriation. (Also referred to as "encumbrance.")
Old Truck	"Old truck" means a truck with a MY1993 or older engine for the purpose of the three-way truck transaction.
Program	"Program" means the Goods Movement Emission Reduction Program, except as otherwise noted.
Program Funds	"Program funds" means the combination of both project and administration funds.
Project Benefits Calculator	"Project Benefits Calculator" or "Calculator" means an analytical method and inputs provided by ARB to estimate the emission reductions and cost-effectiveness of proposed projects.
Project Funds	"Project funds" means the funds used directly to upgrade equipment – it does not include funds used by ARB, local agencies, or other State agencies for administration of the Program.
Recaptured Funds	"Recaptured funds" means Program funds newly eligible for distribution or redistribution prior to any statutory reversion requirements.

Table I.4 Definitions (cont.)

Term	Definition
Recipient Agency	"Recipient agency" means the local agency or State agency that receives Program funds under an executed grant agreement, interagency agreement, or other mechanism (for ARB).
Replacement	"Replacement" means the act of replacing higher-emitting diesel vehicle(s), a piece of diesel equipment, or diesel harbor craft with a lower-emitting vehicle, piece of equipment, or craft (e.g., replacement of one or two old trucks with a new one).
Repower	"Repower" means the act of replacing a higher-emitting diesel engine with a new or remanufactured, lower-emitting engine in the same vehicle, piece of equipment, or harbor craft.
Retrofit	"Retrofit" means the act of adding emission control technology or modifying an engine on an existing diesel vehicle, piece of diesel equipment, or diesel harbor craft. The project specifications may require that this technology be an ARB Verified Diesel Emission Control Strategy.
Salvage Vehicle	"Salvage Vehicle" means any vehicle currently or previously titled as salvage, junk, or the equivalent. Salvage vehicles were often wrecked or damaged, and the owner, insurance company, financial institution, or leasing company considered it too expensive to repair.
Source Category	"Source category" means a discrete category of emission sources specific to this Program. A source category may contain multiple equipment project options. Under this Program, source categories include: heavy duty diesel trucks, locomotives and railyards, ships at berth, cargo handling equipment, and commercial harbor craft. To establish funding targets and promote appropriate competition between projects, ARB may combine multiple source categories within a "funding category."
State Implementation Plan	"State Implementation Plan" or "SIP" means the air quality plan adopted by ARB and local air districts (as applicable) that demonstrates how each region will attain or maintain national ambient air quality standards, as required by the federal Clean Air Act section 110.
Statewide Truck and Bus Rule	"Statewide Truck and Bus Rule" means the Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria Pollutants from In-Use On-road Diesel-Fueled Vehicles (California Code of Regulations, Article 4.5, Division 3, Title 13, § 2025), (Also referred to as "Truck and Bus Rule.")
Supplemental Procedures	"Supplemental Procedures" means the *Supplemental Procedures for Ships at Berth and Cargo Handling Equipment Projects* document available on the Program website http://www.arb.ca.gov/gmbond. The Supplemental Procedures define the responsibilities of ARB, local agencies, and equipment owners.
Three-Way Truck Transaction	"Three-way truck transaction" for projects receiving Year 1 through Year 3 funds means the act of replacing a middle-aged truck with a new truck; installing a retrofit on the middle-aged truck and using it to replace an old truck; and scrapping the old truck. "Three-way truck transaction" for projects receiving Year 4 or later funds means the act of replacing a PM retrofitted middle-aged truck with a new truck; using the middle-aged truck to replace an old truck; and scrapping the old truck.

Table I.4 Definitions (cont.)

Term	Definition
Trade Corridor	"Trade corridor" means any one of the four following regions in California: Bay Area, consisting of: San Francisco Bay Area Air Basin (CCR Title 17 §60101) Central Valley, consisting of: San Joaquin Valley Air Basin (CCR Title 17 §60107) Sacramento Metropolitan Federal Ozone Nonattainment Area (40 CFR Part 81 §81.305, p.23886-23887, Apr 30, 2004) Los Angeles/Inland Empire, consisting of: South Coast Air Basin (CCR Title 17 §60104) Port Hueneme in Ventura County San Diego/Border Region, consisting of: San Diego County (Government Code §23137) Imperial County (Government Code §23113)
Verified Diesel Emission Control Strategy	"Verified Diesel Emission Control Strategy" or "VDECS" means an emission control strategy, designed primarily for the reduction of diesel PM emissions, which has been verified pursuant to the "Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines" in title 13, California Code of Regulations, commencing with section 2700. (Note: ARB has separate procedures to verify control devices for stationary sources.)
Year 1	"Year 1" means the State of California's fiscal year (FY) from July 1, 2007 to June 30, 2008. (Also referred to as "FY2007-08.")
Year 2	"Year 2" means the State of California's fiscal year (FY) from July 1, 2008 to June 30, 2009. (Also referred to as "FY2008-09.")
Year 3	"Year 3" means the State of California's fiscal year (FY) from July 1, 2011 to June 30, 2012. (Also referred to as "FY2011-12.")
Year 4	"Year 4" means the State of California's fiscal year (FY) from July 1, 2012 to June 30, 2013. (Also referred to as "FY2012-13.")
Zero-Emission	"Zero-emission" means an engine producing no emissions of pollutants (including carbon dioxide, carbon monoxide, hydrocarbons, oxides of nitrogen, and particulates) when stationary or operating.

II. ARB Program Administration

This chapter identifies the proposed requirements for ARB to administer the Program. State law requires that the Board hold public hearings, adopt Guidelines, and adopt a final list of local and State agency projects that will receive funding from each appropriation. ARB staff shall implement the Board's direction as defined in Board resolutions, the Guidelines, and the list of local agency projects to be funded.

ARB staff's duties to administer the Program shall include, but are not limited to: developing and updating Guidelines and project specifications; issuing the Notice of Funding Availability (NOFA); soliciting, reviewing, and recommending local and State agency projects for funding; executing and implementing grant agreements with local agencies and interagency agreements with other State agencies; Program reviews by ARB staff or its designees (Program reviews) and fiscal compliance audits by the Department of Finance (DOF) or its designees (fiscal audits) of local and State agency projects; tracking and reporting on progress in expending funds and achieving performance milestones; developing and maintaining a public website on the Program; and conducting workshops and other forms of outreach to seek public input on Program design and implementation.

A. Program Guidelines

As required by State law, ARB developed and adopted the initial Guidelines and 2008 Staff Report in a public process at the February 28, 2008 Board meeting. The Guidelines shall include, at a minimum, all of the following:

- An application process for the funds, and any limits on administration costs.
- Requirements that local agencies identify the useful life of the project and project delivery milestones as part of the application process.
- Criteria for selection of local and State agency projects and equipment projects.
- Requirements for match funding.
- The method by which ARB will consider the air basin's status in achieving State and federal air quality standards.
- Requirements that grant agreements between ARB and local agencies, and interagency agreements with other State agencies, identify project milestones, and remedies for failure to meet project milestones.
- Accountability and auditing requirements, including provisions for Program reviews or fiscal audits of project expenditures and outcomes.

ARB staff shall develop, and the Board will consider adoption of, any appropriate updates to these Guidelines prior to issuing the NOFA for a funding cycle. ARB staff shall evaluate the progress of the Program and any changes needed to improve its effectiveness, plus advances in technology and updated equipment costs that create a need to revise the list of equipment project options. ARB staff shall provide adequate

opportunity for public input, including release of any proposed updates to these Guidelines for public review prior to Board consideration at a noticed public hearing. These Guidelines are designed and intended to effectuate the provisions of SB 88, AB 201, and AB 892. However, in the event a provision of these Guidelines conflicts with these bills, or any other statute enacted to implement Proposition 1B, the relevant statutory provisions shall control.

1. ARB staff clarification of Program requirements

During Program implementation, specific issues may arise that require ARB staff to interpret or clarify these Guidelines. ARB staff clarifications will be made available at http://www.arb.ca.gov/gmbond to assist local agencies with Program implementation.

2. Provisions that do not apply to projects receiving Year 1 through Year 3 funds

ARB staff evaluated the 2008 and 2010 Guidelines, including project specifications, and developed updates. The changes in the updated 2013 Guidelines apply to projects receiving Year 1 through Year 3 funds, with the exception of the provisions listed in Table II.1.

Table II.1 Provisions that Do Not Apply to Projects Receiving Year 1 through Year 3 Funds

Provision *Guidelines reference*	Description
1. Equipment Project Specifications *Appendices A-H.*	Appendix H shows applicable equipment project specifications for Year 1 funded projects. Appendix F and Appendix G show applicable equipment project specifications for Year 2 and Year 3 funded projects. The equipment project specifications shown in Appendices A-E apply only to projects receiving Year 4 and later funds.
2. New Compliance Check Option *Chapter IV.A.8.*	Except for engine label violations, a local agency may not allow applicants in a solicitation for Year 1 funds to correct pollution citations that were outstanding at the time of application to avoid disqualification. A local agency may allow all affected applicants in a solicitation for Year 2 or Year 3 funds the ability to retain eligibility by correcting violations and paying any fines, in a timely manner, prior to execution of an equipment project contract(s) between the local agency and equipment owner.
3. Project Alternatives for Local Agencies *Chapter III.C.*	Local agencies administering Year 1 funds shall implement the approved project alternatives described in their grant agreements, despite any changes to those alternatives in these Guidelines.
4. Equipment Project Contract Requirements *Chapter IV.A.11.*	Local agencies administering Year 1 through Year 3 funds are not required to amend equipment project contracts to include any additional provisions required in these Guidelines, except for ships at berth projects.

Table II.1 Provisions that Do Not Apply to Projects Receiving Year 1 through Year 3 Funds (cont.)

Provision *Guidelines reference*	**Description**
5. Local Agency Timelines for Obligation and Expenditure of Funds *Chapters II.F. and IV.B.*	Year 1 funds must be obligated and expended by local agencies according to the timelines defined in the applicable grant agreement, including any amendment(s). Year 2 and later funds shall be obligated and expended according to the schedules in these Guidelines.
6. Local Agency Administration Funds *Chapter II.F.2.a.*	Local agency administration funds for projects receiving Year 1 funds are set on the schedule and at the level defined in the grant agreement, and may not be accelerated or increased to higher levels based on these Guidelines.
7. State Agency Loan or Loan Guarantee Program *Chapter II.D.*	Year 1 and Year 2 funds may not be used for loan or loan guarantee programs.

B. Program Funding Targets and Priorities

The Board approved funding targets for each trade corridor and each source category or groups of categories (referred to as a funding category). These targets provide overall direction for the Program, and guide each trade corridor in the development of viable project proposals. Such targets can help ensure that all of the statutory criteria are effectively implemented in a straightforward and transparent manner. These targets do not commit the Board to specific allocations in future years and are not considered a programming of funds to specific local agency projects. Funding for local agency projects in each individual funding cycle is responsive to priorities established by the Board and may not be directly proportional to the targets. ARB staff shall recommend funding levels for local (and State) agency projects that are designed to reach the targets over the course of the entire $1 billion Program.

1. Trade corridor funding targets

While SB 88 does not explicitly require an allocation by trade corridor, it does direct ARB to identify a means to consider an air basin's attainment status for State and federal air quality standards and its health risk from goods movement. ARB staff believes this is most efficiently and effectively done by targeting funding to each trade corridor based on population, goods movement emissions, and federal attainment needs. These targets also ensure that California residents in each defined trade corridor see benefits from the Program. Finally, such targets facilitate a transparent and open discussion of the optimum funding splits to reduce the contribution of goods movement sources to each region's toughest air pollution challenges. The 2008 Staff Report describes the basis for the targets.

The funding targets for each trade corridor, including all State and local Program administration funds, are:

Dollars	Trade Corridor
• $550 million:	Los Angeles/Inland Empire trade corridor
• $250 million:	Central Valley trade corridor
• $140 million:	Bay Area trade corridor
• $ 60 million:	San Diego/Border trade corridor

Since this Program looks at the trade corridors as part of a single goods movement system for California, local agencies administering bond monies shall be required to fund projects based on the total emission reductions expected in the State (not just their local area). The majority of the travel or operation must be in one or more of the trade corridors. Regions like the San Joaquin Valley with high through-truck and rail traffic will benefit from projects administered by local agencies in other trade corridors.

The funding for trucks serving ports and intermodal railyards (allocated to the corridors where those facilities are located) was available for all California trucks focused on that service, regardless of their home base. Thus, cleanup funds allocated to the Bay Area for the Port of Oakland may have gone to trucks carrying agricultural products to and from the Central Valley. Likewise, funds for the ports in the Los Angeles area may have gone to trucks based in the San Diego/Border region.

2. Category funding targets

SB 88 recognizes the need for projects to compete against others in the same funding category, not against projects in other funding categories. To implement this approach, set portions of the funding are targeted to each funding category, which may include one or more source categories. Category funding targets support the reduction in local and regional health risk from goods movement as a primary consideration. The 2008 Staff Report describes the basis for the original targets, and the 2010 Staff Report describes the basis for the revisions.

The targets for each funding category, including all State and local Program administration funds, are:

Dollars	Funding Category
$700 million:	Heavy duty diesel trucks that haul goods, plus any truck electrification infrastructure.
$100 million:	Diesel freight locomotives and railyards.
$160 million:	Cargo ships at berth, plus cargo handling equipment used at a port or intermodal railyard.
$ 40 million:	Commercial harbor craft.

The Board directed ARB staff to manage the funds to reserve up to $100 million of the combined truck monies to assist existing drayage truck owners to complete the second phase of upgrades to reduce NOx in advance of the 2014 requirement. These priority funds for drayage trucks were in addition to the $125 million of Year 1 funds expended for this purpose and were made available to drayage truck owners in late 2011.

3. Priorities for Year 1 funds

The Board adopted these priorities for Year 1 funds:

- Eligible projects that can quickly begin implementation and deliver air quality results. This is consistent with statutory direction to give priority to projects that achieve the earliest possible reduction of health risk in heavily impacted communities. These could be communities with high risks due to nearby goods movement facilities or communities impacted by high regional pollution levels from goods movement emissions.
- Truck retrofit projects to add diesel particulate filters for immediate, broad scale, cost-effective risk reduction in many communities. Based on the implementation schedules in related truck regulations, we expect that these projects would only be eligible for Year 1 funding.
- Port truck replacement projects in the Los Angeles/Inland Empire corridor to continue supporting the Port of Los Angeles and the Port of Long Beach clean truck tariff programs. These ports are requiring that all drayage trucks serving the ports be replaced (with models meeting 2007 emission standards) between late 2008 and the end of 2011. This schedule means any financial assistance from the Program needs to come in the early years.

4. Priorities for Year 2 and Year 3 funds

The Board adopted these priorities for Year 2 and Year 3 funds:

- Truck upgrade projects to quickly reduce the health risk in communities near high truck-traffic freeways, warehouse/distribution centers, ports, and railyards. These projects also provide significant reductions to help meet federal air quality standards for regional air pollutants, including PM2.5 and ozone. This is consistent with statutory direction to give priority to projects that achieve the earliest possible reduction of health risk in heavily impacted communities. To support cost-effective early compliance with ARB's truck rules, the truck funds need to be front-loaded.
- Locomotive projects to cut the elevated, excess cancer risks in neighborhoods near railyards, as identified in ARB's health risk assessments. The California State Implementation Plan relies on incentives and other mechanisms to accelerate the introduction of cleaner locomotives and/or engines to attain federal PM2.5 and ozone standards in the South Coast and San Joaquin Valley Air Basins.

- Ships at berth projects to further reduce diesel pollution in port-side communities and greenhouse gas emissions. To comply with the January 2014 requirements of ARB's rule, these multi-year projects to install electric infrastructure to provide shore-based power to ships at berth must begin soon. With incentives, some of these installations may be able to begin operation early and to achieve extra reductions each year through greater use.

5. Priorities for Year 4 and later funds

ARB staff proposes that the Board adopt these priorities for Year 4 and later funds:

- Truck replacement and repower projects for the remaining fleets that can still achieve early or extra emission reductions. These projects will continue to reduce the health risk in communities statewide, especially those near freeways, distribution centers, and border crossing. In addition, these projects represent a vital investment to help attain federal and State health-based air quality standards.
- Locomotive replacement and upgrade projects based on the cleanest engines and emission controls available. These projects will further reduce the health risks near railyards and assist in the attainment of federal PM2.5 and ozone air quality standards for the South Coast and San Joaquin Valley Air Basins.
- Zero-emission replacement, repower, and upgrade projects in the truck, ships at berth, harbor craft, and cargo handling source categories. These projects will reduce greenhouse gas emissions and encourage the transition to cleaner technologies. ARB has supported the ability of local agencies to supplement the Program funds with federal and local monies to make alternative fuel choices that may have lower greenhouse gas emissions more attractive.

C. Project Specifications and Emissions

1. Project specifications for each funding cycle

Appendices A-E detail the equipment project options, including upgrade specifications, funding caps, minimum project life, and key operating conditions for Year 4 funds. For reference purposes, Appendices F-H provide the equipment project options and specifications that apply only to projects receiving Year 1 through Year 3 funds. Local agencies can choose to propose projects for any or all of the funding categories to best address the air pollution problem in that trade corridor. ARB staff continues to consider the funding demand for eligible equipment project options, technology advances and costs, regulatory actions, the need for equipment eligibility and project requirements, and other new information.

SB 88 identifies projects eligible for funding to include:

- The replacement, repower, or retrofit of heavy-duty diesel trucks.
    - The equipment project options for Program funds include all of these approaches for Year 1 through Year 3 funds; retrofits are no longer eligible for Year 4 and later funds due to compliance deadlines.
- The replacement, repower, or retrofit of diesel locomotive engines, with priority given to switcher locomotive engines.
    - The equipment project options include replacement, rebuild, repower, and retrofit approaches, as well as an emerging locomotive emissions capture and control system.
- The provision of on-shore electrical power for ocean freight carriers calling at the State's seaports to reduce the use of auxiliary and main engine ship power at berth.
    - The equipment project options for Program funds include this type of technology.
- Mobile or portable shoreside distributed power generation projects that eliminate the need to use the electricity grid.
    - The equipment project options for Program funds include this type of technology, as well as an emerging ship emissions capture and control system.
- The replacement, repower, or retrofit of harbor craft that operate at the State's seaports.
    - The equipment project options for Program funds include replacement and repower approaches. The new options also include replacement and retrofit with hybrid technology.
- The replacement, repower, or retrofit of cargo handling equipment that operates at the State's seaports and railyards.
    - ARB's adopted regulation for diesel cargo handling equipment operating at ports and intermodal railyards requires this equipment to be upgraded to emission levels achievable through replacement or (possibly) repower. To ensure that the eligible projects in this category meet the statutory requirement to reduce emissions not otherwise required by law or regulation, and are cost-effective, the equipment project options for Year 1 funds include only retrofit of energy storage systems for rubber-tired gantry cranes that already comply with the ARB rule. For Year 2 and later funds, the options include the repower of rubber-tired gantry cranes with a zero-emission power system, and replacement of certain yard trucks with zero-emission yard models that will reduce emissions beyond the requirements of the regulation.
- Electrification infrastructure to reduce engine idling and use of internal combustion auxiliary power systems at truck stops, intermodal facilities, distribution centers, and other places where trucks congregate.
    - The equipment project options for Program funds include this technology.

ARB staff shall evaluate and recommend for Board adoption specifications for equipment project options eligible to compete for funding in each updated cycle, as needed and consistent with the State's fiscal policies for bond-funded programs. These options must be able to cost-effectively reduce emissions and health risk with a high degree of certainty. ARB staff shall assess the list of emission reduction projects identified in SB 88 for technical feasibility, emission reduction potential, and cost. ARB staff shall also consider other effective technology that is verified, available, and can be widely deployed to reduce emissions quickly.

Certain types of projects or activities shall **not** be eligible for funding under the Program. Such ineligible projects or activities include, but are not limited to:

- Projects to design, acquire rights-of-way, perform environmental review, build, improve, or operate transportation infrastructure (like roads, bridges, or interchanges; railyards, tracks, or sidings; rail or highway tunnel widening; railroad crossing grade separations; ship channel dredging; etc.).
- Projects to design, acquire rights-of-way, perform environmental review, build, improve, or operate intermodal transfer or distribution centers (also called inland ports), except for truck electrification infrastructure to reduce engine idling and use of internal combustion auxiliary power systems at truck stops, intermodal facilities, distribution centers, and other places where trucks congregate.
- Scientific or technical research and development activities, including programs to perform emissions testing on new technology.
- Business plan development or implementation.
- Equipment, vehicles, or ship berths owned or leased by the federal government, including the military.
- Fuel or electricity purchases.
- Operation and maintenance costs.
- Legal costs.
- Permit fees or taxes.
- Any other projects that cannot meet all of the requirements of these Guidelines.

The timing and resource demands to get Program funds obligated effectively preclude case-by-case consideration of projects. If a local agency supports demonstration of a cost-effective technology or approach that is consistent with the statute, ARB staff shall evaluate that technology for possible inclusion in the defined equipment project options in the next update to these Guidelines.

2. Quantifying project benefits

a) Pollutants

SB 88 identifies specific pollutants that are targeted for emission reductions under the Program:

- Diesel PM, which ARB identified as a toxic air contaminant.
- NOx and sulfur oxides (SOx) that contribute to PM2.5 formed in the atmosphere.
- NOx and reactive organic gases (ROG) that form ozone in the atmosphere.

SB 88 also adds reductions in greenhouse gases as a criterion to consider in evaluating which projects to fund.

As part of simplifying the Program, the Guidelines require quantification of diesel PM and NOx emissions and the resulting reductions from bond-funded projects. These are the two most consistently important pollutants to reduce the health impacts from goods movement in all four trade corridors, and the most likely to differ between competing proposals within the same source category.

Of the targeted source categories, only ships are still significant sources of SOx emissions. Shore power projects to reduce ship emissions at berth will effectively cut this pollutant. It is not necessary to quantify the SOx emission reductions from each competing shore power project. Comparing the reductions in diesel PM and NOx emissions is an adequate basis to assess shore power project proposals relative to others in the same source category. Diesel engines emit ROG, but emission levels are typically less than 1/10 of the NOx emissions, therefore should also not be a determining factor in project selection.

ARB staff considered greenhouse gas emissions in recommending the source category funding targets, specifically the amount allotted for shore power and cargo equipment projects that reduce fuel consumption. Since projects are competing within funding categories, there is no need to quantify greenhouse gas reductions from individual projects to support the competitive process.

b) Project Benefits Calculators

ARB staff shall develop and make available on the Program website a Project Benefits Calculator (Calculator) for each source category eligible for funding under these Guidelines. These Calculators shall provide the basis for local agencies to quantify the emission reductions and cost-effectiveness of proposed local agency projects. If a local agency identifies an eligible local agency project that cannot be quantified with the Calculator for that source category, the local agency should contact ARB staff for guidance. The Calculators shall also provide the basis for local agencies and equipment owners to quantify the emission reductions and cost-effectiveness of proposed equipment projects. Over time, ARB staff shall build the emission reductions and cost-effectiveness calculator functions into the Goods Movement Online Database.

D. Provision for Truck Loan or Loan Guarantee Programs

ARB may make funding available for loan or loan guarantee programs. For the purpose of administering a loan or loan guarantee program (loan project) only, an applicant may be any State agency, including ARB [H&S §39625.1(a)].

Funds for a loan project may be provided from bond proceeds or through recaptured funds. For any loan project, ARB or other State agency may administer the program directly or may use contractors, such as established non-profit organizations, commercial lenders, truck financing entities, community development banks, and small business assistance entities, to administer the program. Any use of an external contractor requires the State agency to comply with applicable State contracting requirements.

The intent of offering Program funds for loan projects is to provide financial assistance and expand financing opportunities for owners of smaller truck fleets who are experiencing difficulty in obtaining financing to upgrade or replace their vehicles with cleaner technology. Loan programs may include:

- Direct loans (Program funds are used to make a loan directly to the equipment owner).
- Loan guarantees (Program funds are used to create a loan loss reserve to guarantee a loan made by a lender).
- Loan or interest rate subsidies (Program funds are used to buy down the interest rate).
- Lease-to-own (Program funds are used to subsidize a leasing program where the lessee takes ownership of the vehicle at the end of the lease).

The California Pollution Control Financing Authority's (CPCFA) California Capital Access Program (CalCAP), a form of loan portfolio insurance, is an example of a loan guarantee program. ARB's Providing Loan Assistance for California Equipment (PLACE) is an example of a program that provides both loan and loan guarantee programs utilizing partnerships with a State agency and contractors.

State agencies may apply for Program funds for loan projects that may include one of the above-described options or a similar program for equipment owners to retrofit or replace trucks.

Because there are many options and ways to implement a loan project, ARB requires that any proposed loan project meet the following conditions:

- Use funds to upgrade or replace eligible diesel trucks according to the project specifications in Appendix A.
- Adhere to any financial terms and conditions established by ARB staff in the grant or interagency agreement, which may include interest rate, loan term, and minimum credit requirements.
- Funds used for direct loans or lease-to-own projects must be used to implement a sustainable project (repayments will be used to provide additional loans or leases).
- Funds used for loan guarantees must provide a minimum leverage established by ARB.

The ARB Executive Officer or his or her designee has the authority to approve the structure and conditions of any proposed loan project to provide increased assistance to independent owner-operators and smaller trucking fleets.

See Chapter V.A. for State agency project implementation requirements.

E. ARB Process to Award Funds to Local and State Agencies

1. Notice of funding availability

ARB staff shall issue a notice of funding availability (NOFA) no later than November 30th of each fiscal year in which funds are appropriated or reappropriated by the Legislature, unless ARB staff determines that the Guidelines should be updated for those funds or the cash is not yet available to ARB. For Year 1 funding, ARB shall issue the NOFA within 2 weeks of Board adoption of the Guidelines. For Year 2 and later funding, ARB shall issue the NOFA following Board adoption of any needed update to the Guidelines and cash availability, consistent with State fiscal policy.

The NOFA shall include:

- Registration instructions for local public entities seeking Program funds, including concurrent submittal of a demonstration that the local public entity qualifies as an applicant for Program funds.
- Submittal instructions and schedule for local agency project applications.
- The requirement that each applicant hold at least one community meeting prior to the **submittal** of the local agency project application to ARB (see Chapter III.D.).

2. Qualification of applicants

The statute requires an applicant for Program funds to be both a local public entity and one that is involved in the movement of freight through trade corridors or involved in air quality improvements associated with goods movement. For the purpose of administering a loan or loan guarantee program only, an applicant may include any State of California agency. Local public entities do not include states or the federal government. A "local public entity" is defined to include a county, city, district, public authority created by statute, public agency, and any other political subdivision in the State.

The first step in the application process is for a local public entity to register with ARB through the process described in the NOFA. ARB staff shall verify the status of the local public entity and provide access to the electronic application form for each verified local public entity.

Concurrent with the registration, the local public entity will also provide its qualifications for eligibility as a Program applicant so that ARB staff can begin the initial review of this demonstration.

ARB staff shall assess each local public entity's qualifications to determine if that entity meets the requirements of the statute and the Guidelines for applicants. ARB staff may request that the local public entity provide additional documentation to support this assessment.

A local public entity that qualifies as a Program applicant may also be referred to as an applicant or a local agency.

3. Review of local and State agency applications

ARB staff shall complete an initial review of each local and State agency project application to verify that the proposed project is consistent with these Guidelines and is eligible to compete for funding.

ARB staff shall notify any local and State agency that does not meet all of the requirements of paragraphs (a)-(g) of this section within 20 business days of ARB receipt of the completed application package. Notification may occur via letter or email to the designated local or State agency contact, at ARB staff's discretion.

ARB staff shall evaluate any deficiencies and determine, at staff's discretion, whether to disqualify the application or pursue resolution of any deficiencies with the local or State agency.

ARB staff shall post a list of eligible local and State agency project applications on the Program website for public review no later than 30 days after local and State agency project applications are due to ARB.

a) Completeness

ARB staff shall review a local or State agency project application to determine whether all required information is included in the application. At a minimum, ARB staff shall verify that the application is complete and includes a copy of the local agency board/commission resolution.

b) Consistency with legal and equipment project specifications

ARB staff shall review the local or State agency project application and assess the agency's certification that the proposed project achieves emission reductions "not otherwise required by law or regulation." ARB staff shall also evaluate whether the proposed project conforms to the specifications for the desired funding category. Proposals that combine multiple funding categories or that would allow emissions, equipment, technology, or Program funding levels that are inconsistent with one or more equipment project options defined in these Guidelines are subject to disqualification.

In addition, for any local agency project to retrofit, repower, or replace locomotives operated by the Class I railroads, ARB shall evaluate whether the emission reductions that would be achieved by the locomotive equipment project are or are not necessary to satisfy any mandated emission reduction requirement under an agreement between a railroad company and a State or federal agency, or a local air district. ARB must find that the emission reductions are not necessary to determine that the local agency project is eligible to compete for funding [H&S §39625.5(a)(2)(B)].

c) Consistency with air quality plans for goods movement

ARB staff shall assess the local or State agency project application to determine if it meets the requirement for consistency with local and regional plans (or regional elements of statewide plans) to reduce emissions from goods movement.

d) Availability of full funding

ARB staff shall assess the local or State agency project application to determine if it clearly identifies the source(s) of any State and non-State matching funds, and demonstrates that these funds are reasonably available within the timeframes of the project schedule (except for funds from a private equipment owner).

e) Project schedule and milestones

ARB staff shall assess the local or State agency project application to determine if it identifies the required project milestones and includes a demonstration of the agency's ability to meet the timelines of these Guidelines for fund obligation and expenditure.

f) Data to determine air quality benefits and cost-effectiveness

ARB staff shall evaluate the local or State agency project application to verify that it includes sufficient data to support calculation of the emission reduction factor and cost-effectiveness factor for the proposed project.

g) Project implementation demonstration

ARB staff shall evaluate the local or State agency project application to determine if it effectively demonstrates that the agency is prepared to administer the proposed project consistent with the detailed provisions of Chapter IV. or Chapter V., respectively.

4. ARB evaluation of local or State agency capability to implement the project scope

ARB staff shall assess the local or State agency project application to determine if it affirmatively demonstrates that the local or State agency has or will have the necessary expertise and resources in place to meet the demands of the proposed project scope, within the timelines established by these Guidelines.

ARB staff shall examine the local or State agency's documented statistics or other basis for establishing the relationship between the number of pieces of equipment that can be upgraded in a given timeframe and the number of Program staff needed to accomplish those upgrade projects. ARB staff shall rely on the documentation provided by the local or State agency and ARB's experience with this Program, the Carl Moyer program, and other incentive programs to assess the adequacy of the proposed staff resources. If ARB staff determines that the local or State agency has demonstrated the ability to handle the project type, but only at a lesser scope or scale than proposed, staff may identify an alternative scope.

> *For example, a local agency may propose to replace 5,000 trucks, but only demonstrate the resources and ability to process 2,000 trucks within the timelines established in these Guidelines. ARB staff may disqualify the application or recommend that the project go forward to the competitive process with a scope of 2,000 truck replacements (at a pro-rated funding level).*

If ARB staff determines that only a lesser scope is feasible based on the local agency's demonstration, ARB staff shall notify the designated local agency representative in writing and move the project forward to the competitive process based on the benefits of the pro-rated proposal for the funding category. ARB staff shall assume local agency support for a pro-rated proposal based on the acknowledgement required on the application.

5. Match funding

SB 88 distinguishes between State funds and monies from all other non-State sources. It also directs ARB to maximize the amount of match funds used to supplement Program funds. The funds required to cover the difference between the Program funding cap and the total project cost can come from the private sector, local agencies, other State monies, or the federal government. Private match funding can be provided by the equipment owner, an industry sponsored program, or other sources.

See Chapter IV.A.6. for information on match funding for equipment projects from State funds and monies.

6. Competitive ranking of local or State agency projects

ARB staff shall use a quantitative approach to develop a prioritized list of eligible local and State agency projects. This process will be applied to competing local agency projects **within each trade corridor and funding category**. ARB staff shall publish the list of competitively ranked local agency projects on the Program website, as well as the list of eligible State agency projects for truck loans.

The competitive ranking shall be quantitatively based on multiple factors – emission reductions and a measure of cost-effectiveness that considers match funding. The calculation of emission reductions uses the Carl Moyer program protocol of weighting combustion PM emissions (essentially diesel PM) by a factor of 20 relative to other pollutants to account for the greater health impacts of PM per ton of emissions. This protocol helps target Program funding to the local agency projects that will achieve the greatest reduction in health risk.

a) Emission reduction score

Weighted emission reductions = Reduction in NOx + (combustion PM x 20) emissions in California over the average project life in pounds

ARB staff shall list local agency projects in descending order of emission reductions, with the greatest emission reductions on top and the lowest emission reductions on the bottom. ARB staff shall number or score each project starting at the bottom with a score of 1 and continuing consecutively to the top project. For example, if there are 8 project proposals, the one with the greatest emission reductions would receive a score of 8. See Figure II.1 for an example.

Emission Reductions Score = number from above evaluation

b) Cost-effectiveness and match score

For each proposed project in a funding category, ARB staff shall review the local agency's estimate of the total pollutant-weighted emission reductions, divided by the total State funding proposed for the project, based on the Calculator for that source category. Total State funding includes requested Program funds (project and administration funds), plus any other applicable State dollars (see Chapter IV.A.6.).

Cost-effectiveness = weighted emission reductions (lbs)/total applicable State $

ARB staff shall list local agency projects in descending order of emission reductions per State dollar, with the highest number on top and the lowest number on the bottom. ARB staff shall number or score each project starting at the bottom with a score of 1 and continuing consecutively to the top project. For example, with 8 project proposals, the one with the greatest emission reductions per State dollar would receive a score of 8. See Figure II.1 for an example.

Cost-Effectiveness Score = number from above evaluation

This calculation of cost-effectiveness indirectly accounts for the level of match funding. A project will always have a combination of Program funding and match funding (from State or non-State sources) to cover the total cost of the project. The cost-effectiveness equation uses the full weighted emission reductions achieved by the total project funding, not just a subset of the reductions in proportion to the State funding component. By counting the total weighted emission reductions, the Program recognizes the benefits of non-State match funds and offers a competitive advantage to local agency projects with greater match.

Figure II.1 Local agencies A,B,C submit competing truck projects (hypothetical)

Results from Project Benefits Calculator:

Agency/ Project	Reductions over 8-Year Project Life		Weighted Emission Reductions (tons)	State Dollars
	NOx tons	PM tons		
A/ Replace 1,000 trucks	3,170	220	7,570	$50M at $50k/truck
B/ Replace 800 trucks	2,536	176	6,056	$24M at $30k/truck
C/ Replace 700 trucks	2,219	154	5,299	$28M at $40k/truck

Emission Reduction Score

A-7,570 tons Score: 3
B-6,056 tons Score: 2
C-5,299 tons Score: 1

Cost-Effectiveness Score

B-0.5 lbs/$ Score: 3
C-0.4 lbs/$ Score: 2
A-0.3 lbs/$ Score: 1

Competitive Ranking	
Project B: 2+3	5 points
Project A: 3+1	4 points
Project C: 1+2	3 points

For example, assume the Program offers funding for up to 50 percent of the cost of new equipment, with the other 50 percent covered by non-State match funds (resulting in a 1:1 match). Most project proponents seek the maximum Program funds, but proponent X only requests Program funding for 25 percent of the total cost, with the other 75 percent covered by non-State match funds (effectively providing a 3:1 match). The emission reductions for all the projects would likely be similar, but the total reductions per State dollar are much greater for proponent X because this project relies on less State funds and more match funds.

c) Competitive ranking

ARB staff shall add the Emission Reductions Score to the Cost-Effectiveness Score to determine the final points for each local agency project. ARB staff shall rank local agency projects within each trade corridor and funding category from highest points to lowest points. See Figure II.1 for an example.

ARB staff shall assess the costs and benefits of any State agency proposals for truck loan projects, and rank those projects against each other, if appropriate.

7. Public workshops on eligible local and State agency projects

ARB staff shall hold no less than three public workshops statewide to discuss the competitively ranked list of eligible local and State agency projects and any preliminary ARB staff recommendations for funding projects. At least one workshop each will be held in northern California, the Central Valley, and southern California. At ARB staff's discretion, these workshops may be conducted between release of the competitive ranking and development of funding recommendations or after development of ARB staff funding recommendations. For Year 1 funds, these workshops were not required by statute [H&S §39626(c)(2)].

8. Recommendations for funding local and State agency projects

Based on the competitively ranked list of eligible local agency projects and public input, ARB staff shall use a qualitative approach to develop recommendations on the level of funding for the top project(s) in each trade corridor and funding category. This approach shall consider the availability of Program funds, the trade corridor and category funding targets, and priorities established by the Board for each funding cycle. ARB staff shall also consider project proposals from any State agency for truck loan or loan guarantee programs.

ARB staff shall make these funding recommendations for local and State agency projects available to the public via the Program website prior to the public hearing conducted by the Board.

ARB staff shall follow this process:

a) Consideration of available funds and funding priorities

Starting with the project with the highest competitive ranking, ARB staff shall compare the requested Program dollars with the available funds, the Program funding targets for the trade corridor and funding category, and any priorities identified by the Board for those funds.

b) Funding level for project proposals

ARB staff shall recommend whether the most competitive local agency project in each trade corridor and funding category should be funded in whole, in part, or not at all in that funding cycle. ARB staff may recommend pro-rating the requested Program funding and the estimated performance measures (pieces of equipment, emission reductions, etc.) based on the available dollars and funding priorities.

Once the recommended funding is determined for the top project, ARB staff shall evaluate the project with the second highest competitive ranking in consideration of available funds and funding priorities. ARB staff shall continue until the appropriate level of funding for that trade corridor and category – in that funding cycle – is reached.

Based on the process described above for evaluating and ranking eligible local agency projects, as well as assessing the funding level, ARB staff shall issue its written recommendations to the Board for local agency project funding with the available grant funds, as well as any funding to State agencies for truck loan and loan guarantee programs.

9. Public hearing and Board action

The Board will hold a noticed public hearing to consider public testimony, written comments, and ARB staff recommendations for funding local agency projects and loan and loan guarantee programs with the available Program monies. At that hearing, the Board may adopt a resolution approving a final list of primary local agency projects, loan projects, and corresponding funding amounts for each project. This project list may identify ARB as an administering State agency for a loan project and the funds allocated for that purpose. This Board resolution initially obligates the funds, and provides ARB staff with the authority to enter into grant agreements or interagency agreements with the selected agencies, when bond funds are available [H&S §39626(c)(3)]. The ARB Executive Officer or his or her designee may delegate in writing the ability to sign agreements to another individual or individuals on ARB's executive management team.

The project list approved by the Board may also identify "backup" proposals (additional local or State agency projects or increases in funding levels for the approved projects). These backup proposals may be awarded funding if agreements cannot be executed for one or more of the primary projects within the timeframe specified by the Board in the resolution, a local or State agency is unable to expend all of the Program funds or fulfill its obligations, a local or State agency requests to terminate or transfer its grant, or other funding becomes available.

10. Local agency grant agreement

The Board's funding decisions shall become legally enforceable through executed grant agreements between ARB and the selected local agencies. Each local agency project requires a separate local agency grant agreement.

ARB staff shall prepare and submit for review and signature two copies of the local agency grant agreement to each local agency approved for bond funding. The copies may be signed by ARB and then sent to the local agency for signature by an authorized representative from the local agency that will retain one fully executed copy for its files, and return one fully executed copy to ARB staff. Or ARB may send two copies to the local agency for signature by an authorized representative who will return both copies to ARB. ARB staff shall sign and return to the local agency one fully executed copy of the grant agreement for its files.

Each grant agreement with a local agency shall include, but is not limited to, the following elements.

a) Standard grant agreement provisions

- Grant agreement number—unique tracking number provided by ARB.
- Effective date.
- Term of grant agreement.
- Local agency contact information.
- Indemnification—local agency agrees to indemnify and hold harmless the State for any liability arising out of the performance by the local agency.
- Severability—remaining provisions of an agreement continue in effect even if a court holds a specific provision invalid.
- Force majeure—ARB and local agency are not liable for any delay or failure in performance resulting from war, natural disasters, and other acts beyond their control.
- Grant agreement amendments—amendments shall only occur by mutual agreement in writing and signed by all parties.
- Environmental justice—local agency agrees to conduct its programs in a manner that ensures the fair treatment of all people in the State.
- ARB's obligations to pay any funds are contingent upon the availability of funds. In the event funds are not available, the State shall have no liability to pay any funds to the local agency or to furnish any other considerations.

b) General Program provisions

- Application—incorporate by reference the original local agency application and board/commission resolution.
- Guidelines—local agency agrees to implement project in conformance with all applicable requirements of these Guidelines.
- Reporting requirements—local agency is responsible for submitting to ARB quarterly data updates, semi-annual reports, and local agency project completion reports, when requested by ARB staff.
- Ongoing evaluations, Program reviews, and fiscal audits—local agency agrees to allow ongoing evaluations, Program reviews, and fiscal audits by ARB, other State agencies, or their designees.

- Records access requirements—local agency agrees to allow ARB or its designees access to evaluate or audit Program records.
- Recordkeeping requirements—local agency agrees to retain Program records, e.g., invoices, contracts, and correspondence, for 35 years after the bond issuance date providing the funds for the grant or to send all records to ARB by the end date of the grant agreement in an electronic format to be determined by ARB. Program records for ineligible, withdrawn, or incomplete applications shall be retained by the local agency for at least 3 years from the time the application was received.
- Enforcement—provisions authorizing ARB or its designee to inspect equipment projects.
- Non-performance includes, but is not limited to:
    - Failure to comply with these Guidelines or statutes.
    - Failure to obligate or expend Program funds within established timelines, or to show timely interim progress to meet these timelines.
    - Insufficient performance or widespread deficiencies with Program oversight, enforcement, record keeping, contracting provisions, inspections, Program review or fiscal audit procedures, or any other Program element as determined by ARB.
    - Misuse of Program funds.
    - Funding of ineligible equipment projects or other items.
    - Exceeding administration fund allotment.
    - Insufficient, incomplete, or faulty project documentation.
    - Failure to provide required documentation or reports requested from ARB, DOF, or other agencies in a timely manner.
    - Poor performance as determined by a Program review or fiscal audit.
- Remedies for non-performance include:
    - Probation.
    - Recovery of funds.
    - Constraints on opportunity to compete for future Program funds.
- Direct payments to vendor—requirement for local agency to offer payments directly to vehicle or equipment dealers, manufacturers, or financing entities if requested by equipment owner and local agency has the authority to issue these types of payments.
- Tax implications—local agency agrees to notify equipment owners of possible tax implications from receipt of Program funds and encourage participants to consult a tax professional.
- Program acknowledgment—local agency agrees to acknowledge the Program as a funding source in any related media events or other publicity material.
- Earned interest—local agency agrees to maintain records and report on interest earned on Program funds in local agency accounts, and to expend earned interest according to the provisions in these Guidelines.
- Recapture—ability of ARB to recapture Program funds.

c) Funding category-specific elements

- Local agency project description.
- Estimated total cost for project.
- Eligible costs—costs directly tied to the purchase and installation of upgraded equipment or other eligible equipment project costs as defined in the Guidelines or accompanying Staff Report.
- Ineligible costs—any cost specifically identified as ineligible in the Guidelines or accompanying Staff Report cannot be paid for or reimbursed with Program funds.
- Funding caps for each equipment project.
- Total grant amount.
- Total amount of estimated non-State match funds and source of funds.
- Project performance benchmarks—expected number of vehicles, pieces of equipment, berths, etc., to be upgraded and expected emission reductions.
- Project schedule—timeframe for completing the local agency project including major milestones and any milestones specific to each equipment project option.
- Expenditure schedule—estimated schedule for ARB to expend funds to the local agency.
- Request for payment—steps for a local agency to request expenditure of Program funds.
- Equipment project inspections—local agency agrees to complete equipment project pre-inspections and post-inspections prior to reimbursement (except in the case of early reimbursement for ships at berth grid-based power projects).
- Equipment project contracts—local agency agrees to include all equipment project requirements and conditions (e.g., restrictions on operating location, provisions for electronic monitoring devices, etc.) in contracts with equipment owners.
- Proper disposal of old equipment—local agency agrees to establish agreements with qualified salvage yards and verify scrappage/disposal of old vehicle, vessel, equipment, or engine, and to comply with any ARB direction to make trucks available for reuse.
- Small businesses—outreach to small businesses for infrastructure construction.

11. State agency loan and loan guarantee program interagency agreement

The Board's funding decisions shall become legally enforceable through executed interagency agreements between ARB staff and the selected State agencies, unless ARB is the selected State agency. Each State agency project requires a separate interagency agreement.

ARB, if required, will enter into an interagency agreement with a State agency to implement a loan or loan guarantee program (loan project). ARB staff shall obtain all authorized State signatures and return to the other State agency one fully executed copy of the interagency agreement for its files. An interagency agreement is not required if ARB is the applicant and recipient of the Program funds.

The interagency agreement includes, but is not limited to, the following elements:

a) Standard interagency agreement provisions

- Interagency agreement number—unique tracking number provided by ARB.
- Effective date.
- Term of agreement.
- State agency contact information.
- Agreement amendments—amendments shall only occur by mutual agreement in writing and signed by all parties.
- Enforcement—provisions authorizing ARB or its designee to inspect equipment projects.
- Program acknowledgment—State agency agrees to acknowledge the Program as a funding source in any related media events or other publicity material.
- Non-performance includes, but is not limited to:
    - Failure to comply with these Guidelines or statutes.
    - Failure to obligate or expend Program funds within established timelines, or to show timely interim progress to meet these timelines.
    - Insufficient performance or widespread deficiencies with Program oversight, enforcement, record keeping, contracting provisions, inspections, Program review or fiscal audit procedures, or any other Program element as determined by ARB.
    - Misuse of Program funds.
    - Funding of ineligible projects or other items.
    - Exceeding administration fund allotment.
    - Insufficient, incomplete, or faulty project documentation.
    - Failure to provide required documentation or reports requested from ARB, DOF, or other agencies in a timely manner.
    - Poor performance as determined by a Program review or fiscal audit.
- Remedies for non-performance include:
    - Recovery of funds.
    - Constraints on opportunity to compete for future Program funds.
- Earned Interest—State agency agrees to maintain records and report on interest earned on Program funds and to expend earned interest according to the provisions in these Guidelines.
- Reporting requirements—State agency is responsible for submitting semi-annual reports and project completion reports.
- Ongoing evaluations, Program reviews, and fiscal audits—State agency agrees to allow ongoing evaluations, Program reviews, and fiscal audits by ARB, DOF, other State agencies, or their designees.
- Records access requirements—State agency agrees to allow ARB, DOF, other State agencies, or its designees access to evaluate or audit records.

- Recordkeeping requirements—State agency agrees to retain Program records for 35 years after the bond issuance date for funds provided for the loan or loan guarantee program(s) or send all records to ARB within 2 years of the last loan being paid off in an electronic format to be determined by ARB.
- ARB's obligations to pay any funds are contingent upon the availability of funds. In the event funds are not available, the State shall have no liability to pay any funds to the State agency or to furnish any other considerations.

b) Scope of work provisions

- State agency project description.
- Project performance benchmarks—expected number of vehicles to be upgraded and expected emission reductions.
- Project schedule—timeframe for completing the State agency project including major milestones.
- Request for payment—steps for a State agency to request expenditure of Program funds.
- The amount of Program funds awarded to the loan project.
- Requirements for transferring funds between ARB and another State agency.

If ARB is the administering agency for a loan project and ARB contracts with either another State agency or other entity, ARB will require an interagency agreement or contract that includes the above provisions.

F. ARB Program Oversight

ARB is the administering agency for this Program, and is responsible for ensuring that Program funds are spent on equipment projects that meet the provisions of State Law and these Guidelines.

To maintain sound fiscal practices and ensure that projects can reach completion once begun, ARB staff shall provide a Start Letter (or multiple letters) for each grant. The Start Letter shall authorize the local agency (or State agency for loan projects) to proceed with project implementation based on a specified level of available funds. For a high dollar value grant, ARB staff may identify partial funding that conforms to the bond cash on deposit. The Start Letter shall itemize both the level of project funds and administration funds that are available at the request of the local agency, consistent with the performance benchmarks in the Guidelines and agreement. ARB may issue multiple Start Letters that authorize the local agency (or State agency for loan projects) to request additional funds, consistent with the grant or interagency agreement.

1. ARB obligations to local or State agencies

ARB shall obligate Program funds for each fiscal year's appropriation according to the obligation deadlines set forth in State law, but consistent with the State's fiscal policies for bond-funded programs. This is a two-step process, beginning with the Board's allocation of funds via resolution to specific local or State agency projects and ending with fully executed grant agreements or interagency agreements.

If needed, ARB staff may propose updates to the Guidelines for Board consideration prior to obligating funds from new appropriations.

2. ARB expenditures

ARB shall liquidate Program funds for each fiscal year's appropriation according to the liquidation deadlines set forth in State law but consistent with the State's fiscal policies for bond-funded programs.

- Once Program funds are obligated, with the exception of recaptured funds, any funds unspent by a local or State agency within the statutory timeframes revert back to the California Ports Infrastructure, Security, and Air Quality Improvement Account, and must be re-appropriated by the Legislature. It is therefore the policy of ARB to retain grant funds until necessary for the purchase of equipment, for the purpose of advancing the completion of an equipment project, for the purpose of funding a truck loan or loan guarantee program, or for the purpose of meeting liquidation deadlines set forth in State law.
- ARB shall only expend Program funds upon receipt of a valid Grant Expenditure Request submitted to ARB by an authorized local or State agency representative acting under a fully executed agreement.

a) Administration funds

Administration funds expended by ARB for this Program may be used by a local agency for the administration of a local agency project covered by a fully executed grant agreement. If a local agency has more than one fully executed grant agreement with ARB, administration funds identified under one grant agreement may be used to assist in the implementation of another grant agreement. Any project funds transferred by a local agency from one grant agreement to another, as approved by ARB, shall include the applicable amount of administration funds from that grant. The local agency shall not use administration funds in excess of the total administration funds allowed under all grant agreements (i.e., the sum of all administration funds for one local agency shall not exceed 5 percent of the total project funds awarded to that local agency).

Local agency requests for administration funds are subject to the following restrictions:

- Local agencies with the ability to generate new funding from goods movement sources to cover administration funds (e.g., seaports) shall be prohibited from requesting administration Program funds.
- In all other cases, requests for administration funds are capped as follows:
    - 3 percent of the grant amount for locomotives and railyards, cargo equipment, and ships at berth.
    - 4 percent of the grant amount for harbor craft.
    - 5 percent of the grant amount for trucks and truck electrification infrastructure.

Administration funds expended by ARB for this Program may be used by a State agency for the administration of a State agency truck loan project covered by a fully executed interagency agreement, if applicable. State agency requests for administration funds are capped at 5 percent of the project funding awarded to the State agency for truck loans and loan guarantees.

Administration funds shall be used for tasks associated with Program outreach/marketing, implementation, and Program review or fiscal audit and oversight, including: staff time; consultant fees; printing, mailing, and travel costs; project monitoring and compliance expenses; and indirect Program costs, such as general administration services, office space, and telephone services.

(1) Initial expenditure

Consistent with the Start Letter, the local agency may request and ARB may initially expend administration funds for local agencies, according to the provisions for each source category listed in Table II.2 below, except for loan projects administered by a State agency. A State agency may request and ARB may approve administration funds up to 100 percent, consistent with the terms of the executed interagency agreement. The interagency agreement will include specific terms and conditions that the State agency must meet to request funds.

Table II.2 Initial Expenditure for Local Agency Administration Funds

Source Category	% of Funds	Requirements
Heavy duty diesel trucks	up to 90%	1. ARB and local agency have fully executed the grant agreement. 2. A Start Letter authorizes the expenditure based on available bond cash.
Locomotives and railyards	up to 50%	
Ships at berth	up to 50%	
Cargo handling equipment	up to 50%	
Harbor craft	up to 50%	

(2) Additional expenditures

Consistent with the initial Start Letter or a subsequent Start Letter, the local agency may request and ARB may expend the remaining administration funds according to the provisions for each source category listed in Table II.3 below.

Table II.3 Additional Expenditures for Local Agency Administration Funds

Source Category	% of Funds	Requirements
Heavy duty diesel trucks	remaining	1. A Start Letter authorizes the expenditure based on available bond cash. 2. The local agency liquidates at least 50% of the total project funds and ARB staff verifies that this condition has been satisfied.
Locomotives and railyards	remaining	1. A Start Letter authorizes the expenditure based on available bond cash. 2. The local agency liquidates 100% of the total project funds and ARB staff verifies that this condition has been satisfied.
Ships at berth	remaining	
Cargo handling equipment	remaining	
Harbor craft	remaining	1. A Start Letter authorizes the expenditure based on available bond cash. 2. The local agency liquidates at least 50% of the total project funds and ARB staff verifies that this condition has been satisfied.

b) Equipment project funds

(1) Initial expenditure

Consistent with the Start Letter, the local agency may request and ARB may initially expend Program funds for equipment projects according to the provisions for each source category listed in Table II.4 below, except for loan projects administered by a State agency. Consistent with the Start Letter, a State agency may request and ARB may expend Program funds for loan projects up to 100 percent once the interagency agreement has been executed, if applicable.

Table II.4 Initial Expenditure for Local Agency Equipment Project Funds

Source Category	% of Funds	Requirements
Heavy duty diesel trucks	up to 100%	1. A Start Letter authorizes the expenditure based on available bond cash. 2. The local agency has provided data on eligible equipment projects to ARB. ARB staff has approved the competitively ranked list of projects. The local agency has posted the approved list on its public website. 3. The approved list demonstrates a demand for the requested project funding.
Locomotives and railyards	up to 10%	
Ships at berth	up to 10%	
Cargo handling equipment	up to 100%	
Harbor craft	up to 10%	

(2) Additional expenditures

Consistent with the initial Start Letter or a subsequent Start Letter, the local agency may request and ARB may expend the remaining Program funds for equipment projects according to the provisions for each source category listed in Table II.5 below.

Table II.5 Additional Expenditures for Local Agency Equipment Project Funds

Source Category	% of Funds	Requirements
Heavy duty diesel trucks	remaining	1. A Start Letter authorizes the expenditure based on available bond cash. 2. The approved ranked list demonstrates a demand for the requested project funding.
Cargo handling equipment	remaining	
Ships at berth	remaining	1. A Start Letter authorizes the expenditure based on available bond cash. 2. The local agency has fully executed contracts for the equipment projects, demonstrating a demand for the requested project funding.
Locomotives and railyards	remaining	1. A Start Letter authorizes the expenditure based on available bond cash. 2. The local agency has fully executed contracts for the equipment projects. 3. The equipment projects are within 6 months of the anticipated post-inspection date.
Harbor craft	remaining	

3. Funding recapture – ARB

It is ARB's policy that Program funds be obligated and expended in a timely manner. The ARB Executive Officer or his or her designee has the authority to recapture funds for reallocation and expenditure prior to reversion deadlines, and may amend or modify an executed grant or interagency agreement, or establish a new grant or interagency agreement, to implement this policy.

ARB may recapture and reallocate funds including, but not limited to, the following:

- Funds allocated or paid to a local agency (or State agency administering a loan project) that the local (or State) agency notifies ARB are unlikely to be spent within the Program or statutory deadlines.
- Funds allocated or paid to a local agency (or State agency administering a loan project) that ARB staff determines are unlikely to be spent within the Program or statutory deadlines, based on the local (or State) agency's progress in implementing the grant agreement. The ARB Executive Officer or his or her designee shall notify the local (or State) agency in writing of any such determination before taking action to recapture and reallocate the funds. This action may include termination of a grant or interagency agreement, or notification that the local or State agency must return unexpended funds to ARB.
- Funds returned to ARB by a local agency (or State agency administering a loan project).
- Earned interest held by ARB or a local (or State) agency, as permitted by State law and fiscal policies.
- Funds paid to an equipment owner but returned to the local (or State) agency after the funds have been liquidated.
- Other funds that may come into the Program from other sources in the future.

ARB staff shall follow the hierarchy below for allocating recaptured funds to Board-approved primary or backup projects:

- Within the same funding category and trade corridor.
- Within the same trade corridor.
- To another trade corridor.

4. Ongoing evaluations

ARB staff shall evaluate local agency and equipment projects on an ongoing basis. Evaluations are designed to meet the accountability requirements of State law and the Executive Order S-02-07. Any Program funds that local agencies expend on projects not eligible for Program funds shall be documented as an adverse finding in the local agency's Program review or fiscal audit. The ARB Executive Officer or his or her designee may require that the local agency reimburse ARB the Program funds identified in an adverse finding, or may seek other remedies from the local agency as the Executive Officer deems appropriate.

a) Ongoing evaluations of local agency projects

Ongoing evaluation of local agency projects includes reviewing local agency project records to ensure consistency with Guidelines and emission reduction goals. Evaluations may occur as ARB staff deems necessary and feasible with available resources.

Local agencies shall allow Program review or fiscal audit staff, or any authorized designee, access to all required records and personnel with knowledge of such records during normal business hours, to conduct ongoing evaluations for the purpose of monitoring the Program.

b) Ongoing evaluations of equipment projects

Ongoing evaluation of equipment projects includes reviewing equipment project records to ensure consistency with Guidelines and emission reduction goals, and site visits to inspect engines, vehicles, or other equipment funded under the Program. Evaluations of equipment projects may occur unannounced as ARB staff deem necessary and feasible with available resources.

Equipment owners shall allow local agencies, Program review or fiscal audit staff, or any authorized designee access to all required records and personnel with knowledge of such records during normal business hours to conduct ongoing evaluations for the purpose of monitoring the Program.

In addition to local agency review to ensure the appropriate registration and operation of bond funded equipment, ARB may periodically monitor, through federal, State, and local equipment registration databases, as applicable, ongoing equipment project compliance with California registration and operational requirements. Equipment registration databases may include, but are not limited to:

- California Air Resources Board databases.
- California Department of Motor Vehicle databases.
    - California International Registration Plan (California IRP).
- California Department of Fish and Wildlife databases.
- California Department of Transportation databases.
- Local agency databases, as available, such as air district permit records or port access databases.

When ARB field inspectors check trucks, locomotives, railyards, harbor craft, cargo handling equipment, and ship berths for compliance with ARB regulations or enforceable agreements, they shall also assess compliance with Program requirements for any bond-funded equipment. The inspectors, via an equipment database, shall determine if the equipment received bond funding and evaluate bond-funded equipment to ensure that all pollution controls are functioning and the equipment is meeting the Program operating conditions.

Nothing in these Guidelines is to be construed as limiting or otherwise affecting in any way ARB's enforcement authority for ensuring that equipment subject to the Program complies with all Program requirements, as well as all applicable regulations or enforceable agreements.

(1) Electronic monitoring devices

With the exception of contracts for locomotive projects and grid-based shore power projects, all equipment project contracts shall require that the equipment owner agree to the installation and use of an electronic monitoring device at any time during the equipment project contract term. Equipment project contracts for locomotives shall require equipment owners to install and use global positioning systems (GPS), and report data.

ARB staff requires the use of electronic monitoring devices on bond-funded equipment for the locomotive and harbor craft projects that allow for 90 percent California operation.

For each equipment project, all data collected from any electronic monitoring device required under this Program shall be provided to the local agency administering that equipment project and to ARB staff or its contractors for their use and analyses. Such data may include, but not be limited to, vehicle identification number (VIN); date, time, and distance traveled for each trip; GPS locational information; emissions or fuel usage rates; and other information collected from gauges, sensors, and other sources.

Data collected from these monitoring devices shall be disclosed only to the local agency and ARB staff or its contractors, except as otherwise provided by law. Such data shall be provided upon request in the form and format agreed to by the parties or as otherwise specified in these Guidelines. Each equipment project contract shall require all signatories to acknowledge their understanding and agreement to allowing the local agency and ARB staff and its contractors such access to the collected data. Nothing in this provision or these Guidelines shall be construed in any way as limiting ARB's ability to publish or release the collected data or the results of analyses using these collected data in summary form without individual personal identifiers. For purposes of this Program, "personal identifiers" include only the name of the vehicle driver or equipment operator and the driver's or operator's home address in alpha-numeric format (e.g., 1000 Apple Way), if collected.

5. Program Oversight

Program oversight is designed to ensure that all local agency and equipment projects funded under the Program meet the requirements of these Guidelines. ARB or its designees shall review a sufficient number of local agency projects and equipment projects each year to ensure effective Program implementation and accountability, subject to available resources.

a) Program review and fiscal audit of local agency projects

Pursuant to H&S §39625.02(e)(1), ARB staff or its designees shall conduct local agency programmatic reviews and fiscal audits. This may include Program reviews by ARB staff or its designees (Program review) and fiscal compliance audits by DOF or its designees (fiscal audit).

To ensure objectivity and the efficient use of resources, ARB shall use a risk-based approach to select specific local agency projects for review during a given year. Consistent with this approach, local agencies that are found to demonstrate good performance in a Program review will likely be subject to less frequent reviews in the future.

Any Program funds that local agencies expend on projects not eligible for Program funds shall be documented as an adverse finding in the local agency's Program review or fiscal audit. The ARB Executive Officer or his or her designee may require that the local agency reimburse ARB the Program funds identified in an adverse finding, or may seek other remedies from the local agency as the Executive Officer deems appropriate.

The responsibilities of ARB or its designees during a Program review or fiscal audit include, but are not limited to, the following:

- Program review or fiscal audit shall be conducted in a manner that reflects the public responsibility and accountability entrusted to ARB.
- ARB or its designees shall maintain open channels of communication with the local agency; for example, fully explaining the scope and procedures of the Program review or fiscal audit at the beginning of the process, informing the affected parties of potential issues as they unfold, affording numerous opportunities for input throughout the Program review or fiscal audit, thoroughly discussing any findings and recommendations during the exit interview, and allowing the local agency an opportunity to formally respond to the Program review or fiscal audit report.
- To ensure objectivity and predictability, ARB or its designees shall base findings and recommendations on materials such as State law, these Guidelines, Generally Accepted Accounting Principles (GAAP), e-mail communications between ARB staff and the local agency or equipment owner, the local agency project application, and any local agency's own requirements.
- All final Program review or fiscal audit reports, local agency or equipment owner responses, and related documents shall be readily available to the public.
- ARB shall conduct sufficient follow-up activities, including follow-up reviews, to ensure that any identified deficiencies are promptly and effectively addressed.

The responsibilities of a local agency during a Program review or fiscal audit shall include, but are not limited to, the following:

- Ensure that Program files and other requested information are readily available to Program review or fiscal audit staff.
- At a minimum, participate in the entrance and exit interviews and ensure that local agency or equipment owner staff is cooperative with Program review or fiscal audit staff.
- Communicate fully with review or audit staff throughout the course of a Program review or fiscal audit.
- Make every effort, including requesting assistance from ARB if necessary, to ensure that identified deficiencies are promptly and effectively rectified.

To assist State agencies with the Program review or fiscal audit process, local agencies shall provide, upon request, access to documentation pertaining to the Program which includes, but is not limited to, the following:

- General:
    - Organization charts.
    - Contact information for the Program and designated accounting liaisons.
    - Copies of grant agreements and any amendments between ARB and the local agency.
    - Copies of contracts and any amendments between the local agency and the equipment owner.
    - Copies of any contracts and any amendments between the local agency and subcontractors and consultants.
    - Reports filed with ARB, if applicable.
- Accounting records:
    - General ledger chart of accounts.
    - Copies of the policies and procedures for:
        - Receipt and deposit of project funds.
        - Review, approval, and payment of project invoices.
        - Calculation and allocation of Program administration costs.
        - Tracking and allocating interest earned on the Program.
    - Reports from the general ledger showing receipts, expenditures, interest earnings, and annual balances for projects and local administration during the Program review or fiscal audit period.
    - Copies of audit reports covering financial statements, operations, and internal controls during the Program review or fiscal audit period.

    - Access during fieldwork to the following accounting records:
        - Invoices/claims from the local agency to ARB for Program payments, and invoices from equipment owners to the local agency.
        - Receipts/deposit slips showing payments received from ARB.
        - Invoices from subcontractors/consultants to the local agency or equipment owner.
        - Canceled checks or other expenditure documents supporting payment to the subcontractors/consultants.
        - Bank statements and reconciliations throughout the Program review or fiscal audit period.
- Program records:
    - Reports that list all projects associated with the programs showing:
        - Equipment project number.
        - Subcontractor and consultant contact information.
        - Dates, check numbers, amounts, and funding sources for each equipment project expenditure.
        - Fiscal year of the funding appropriation for the applicable grant agreement.
    - Copies of any and all records prepared by the local agency, the equipment owner, and any third parties involved in the application, review, inspection, scrappage, or payment steps.
    - Copies of the local agency procedures for review, approval, and submittal of subcontractor invoices for payment.
    - Access during fieldwork to the following Program project records:
        - Contracts between the local agency or equipment owner and the subcontractors/consultants.
        - Invoices from subcontractors/consultants to the local agency or equipment owner.
        - Requests to local agency's accounting for payment of project invoices.

The local agency shall retain all records subject to the recordkeeping requirements for local agency projects, including records to meet State and federal bond requirements. Retained records shall include, but are not limited to: local agency file reviews of annual equipment project reports, annual reports provided by equipment owners, any relevant project updates provided by equipment owners, documentation of equipment inspections, accounting records and reports for the fund accounts from which the proceeds were disbursed, and other relevant information.

The local agency agrees to maintain such records as specified in the grant agreement to support a possible Program review or fiscal audit for 35 years after the bond issuance date and to send all records to ARB by the End Date of the grant agreement in an electronic format to be determined by ARB.

Local agencies shall allow Program review or fiscal audit staff, or any other authorized designee, access to all required records and personnel with knowledge of such records during normal business hours to conduct Program reviews and fiscal audits.

b) Program review and fiscal audit of equipment projects

ARB staff or its authorized designee shall use a risk-based approach to select specific equipment projects for Program review or fiscal. If ARB staff discovers non-performance issues with specific equipment projects, the local agency shall be notified to take appropriate action. If ARB staff discovers that the equipment project is not in compliance with ARB regulations, the ARB Enforcement Division shall be notified to take appropriate enforcement action.

Local agencies shall allow Program review or fiscal audit staff, or any other authorized designee, access to all required records and personnel with knowledge of such records during normal business hours, to conduct Program reviews and fiscal audits.

6. ARB reporting

ARB staff shall provide regular updates and reports on the implementation status of the Program.

a) Public website

ARB is committed to providing the public with information regarding the status of bond-funded programs. In accordance with ARB policy and Executive Order S-02-07, ARB shall provide periodic data updates on ARB's Program website. At a minimum, ARB shall post:

- ARB semi-annual reports to DOF (compiled from local agency reports).
- Local agency project completion reports.
- ARB annual reports.

ARB shall also develop and maintain the Goods Movement Online Database showing information and progress on local agency projects, as well as individual equipment projects. This searchable Database will allow the public to find out about projects funded in a specific trade corridor, and the implementation status for each project.

b) Community meetings

ARB, in conjunction with the local agencies, shall host community meetings as specified in Chapter IV.A.1.a.

c) Updates to the Department of Finance

ARB shall provide semi-annual and project completion reports to DOF, based on the reports submitted by local agencies [H&S §39625.02(f)(1)-(2)].

d) ARB annual report

ARB staff shall prepare an annual report on progress made to implement the Program [H&S §39627.5]. This report shall be submitted to the Legislature and shall include the following minimum elements:

- Description of local agency projects funded by the Program, including the following information for each project:
  - Amount of Program funds allocated.
  - Location.
  - Implementation status.
  - The number of vehicles, pieces of equipment, ship berths, etc., expected to be updated.
  - Estimate of the emission reductions achieved or expected.
  - Any changes to the scope or award amounts of grant agreements.
- Total funds allocated, obligated, and expended under the Program to date.
- Actions undertaken to ensure local agency-funded projects are being implemented in a timely fashion and within the budget for Program funds.

7. Local agency non-performance

Prior to implementing any of the non-performance provisions, ARB staff shall make a reasonable effort to work with local agency staff to address and resolve any issues relating to Program implementation.

ARB staff may request a local agency to provide sufficient information to demonstrate what actions the agency will take to obligate and/or liquidate Program funds within the Program or statutory deadlines, if it appears the local agency may be unlikely to meet those deadlines.

a) Non-performance finding

If ARB staff identifies instances of local agency non-performance, ARB staff shall issue a written non-performance finding to that local agency.

Local agency non-performance includes, but is not limited to, issues with any one or more of the following areas:

- Misuse of Program funds.
- Funding of ineligible equipment projects or other items.
- Failure to comply with these Guidelines or statutes.
- Failure to meet schedule milestones identified in the grant agreement.
- Failure to obligate or expend Program funds within established timelines.
- Insufficient performance or widespread deficiencies with Program oversight, enforcement, record keeping, contracting provisions, inspections, Program review or fiscal audit procedures, or any other Program element as determined by ARB staff.
- Exceeding administration fund allotment.

- Insufficient, incomplete, or faulty project documentation.
- Failure to provide required documentation or reports requested by ARB, DOF, or other agencies in a timely manner.
- Poor performance as determined by a Program review or fiscal audit.

b) Local agency appeal process

Upon notification of a non-performance finding, local agency staff or management may request a meeting with ARB management to dispute or discuss the validity of the non-performance finding. Any disagreements over the validity of the non-performance finding that cannot be resolved at the management level within 30 days of when the issue is first raised with ARB staff shall be subject to resolution by ARB's Executive Officer or his or her designee. Nothing contained in this paragraph is intended to limit any of the rights or remedies that the parties may have under law.

c) Remedies for non-performance

(1) Local agency probation

ARB staff shall consider a local agency on probation at the time a non-performance finding is sent to the local agency.

The local agency on probation shall develop a corrective action plan that must be submitted to ARB within 30 days of receipt of the written non-performance finding from ARB.

ARB shall approve or disapprove with recommendations the corrective action plan within 30 business days of receipt from the local agency. To be considered for approval, the corrective action plan must include adequate, expeditious, and enforceable commitments to address the specific non-performance problems, including timeframes to complete each commitment.

If the corrective action plan is approved, ARB staff shall evaluate the local agency's performance under the approved corrective action plan, including timelines, to determine whether the local agency met its commitments and fully addressed the issues for which it was placed on probation. ARB may also impose additional requirements, depending upon the scope or severity of the local agency's non-compliance with Program requirements.

No later than 1 year from the date the local agency is originally placed on probation, ARB shall do one of the following, whichever ARB, in its sole discretion, deems appropriate:

- Remove the local agency from probation designation.
- Re-designate the local agency on probation for a period of up to one additional year.

- Re-designate the local agency on probation for a period of up to one additional year, and require that all, or a portion of, the remaining unspent Program funds available for expenditure by ARB and/or the local agency plus any unspent earned interest are either:
    - Recaptured by ARB, or
    - Revert back to the California Ports Infrastructure, Security, and Air Quality Improvement Account.

ARB may also require local agencies on probation to comply with additional requirements or stipulations prior to future ARB expenditures under existing grant agreement(s), or prior to ARB consideration of future applications from the local agency for Program funds.

If the corrective action plan is disapproved by ARB with recommendations, the local agency shall have 30 days to revise the plan according to the recommendations, and resubmit it to ARB. ARB shall approve the corrective action plan as re-submitted within 30 days, or develop a recommendation to require that all, or a portion of, the remaining Program funds available for expenditure by ARB and/or the local agency plus any unspent earned interest are either:

- Recaptured by ARB, or
- Revert back to the California Ports Infrastructure, Security, and Air Quality Improvement Account.

ARB shall make information pertaining to a local agency's probationary status available to the public.

(2) Fund reversion

Program funds automatically revert back to the California Ports Infrastructure, Security, and Air Quality Improvement Account under the following conditions:

- Funds held by ARB revert if ARB does not obligate funds or liquidate funds within the deadlines set forth in State law.
- Funds held by a local agency revert if the local agency does not obligate funds within 2 years of executing a grant agreement with ARB, or expend funds within 4 years of obligation. A local agency may return unused funds ahead of the reversion deadline if the local agency concludes it cannot spend the funds for any reason.
- Funds held by a local agency are recaptured when the local agency withdraws from the Program or its grant agreement is terminated, consistent with State law, irrespective of whether the funds have been obligated but not yet expended.

All Program funds that revert back to the California Ports Infrastructure, Security, and Air Quality Improvement Account are subject to re-appropriation by the Legislature.

ARB and local agencies are released from funding commitments in grant agreements or contracts, as applicable, for any and all funds that are reverted back to the California Ports Infrastructure, Security, and Air Quality Improvement Account. This release does not apply to any contractual obligations the local agency may have with the equipment owner or operators.

(3) Future grant opportunities

A local agency's track record in administering Program funds shall be a factor in ARB's consideration of subsequent applications from that local agency for future funds. ARB may require local agencies with a current or prior probation designation to comply with additional requirements or stipulations, prior to ARB consideration of future fiscal year Program funds. This may include:

- Exclusion of a local agency from participation in the Program due to past non-performance issues.
- Based on the specific types and seriousness of a local agency's past non-performance issues, limitation(s) on future grant funding opportunities, levels, volume(s), or other limitation(s), as determined by ARB on a case-by-case basis.
- The track record of the local agency may also be considered by ARB in conducting its Program review or fiscal audits of the local agency.

8. State agency non-performance

Prior to implementing any of the non-performance provisions, ARB staff shall make a reasonable effort to work with State agency staff to address and resolve any issues relating to Program implementation.

ARB shall issue a written non-performance finding if ARB staff identifies instances of non-performance.

State agency non-performance includes, but is not limited to, issues with any one or more of the following areas:

- Failure to comply with these Guidelines or statutes.
- Failure to obligate or expend Program funds within established timelines, or to show timely interim progress to meet these timelines.
- Insufficient performance or widespread deficiencies with Program oversight, enforcement, record keeping, contracting provisions, inspections, Program review or fiscal audit procedures or any other Program element as determined by ARB.
- Misuse of Program funds.
- Funding of ineligible projects or other items.
- Exceeding administration fund allotment.
- Insufficient, incomplete, or faulty project documentation.
- Failure to provide required documentation or reports requested from ARB, DOF, or other agencies in a timely manner.
- Poor performance as determined by a Program review or fiscal audit.

Remedies for non-performance include:

- Recovery of funds
- Constraints on opportunity to compete for future Program funds.

III. Local Agency Project Proposal

Local public entities shall successfully register with ARB according to instructions described in the notice of funding availability (NOFA) before submitting an application for Program funds.

Note: Since the applications will require a substantial investment of time by the local public entity, ARB staff encourages each entity to consult early with ARB staff regarding its ability to meet the requirements of the statute and the Guidelines to qualify as an applicant.

A. Local Agency Registration

Interested local public entities shall submit registration information as required by the NOFA sufficient for ARB staff to assess the entity's qualification as a local public entity, by the deadline identified in the NOFA.

1. Existing or returning local agency registration

Local public entities that have successfully registered as local agencies in the Program for past funding cycles do not need to resubmit registration information. These agencies shall submit the following information:

- Letter of intent to ARB to compete for Program funds for the funding cycle(s) announced in the NOFA.
- Any appropriate updates to the agency contact information.
- Any additional documentation requested by ARB staff.

2. New local agency registration

Local public entities that have not previously registered as local agencies in the Program shall provide sufficient information to demonstrate to ARB that they are eligible to apply as a local public entity. Registration information shall include, at a minimum, the following:

- Type of local agency (air district, seaport, transportation agency, etc.).
- Jurisdiction, including geographic boundaries and trade corridor.
- Mission statement or purpose.
- General information on the entity (total budget, overall work plan or program, etc.).
- Legal citations and text which establishes that the local public entity has the legal authority to implement a regional scale incentive program for freight movement sources that includes: project solicitation, competition for funding, funding awards, execution of contracts, and equipment inspections across the entire trade corridor where the local public entity is based.

- A description of how the local public entity is involved in freight movement or air quality improvements associated with goods movement, as required by the statute. This description shall include the entity's specific roles, authorities, responsibilities, and annual budget for goods movement air quality projects.
- A statement as to whether the local public entity fulfills the additional requirements of these Guidelines and further qualifies as an applicant because it:
    - Is directly responsible for operating a freight movement facility (e.g., seaport or airport); or
    - Has statutory authority for designing and implementing strategies and/or plans to reduce emissions or health risk from air pollution sources (e.g., local air pollution control district and air quality management district); or
    - Has statutory authority for planning and funding regional goods movement infrastructure projects (e.g., regional transportation planning agency).
- Local public entity contact information.

Local public entities shall provide any additional documentation not described above upon request by ARB.

3. New State agency registration

For the purpose of administering a loan or loan guarantee program only, any State agency, including ARB, is eligible to apply for Program funding. All State agencies shall provide the information in the NOFA to register.

B. Legal and Program Restrictions

In the application for funding, local agencies shall certify that the proposed local agency project would meet the requirements of the statute and the Guidelines. This section discusses the legal and Program restrictions on eligible projects.

1. Legal restrictions

Local agencies shall certify that the local agency project would achieve emission reductions not otherwise required by law or regulation [H&S §39625.5(a)(1)]. "Not otherwise required by law or regulation" means the emission reductions are not required pursuant to any local, State, or federal law, rule, or regulation; any requirements imposed by the California Environmental Quality Act (CEQA); or any requirements imposed by a legal instrument such as a legal settlement or consent decree (collectively referred to as "law or regulation"). For purposes of this Program only, "not otherwise required by law or regulation" does not apply to any tariff, ordinance, or other requirement imposed by a local agency based on that local agency's authority as a market participant or municipal proprietor or the local agency's authority to enter into contracts with equipment owners and operators.

The following are examples of laws or regulations that may prohibit equipment projects that would otherwise be eligible for funding under this Program. Chapter III.B.1.d. below discusses Program funding for equipment projects that may be subject to future ARB regulations.

a) Environmental mitigation

Local agencies shall not request or expend Program funds for equipment projects that are required as a specific CEQA or National Environmental Policy Act (NEPA) mitigation measure in a certified CEQA or NEPA document.

b) Railroad agreements

For locomotives, the statute specifically requires ARB to determine that the emission reductions that would be achieved by the locomotive equipment project are not necessary to satisfy any mandated emission reduction requirement under an agreement between a railroad company and a state or federal agency, or a local air district [H&S §39625.5(a)(2)(B)].

ARB has signed two Memoranda of Understanding (MOU) with the Class I railroads – Union Pacific and BNSF Railway – to reduce the emissions and health risks from locomotive operations. Program funding shall not be used for idle reduction technology on locomotives (required by the 2005 MOU) or for cleaner locomotives credited towards the railroads' compliance with the 2010 fleet average emission standard for the South Coast Air Basin (required by the 1998 MOU). Locomotive repowers or replacements that go beyond the itemized requirements of these agreements shall be eligible for bond funding.

c) Existing ARB regulations

Local agencies shall not request or expend Program funds for equipment projects that are used to directly comply with existing regulations. The Program can co-fund eligible equipment subject to existing or future regulations, but only if the equipment upgrades are early (completed a set time prior to the compliance date) or extra (the upgrade must go beyond the regulatory requirements, as described in these Guidelines).

Existing ARB regulations that are currently in place for the following source categories applicable to this Program include, but are not limited to:

- New heavy-duty diesel vehicles – *Exhaust Emissions Standards and Test Procedures -1985 and Subsequent Model Heavy-Duty Engines and Vehicles* (Code of Regulations (CCR), title 13, division 3, chapter 1 §1956.8).
- In-use on-road heavy-duty trucks and buses – *Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-use Heavy Duty Diesel-fueled Vehicles* (CCR, title 13, division 3, chapter 1, article 4.5, §2025).

- Trucks serving ports and intermodal railyards – *In-Use On-Road Diesel-Fueled Heavy-Duty Drayage Trucks* (CCR, title 13, division 3, chapter 1, article 3 §2027).
- Heavy-duty truck idling – *Requirements to Reduce Idling Emissions from New and In-Use Trucks, Beginning in 2008* (CCR, title 13, division 3, §1956.8, §2404, §2424, §2425, and §2485).
- Truck smoke and emission control inspections – *Heavy-Duty Diesel Smoke Emission Testing, and Heavy-Duty Vehicle Emission Control System Inspections* (CCR, title 13, division 3, chapter 3.5, §§2180-2189) and *Periodic Smoke Inspections of Heavy-Duty Diesel Powered Vehicles* (CCR, title 13, division 3, chapter 3.6, §§2190-2194).
- Cargo handling equipment – *Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards* (CCR, title 13, division 3, chapter 1 §2479).
- Ships at berth (shore power) – *Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port* (CCR, title 13, division 3, chapter 5.1, §2299.3 and title 17, division 3, chapter 1, subchapter 7.5, §93118.3).
- Commercial harbor craft engines – *Regulations to Reduce Emissions from Diesel Engines on Commercial Harbor Craft Operated Within California Waters and 24 Nautical Miles of the California Baseline* (CCR, title 13, division 3, chapter 5.1, §2299.5 and title 17, chapter 1, division 3, subchapter 7.5, §93118.5).

Information regarding existing ARB regulations for specific source categories can be found on the following ARB website: http://www.arb.ca.gov/diesel/mobile.htm, or in the California Code of Regulations through the Office of Administrative Law: http://www.oal.ca.gov/ccr.htm.

d) Upcoming ARB regulations

Local agencies may request and expend Program funds for equipment upgrades that may be required by a future ARB regulation up until the date of Board action to adopt the regulation.

As of the date of Board action, only equipment projects with executed contracts between the equipment owner and local agency shall be exempt from project completion timing requirements (e.g., specified months or years prior to the adopted regulatory compliance date for that equipment upgrade).

Once the Board has taken action to approve a regulation, subsequent equipment projects shall be subject to the project completion timing requirements identified in the equipment project specifications or include emission reductions that go beyond the regulatory requirements.

Information regarding upcoming ARB regulations for specific source categories can be found on the following ARB website: http://www.arb.ca.gov/diesel/mobile.htm.

2. Program restrictions

The local agency shall solicit, accept applications, and fund equipment projects from all equipment owners who meet the eligibility requirements defined in these Guidelines, subject to the local agency project described in the grant agreement as well as the project evaluation and competitive ranking process. Notwithstanding the above, a local agency may exclude from funding eligibility any equipment owner who has a demonstrated inability to meet contractual obligations with the local agency.

A local agency shall not propose or implement any requirements that are inconsistent with these Guidelines, including, but not limited to:

- A local agency applying for Program funds cannot limit the request for funds to only certain equipment project options within source and funding categories. A local agency must administer projects for the entire funding category in the trade corridor.
- A local agency shall not restrict funding eligibility to a preferred individual, company, business entity, or other defined group of equipment owners.
- A local agency shall not accept equipment project applications for equipment that is under a contractual obligation with this Program, the Carl Moyer program, the Voucher Incentive Program (VIP), or any other ARB incentive programs.
- Other than the exceptions specifically described in Chapter III.C.4., a local agency shall not restrict funding eligibility to equipment that operates solely or primarily within its jurisdictional boundaries.
- A local agency shall not restrict equipment projects to replacement or retrofit equipment manufactured or sold by a specified company or companies. The local agency shall allow all eligible equipment projects that meet the emissions performance level detailed in the project specifications of these Guidelines to compete for Program funding.
- A local agency shall not restrict equipment projects to equipment sold by a truck dealer or retrofit vendor with a contract or MOU to do pre-inspections.
- The local agency shall not propose or allow equipment projects to be completed less time in advance of a regulatory requirement than provided for in the project specification.
- A local agency shall not impose travel restrictions on Program-funded equipment beyond the operating limitations defined in these Guidelines and any approved alternatives described in Chapter III.C.4. For example, a local agency cannot restrict the travel (or a portion of the travel) of trucks or line-haul locomotives to within a single city, county, air district, air basin, trade corridor, or similar geographic area that is smaller than the four trade corridors or the State of California.

- A local agency shall not fund equipment projects failing to meet the minimum equipment project requirements listed in Appendices A-H. In conjunction with the minimum equipment project requirements, a local agency shall not fund higher emitting equipment, pay more per piece of equipment, modify the project life options, remove the project eligibility and other requirements, or relax the operating conditions as compared to the specifications in these Guidelines for each equipment project option.
- A local agency shall not impose non-air quality requirements (like fees or employee drivers) on Program-funded equipment projects.

C. Project Alternatives for Local Agencies

Under this Program, a "local agency project" is defined as the funding category-specific incentive program that the local agency proposes to implement with Program funding.

These Guidelines limit eligibility for Program funds to equipment with recent operation in one or more trade corridors. Except as described in Chapter III.B.1. and Chapter III.B.2., local agencies may customize their proposal(s) for each funding category, by incorporating any of the Program alternatives listed below, if clearly stated in the application and approved by ARB staff.

ARB staff may, at its discretion, expand the following list of alternatives to include additional items that do not fundamentally alter the equipment project eligibility criteria, the equipment project requirements and operating conditions, or the effectiveness of those provisions in reducing emissions.

1. Technology alternatives

The local agency must solicit, evaluate, and fund applications for all equipment project options within a funding category. The local agency may propose to customize its proposal by incorporating any of the following approved technology alternatives:

- A local agency may propose to offer non-Program funding for equipment that meets an emissions performance standard that requires lower emissions than the specifications in these Guidelines, provided the technology to meet that standard is demonstrated, verified by ARB (if applicable) and commercially available. This alternative is subject to the following restrictions:
    - The local agency shall not propose to offer Program funding at a level for each equipment project that exceeds the funding caps in these Guidelines.
    - The local agency shall not require equipment meeting lower emission standards than the emissions levels for the equipment project options in these Guidelines.
    - The local agency shall not propose to restrict eligibility for Program funding to equipment projects that utilize the additional funding to meet the lower emission standards (i.e., any equipment project that meets the minimum specifications established in these Guidelines must be eligible to compete for Program funding administered by the local agency for that funding category).

For example, a local agency could propose a truck program that does not require but offers additional funds for replacement with natural gas; with the Program paying up to the maximum $60,000 per truck and the local agency providing funding from another, non-State source for the incremental cost of natural gas. Following ARB approval of the local agency project, the local agency shall solicit equipment applications for both the lower emission natural gas replacement approach as well as the truck replacement approach listed in the Guidelines.

- A local agency may propose to offer non-Program funding for equipment monitoring or tracking devices (like GPS or radio-frequency identification (RFID) devices). In this case, the local agency shall commit to monitor the equipment for the project life. The local agency shall also make provisions acceptable to ARB staff for access to the data collected on individual vehicles, vessels or equipment and periodic data reports.
- A local agency may propose to offer non-Program funding for efficiency upgrades, like aerodynamic devices on trucks.

2. Project implementation approaches and use of contractors

A local agency project implementation approach is defined as the mechanism(s) a local agency may propose to implement a local agency project. For example, as part of a single local agency project, a local agency may propose to directly administer grants to truck owners for replacement projects and to hire a contractor or other third party to run a truck retrofit program. Each of these is an implementation approach.
The local agency may propose to customize its proposal by incorporating any of the following approved implementation approaches and use of contractors, if clearly stated in the application and approved by ARB staff:

- A local agency may propose a combination of implementation approaches to target recruitment of eligible projects and administration of funds for selected projects.
- The local agency may apply for Program funds to be administered in full or in part by a third party contractor or contractors, but shall retain full responsibility for the Program requirements and deadlines specified in these Guidelines and executed grant agreements with ARB. Any third party overhead and administration costs shall count against the cap established in these Guidelines for local agency administration funds.

Program requirements for implementation approaches:

- Regardless of the local agency's use of multiple implementation approaches or third party contractors, the competitive ranking process must take place across the entire funding category to ensure fair and equitable competition between eligible equipment projects.
- The local agency shall not commit or obligate Program funds to specific project implementation approaches or third party contractors prior to the completion of the competitive ranking process.

For example, as part of a single local agency project, a local agency may propose to employ three contractors to run truck replacement programs – one focused on a lease-to-own program for diesel trucks, one on leasing natural gas trucks, and one on offering grants to truck owners for the purchase of new trucks. These contractors can each market their project implementation approach and solicit applications for eligible truck projects, consistent with these Guidelines and the project grant agreement. The local agency must then competitively rank the applications from all three contractors together to determine which specific equipment projects will be funded. The contractors can then administer the funding for the equipment projects selected from the competitive process.

3. Procedure/process alternatives

The local agency may propose to customize its proposal by incorporating any of the following procedure/process alternatives, if clearly stated in the application and approved by ARB staff:

- A local agency can shorten the time allowed from execution of the equipment project contract to the project becoming operational, consistent with typical and customary schedules to complete such projects.
- A local agency can expand the list of information required on an equipment project application or the reporting requirements for equipment options.
- A local agency can expand the equipment inspection or scrappage requirements.

4. Geographic operations

For clarity, this section describes both the geographic requirements that a local agency must implement and the specific situations where the local agency may propose to customize its proposal by incorporating geographic alternatives. The local agency application shall clearly describe (if applicable) any proposed geographic alternatives. ARB staff expects that local agencies will propose to administer local agency projects for equipment that operates in the trade corridors, including the corridor where the local agency has jurisdiction.

These Guidelines limit eligibility for Program funds to equipment with recent operation in one or more trade corridors. Except as described below, a local agency may not propose or implement a local agency project that restricts access to Program funding to equipment operating at a single facility or within a single city, county, air district, air basin, trade corridor, or similar geographic area that is smaller than the four trade corridors or the State of California.

- **Trucks**. A local agency that applies for truck funds shall recruit eligible trucks that travel within the trade corridor and eligible truck stop/distribution centers within the trade corridor where the local agency has jurisdiction. The local agency shall accept applications and fund all eligible trucks that travel within the four trade corridors, regardless of where those trucks are based, subject to review of equipment project

applications and the competitive ranking process. A local agency may propose to add an eligibility requirement that the old truck must have traveled at least 10 percent of its annual miles within the trade corridor where the local agency has jurisdiction. This requirement would be added to the base Program requirements that the old truck traveled at least 75 percent of its annual miles within California and the new truck travel at least 50 percent of its annual miles within the four trade corridors as well as 90 percent or 100 percent of its miles in California, as applicable. A local agency may require that truck stops and distribution centers eligible for funding be located within the trade corridor where the local agency has jurisdiction.

- **Locomotives**. A local agency that applies for locomotive funds may require that both the old and new switcher locomotive operate full-time within the trade corridor where the local agency has jurisdiction, except for periodic maintenance in another region or neighboring state. A local agency may propose to offer an option for 90 percent future operation in California. All locomotive projects require the equipment owner to install a GPS device, fund data collection, and report location data. The local agency may also require that both the old and new medium horsepower or line-haul locomotive operate at least 10 percent of the time in the corridor where the local agency has jurisdiction, and full-time within California, except for periodic maintenance in a neighboring state. The local agency shall recruit all eligible medium horsepower and line-haul locomotives operating in the trade corridor, regardless of where in California the locomotives are based. The local agency shall similarly fund all eligible medium horsepower and line-haul locomotives serving that trade corridor and others, subject to review of equipment project applications and the competitive ranking process. A local agency may require that railyards eligible for funding install a locomotive emissions capture and control system located in the trade corridor where the local agency has jurisdiction.
- **Harbor craft**. A local agency that applies for harbor craft funds may propose to restrict eligibility to vessels that are home-ported in the trade corridor where the local agency has jurisdiction. A local agency may propose to offer an option for 90 percent future operation in California with the requirement that the equipment owner install a GPS device, fund data collection, and report location data.
- **Ships at berth**. A local agency that applies for ships at berth funds may restrict eligibility to seaports within the trade corridor where the local agency has jurisdiction.
- **Cargo handling equipment.** A local agency that applies for cargo equipment funds may restrict eligibility to equipment operating at ports and railyards within the trade corridor where the local agency has jurisdiction.

Note: Because seaports can apply directly to ARB, but railroads cannot, a seaport applying to administer projects within the combined ships at berth and cargo handling equipment funding category must solicit, evaluate, and fund equipment projects at any seaport or railyard within the trade corridor where the local agency has jurisdiction.

D. Local Agency Pre-Application Community Meeting

The local agency shall hold at least one community meeting prior to the **submittal** of the local agency project application to solicit public input on the funding categories to be addressed in the local agency project proposal. The local agency shall consider public input as it develops the local agency project application.

At a minimum, the local agency project application shall identify when and where the community meeting(s) was held, and what methods were used to advertise the meeting(s). The application shall also include documentation of the attendance and the comments received.

E. Local Agency Project Application

Local public entities that have successfully registered shall submit **two complete local agency applications** with an original signature by an authorized local agency representative **for each funding category**. Applications shall be submitted to ARB by the NOFA deadline and according to the instructions contained in the NOFA. The completed application shall include the following:

- Completed application, including a written acknowledgement that ARB staff may pro-rate the proposed local agency project at a lower level of funding and proportionally lower performance measures (vehicles, equipment, harbor craft, or berths to be updated; and the resulting emission reductions).
- Local agency board/commission resolution (see Chapter III.E.9.).

All application information shall be provided or the application shall be considered incomplete. Updates to any application information after the submittal deadline shall only be allowed on a case-by-case basis, at the discretion of ARB staff.

The local agency project application shall include, at minimum, the following information.

1. General information

a) Existing or returning local agency application

Local agencies with prior experience administering the Program shall include a brief description of such experience, including source categories and associated funding amounts.

b) New local agency application

The local agency shall include general information about the local agency consisting of, at minimum, the following:

- A description of the local agency's experience administering other incentive programs. If the local agency has implemented more than one type of incentive program, describe the program that is most similar to the project proposal first; then any other incentive programs. At minimum, the description of prior experience shall include:
    - Purpose of the incentive program (equipment upgrades, new technologies, etc.).
    - How long the local agency has administered the program.
    - Annual funding amounts.
    - General description and quantification of the equipment purchased through the program.
    - Successful outreach strategies used to solicit participation.
    - Overview of the monitoring and reporting under the program.
- Staff contact information.

The State agency shall include general information about the State agency consisting of, at minimum, the following:

- Type of State agency (environmental, finance, business, transportation, etc.).
- Mission statement or purpose.
- General information on the entity (type of programs and budget).
- A description of how the State agency is involved in providing financial assistance, such as grants or loan or loan guarantee programs. This description shall include the agency's specific roles, authorities, responsibilities, and annual budget for these programs.
- State agency contact information.

2. Project proposal

The local or State agency shall provide the following information about the agency's proposed project. The local or State agency shall at a minimum:

- Identify the trade corridor(s) targeted.
- Identify the funding category(s).
- Describe the air quality problems and key contributing pollutants in the trade corridor.

- Describe how the project is consistent with local and regional plans to reduce emissions from goods movement activities, or consistent with the regional strategies in ARB's 2006 *Emission Reduction Plan for Ports and Goods Movement in California* or the State Implementation Plan. At minimum, this description shall include the strategies or measures identified in these goods movement plans that are addressed by the local agency project proposal.
- Other related information requested by ARB staff.

3. Provisions to customize proposal

The agency application shall clearly indicate, for each funding category, if the agency is proposing to customize its proposal by incorporating any of the approved Program options described in Chapter III.C.:

- Technology alternatives.
- Project implementation approaches and use of contractors.
- Procedure/process alternatives.
- Geographic operations.

The application shall describe the reasons for each alternative proposed.

4. Funding demonstration

The local or State agency shall include a funding demonstration for each project.

Elements of funding demonstration. This funding demonstration shall include, but is not limited to:

- Documentation of the local or State agency's fiscal ability to implement the proposed local agency project.
- A copy of the local agency's most recent final fiscal compliance audit by the Department of Finance (DOF) or its designees (fiscal audit).

a) Program funds requested

- The total cost of the project, based on the estimated per unit cost for new equipment. For grid-based shore power projects and harbor craft projects, the local agency may estimate the total cost of the project in the anticipated completion year.
- The amount of Program funds requested from ARB, including the breakdown of equipment project funds and administration funds, subject to the limits in these Guidelines.

b) Match funding requirements

The local or State agency shall identify all non-Program match funding and provide the following minimum documentation:

- The specific sources of the matching funds, including private, federal, local, applicable other State, and non-applicable other State (see Chapter IV.A.6. regarding which types of other State funding are applicable for purposes of calculating the cost-effectiveness under this Program). If a local air district proposes to co-fund projects with the monies derived from the $2 surcharge on vehicle registration fees authorized by AB 923 (Chapter 707, Statutes of 2004), these monies must be identified as applicable other State funds in this demonstration.
- For each source of match funding, other than from the equipment owner:
    - Name of the program.
    - The amount.
    - Any conditions or restrictions associated with its use.
    - Any timeframe requirements associated with its expenditure.
- A demonstration that all non-Program match funds, other than from the equipment owner, are reasonably available within the timeframes of the project schedule.

Equipment owner match funding for truck projects is assumed to be 50 percent of the total cost of the project, but may vary as these projects are not subject to a 50 percent funding cap. Therefore, equipment owner match funding listed in the local agency's grant agreement is an estimate and the local agency is not required to supplement these funds if the estimate is less than what is provided in the agency application and in the grant agreement.

If a local agency wishes ARB to consider the availability of non-private match funds as a supporting factor in its allocation and award of Program grants, the local agency must submit the following additional documentation:

- For each entity identified as a source of matching funds, attach the entity's approved governing board or commission resolution (if a public agency) or a letter signed by an authorized representative (if a federal agency), stating:
    - A commitment from the entity to provide such funds for the stated purpose, including the amount, any conditions and restrictions associated with their use, and any timeframe requirements associated with their expenditure.

ARB staff may, on a case-by-case basis, allow the written commitment to be submitted up to 20 days after the application deadline.

These funds shall be considered required match funding and any changes must be approved by ARB.

5. Air quality benefits

The local agency shall use the Goods Movement Online Database to quantify the emission reductions and cost-effectiveness of a proposed local agency project. The local agency shall enter the required funding and project information into the Database. Based on that information, the Database will calculate the estimated air quality benefits and cost-effectiveness for the local agency project.

If a local agency identifies an eligible project that cannot be quantified with the Database for that funding category, the local agency should contact ARB staff for guidance. Any State agency applying for funds to administer a loan or loan guarantee program should contact ARB staff for assistance to determine the benefits and cost-effectiveness.

6. Staff resources

The local agency application shall identify and describe the staff resources necessary to effectively implement the local agency project proposal. This includes documentation of existing and planned staffing, with an indication of when planned staff will be hired.

The local agency shall affirmatively demonstrate that the agency has or will have the necessary resources in place to meet the demands of the project(s) type and scope. The staff demonstration shall be based (if applicable) on the local agency's prior experience implementing incentive programs that are similar to the funding category in the proposal. A local agency without prior experience implementing incentive programs for the proposed funding category should contact ARB or a local agency in the region to obtain assistance with assessing the staff resources the agency will need to meet the demands of the project(s).

The local agency shall provide documentation regarding the relationship between the number of pieces of equipment that can be upgraded in a given timeframe and the number of staff needed to accomplish those upgrades. The information shall include, but is not limited to, the following (based on experience):

- Total staff positions (in equivalent PYs) assigned to implement incentive funds under the prior program(s) in the last 2 years.
- Plans to hire or contract additional staff to implement funding requested.

7. Project schedule

At a minimum, the local agency project schedule shall provide the approximate number of weeks necessary to accomplish each of the milestones identified below (following the execution of grant agreements and the receipt of the project Start Letter from ARB).

- Equipment project solicitation period, including marketing/outreach.
- Equipment project application review period.
- Competitive ranking and selection of equipment projects and webposting.
- Equipment owner notification period.

- Equipment pre-inspection period.
- Contract signature period.
- Equipment post-inspection period.
- Liquidation period.

The State agency project schedule shall identify the key milestones and the approximate number of weeks necessary to accomplish each of the milestones, following the execution of an interagency agreement (where applicable) and notification from ARB that there is bond funding available to begin the project.

8. Certification to comply with Program requirements

The local agency shall include a certification that it has the ability and intent to fully and effectively satisfy each of the local agency project implementation requirements detailed in these Guidelines including, but not limited to, those listed below. Local agencies currently administering incentive programs similar to this Program may use existing policies and procedures that are modified to reflect the unique requirements of this Program.

- Support public participation.
- Conduct marketing and solicit equipment project applications (including targeted outreach and assistance to independent truck owner-operators).
- Review and competitively rank project applications (including web posting).
- Select equipment projects for funding, including any local board/commission approval process.
- Conduct equipment pre-inspections and compliance checks.
- Notify equipment owners of the status of their application.
- Execute equipment project contracts.
- Ensure equipment scrappage where required.
- Conduct post-inspections of new or upgraded equipment.
- Request expenditures from ARB.
- Process invoices and requests from equipment owners for payment (including direct payments to vendors and reimbursements).
- Calculate and report earned interest.
- Evaluate equipment projects and assess on-going compliance with contract conditions.
- Provide required reports to ARB (including the ability to submit equipment project data electronically when requested).
- Participate in Program reviews by ARB staff or its designees (Program review) and fiscal audits.

A State agency shall include a certification that will comply with all requirements that are applicable to loan or loan guarantee projects. State agencies shall also include a description of proposed actions to evaluate loan and loan guarantee projects on an ongoing basis to meet the accountability requirements of SB 88 and the Governor's Executive Order S-02-07.

9. Local agency board/commission resolutions

The local agency shall provide ARB with a resolution of the local agency governing board or commission that authorizes the local agency to enter into a grant agreement with ARB, accept funds, and provide any matching funds under the fiduciary control of the local agency that are identified in the local agency project funding demonstration.

The local agency resolution shall also clearly identify the local agency's board/commission role or board/commission delegations to local agency staff for the following:

- The local agency representative authorized to sign and submit the local agency project application.
- The local agency representative authorized to sign/execute a grant agreement between ARB and the local agency.
- The approval of a competitively ranked equipment project list indicating the equipment projects selected for funding and a backup list of eligible equipment projects.
- The local agency representative authorized to sign/execute an equipment project contract between the local agency and equipment owner.
- The local agency representative authorized to sign Grant Expenditure Requests and delegate signature authorization to others.

The local agency resolution shall also identify all sources and amounts of non-private matching funds committed to Program projects, and shall state any conditions and time constraints associated with those funds.

ARB staff may, on a case-by-case basis, allow a local agency to submit its approved resolution up to 20 days after the application deadline.

For loan projects, if required by the State agency that is accepting the funds, the State agency will provide ARB with a resolution or similar document that authorizes the State agency to enter into an interagency agreement with ARB and accept funds.

IV. Local Agency Project Implementation

A. Project Implementation Requirements

1. Community and public participation

a) Public participation

The local agency shall identify and implement mechanisms for the public to provide input to the local agency on the equipment project solicitations, the competitively ranked list of equipment projects, the periodic progress reports, and the equipment project status updates on the ARB website (and the local agency website, if applicable).

b) Public website

The local agency shall maintain a Program website available to the public. Prior to the first solicitation for projects, the local agency shall include an easily identifiable Program hyperlink visible and active directly from the agency's main webpage (or the main page for incentive programs). The website shall contain, at a minimum, the following information:

- Local agency contact information.
- A link to ARB's Program website (http://www.arb.ca.gov/gmbond).
- Information pertaining to equipment project solicitations.
- The competitively ranked equipment project list(s), when available.

To enhance outreach efforts and Program transparency, the local agency shall submit a website link to ARB containing specific local agency program information, including information on community meetings or public workshop announcements which will then be posted on ARB's Program website.

2. Equipment project marketing tools

The local agency shall use marketing strategies that specifically target the owners of Program-eligible equipment covered by the local agency project, and operating in the trade corridor, regardless of where that equipment is based.

Local agencies shall provide technical and administrative assistance to equipment project applicants to help them understand and apply for equipment projects.

a) Marketing tools

Local agencies shall advertise the Program to a broad and diverse audience. The local agency's strategies should include some of the marketing tools below:

- Develop and maintain list of interested parties.
- Use web-based marketing.
- Advertise and post announcements in local newspaper(s) and trade journals, including non-English publications.
- Use radio advertisements.
- Issue public notices.
- Distribute brochures/fact sheets/community newsletters.
- Partner with trade associations, dealerships, truck stops, ports, and railroads.
- Hold outreach events at locations where targeted audience(s) typically congregate.
- Use direct mail campaign(s).

b) Outreach to independent truck owner/operators

For truck programs, the local agency shall design and implement a targeted outreach program for independent owner/operators to inform them about Program funding opportunities and to assist them in completing equipment project applications. The local agency should hold some outreach events outside of normal working hours to allow more independent owner operators to attend.

The outreach information shall include, at a minimum, the Program funding available, equipment and operating requirements, and application deadlines. Marketing tools to reach this audience may include, but are not limited to:

- Education and application assistance via a kiosk set up near a location where independent truck drivers congregate.
- A toll free number for equipment project applicants to check the status of applications or get phone assistance in completing an application, including access in languages other than English.
- A notice in local papers or other written material of funding availability (including papers published in languages other than English).

c) Information on truck efficiency upgrades

For truck programs, the local agency shall make information available to equipment owners regarding upgrades to improve fuel efficiency, especially for long-haul trucks. Technologies that improve fuel efficiency for trucks may include devices that reduce aerodynamic drag and rolling resistance. Aerodynamic drag may be reduced using devices such as cab roof fairings, cab side gap fairings, cab side skirts, and on the trailer side, trailer side skirts, gap fairings, and trailer tail. Rolling resistance may be reduced using single wide tires or low-rolling resistance tires and automatic tire inflation systems on both the tractor and the trailer. These upgrades offer the potential to cut emissions of greenhouse gases and criteria pollutants, with a 2 to 3 year payback period through lower fuel costs. The benefits are variable based on the type of truck operations.

On December 11, 2008, ARB adopted a *Regulation To Reduce Greenhouse Gas Emissions From Heavy-Duty Vehicles (CCR, title 17, section 95300)*. The regulation applies primarily to owners of 53-foot or longer box-type trailers requiring their trucks and trailers to become more fuel efficient. Truck owners may be responsible for replacing or retrofitting their affected vehicles with efficiency upgrades that fit their operating profile. While this Program does not provide funding for the efficiency upgrades, other incentive programs may help offset the purchase cost or help finance the purchase of the upgrades, including ARB's Providing Loan Assistance for California Equipment (PLACE) Program (http://www.arb.ca.gov/ba/loan/on-road/on-road.htm).

d) Outreach to small businesses for infrastructure construction

AB 761 (Chapter 611, Statutes of 2007) imposes requirements on State agencies awarding bond-funded contracts to encourage the participation of small businesses in the construction of the State's infrastructure. Government Code Section 14838.1. Under SB 88, ARB cannot directly award contracts to build infrastructure under the Program and is therefore not subject to the requirements of AB 761. However, ARB can impose requirements to meet the spirit of the law when it provides funds via grant agreements to local agencies to build the electric infrastructure to support both grid-based shore power for ships at berth and electric truck pedestals at truck stops or distribution centers.

For grid-based shore power and truck electrification infrastructure projects, the local agency shall design and implement a targeted outreach program to encourage small businesses to participate in the construction, alteration, demolition, repair, or improvement of the project infrastructure funded by the bond Program. Outreach shall include advertising opportunities to bid for projects (as applicable), providing the bidding procedures, and providing California small businesses with information on available training and technical assistance for understanding and bidding on contracts.

A local agency that receives funding for these equipment project types shall keep statistics on small business and microbusiness participation in any contracts for this equipment installation. The local agency shall include these statistics in project data updates and reports to ARB.

Additional information on outreach requirements for ships at berth and cargo handling equipment projects can be found in Supplemental Procedures available on the Program website.

3. Local agency solicitation of equipment projects

A local agency must solicit applications for equipment, evaluate, and fund eligible applications for all equipment project options within the funding category, and base project selection on the competitive ranking process.

A local agency may conduct more than one solicitation for each Program grant, unless otherwise indicated in a grant agreement. If multiple solicitations are conducted, the subsequent solicitation shall not occur before the prior one is closed, unless the demand for funds is less than the amount available and the local agency obtains approval from ARB staff. ARB encourages additional solicitations be held in coordination with all local agencies.

- ARB staff may include a requirement in a truck project grant agreement that the local agency align the timing of its solicitation(s) with the solicitation(s) of other participating local agencies.
- Prior to opening a solicitation period, the local agency must submit a complete solicitation package, including the proposed equipment application form(s), program announcement(s), and information packet(s) to ARB staff for review and approval. Upon receipt of a complete solicitation package, ARB staff shall have a maximum of 8 business days to identify any necessary revisions, or the solicitation package shall be considered approved.

The documentation on the solicitation process shall include, but is not limited to, the following:

- Start and end dates for the equipment project application period.
- A list of materials in the information packet (see below).
- A solicitation schedule with milestones.

As part of the program announcement, the local agency shall make an information packet available to equipment owners who may be interested in applying for funding. This packet shall include the equipment project application, plus materials that describe all of the following:

- Application submittal information (how, where, by when, to whom).
- The Program and purpose for the solicitation.
- The equipment eligible for Program funding, including equipment project requirements and conditions (e.g., equipment inspections and any associated requirement for the equipment owner to bring equipment to a designated location, California operation, scrappage of old equipment, legally binding contract and contract terms, etc.).
- Information on what owners must do to maintain eligibility throughout the funding process.
- The application forms (all required information specified in the applicable Appendix), including disclosure language.
- Limits on available funding per piece of equipment.
- Provide information on where the applicant may obtain the equipment project evaluation and competitive ranking process. The local agency must inform equipment owners that they **may** request a reduced funding amount to improve the cost-effectiveness and competitiveness.

- A clear statement that locomotives and trucks funded by this Program may be pre-ordered 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 equipment owner and the local agency.
- A clear statement for cargo handling equipment and harbor craft funding categories that new equipment funded by this Program can only be purchased or ordered once the existing equipment has been pre-inspected and the contract is signed between the equipment owner and local agency.
- The payment process, including invoice payments and direct payments, as applicable.
- The reporting requirements.
- Other information as required by the Supplemental Procedures (for ships at berth projects) including what activities that may begin prior to the execution of an equipment project contract. The Supplemental Procedures are available on the Program website.

4. Requirements for equipment projects where the local agency is also the equipment owner

For certain types of equipment projects, the local agency administering the grant from ARB may also be the owner of the equipment that is competing for funding to upgrade. For example, a port may be acting as a local agency under this Program and seeking funding as the equipment owner to install a grid-based shore power project. Any local agencies awarded grants from ARB that also want to be the equipment owner recipient of the funding shall comply with the additional requirements listed below, and any supplemental requirements identified by ARB staff, to reduce the inherent conflict of interest:

- Prior to opening a solicitation period, the local agency must submit to ARB staff (for review and approval) the proposed equipment application form(s), the solicitation/program announcement(s) and information packet(s) for applicants.
- Solicitation must require that the applications be sent in a sealed envelope.
- Sealed applications must be opened with ARB staff and the local agency present.
- Ranked list must be developed and approved in conjunction with ARB staff.
- The local agency must sign a contract with ARB to receive authorization to use those funds (this contract is in addition to the grant agreement that covers the local agency's grant administration responsibilities).

5. Evaluation and Goods Movement Online Database entry of equipment project applications

The local agency shall review equipment project applications for eligibility and content, including whether an application is submitted in good faith, credible, and in compliance with these Guidelines.

a) Review of equipment project applications

At a minimum, the local agency review of all equipment project applications shall include:

- Verification that the equipment and owner are eligible to participate in the Program.
- Verification that the proposed equipment project is consistent with these Guidelines.
- Determination that all data and information necessary to calculate benefits and costs consistent with approved ARB methods are included.

For truck projects, at a minimum, the local agency review of equipment projects shall also include:

- Verification of current ownership (copy of the title of the truck or registration) for any truck that will be scrapped or reused (not applicable to repower projects).
- Verification of California registration.
    - Eligible registration types include:
        - California base-plated registration, OR
        - California IRP, OR
        - Dual-plated registration (California based-plated/California IRP and Mexico only) for trucks carrying goods across the California-Mexico border, as they are required to be dual-plated.
    - Current registration.
    - Registration for the past 2 years.
        - Current year (1-12 months prior to application date) and prior year (13-24 months prior to application date).
        - California Department of Motor Vehicles (DMV) registration cards for the past 2 years or California DMV Vehicle Registration Information Record (DMV printout).
            - The DMV printout may be obtained by submitting a Request for Driver Record Information form (INF 1125) to the DMV.
            - The DMV printout must show registration in both the current year and prior year (as defined above) with a minimum of 6 months of total registration.
            - If the DMV printout shows registration in the current year of 8 months and no registration in the prior year, alternative documentation (insurance certificate or Biennial Inspection of Terminals inspection (BIT inspection)) may be used to show operation in the prior year.

- Verification of the original manufacturer's gross vehicle weight rating (GVWR).
    - If the GVWR is not readily available or is conflicting with the information listed on the equipment project application or approved ranked list, the local agency shall obtain the GVWR from the manufacturer or ARB using the VIN.
    - If allowed, the manufacturer's GVWR for a glider kit truck shall be determined using build documentation.
    - If these options fail to establish the GVWR, the local agency may determine the most likely GVWR (at time of original manufacture) based on the local agency inspector's experience and available corroborating information/ documentation.
- Verification of the vehicle miles traveled (VMT) in California for the past 2 years.
    - Two (2) odometer readings (required) at least 6 months apart including any of the following records or combination of records:
        - Pre-inspection reading.
        - Maintenance records.
        - Biennial Inspection of Terminals (BIT inspection).
        - International Fuel Tax Agreement (IFTA) records.
        - Alternate documentation, as approved by the local agency.
    - For concrete mixer trucks, dump trucks, bulk blower trucks, and other truck types specifically identified by ARB staff, the owner may provide the Power Take Off (PTO) hours in conjunction with VMT:
        - Documentation from the hour meter unit is required. Include information that verifies whether or not PTO hours are accumulated independently of VMT.
        - PTO hours will be converted to miles based on a factor of 20 miles for every hour. These converted miles may then be combined with VMT in the calculation of emission reductions and cost-effectiveness if the local agency determines PTO hours are accumulated independently of VMT.
        - Where PTO hours and VMT are not accumulated independently, the local agency may use either PTO hours or VMT.

b) Goods Movement Online Database entry of equipment project applications

After the initial review of the equipment project applications, the local agency shall enter or import eligible equipment project applications into the Goods Movement Online Database. The Database shall aid the local agency and ARB in reviewing, ranking, and tracking equipment projects.

6. Match funding for equipment projects

a) Carl Moyer program

Local air districts cannot combine funding from this Program and direct funding from the Carl Moyer program on the same equipment project (i.e., funds directly authorized under H&S §44091.1(a) and Public Resources Code §42889).

In response to air district requests, ARB staff has evaluated whether some "pass-through" vehicle registration fees that can be used in the Carl Moyer program may also be used for match funding under this Program. Under AB 923 (Chapter 707, Statutes of 2004), the $2 surcharge on the vehicle registration fee can be used for match funding of Proposition 1B projects, consistent with State law.

Program funds and the $2 surcharge may be combined on the same equipment project if all of the following conditions are met: (a) the equipment project meets both bond Program eligibility requirements and Carl Moyer program funding criteria; (b) the equipment project does not exceed the Carl Moyer program cost-effectiveness limit, with the project cost including both Program and AB 923 funds; and (c) the $2 surcharge funds are not counted as part of an air district's Carl Moyer program match requirement.

For the purpose of competitively ranking local agency and equipment projects under this Program, the calculation of reductions per State dollar invested must treat both bond Program monies and the $2 surcharge monies as applicable State funds since the surcharge monies would otherwise be used in the Carl Moyer program.

b) Motor vehicle registration fees (AB 2766)

Assembly Bill 2766 (AB 2766) (Motor vehicle registration fees; Chapter 1705, Statutes of 1990) provides for the collection of an additional $4 in motor vehicle registration fees to fund various air pollution efforts. For the purpose of this Program, AB 2766 funds can be used for match funding of Program projects and are not considered State funds.

c) Match funding from greenhouse gas reduction incentives, including AB 118

SB 88 directs ARB to consider projects that cut greenhouse gas emissions to support the State's greenhouse gas emission reduction goals. To encourage greater State funding for projects with significant greenhouse gas reductions, local agencies, and equipment owners can supplement Program funds with monies from other State sources intended to reduce greenhouse gases, including (but not limited to) the AB 118 Alternative and Renewable Fuel and Vehicle Technology Program administered by the California Energy Commission. Provided that toxic and criteria pollutant emission reductions are only credited to the Proposition 1B Program (not the other State funding source), such monies shall be excluded from the total applicable State funds used to determine the cost-effectiveness of a proposed project under this Program. Since reductions in greenhouse gases are not quantified as part of the benefit side of the cost-effectiveness calculation, State incentives to cut greenhouse gases can similarly be excluded from the cost side of this calculation.

For zero-emission truck projects co-funded with AB 118 funds, criteria pollutant emission reductions beyond the 2010 engine standard may be credited to the ARB's AB 118: Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program (HVIP). These funds may be included in the cost side of the cost-effectiveness calculation.

7. Competitive ranking and selection of equipment projects

Local agencies shall enter or import equipment project application information into the Goods Movement Online Database to create a competitively ranked list of eligible equipment projects. This process will be applied to competing equipment projects under each solicitation and grant agreement. Should the Database not be available, the local agency shall create a competitively ranked list on an Excel spreadsheet using a template provided by ARB staff.

The following procedures for local agencies to rank and select equipment projects are based on the quantitative process ARB will use to competitively rank and select local agency projects. Chapter II.E.6. provides additional explanation of the elements of this process and Figure II.1 illustrates how the competitive process works.

The competitive ranking shall be quantitative based on multiple factors – emission reductions and a measure of cost-effectiveness that considers match funding. The calculation of emission reductions uses the Carl Moyer program protocol of weighting combustion PM emissions (essentially diesel PM) by a factor of 20 relative to other pollutants to account for the greater health impacts of PM per ton of emissions. This protocol helps target Program funding to the projects that will achieve the greatest reduction in health risk.

The local agency shall publish the ARB-approved list of competitively ranked projects on the agency's website and provide a link to ARB's Program website.

a) Emission reduction score

For each equipment project within a funding category, the local agency shall use the Goods Movement Online Database, or alternate means provided by ARB, to calculate the total pollutant-weighted emission reductions in California, over the project life.

> *Emission reductions* = Reduction in NOx + (combustion PM x 20) emissions in California over the project life in pounds

The local agency shall list all equipment projects within the same funding category and eligible under the same local agency project grant agreement, in descending order of emission reductions, with the greatest emission reductions on top and the lowest emission reductions on the bottom. The local agency shall number or score each project starting at the bottom with a score of 1 and continuing consecutively to the top project. For example, if there are 8 project proposals, the one with the greatest emission reductions would receive a score of 8.

> **Emission Reduction Score** = number from above evaluation

b) Cost-effectiveness score

For each equipment project within a funding category, the local agency staff shall use the Goods Movement Online Database, or alternate means provided by ARB, to calculate total pollutant-weighted emission reductions in pounds (as determined above), divided by the total applicable State funding proposed for the project. Total applicable State funding includes requested Program funds specific to that equipment project, plus any other State dollars, as applicable (see Chapter IV.A.6.).

Cost-effectiveness = weighted emission reductions (lbs)/total State $

The local agency shall list all equipment projects within the same funding category and eligible under the same local agency project grant agreement, in descending order of emission reductions per State dollar, with the highest number on top and the lowest number on the bottom. The local agency shall number or score each project starting at the bottom with a score of 1 and continuing consecutively to the top project. For example, with 8 equipment project proposals, the one with the greatest emission reductions per State dollar would receive a score of 8.

Cost-Effectiveness Score = number in above evaluation

c) Competitive ranking

The local agency shall add the Emission Reduction Score to the Cost-Effectiveness and Match Score to determine the final points for each equipment project. The agency shall rank equipment projects within the funding category covered by the grant agreement from highest points to lowest points to create the competitive ranking list.

Note: Eligible zero-emission truck projects utilizing AB 118 funds shall automatically be ranked above other competing equipment project options. Also, eligible projects to upgrade switcher locomotives shall automatically be ranked above other types of competing locomotive equipment project options, consistent with the statutory direction to give funding priority to switchers.

d) Ranked list approval process

The local agency must submit ranked lists to ARB staff for approval prior to selecting projects for funding or requesting project funds from ARB. The process for generating an approval of a ranked list is described below and may be revised by ARB staff as needed and available on the Program website:

- A local agency enters equipment project application information into the Goods Movement Online Database to create a preliminary competitively ranked list of eligible equipment projects. The local agency may also submit the information via an Excel spreadsheet which will be imported into the Database. Applications that are ineligible, incomplete, or withdrawn prior to the ranked list do not need to be entered into the Database. Only minimum information (applicant name, local agency tracking number, VIN, fleet size, and if project was ineligible, incomplete, or withdrawn) shall be entered into an Excel spreadsheet, or other means specified by ARB staff. The local agency shall keep this and related files for 3 years to be made available for Program review or fiscal audit and to be provided, upon request, to ARB.
- After the local agency has completed its internal review of the submitted data and the preliminary ranked list, the agency notifies ARB staff (by e-mail) that the ranked list is ready for approval. ARB staff reviews the ranked list and if needed, requests additional clarification, corrections, and/or documentation to ensure information in the Database is credible. ARB staff identifies any issues with the ranked list via email to the local agency.
- ARB staff notifies the local agency when the ranked list has been approved and is available to be posted on the local agency's website.

e) Selection of projects for funding

The local agency shall use the ARB approved ranked list to select projects for funding. The local agency shall apply the available grant dollars (minus allowed administration funding) to the list of competitively ranked equipment projects within the funding category. The local agency shall award grant funds to the top project and continue down the competitive ranking list until the grant funds are exhausted. Projects with an increase in emissions or negative cost-effectiveness are not eligible for funding. ARB staff may identify a minimum cost-effectiveness to ensure that Program monies achieve the intended benefits. Any minimum cost-effectiveness requirement not currently included in the Guidelines will be available on the Program website.

The local agency shall maintain an equipment project backup list comprised of the projects on the competitive ranking list that did not receive funding. Equipment projects on this backup list are available for Program funding, in the order established on the competitive ranking list, if additional funds become available. Funds may become available when an equipment project selected for funding does not pass the pre-inspection, when an equipment owner voluntarily withdraws from the Program prior to execution of an equipment project contract, or for other reasons.

As funding becomes available, local agency staff shall make a reasonable effort to contact the equipment owner with the top unfunded equipment project on the competitive ranking list to: (a) determine if the owner is still interested in participating in the Program; and (b) obtain an updated signed equipment project application disclosure statement to verify that the equipment owner has not applied for Program funds elsewhere. If the local agency is unable to proceed with the top equipment project after a reasonable effort, the local agency may proceed with the next equipment project on the competitively ranked list.

f) Reinstating withdrawn or cancelled projects

Reinstatement of a withdrawn or cancelled project is at the local agency's discretion, subject to the availability of Program funds, and shall include, but is not limited to the following provisions:

- Local agency has a policy that provides opportunities for all similar applicants.
- The equipment owner's request for reinstatement shall be in writing.
- Only equipment projects on the ARB approved ranked list may be reinstated.
- No equipment project that received a funding commitment shall be displaced as a result of reinstating a withdrawn project.
- The equipment project and owner meet all Program eligibility requirements.

8. Compliance check

All projects in each source category may be subject to a compliance check.

For truck projects, the local agency shall submit information for a compliance check on the old vehicle and the equipment owner for all truck replacement, repower, or retrofit projects proposed for funding prior to executing an equipment project contract to ensure both the equipment and owner are in compliance with all ARB regulations. Potential non-compliance may include, but is not limited to the following:

- Outstanding ARB citation or violation.
- Pending ARB enforcement investigation.
- Failure to meet ARB regulatory requirements.

a) Compliance check results and implications for truck projects

If the compliance check indicates there is an outstanding ARB citation or violation that is a result of the improper use or maintenance of a compliant engine, the applicant has the ability to correct the violation and pay applicable fines prior to the execution of an equipment project contract. Such violations may include, but are not limited to the following:

- An engine control label (ECL) violation.
- An opacity violation.
- An idling violation.
- A smoke inspection violation.

If the compliance check indicates there is an outstanding ARB enforcement investigation, or an investigation is opened during the time prior to funding, ARB will determine whether the applicant may maintain eligibility.

If the compliance check that any ARB regulation has been violated (other than correctable violations as described above), the applicant is no longer eligible for Program funds. The local agency shall inform the equipment owner in writing that the equipment project application has been disqualified for funding.

b) Compliance check process for truck projects

To submit the compliance check, the local agency may either enter requested information for each project into the Goods Movement Online Database, or submit this information to ARB via an external compliance check spreadsheet. This information may include, but is not limited to the following:

- Registered equipment owner name.
- Company/business name.
- Vehicle identification number (VIN).
- Vehicle license plate number.
- Unique ARB identifier (e.g., equipment owner's identification number from ARB's online Truck Regulation Upload, Compliance, and Reporting System (TRUCRS)).

The local agency may also enter the following optional information into the Database:

- California Highway Patrol number (CA Number).
- U.S. Department of Transportation number.
- Interstate Commerce Commission number.

Due to the large number of projects that may require compliance checks, local agencies are encouraged to submit data as soon as possible after receipt of the application.

ARB Program staff shall work with ARB's Enforcement Division and other ARB staff to obtain the information and display the results of the compliance check in the Database. ARB staff will endeavor to provide the results to the local agency within 10 business days, based on the receipt of complete and accurate information. The turnaround time may increase depending upon work volume and available ARB staff resources.
Local agencies may sign equipment project contracts prior to completion of ARB's fleet compliance checks for the Statewide Truck and Bus Rule. The contracts must contain appropriate language that states funding for each project is contingent upon successful completion of the compliance check which: (1) verifies fleet compliance with rule requirements; and (2) states that the project is still eligible for funding.

For Year 1 funds, if the compliance check indicates there is an outstanding violation prior to the application date, the equipment project application shall be disqualified unless the violation is for an engine label. The local agency shall inform the equipment owner in writing that the equipment project application has been disqualified for funding, and that the owner must correct the violation and pay any applicable fines.

For Year 2 and Year 3 funds, if the compliance check indicates there is an outstanding violation on any vehicle within an owner's fleet, the local agency may offer all affected equipment owners the opportunity to retain grant eligibility by correcting the violation and paying any fines prior to execution of the contract(s) between the local agency and equipment owner. If the local agency has notified the equipment owner of the violation, and the equipment owner does not correct the violation and pay applicable fines in a timely manner, the local agency shall inform the equipment owner in writing that the equipment project application has been disqualified for funding.

For Year 4 and later funds, if the compliance check indicates there is an outstanding **correctable** violation (as described in Chapter IV.A.8.a.) on any vehicle within an owner's fleet, the local agency may offer all affected equipment owners the opportunity to retain grant eligibility by correcting the violation and paying any fines prior to execution of the contract(s) between the local agency and equipment owner. If the local agency has notified the equipment owner of the correctable violation, and the equipment owner does not correct the violation and pay applicable fines in a timely manner, the local agency shall inform the equipment owner in writing that the equipment project application has been disqualified for funding. If the violation is for ARB regulations, the local agency shall inform the equipment owner in writing that the equipment project application has been disqualified for funding.

9. Notifications to equipment owners

The local agency shall notify equipment project applicants of the status of their applications. Notifications shall be in writing, and occur within a reasonable time after the end of the solicitation period.

At a minimum, written notifications shall include the following:

- A clear statement whether or not the equipment project is eligible for Program funds.
- If the equipment project is eligible, the notification shall include a clear statement indicating whether the equipment project was selected for funding or placed on the backup list.
- If the equipment project is selected for funding, the notification shall include:
    - Total Program funding amount for equipment project.
    - Information and deadlines for scheduling a pre-inspection.
    - Language indicating Program funding is contingent on passing the equipment pre-inspection and compliance checks.
    - Information regarding what the equipment owner must do to maintain eligibility.
    - Information and deadlines for executing equipment project contracts, applying for direct payments to vendors (if applicable), post-inspection requirements, deadlines to complete the project, and the process for obtaining Program funds through invoice payments.
- If the equipment project is placed on the backup list, the notification shall include information pertaining to the potential for future funding of the equipment project.
- If the equipment project is not being considered for Program funding, the notification shall include information about the equipment owner's ability to apply for other incentive funding opportunities, and the ability to participate in Program funding in future years.

10. Equipment project pre-inspections

The local agency shall conduct and document equipment project pre-inspections after the local agency has identified equipment projects for funding under this Program. Pre-inspection information and results shall be entered into the Goods Movement Online Database. Pre-inspections are not required if the existing equipment was previously funded by the Program within 2 years of the equipment project application date. All items shall remain in the project files and be made available to ARB upon request. At a minimum, the local agency shall:

- Ensure pre-inspections are conducted by local agency equipment inspectors, their designated contractors (i.e., dealerships), or staff from another local agency with an executed Program grant agreement and experience administering Program grants for that specific source category.
- Initiate and maintain a contract or MOU with any contractor pre-inspecting equipment to ensure Program pre-inspection requirements are met.
- Only designate a contractor for one of the two required equipment project inspections (pre-inspection or post-inspection), not both.
- Not restrict equipment projects to equipment sold by a truck dealer or retrofit vendor with a contract or MOU to do pre-inspections.

The pre-inspection for each source category shall, at a minimum, include:

- Collection of the owner's name, address, and telephone number.
- Identification of the location of the engine (business, ship berth, or truck facility).
- Collection of the serial number of the baseline engine and any additional information necessary to assist in the verification of the baseline engine application information. For engines without a visible and legible serial number, the local agency inspector must stamp or tag the engine block with the Program equipment project number.
- Collection of baseline information on ship activity at the berth, or truck activity at the truck stop or distribution center.
- Photographic, digital documentation for the project file of each piece of equipment being pre-inspected. The photographic documentation shall include:
    - The serial number of the engine (if legible) or Program equipment project number.
    - License plates or other distinguishing identification that is visible on the equipment.
    - A photograph that captures a full view of the equipment being inspected (e.g., the entire truck, vessel, locomotive, etc.).
- Description of the local agency's method for cataloging, referencing, storing, and easily retrieving project-specific photos.
- Verification by meter reading of the equipment usage (hours or miles), and that the usage reported in the equipment project application is reasonable given the usage meter reading.
- Verification that the engine is operational (with a start-up) and is working as described in the equipment project application (document function and use).

- Verification that engines subject to the software upgrades for diesel truck retrofit projects (i.e., chip reflash) have completed the upgrade.
- Verification that a functioning diesel particulate filter or other retrofit device is installed if listed on the application, listed on the approved ranked list, or required by regulation.
- Verification of project eligibility and the information gathered during the pre-inspection is consistent with information listed on the equipment project application or approved ranked list (including, but not limited to, the engine model year, activity/mileage, registration, installation of a functioning retrofit device, and for truck projects, the original manufacturer's gross vehicle weight rating (GVWR)).

If the contract is executed prior to pre-inspection, the equipment owner may not order the new equipment until the existing equipment has passed pre-inspection, except for truck and locomotive equipment projects, and ships at berth projects, as specified in the Supplemental Procedures available on the Program website.

11. Equipment project contracts

The local agency shall obligate funds for each equipment project as described in these Guidelines and within the obligation deadlines as described in Chapter IV.B.1. These funding commitments shall become legally enforceable only through executed equipment project contracts between the local agency and equipment owner. The local agency shall obtain ARB approval of contract templates before executing contracts with equipment owners.

Local agency staff shall prepare and submit for review and signature two copies of the contract for Program funding to be signed by the equipment owner. After an equipment owner and the local agency sign two copies of the contract agreement, the local agency shall retain one fully executed copy for its files, and return one fully executed copy to the equipment owner. Following execution of an equipment project contract, local agency staff shall enter or import the equipment project contract information into the Goods Movement Online Database. All items must remain in the project files and be available to ARB upon request.

At a minimum, an equipment project contract shall contain the following provisions:

a) Standard contract provisions

- Contract number—unique tracking number provided by local agency for each contract.
- Effective date.
- Term of contract (project completion time plus equipment project life).
- Equipment owner contact information.
- Indemnification—equipment owner agrees to indemnify and hold harmless ARB and the local agency for any liability arising out of the performance by the equipment owner.

- Severability—remaining provisions of a contract continue in effect even if a court holds a specific provision invalid.
- Force majeure—ARB, local agency, and equipment owner are not liable for delay or failure in performance resulting from acts beyond their control.
- Contract amendments—amendments shall only occur by mutual agreement in writing and signed by all parties.

b) General Program provisions

- Application—incorporate by reference the original equipment owner application.
- Reporting requirements—equipment owner is responsible for submitting annual reports to the local agency, unless otherwise noted in these Guidelines. The local agency contract with equipment owner must specify reporting requirements listed in the applicable Appendix.
- Ongoing evaluations, Program reviews, and fiscal audits—equipment owner agrees to allow ongoing evaluations, Program reviews, and fiscal audits of equipment and documentation by the local agency, ARB, or their designees.
- Records access requirements—equipment owner agrees to allow the local agency, ARB, or their designees access to evaluate or audit Program records.
- Recordkeeping requirements—equipment owner agrees to retain all records pertaining to the Program e.g., invoices, contracts, and correspondence, for at least 2 years after equipment project life ends or 3 years after final payment, whichever is later.
- Enforcement—provisions authorizing the local agency to inspect equipment projects to enforce contract terms.
- Equipment project contract non-performance provisions (see Chapter VI.K.) includes, but is not limited to:
    - Failure to meet the terms and conditions of an executed equipment project contract.
    - Equipment/engine is non-operational, malfunctioning, or damaged.
    - Failure to operate or maintain equipment in accordance with manufacturer's recommendations.
    - Intentional destruction of equipment.
    - Failure to meet established deadlines for equipment project completion.
    - Failure to allow for an electronic monitoring device, if required, or tampering with an installed device or data.
    - Misuse of direct payments to vendors provisions.
    - Insufficient, incomplete, or faulty equipment project documentation.
    - Failure to provide required documentation or reports in a timely manner.

- Remedies for non-performance include, but are not limited to:
    - Recovery of all or a portion of Program funds.
    - Other fiscal penalties on equipment owners based on the severity of the non-performance.
    - Cancellation of the contract.
    - A ban on the equipment owner's ability to participate in future State incentive programs.
    - Prohibiting a specific piece of equipment from participating in another State incentive program.
- Contract reinstatement requirements (see Chapter VI.G.).
- Contract transfer and buy-out provisions (see Chapters VI.I. through VI.J.).
- Lease-to-own—allowance for an equipment owner with a lease-to-own contract to elect to change to a direct purchase contract.
- Direct payments to vendors or financing entities—allowance for local agency payments to go directly to vendors, including vehicle or equipment dealers or manufacturers, or third party financing entities (banks for financing companies). Checks may be made payable to both parties: equipment owner and dealer, manufacturer, or financing entities, if applicable. Chapter IV.B.2.d. describes the requirements for direct payment to vendors or financing entities.
- Independent contractor—equipment owner is an independent contractor and none of equipment owner's agents shall be construed as agents or employees of ARB or the local agency.
- Equipment maintenance—equipment owner is responsible for maintaining Program-funded engines or equipment in good operating condition and according to manufacturer's recommendations, and as described in these Guidelines.
- Time is of the essence—time is of the essence in the performance of all contracts.
- Program acknowledgment—equipment owner agrees to acknowledge the Program as a funding source in any related media events or other publicity material.

c) Source category-specific elements

- Equipment project description.
- Total cost for the equipment project.
- Project cost breakdown (including technology/equipment purchase, labor for retrofit/installation, etc.).
- Eligible costs—costs directly tied to the purchase of ARB-approved equipment projects.
- Total Program funds for the project.
- Non-State match funds and source(s) of those funds—includes cash, in-kind, or other sources.
- Ineligible costs—costs not directly tied to the purchase of ARB-approved equipment projects, if applicable.

- Project performance benchmarks—the expected activity (e.g., estimated annual mileage or engine hours from application) and emission reductions (estimated NOx and PM reductions over the life of the project from the posted ranked list) from the new equipment.
- Project inspections—equipment owner agrees to pre-inspection by the local agency (or their designee) of old equipment and post-inspection of the new/upgraded equipment.
- Project schedule—timeframe required to complete equipment project including major milestones.
- Schedule to expend funds—estimated schedule for local agency to expend Program funds to the equipment owner.
- Request for payment—steps required for equipment owners to request expenditure of Program funds, including the prohibition of payment for equipment that was ordered or purchased prior it to contract execution (as applicable) and direct payments to vendors or financing entities, as applicable (see Chapter IV.B.2.).
- Equipment warranty/insurance—equipment owner is responsible for securing warranty and maintaining insurance on the new equipment sufficient to repay the State's investment in case of major damage.
- Electronic monitoring devices—provisions requiring equipment owners to agree to the installation and use of an electronic monitoring device at any time during the contract term. For locomotives and harbor craft utilizing the 90 percent California operation option, the equipment owner is responsible for purchasing, installing, and maintaining a device that can produce the electronic reports required by ARB, as documented on the Program website.
- Project acknowledgement—if the applicant (equipment owner) of a truck electrification infrastructure or grid-based shore power project does not own the site where the equipment will be installed, the equipment project contract shall address the project acknowledgement requirements listed in Appendix A, Section B.2.b. or Appendix C, Section C.3.a. by one of the following methods:
    - Inclusion of the project acknowledgement requirements and site owner signature as a third party to the contract.
    - Incorporation by attachment of a separate project acknowledgement document from the site owner (e.g., a signed letter).
    - Requiring the equipment owner to enter into a contract or lease with the site owner which meets the project acknowledgement requirements. Require the executed contract or lease with the site owner to be sent to the local agency for review when available and in a timely manner.
- Ships at berth projects—for Year 4 and later funded projects, the equipment project contracts shall hold both the equipment owner and the shipping line legally liable for complying with the contract and Program requirements. The equipment project contract may allow certain provisions to apply solely to the shipping line (e.g., the number of ship visits or the number of hours). Refer to the Supplemental Procedures available on the Program website for additional equipment project contract requirements.

12. Tax reporting

The local agency shall comply with all State and federal tax reporting requirements associated with the payment of Program funds to equipment owners. This may include requiring the submittal of tax information using federal tax Form W-9, and issuing a federal Form 1099 to the equipment owner receiving grant funds. The local agency shall also report the applicable tax information to the California Franchise Tax Board and federal Internal Revenue Service.

13. Provisions for lease-to-own programs

The local agency projects may use a lease-to-own program(s) for truck replacement projects. ARB staff may revise the specific requirements of this section as needed and post on the Program website.

a) General requirements

Lease-to-own programs shall comply with the following minimum requirements:

- The equipment project application must be signed and submitted by the owner of the old truck (applicant), and must include information on the old truck to be replaced, the new replacement truck, and the proposed lessee.
- The applicant must be the legal owner of the old truck at the time of application and must participate in the lease-to-own program as either the lessor or lessee.
- Equipment project applications may be amended to change the applicant's participation in a lease-to-own program, or change the lessor if approved by the local agency. All amendments must be completed prior to contract execution.
- Grant funds shall only be used to offset the capital cost of the truck and shall reduce the principal owed by the lessee to purchase the truck. The lessor shall not impose a charge on the lessee for any portion of the Program funds as a component of the lease payments. The lessor may set a lease payment schedule that recoups his or her out-of-pocket investment to purchase the new truck and a reasonable rate of interest over the term of the lease. Equipment project funds shall not be applied toward administration costs.
- As a remedy for the non-performance of a lessee under the equipment project contract, the lessor, with local agency approval, may transfer the truck to a new lessee, so long as the new lessee agrees to sign an equipment project contract under the same provisions, for the remaining contract term.
- A truck project participating in a lease-to-own program shall be subject to the same Program requirements as any other truck competing for funding under that local agency project – they must compete against all other truck projects within that funding category and trade corridor.

- Prior to executing contracts for the lease-to-own program(s), the local agency must submit program information and sample contracts to ARB staff for review and approval. Deliverables for approval include:
  - Sample equipment project contract(s) the local agency will execute with the lessor, lessee, and/or administrative entities participating in the Program.
  - Sample lease rider (see Chapter IV.A.13.c.) that will be executed by lessor and lessee.
- Other information specified by ARB staff and available on the Program website.

b) Legal structure provisions

- Equipment project contracts shall hold both the lessor and lessee legally liable (i.e., jointly and severally) for complying with the contract and Program requirements. There are multiple ways for the local agency to implement a lease-to-own program that ensures that the lessor and lessee are jointly and severally liable. Examples are shown below:
  - A local agency or an approved administrator executes a joint contract with the lessor and each lessee which includes all Program requirements. The equipment project contract may allow certain provisions to apply solely to the lessor (e.g., financial requirements) or lessee (e.g., operational requirements), so long as the local agency maintains the ability to enforce all remedies for non-performance under the contract(s), including the recovery of funds or repossession of the truck, if necessary.
  - A local agency or an approved administrator may also establish separate legally binding agreements with the lessor and the lessee, or they may execute a contract with all Program requirements with a lessor and the lessor executes a lease agreement with each lessee. Program requirements can be distributed between the lessor and lessee. Both agreements must specify the ability of the local agency and lessor to enforce all remedies for any lessee's non-performance under an equipment project contract.
- See Chapter VI.K. for equipment project non-performance provisions.

c) Lease agreement provisions

- Prior to executing a lease agreement with the lessee, the lessor shall disclose in writing the following terms and conditions (signed or initialed by the lessee and attached to the lease agreement):
  - Cost of the vehicle (total cost lessor paid for the vehicle less the amount of the grant).
  - Amount due at lease signing with an itemization of the charges.
  - Interest rate, monthly payment, and number of payments.
  - A schedule of potential late fees, penalties, mileage charges, or other items that can be charged to the lessee.
  - Residual or buyout amount the lessee will be required to pay at the end of the lease term in order to take ownership of the truck.
  - Total cost to lessee to take ownership at the end of the lease (total of fees, charges, monthly payments, and residual or buyout amount).

- If the local agency does not execute a contract with the lessee, the local agency shall require the lessor to incorporate the following requirements in a lease rider.
    - Statement that if any provision of the lease agreement conflicts with the terms of the lease rider, the provisions of the lease rider shall govern.
    - Contract terms that provide for the lessee to assume ownership of the Program-funded truck at the end of the lease period.
    - Other operational requirements of the Program, as identified by ARB staff and available on the Program website.

14. Equipment project scrap requirements

The local agency shall ensure that old equipment is scrapped (permanently removed from service) and associated materials disposed of in an environmentally acceptable manner, in accordance with these Guidelines and any applicable federal, State, or local laws, regulations, or requirements.

Scrapping operations and material disposal applies to the following:

- Truck engine repowers and truck replacement projects.
- Harbor craft engine repowers and vessel replacement projects.
- Locomotive engine repowers and new replacement projects.
- Cargo handling equipment replacement projects.

Local agencies shall be responsible for implementing procedures for collecting all necessary information prior to scrap/disposal activities (e.g., during the pre-inspection). All information collected and recorded must be readily accessible to verify that scrap and disposal procedures were conducted for the appropriate engine, vehicle, vessel, or locomotive. Documentation shall be available to ARB or its designee to support ongoing Program reviews or fiscal audits as necessary.

The following procedures must be implemented for all repower and replacement projects:

- Prior to destruction, old equipment must be in operable working condition and legal for use in California, as documented in the equipment pre-inspection provisions of these Guidelines.
- The old equipment engine block (for repower projects) or vehicle/vessel/locomotive, including the frame, diesel particulate filter, and engine block (for replacement projects) shall be physically destroyed in such a manner to eliminate the possibility of future operation. Engine blocks shall be punctured and the vehicle, vessel, or locomotive frame structure shall be dismantled, cut through, and/or demolished to render the equipment useless and to prevent future use. Diesel particulate filters may be swapped or re-designated if allowed under ARB's Verification Procedure for In-use Strategies to Control Emissions from Diesel Engines.

- Licensed dismantlers are required to enter into an agreement with the local agency to qualify for participation. Dismantlers are required to be licensed by the DMV (for auto-dismantlers), and also have a valid California Environmental Protection Agency (Cal/EPA) Hazardous Materials Generators Permit. In addition, the dismantler must ensure compliance with any federal, State, and local material disposal requirements, regulations, permits, or requirements.
- Funding is not available for any salvage or material disposal costs, including hazardous waste abatement fees, labor costs, fines, permits, or other charges resulting from destruction or disposal.
- All equipment to be scrapped must have a complete, visible, and legible serial number or a stamp of the Program equipment project number applied at the time of pre-inspection by the local agency or its designee.
- The local agency or its designee must obtain digital documentation to ensure the engine identified in the equipment contract and the pre-inspection is the one that is to be scrapped. This documentation includes specific photos to be taken before the engine is destroyed, as well as photos after the engine is destroyed as per the scrappage tables in Appendices A, B, D, E, and F.

The destruction of any engine without a verifiable serial number or Program equipment project number stamped on the equipment at the time of the equipment pre-inspection does not fulfill the scrappage requirement under this Program.

The local agency must ensure the additional requirements for each piece of equipment are undertaken as per the scrappage tables in Appendices A, B, D, and F.

15. Reuse of trucks/limited alternative to scrappage for trucks

ARB may require or allow the local agency to make existing trucks being replaced under this Program available for limited reuse under specific programs approved by ARB. Trucks that are selected for reuse will not be subject to the scrappage requirements. Trucks that are not selected for reuse, and the older trucks being replaced by reused trucks, must be scrapped (see Appendix A). The ARB Executive Officer or his or her designee may approve truck reuse proposals that meet all of these criteria:

- Deliver an equivalent or greater air quality benefit in California (compared to scrappage of the middle-aged truck).
- Require any truck reused in California to be retrofit with a PM filter to ensure a localized health benefit.
- Require any truck reused outside of California to be prevented from re-entering the State.
- Are consistent with the principles and goals of this Program.
- Do not increase Program cost and do not substantially increase the Program administration workload.

ARB staff shall notify local agencies implementing truck projects of any new requirements to implement this provision, including reporting on the number of trucks made available for reuse as part of the semi-annual report.

16. Equipment project post-inspections

The local agency shall conduct and document equipment project post-inspections on all Program-funded equipment projects. Post-inspection information and results shall be entered into the Goods Movement Online Database. All items shall remain in the project files and be made available to ARB upon request. At a minimum, the local agency shall:

- Conduct a post-inspection after equipment project contract execution and before final Program payments are made by the local agency to the equipment owner.
- Ensure post-inspections are conducted by local agency equipment inspectors, their designated contractors (i.e., dealerships), or staff from another local agency with an executed Program grant agreement and experience administering Program grants for that specific source category.
- Initiate and maintain a contract or MOU with any contractor post-inspecting equipment to ensure Program post-inspection requirements are met.
- Only designate a contractor for one of the two required equipment project inspections (pre-inspection or post-inspection), not both.
- Not restrict equipment projects to equipment sold by a truck dealer or retrofit vendor with a contract or MOU to do post-inspections.

The final payment of Program funds held in retention shall be disbursed upon the completion of the post-inspection and as described in Chapter IV.B.2.e. For ships at berth grid-based power projects only, early reimbursement of up to 80 percent of eligible project costs may occur prior to post-inspection and as described in Chapter IV.B.2.e.

Post-inspections for all equipment projects shall include, but are not limited to, the following requirements:

- Collection of the equipment owner's name, mailing address, and telephone number.
- Verification of equipment application information with new equipment to ensure the new equipment is consistent with the equipment described in the equipment application.
- Documentation of new equipment identifiers and specifications (e.g., VIN for new trucks, serial numbers for new engines, etc.).
- Digital photographic documentation of the equipment that is being post-inspected for the project file. This documentation shall include:
    - A photograph of the serial number of the engine.
    - A photograph of the license plate or other distinguishing identification that is visible on the equipment.
    - A photograph that captures the full piece of equipment (i.e., the entire truck, vessel, locomotive, etc.) that is being inspected.
- Methods for cataloging, referencing, storing, and easily retrieving specific equipment project documentation and photographs.

- Visual witness and verification that the vehicle/engine/equipment is operational as stated in the contract. The inspector must visually witness and verify all engine start ups and that all mobile equipment projects are operating properly.
- Verification of the destruction of the old/replaced equipment (engine, vehicle, vessel, or locomotive), where applicable. The inspector must be present to personally verify engine removal or must be provided documentation and photographic evidence of the equipment before and after the engine destruction for these engines.

In addition to the general post-inspection requirements above, Appendices A-E provide additional post-inspection requirements for each source category and equipment project option, as applicable.

17. Local agency requests to ARB for grant funds

The local agency may request grant funds from ARB by submitting a valid Grant Expenditure Request signed by an authorized local agency representative acting under a fully executed grant agreement. See Chapter II.F.2. for ARB's expenditure requirements and provisions.

18. Administration of Program funds

The local agency shall be held responsible for the administration of Program funds beginning immediately after receipt of these funds from ARB.

The local agency shall maintain Program funds in an account separate from all other funds administered by the local agency. It is the intent of Board that the Program funds shall not be placed in an account that puts the funding at financial risk. The local agency shall accept all financial risk, including losses from interest bearing accounts, and replace any loss of Program funds principal due to investment choice.

19. Local agency non-performance provisions

The local agency shall be held responsible for the implementation of the local agency project. See Chapter II.F.7. for local agency non-performance provisions and requirements.

B. Obligations, Expenditures, and Earned Interest

H&S §39626.5(b) requires the local agency to award the funds via contracts with equipment owners within 2 years of ARB allocating funds to the agency pursuant to a grant agreement. The statute also requires the local agency to liquidate funds within 4 years of the date of the award of the contract between the agency and the equipment owner. The funds revert to the California Ports Infrastructure, Security, and Air Quality Improvement Account if the statutory timeframes are not met. ARB staff may provide direction to local agencies regarding how this statute shall be applied in situations where the local agencies are expressly prohibited from implementing their grant agreements for a period of time due to suspension of the State's bond programs.

ARB staff may extend (or shorten prior to the execution of a grant agreement with the local agency) the obligation and expenditure deadlines from those described below to allow for factors which may affect the project's implementation schedule (i.e., upcoming regulatory deadlines or a delay in receiving Program funds). Extensions shall not exceed statutory deadlines. For Year 4 locomotive projects, the ARB Executive Officer or his or her designee may extend a local agency's obligation and/or expenditure deadline, as indicated below.

1. Local agency obligation of funds to equipment owners

For Year 1 funds only, local agencies shall obligate Program funds via executed equipment project contracts no later than 24 months from the date of the executed grant agreement between ARB and the local agency, excluding the period of time that the local agency was prohibited from implementing the grant.

For Year 2 and later funds, local agencies shall obligate Program funds via executed equipment project contracts no later than 18 months from the date of the executed grant agreement between ARB and the local agency, or no later than 18 months from the date ARB issues a Start Letter to the local agency, whichever comes later.

For Year 4 locomotive projects, the ARB Executive Officer or his or her designee may extend a local agency's obligation deadline for up to an additional 6 months, in the case of a manufacturer delay for a new engine or 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). The local agency may submit to ARB a written request to extend the obligation deadline if they have determined the results of the Tier 4 field demonstrations inhibit the equipment owner's interest in eligible equipment projects. ARB staff shall review the request and issue a finding. If the finding supports the request for an extension, ARB shall provide an approval letter to the local agency.

2. Local agency expenditures on equipment projects

a) Expenditure deadlines for equipment projects

Local agencies shall comply with the following deadlines to liquidate Program funds. These expenditure deadlines represent the maximum time allowed from the equipment project contract execution date to the expenditure of Program funds to complete and close out an equipment project:

- 18 months to verify project completion/close out payment for truck retrofit, repower, replacement, and three-way transaction projects, and cargo handling equipment projects.
- 2 years to verify project completion/close out payment for locomotive projects, non-grid-based shore power projects, and projects to install a locomotive or ship emissions capture and control system. For Year 4 locomotive projects, the ARB Executive Officer or his or her designee may extend a local agency's expenditure

deadline for up to an additional 12 months, in the case of a manufacturer delay for a new engine or technology that meets U.S. EPA Tier 4 or lower emission standards. The local agency may submit to ARB a written request to extend the expenditure deadline if they have determined an equipment owner would be unable to meet the project completion deadline due to Tier 4 locomotive manufacturing delays. ARB staff shall review the request and issue a finding. If the finding supports the request for an extension, ARB shall provide an approval letter to the local agency.

- 3 years to verify project completion, obtain at least 1 year of data on actual use, and close out payment for truck electrification infrastructure projects.
- 4 years to verify project completion/close out payment for harbor craft projects and grid-based shore power projects.

No expenditures shall be approved if the engine, piece of equipment, or vehicle becomes operational after the operational deadline(s) listed in the grant agreement covering the equipment project contract.

b) Equipment project purchase restrictions

Except in the case of locomotive, ships at berth grid-based power, and truck projects, local agencies shall not reimburse equipment project applicants for orders or any payments on a new engine, piece of equipment, vehicle, infrastructure, or other eligible costs that take place prior to local agency approval of the project.

Some ships at berth grid-based power costs may remain eligible for reimbursement if ordered, installed, or paid for prior to contract execution. The Supplemental Procedures available on the Program website provides information on eligible and ineligible expenses.

Replacement truck projects may remain eligible for reimbursement if ordered after the ARB-approved ranked list was posted on the administering local agency's website, providing the replacement truck was not paid for prior to contract execution.

Dealers and equipment owners ordering engines, equipment, or vehicles prior to contract execution assume all financial risk, and are in no way assured Program funds.

An equipment owner may not receive or place into operation replacement engines, equipment, or vehicles, nor may work begin on a repower or retrofit project or a project to install electrical infrastructure, until the project contract is fully executed, unless permitted within these Guidelines or the Supplemental Procedures available on the Program website.

Equipment owners shall not request or receive payments for an engine, piece of equipment, or vehicle that has become operational after the operational deadline(s) listed in the equipment project contract.

c) Invoice payments (reimbursements)

With the exception of approved direct payments to vendors and financing entities as described in Chapter IV.B.2.e. and early reimbursement as described in Chapter IV.B.2.e., local agencies shall only expend Program funds through invoice payments. Invoice payments provide Program funding to equipment owners on a reimbursement basis.

Reimbursement to equipment owners cannot exceed the amount directly paid by the equipment owner.

Reimbursement may only occur after the equipment has passed a post-inspection and the local agency has received from the equipment owner a valid invoice for the fully operational new engine, vehicle, or piece of equipment, except for described in Chapter IV.B.2.e. for ships at berth grid-based power projects. However, for truck replacement projects, the local agency may reimburse the equipment owner upon submission of a valid invoice once the following requirements have been met:

- Equipment owner or dealer must deliver the old truck(s) to a licensed dismantler up to 30 days after receiving the new fully operational equipment.
- Local agency must verify with the licensed dismantler that the old equipment has been delivered and is in custody of the dismantler.

An invoice shall be itemized to include enough detail to ensure that the local agency provides reimbursement only for eligible project costs, yet be clear and concise enough to be understandable. The local agency shall review the itemized invoice and only pay for eligible expenses up to the funding caps established by these Guidelines and the grant agreement.

Equipment owners shall not request or receive payments for engines, vehicles, equipment, or electric infrastructure that are non-operational, taxes, consulting services, license, permit fees, registration, insurance, or any other costs not eligible for Program funds. Only ships at berth grid-based power projects shall be eligible for early reimbursement prior to the equipment being placed into operation, as described in Chapter IV.B.2.e.

Charges for equipment and parts on engine repower projects are only eligible for funding if they are required to ensure the effective installation and functioning of the new engine and achieve the expected emissions performance, but are not part of typical vehicle or equipment maintenance or repair. Examples of ineligible repower costs include, but are not limited to: tires, axles, paint, brakes, and mufflers.

Most labor expenses are not eligible for payment with Program funds; the exceptions are: labor to install a diesel PM filter on a truck, labor to make necessary vessel modifications and install the new engine in a harbor craft, and labor to install the electrical infrastructure to supply a ship berth or truck pedestal. Whether reimbursable with Program funds or not, labor expenses shall be included in the itemized invoice with the detailed number of hours charged and the hourly wage.

Equipment owners may submit a single, itemized invoice for multiple, completed equipment projects under this Program. The invoice shall itemize the charges for each equipment project.

Invoice payments may be made directly to the equipment or engine dealer or distributor only if such payment arrangements are specified in the equipment project contract.

The local agency shall maintain copies of all invoices and documentation of payment in the equipment project file.

d) Direct payment

Local agencies may expend Program funds through invoice payments (described in Chapter IV.2.c.) or according to the direct payment option described in this section. The direct payment option is only available for truck retrofit and replacement equipment projects, and harbor craft repower and replacement equipment projects. Direct payments may be made to vendors (vehicle or equipment dealers or manufacturers) or third party financing entities (banks or financing companies). The following requirements apply:

- Funds paid to the vendor shall be used only towards the purchase of the funded equipment.
- Funds paid to the financing entity shall be used only to reduce the principal amount of a loan secured against the funded equipment.

Local agencies shall approve direct payment requests prior to payment. Direct payment terms shall be incorporated in the legally binding equipment project contract between the local agency and equipment owner. The equipment project contract shall include terms specifying arrangements for the local agency payments to go directly (or jointly) to a vendor or financing entity.

The local agency may issue a check made payable to two parties, the equipment owner and the dealer, manufacturer, or financing entity once the following requirements are met:

- The local agency has entered into a written agreement (contract or MOU) with a verified representative of the dealer, manufacturer, or financing entity.
- The verified representative of the dealer, manufacturer, or financing entity has physical custody of the old equipment and has agreed in writing to ensure that the old equipment is delivered to a licensed dismantler up to 30 days after the issuance of the check, or has verified that the old equipment has been delivered to a licensed dismantler prior to the issuance of the check.

e) Early reimbursement option - ships at berth grid-based power

The early reimbursement option is only available to seaport equipment owners on ships at berth grid-based power projects.

Local agencies shall approve early reimbursement of up to 80 percent of eligible project costs, provided the equipment owner has expended all non-Program match funding and remains in compliance with the equipment project contract.

Local agencies shall hold a minimum of 20 percent of project funds per berth in retention until post-inspection is complete.

If a small seaport of less than 10 berths experiences difficulties expending all non-Program match funding prior to early reimbursement, the ARB Executive Officer or his or her designee may approve alternate requirements that facilitate project completion and maintain robust accountability.

3. Earned interest

The local agency shall:

- Track the amount of interest earned on Program funds held in local agency accounts, beginning immediately after receipt of Program funds from ARB.
- Maintain Program funds in an interest-bearing account separate from other local agency funds.
- Maintain accounting records (e.g., general ledger) that track interest earned on Program funds on a per grant basis.

a) Reporting requirement for earned interest

The local agency shall indicate the amount of interest earned and expended on all Program funds in the quarterly- and semi-annual reports, on a per grant basis.

Documentation of earned interest generation and expenditure shall be retained for a minimum of 35 years from the grant agreement date to comply with federal and state bond requirements.

b) Earned interest expenditure provisions

The local agency shall expend interest earned from Program funds on eligible equipment projects.

If a local agency is unable to expend all or a portion of the earned interest on eligible equipment projects within a grant, the local agency may request ARB to transfer the interest to another grant. Upon approval of the request, the local agency may utilize the interest on eligible equipment projects.

If the local agency is authorized to use a portion of the grant for administration funds, the local agency may use a portion of the earned interest for administration costs up to the maximum allowed by these Guidelines for that source category to implement additional projects. Interest earned on grants funded by non-taxable bonds (i.e., Build America Bonds) may not be used towards administration costs.

The local agency shall return earned interest within 90 days of the determination that interest cannot be expended, as described in Chapter IV.C.2.

C. Funding Recapture – Local Agency

1. Process for recapturing funds

A local agency shall obligate and expend Program funds in a timely manner. A local agency shall notify ARB of funds that were not obligated or liquidated by Program deadlines within specified timeframes and may be required to return these funds to ARB per the deadlines established in the grant agreement. The ARB Executive Officer or his or her designee has the authority to recapture funds for reallocation and expenditure prior to reversion deadlines, and may amend or modify an impacted grant agreement, or establish a new grant agreement, to implement this policy. The local agency shall agree to comply with the recapture process.

Recaptured funds may become available to a local agency in several ways including, but not limited to, the following:

- Allocated to a local agency by ARB.
- Funds obligated through contract with equipment owners that are returned or not spent prior to the statutory deadline.
- Earned interest held by a local (or State) agency, as permitted by State law and fiscal policies.
- Funds paid to the local agency by equipment owners through voluntary buyout, involuntary buyout (equipment rendered inoperable), or penalties.

2. Expending recaptured funds

The local agency shall obligate and expend recaptured funds according to the following hierarchy:

- Eligible equipment projects on the ARB-approved ranked list for the funding category covered by the grant that generated the funds.
- Eligible equipment projects from a new solicitation for the funding category covered by the grant that generated the funds.
- Upon ARB staff approval, eligible equipment projects for another funding category covered by a grant agreement between the local agency and ARB.

The local agency may be required to return recaptured funds to ARB for re-allocation if it cannot expend them according to these priorities:

- With the exception of funds acquired through buyouts and penalties, the local agency shall track fund activity by year of appropriation. A local agency shall also track all fund activity by fiscal year.
- The local agency shall report semi-annually all Program funding activity using the Goods Movement Online Database.

D. Ongoing Local Agency Evaluation of Equipment Projects

Local agencies shall evaluate equipment projects on an ongoing basis. The ongoing evaluation process is designed to meet the accountability requirements of SB 88 and the Governor's Executive Order S-02-07.

Local agency evaluation efforts shall include, but are not limited to: ongoing desk reviews of reports and equipment project updates provided by equipment owners, review of electronic monitoring unit data (as applicable), site inspections, equipment inspections, review of equipment maintenance and activity logs, and other measures deemed appropriate by ARB or the local agency.

Equipment owners shall permit the local agency, ARB, Department of Finance, the Bureau of State Audits, or any authorized designee, access, during normal business hours, to conduct ongoing evaluations, Program reviews, or fiscal compliance audits (fiscal audits) for the purpose of monitoring the Program.

E. Local Agency Reporting Requirements

Local agencies shall obtain, verify, and submit to ARB all local agency and equipment project reporting information as outlined in these Guidelines.

1. Quarterly data updates

Local agencies shall submit to ARB quarterly data updates on all local agency projects and the equipment projects associated with each. The local agency shall submit these updates using the Goods Movement Online Database when available.

Local agency quarterly data updates shall begin, at a minimum, one quarter after the beginning of the first solicitation period, and continue until the local agency provides ARB with the local agency project completion report (see below). These quarterly data updates shall be cumulative, reflecting the most current local agency project information. ARB staff may temporarily eliminate this requirement for grants that are suspended, or have recently been suspended, due to lack of bond funding.

Quarterly data updates to ARB shall include the following information, if applicable:

- Start and end dates of most recent equipment project solicitation.
- Updates to each equipment project application received by the local agency through the solicitation process, including:
    - Equipment project application information.
    - Equipment pre-inspection information.
    - Funding status (selected for funding, not funded).
    - Equipment project contract information.
    - Equipment post-inspection information.
    - Equipment project status (active/withdrawn/ineligible).
- Total Program funds obligated.
- Total Program funds expended/remaining (breakdown by project funds and administration funds).
- Total interest earned.

2. Semi-annual report

Local agencies shall submit to ARB semi-annual reports through the Goods Movement Online Database or another method established by ARB.

Local agency semi-annual reports shall begin the year following initial ARB payment of project funds to the local agency, and continue for the term of the grant agreement. ARB staff may standardize the submittal dates for these reports and notify local agencies. Local agencies shall submit semi-annual reports on the schedule established by ARB [H&S §39625.02(f)(1) and Executive Order S-02-07]. The purpose of the report is to ensure that each local agency project is being executed in a timely fashion, within the scope and budget identified when ARB awarded funding.

At a minimum, the semi-annual report shall include the following information:

- All data required in the quarterly report.
- Amount of interest earned from Program funds.
- Recaptured fund activity (see Chapter IV.C.).
- The anticipated costs of the local agency project compared to the total estimated cost in the grant agreement.
- Actions undertaken to ensure funded local agency project is being implemented according to budget allocations or a plan for achieving the benefits of the project by either down-scoping the project or by identifying alternative funding sources to meet any identified cost increases and remain within budget.
- The anticipated duration of the local agency project compared to the original schedule at the time the grant agreement was executed.
- Status of equipment project tracking efforts to ensure compliance with operating conditions, including the results of the annual reports submitted by the equipment owners (once available). The results of the equipment owner's annual reports shall be submitted annually, on a schedule to be determined by ARB.

- Status of equipment owner reporting compliance.
- A document signed by the local agency's Chief Administrative Officer, Chief Financial Officer, or Program Grant Administrator verifying that the equipment project and financial data submitted in the report is complete, accurate, and that there are no known instances of fraud.
- Any other information requested by ARB staff.

3. Local agency project completion report

Local agencies shall submit to ARB a local agency project completion report no later than 6 months following the full local agency liquidation of Program funds under the grant agreement [H&S §39625.02(f)(2)]. This report shall provide information regarding the specific local agency expenditure of Program funds on administration and equipment project costs.

At a minimum, the local agency project completion report shall include the following, as applicable, based on specific guidance from ARB staff:

- The final costs of the local agency project compared to the total estimated cost in the grant agreement.
- The duration of the local agency project compared to the original schedule at the time the grant agreement was executed.
- The performance outcomes of the project (number of pieces of cleaner equipment and reductions in PM and NOx emissions) compared to the performance benchmarks identified in the grant agreement.

V. State Agency Project Implementation

ARB will enter into interagency agreements with other State agencies that are awarded funds for a truck loan or loan guarantee program (loan project). If ARB is the State agency, no interagency agreement is required. The interagency agreement shall specify the requirements that the State agency and/or its contractor(s) must meet. These include implementation and funding requirements.

A. Implementation Requirements

A State agency implementing a loan project (either directly or through contractors) must meet the following conditions:

- Use funds to upgrade or replace eligible diesel trucks according to the project specifications in Appendix A.
- Adhere to any financial terms and conditions established by ARB staff, which may include interest rate, loan term, and minimum credit requirements.
- Maintain a public website.
- Use marketing strategies in partnership with ARB and local agencies to target independent owner-operators and smaller fleets that need financial assistance.

For loan project applicants who are not receiving a Program grant, the State agency or its contractor(s) shall also:

- Determine that the applicants meet the Program eligibility requirements.
- Conduct a compliance check on the old vehicle and the equipment owner.
- Perform pre-inspections of old equipment.
- Perform post-inspections of new equipment.
- Ensure old equipment is scrapped.

B. Transfer, Obligation, and Expenditure of Funds

Funds will be considered obligated when available to ARB for expenditure and upon execution of the interagency agreement. ARB will transfer the funds to the State agency according to the terms of the interagency agreement.

If no interagency agreement is required because ARB is the recipient, funds are considered obligated when they are awarded by the Board and available to ARB for expenditure. Funds are considered expended (liquidated) when the State agency or its contractor(s) has completed the transaction which may include: executing loan documents, transferring funds into an account for loan guarantees, or transferring funds for interest rate subsidies.

C. Ongoing Evaluation of Loan and Loan Guarantee Programs

State agencies and any contractor(s) shall evaluate loan and loan guarantee projects on an ongoing basis to meet the accountability requirements of SB 88 and the Governor's Executive Order S-02-07. The State agency shall include information in its application to ARB for funding that describes the proposed actions to evaluate these projects. ARB shall include appropriate provisions for ongoing evaluations in the interagency agreement.

Equipment owners shall permit the State agency, ARB, Department of Finance, the Bureau of State Audits, or any authorized designee, access, during normal business hours, to conduct ongoing evaluations for the purpose of monitoring the Program.

D. State Agency Reporting Requirements

1. Semi-annual report

State agencies shall obtain, verify, and submit to ARB all equipment project reporting information as described below.

- Total number of truck projects funded, including the number of retrofits and replacements by loan type.
- Total Program funds obligated and liquidated.
- Amount of interest earned from Program funds.
- A cumulative list of all loan and loan guarantee projects funded under the interagency agreement.
- A document signed by an authorized individual of the State agency verifying that the equipment project and financial data submitted in the report is complete, accurate, and that there are no known instances of fraud.
- Any other information requested by ARB staff.

2. Project completion report

State agencies shall submit to ARB a local agency project completion report no later than 6 months following the full local agency liquidation of Program funds under the interagency agreement [H&S §39625.02(f)(2)].

This report shall provide information regarding the expenditure of Program funds on administration and equipment project costs.

The State agency project completion report shall include the following, as applicable based on specific guidance from ARB staff:

- The final costs of the project compared to the total estimated cost in the interagency agreement.
- The duration of the project compared to the original schedule at the time the interagency agreement was executed.
- The performance outcomes of the project (number of cleaner trucks funded compared to the performance benchmarks identified in the interagency agreement).
- A list of the completed loan and loan guarantee projects.
- Amount of interest accrued on Program funds.
- List and description of equipment projects funded with earned interest.
- A document signed by an authorized individual of the State agency verifying that the equipment project and financial data submitted in the report is complete, accurate, and that there are no known instances of fraud.

VI. General Equipment Project Requirements

A. Ownership Requirements

Equipment project applications shall be signed and submitted by the current legal owner of the existing equipment that will be upgraded or replaced. Equipment project applications for ships at berth, truck electrification infrastructure, and locomotive emissions capture and control system projects shall be signed and submitted by the future owner of the new equipment because there is no existing equipment.

Non-owner applications are not eligible for funding.

Ownership of the existing equipment shall not change from the time an equipment project application is submitted through receiving Program funding. Refer to Chapter VI.E. for additional requirements to maintain eligibility.

Individuals or companies that operate the existing equipment under a lease agreement with the equipment owner are prohibited from applying for bond funding.

Individuals or companies that currently own the equipment but will operate the replacement equipment under a lease-to-own agreement may participate if a lease-to-own program is offered by the local agency according to the provisions described in Chapter IV.A.13.

The owner of existing equipment applying for truck replacement under a lease-to-own program may apply jointly with the proposed lessor or lessee.

B. Third Party Applications

Third party applications are not allowed. The owner of the existing equipment must sign and agree to the submittal of the equipment project application. If there is no existing equipment, the owner of the future Program-funded equipment shall sign and agree to the submittal of the equipment project application.

A third party may, however, complete an application (in whole or in part) on the owner's behalf. Equipment project applications shall include a signature section for third parties. The third party signature section shall include signature and date lines, and blanks for the third party to list how much they are being paid, if anything, to complete the application and what source of funds are being used to pay them.

C. Equipment Project Specifications

Equipment owners may refer to Appendices A-H for descriptions and specifications for the equipment projects eligible for Program funds. Equipment projects shall comply with all requirements and restrictions in the Guidelines, except for those allowable alternatives that the local agency is approved to implement, consistent with Chapter III.C.

Equipment owners are advised to carefully review the information packets provided by local agencies during the equipment project solicitation period.

D. Equipment Project Application Requirements

1. Equipment project information

Equipment owners are required to provide project application information for the applicable equipment project option identified in Appendices A-H. This typically includes information on: the equipment owner, the existing equipment, the proposed equipment project (with funding level and project life), costs, schedules, and operational/activity data to quantify the benefits of the equipment project.

2. Equipment project schedule

As part of the application, equipment owners shall commit to meeting project schedule requirements listed in the equipment project application for the major milestones listed by source category in Appendices A-H. The equipment project schedule shall also be included as part of the equipment project contract signed between the local agency and equipment owner. Adjustments to the schedule prior to contract execution may only occur with local agency consent.

3. Case-by-case equipment projects

Only equipment project options specifically identified in these Guidelines shall be eligible for Program funds. Equipment project options beyond those identified in these Guidelines may be recommended to ARB staff for inclusion in future Guideline updates.

4. Certifications and disclosures

Equipment project applications shall include certifications and disclosures that the equipment owner shall sign, that include, at a minimum:

- Certification that the equipment owner has reviewed the application and that the application information is correct.
- Certification that once the equipment owner submits the equipment project application, the owner shall not submit other applications to local agencies in any trade corridor for funding for the same truck, locomotive, equipment, vessel, berth, or facility under this Program or the Carl Moyer program. This prohibition does not include applications for loans or loan guarantees.
- Certification that the equipment owner agrees to all requirements of the Guidelines.
- Certification that the Program-funded equipment shall be placed into operation and post-inspected prior to the applicable operational deadlines to remain eligible for funding.
- Certification that the Program-funded equipment may not be used by the equipment owner to comply with any applicable ARB regulations for the specified timeframe. ARB will post and update information on the Program website describing operational deadlines and when the Program-funded vehicle will become eligible to be included in the equipment owner's fleet compliance strategy for the applicable project option.
- Certification that neither the owner nor equipment identified in the equipment project application has any outstanding ARB violations or non-compliance with ARB regulations.
- Disclosure of any other source(s) of funding that the equipment owner has applied for that would be used for the same equipment project. The disclosure shall identify the source of funds, how much is being applied for, and what the funding would be used for.
- Disclosure of the value of any existing financial incentive that directly reduces the project cost, including tax credits or deductions, grants, or other public financial assistance, for the same equipment project.
- Certification that Program funds were not used to previously upgrade the equipment identified in the equipment project application, except for funds received to retrofit a truck with a diesel PM filter.
- Certification that equipment project match funding is reasonably available to complete the equipment project according to the proposed timeframe.
- Certification that the equipment must **not** be purchased, received, installed, paid for, or placed into operation prior to contract execution, unless specified in these Guidelines. If allowed, the equipment owner shall assume all financial risk and is in no way assured Program funds.
- Certification that any equipment purchased outside of California may be subject to California sales or use tax.

- Certification that the equipment owner has all the information needed to understand what must be done to maintain eligibility for Program funds. This includes maintaining ownership; maintaining registration; keeping equipment in legal operating condition within California; correcting any air pollution citations; complying with all ARB regulations; and reporting, repairing, or replacing equipment that has been damaged, destroyed, or stolen. ARB staff shall develop, and make available on the Program website, a fact sheet for all local agencies for incorporation or attachment to the application.

Source category-specific requirements listed in Appendices A-H shall be used to customize the equipment project application, certifications, and disclosures.

The equipment owner may be allowed to re-apply for equipment project funding if a previous application for the same project has been rejected and is no longer being considered by a local agency for funding.

An equipment owner who is found to have submitted multiple applications for the same equipment project and not disclosed any other requested, or received financial incentive may be disqualified from funding for that engine, piece of equipment, or vehicle under this Program. The equipment owner may also be prohibited from submitting future applications to any and all ARB incentive programs.

5. Equipment project funding demonstration

Equipment project applications shall list the source(s) funds to complete the proposed equipment project, including the proposed Program funds, and matching funds from other State, local, federal, or private sources. The equipment owner may be required to demonstrate fund availability or provide proof of approved financing at any time during the application and review process.

Equipment project applications may identify any loan or lease-to-own programs the equipment owner intends to utilize to fully fund the equipment project.

The total project cost shall include the purchase price of the equipment, including shipping charges, and the cost of installation or construction (as applicable). Installation costs shall only include installation of the components necessary to operate the equipment.

- Program funds may only be used for eligible expenses.
- Optional items (such as cigar lighters or custom mud flaps on trucks) shall be paid at the owner's expense.
- Taxes, fees, insurance, and other charges may not be included as part of the total project cost.

- Electricity and fuel costs may not be included in the project cost.
- Costs for equipment and parts on engine repower projects are only eligible for funding if they are required to ensure the effective installation and functioning of the new engine, and achieve the expected emissions performance, but are not part of typical vehicle or equipment maintenance or repair. Examples of ineligible repower costs include, but are not limited to: tires, axles, paint, brakes, and mufflers.

The equipment owner may estimate the total project cost in the first year of operation.

E. Equipment Owner Requirements to Maintain Eligibility

Equipment owners shall maintain Program eligibility for their equipment projects throughout the funding process. Project information may change between the time of submitting an application and receiving Program funding.

For truck projects, the equipment project shall meet, at a minimum, the following requirements at all times:

- Ownership of the equipment matches what is listed on the application.
- Equipment is in legal operation at all times, travels in California at least 75 percent of the time, and moves goods a majority of the time.
- Equipment is in conformance with the minimum operational requirements listed in the application materials, solicitation, and Guidelines.
- Equipment owner maintains California base-plated registration or California IRP. Non-operational registration is prohibited. Dual plates and out-of-state registration, including out-of-state IRP, are prohibited, except for trucks that carry goods across the California-Mexico border, as they are required to be dual-plated (California and Mexico only).
- Equipment owner and fleet remain in compliance with all ARB regulations (Program-funded trucks cannot be used towards compliance for the specified timeframe).

For truck projects, the equipment owner shall notify the local agency as soon as possible if anything about a project changes, as there may be circumstances where a project becomes ineligible. Under limited circumstances, changes which may be allowed include:

- Equipment operation (equipment becomes inoperable, destroyed, or stolen; see Appendix I.).
- Equipment owner's request to reinstate a withdrawn application or contract (see Chapter VI.G.).

For all other projects, the equipment owner shall contact their local agency as soon as possible if anything about a project changes to determine if project eligibility can be maintained.

F. Equipment Project Operation

Equipment owners with executed equipment project contracts shall be responsible for the operation of equipment funded under this Program, in compliance with the conditions of the contract. Except for approved truck lease-to-own programs, equipment owners may not assign, sell, transfer, license, or subcontract any rights or obligations to a third party without the express prior written consent of the local agency.

G. Equipment Project Contract Cancellation/Reinstatement

Equipment owners may request to withdraw or cancel their equipment project contract without any obligation, prior to payment of Program funds. Notification to the local agency shall be in writing.

Reinstatement of a withdrawn or cancelled project is at the local agency's discretion, subject to the availability of Program funds, and shall include, but is not limited to the following provisions:

- The equipment owner's request for reinstatement shall be in writing.
- Only equipment projects on the ARB approved ranked list may be reinstated.
- No equipment project that received a funding commitment shall be displaced as a result of reinstating a withdrawn project.
- The equipment project and owner meet all Program eligibility requirements.

H. Equipment Accidentally Rendered Inoperable, Destroyed, or Stolen

1. Equipment project application has been submitted and existing equipment is not yet replaced

If the existing equipment is accidentally rendered inoperable, destroyed, or stolen prior to replacement, the project may, in some cases, remain eligible for funding if the equipment owner promptly notifies the local agency and takes action using one of the remedies listed in Appendix I.

2. Replacement equipment has been placed into operation

If the Program-funded equipment is accidently rendered inoperable, destroyed, or stolen during the term of the equipment project contract, the equipment owner must promptly notify the administering local agency and coordinate a remedy consistent with the terms of the contract and these Guidelines. The Program-funded equipment may be repaired or replaced at the equipment owner's expense subject a pre-inspection, as described in Chapter IV.A.10.

If the equipment owner's insurance company or the local agency determines that Program-funded equipment has been accidentally rendered inoperable or destroyed, the equipment owner may replace the inoperable or destroyed equipment with equipment certified to equal or lower emission levels, and continue with the terms of the original contract or request to close-out the terms of the contract with the local agency. The equipment owner shall notify the local agency if that owner chooses to use his/her own funds to replace the inoperable equipment with equipment certified to equal or lower emission levels, and continue with the terms of the original contract. The equipment owner shall be responsible for providing the local agency with updated information for the new equipment.

If the equipment owner reports to the local agency that the Program-funded equipment has been stolen, and this is confirmed by a police report and an insurance company determination of loss due to theft, the equipment owner may replace the stolen equipment with equipment certified to equal or lower emission levels at his/her own cost, and continue with the terms of the original contract or request to close-out the terms of the contract with the local agency.

The equipment owner shall notify the local agency if he or she chooses to close-out the contract due to accident or theft. The equipment owner shall provide supporting documentation (e.g., salvage title, policy report, insurance company determination, copy of insurance company reimbursement quote/check, and/or other) to the local agency exhibiting that the equipment was accidentally rendered inoperable or stolen and remit the following amount to the local agency:

Insurance reimbursement amount (minus any lien amounts), or

$$\text{Contract Recapture Amount} = \text{Contract Value} - \left(\text{Elapsed Equipment Project Life} \times \frac{\text{Contract Value}}{\text{Equipment Project Life}}\right)$$

Example: An equipment owner receives $50,000 in Program funding for a truck replacement project. The owner signs an equipment project contract for 5 years (60 months). After 3 years and 6 months (42 months) from the project being post-inspected and placed into operation, the equipment is rendered inoperable according to the above description. The equipment owner may request to close-out the terms of the contract and pay $15,000 to the local agency.

Contract Recapture Amount: $15,000 = $50,000 – (42 months x ($50,000/60 months))

I. Equipment Transfer/Sale/Replacement Requirements

Equipment owners with executed equipment project contracts with a local agency shall be fully and legally responsible for the operation of equipment funded under this Program in compliance with the conditions of the contract. Equipment owners may not assign, sell, transfer, license, or subcontract any rights or obligations to a third party without the express prior written consent of the local agency.

If the original owner of Program-funded equipment chooses to sell the equipment for any reason, or is required or chooses to replace the equipment with cleaner equipment prior to the end of the equipment project life, the original owner shall notify the local agency in writing and receive prior written consent for the transaction from the local agency.

Prior to completing the replacement transaction, the original owner shall make the new truck available for inspection by the local agency to verify it meets Program requirements.

Prior to completing the sales transaction, the original owner shall inform the party purchasing the equipment of the equipment project contract provisions, and disclose the remaining contract term. The original owner shall be responsible for establishing contact between the new owner and local agency to facilitate the transfer of the contract provisions and terms. The original owner shall be responsible for providing the local agency with the purchase price of all sold Program-funded equipment.

The original owner shall provide the prospective new owner with valid contact information for the local agency so the new owner can assume legal responsibility under the original contract or enter into a new equipment project contract with the local agency, for the remainder of the contract term. The original equipment owner who received Program funding shall not be relieved of his or her legal obligation to fulfill the conditions of the contract unless the new owner has assumed responsibility through an executed contract with the local agency.

If the equipment is sold, and the original equipment owner failed to fulfill the responsibilities described in this section, remedies for equipment project non-performance shall be imposed (see Chapter VI.K.).

J. Optional Equipment Project Contract Buy-Out

If the owner of Program-funded equipment cannot meet the obligations of the equipment project contract for any reason and does not use the options in Chapter VI.G-I., the owner may request to buy-out the remaining time on the contract prior to the end of the contract term. The owner shall notify the local agency in writing and receive prior written consent for the transaction from the local agency. The equipment owner shall remit the contract buy-out amount to the local agency, based on the remainder of the contract value and an Administrative Fee. Any monies received by the local agency under this buy-out provision shall be treated as recaptured funds subject to the requirements of Chapter IV.C. The contract buy-out amount shall be determined according to the formula shown below.

Equipment Project Contract Buy-Out Formula:

$$\text{Contract Buy-Out Amount} = \left(\text{Contract Value} - \frac{\text{Elapsed Equipment Project Life} \times \text{Contract Value}}{\text{Equipment Project Life}}\right) + \text{Admin Fee}$$

The Administrative Fee shall be:

- $5,000 for truck projects.
- $10,000 for locomotive, commercial harbor craft, and cargo equipment projects.
- $250,000 for ships at berth projects.

Example: An equipment owner receives $50,000 in Program funding for a truck replacement project. The owner signs an equipment project contract for 5 years (60 months). After 3 years and 6 months (42 months) from the project being post-inspected and placed into operation, the equipment owner requests to close-out the outstanding contract. The equipment owner may request to close-out the terms of the contract and pay $20,000 to the local agency.

Contract Buy-Out Amount: $20,000 = ($50,000 - (42 months x ($50,000/60 months))) + $5,000

K. Equipment Project Non-Performance

All equipment project contracts signed by the equipment owner shall include non-performance provisions enforceable by the local agency. Non-performance includes, but is not limited to:

- Failure to meet the terms and conditions of an executed equipment project contract, including, but not limited to, equipment operating conditions and geographic restrictions.
- Equipment/engine/vehicle is non-operational, malfunctioning, or damaged.
- Failure to operate or maintain equipment in accordance with manufacturer's recommendations.
- Failure to meet established deadlines for equipment project completion.
- Failure to allow for an electronic monitoring device, or tampering with an installed device or data.
- Misuse of direct payments to vendors provisions.
- Insufficient, incomplete, or faulty equipment project documentation.
- Failure to provide required documentation or reports in a timely manner.

Remedies for equipment project non-performance may include, but are not limited to:

- Recovery of all or a portion of Program funds.
- Other fiscal penalties on equipment owners based on the severity of the non-performance.
- Cancellation of the contract.
- A ban on the equipment owner's ability to participate in future State incentive programs.
- Prohibiting a specific engine, piece of equipment, or vehicle from participating in another State incentive program.

APPENDICES

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APPENDICES A-E

Project Specifications for FY2012-13 (Year 4) and Later Funds by Source Category

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APPENDIX A Heavy Duty Diesel Trucks

A. Equipment Project Specifications

Eligible Equipment	Heavy duty diesel trucks used to move goods (a majority of the time) for the past 2 years, with an original manufacturer's gross vehicle weight rating (GVWR) of 19,501 lbs or greater listed on the application and verified at pre-inspection.
	Equipment owner must demonstrate:
	• Fleet compliance with the Statewide Truck and Bus Rule.
	• California operation:
	  ○ At least 75% operation within California for the past 2 years.
	  ○ Annual vehicle miles traveled (VMT) in California each year for the past 2 years:
	  ▪ At least 20,000 miles for Class 8 trucks (33,001 lbs GVWR or greater).
	  ▪ At least 20,000 miles for Class 7 trucks (26,001 - 33,000 lbs GVWR).
	  ▪ At least 10,000 miles for Class 6 trucks (19,501 - 26,000 lbs GVWR).
	• California registration:
	  ○ Current registration and prior registration for the past 2 years[1]. Eligible registration types include:
	  ▪ California base-plated registration, OR
	  ▪ California International Registration Plan (California IRP), OR
	  ▪ Dual-plated registration (California based-plated/California IRP and Mexico only) for trucks carrying goods across the California-Mexico border, as they are required to be dual-plated.
	[1]Note: The past 2 years means the current year (1-12 months prior to application date) and prior year (13-24 months prior to application date).

Ineligible Equipment	• Trucks subject to ARB's Drayage Truck Rule (see Chapter I, Table I.4). • Trucks subject to ARB's Public and Utility Fleet Rule. • Trucks subject to ARB's Solid Waste Collection Vehicle Rule. • Trucks subject to ARB's Diesel Cargo Handling Equipment Rule. • Trucks not in compliance with the Statewide Truck and Bus Rule. • Trucks registered outside the State of California, including dual-plated registration, except for trucks that carry goods across the California-Mexico border, as they are required to be dual-plated, as described above. • Trucks which are a salvage vehicle (see Chapter I, Table I.4). • Trucks constructed from a glider kit, unless allowed by the local agency for an old, existing truck to be replaced. Glider kit trucks may not be repowered or utilized as a replacement truck. • Repowered trucks when used as a replacement truck.
General Requirements Applicable to All Truck and Truck Electrification Infrastructure 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 milestone 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.

Heavy Duty Diesel Trucks (cont.)

General Requirements Applicable to All Truck Project Options	The equipment owner shall: • Maintain fleet compliance with the Statewide Truck and Bus Rule without utilizing Program-funded equipment until the specified timeframe. ARB will post and update information on the Program website describing operational deadlines and when the Program-funded vehicle will become eligible to be included in the equipment owner's fleet compliance strategy for the applicable project option. For the duration of the project life, the equipment owner shall: • Commit to move goods a majority of the time. • Maintain California base-plated registration or California IRP, except as described in Eligible Equipment previously listed including no out-of-state and non-California IRP registration. • Commit to 100% California-only operation (or 90% California operation as selected by the equipment owner). • Commit to at least 50% of travel within the four California trade corridors. • Agree to accept an on-board electronic monitoring device at any time. • Maintain collision/comprehensive insurance on the replacement truck for replacement projects.
General Requirements Applicable to All Engines for Repower or Replacement Project Options	Program requirements for **engines** for repower or replacement projects must be certified by an ARB Executive Order for on-road use with the following: • 2010 emissions - 0.20 grams per brake-horsepower hour (g/bhp-hr) or less NOx (FEL and CERT values) and 0.01 g/bhp-hr or less PM (CERT value). • Class 8 truck - intended service of Heavy Heavy Duty (HHD) for diesel engines or Heavy Duty Otto (HDO) for applicable alternative fuel vehicles. • Class 7 truck - intended service of Medium Heavy Duty (MHD) or HHD for diesel engines or HDO for applicable alternative fuel vehicles. • Class 6 truck - intended service of MHD for diesel engines or HDO for applicable alternative fuel vehicles. • Class 6-8 trucks - all heavy duty hybrid or electric vehicles shall follow ARB's Heavy Duty Hybrid Electric Vehicle Certification Procedure.

General Requirements Applicable to All Trucks Replacement (New or Used) Project Options	Program requirements for **trucks** (new or used) purchased for replacement projects must meet the following:
	• Original manufacturer's GVWR:
	  ○ Class 8 (33,001 lbs or greater).
	  ○ Class 7 (26,001 - 33,000 lbs).
	  ○ Class 6 (19,501 - 26,000 lbs).
	• Same weight classification range (Class 8, Class 7, or Class 6) as the existing truck, except under the following conditions:
	  ○ Replacement of 2 eligible trucks for 1 new truck under Option (2) and the funding amount is based on the highest weight classification of the two existing trucks, or the weight classification of the new truck, whichever is less.
	  ○ Replacement required by the equipment owner in order to meet a vocational need, as approved by the local agency, and the funding amount is based on the weight classification of the existing or new truck, whichever is less.
	  ○ Replacement of a Class 7 truck with a Class 8 truck, or a Class 8 truck with a Class 7 truck, as long as both trucks have a HHD engine, and the funding amount is based on the weight classification of the existing or new truck, whichever is less.
	• Maximum truck VMT, with odometer verification during post-inspection:
	  ○ Class 8 (less than 500,000 miles).
	  ○ Class 7 (less than 250,000 miles).
	  ○ Class 6 (less than 250,000 miles).
	• Original equipment manufacturer engine installed in a chassis of the same model year, make, and configuration as was originally provided from the truck manufacturer when the chassis and engine were both new.

Heavy Duty Diesel Trucks (cont.)

Modifying an Application (applicable to truck projects only)	Equipment owners may change the equipment project option (replacement, repower, or three-way truck transaction) or lease-to-own program participation after the local agency solicitation period has closed if permitted by the local agency and subject to the following requirements: • The change must result in a funding amount equal to or less than the amount that was requested in the original application. • The change must result in a calculated project cost-effectiveness equal to or greater than the project listed in the original application. • The change must result in the project remaining above the funding line on the ranked list. Notes: Unless specifically allowed in these Guidelines, equipment owners cannot substitute a different vehicle or change the ownership of the existing vehicle identified on the application after the local agency solicitation period has closed.
Option (1) Repower	Partial funding (see options below) to repower a truck equipped with an eligible heavy duty diesel engine with a new MY2013 or newer engine that meets 2010 emissions. Eligible projects include: • Class 8 or Class 7 truck with a MY1994-2006 engine. • Class 6 truck with a MY1996-2006 engine.
Funding Options	1. $20,000/truck to repower a Class 8 or Class 7 truck with a new MY2013 or newer HHD engine that meets 2010 emissions. 2. $10,000/truck to repower a Class 7 or Class 6 truck with a new MY2013 or newer MHD engine that meets 2010 emissions.
Requirements	Program-funded engine shall be installed and operational (post-inspection completed, except scrappage) prior to a regulatory requirement for that technology or level of emissions control under applicable provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing operational deadlines for the applicable project option. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years or 500,000 miles, whichever comes first. • Scrap the old engine. • Purchase a minimum of a 1-year or 100,000-mile major component engine warranty that covers parts and labor (if the truck is no longer under warranty or has less than 1 year of warranty). • Provide a copy of ARB Executive Order documenting that the new engine meets 2010 emissions.

Heavy Duty Diesel Trucks (cont.)

Option (2) Replacement	Partial funding (see options below) to replace 1 or 2 truck(s) equipped with an eligible heavy duty diesel engine(s) with a diesel, alternative fuel, or zero-emission truck. Funding amounts are based on the same weight classification range (Class 8, Class 7, or Class 6) as the existing truck, except as described in the "General Requirements Applicable to All Trucks Replacement (New or Used) Project Options" section above. Eligible projects include: • Class 8 or Class 7 truck(s) with a MY1994-2006 engine. • Class 6 truck(s) with a MY1996-2006 engine.
Funding Options	Class 8 truck: 1. $50,000/truck for a new replacement truck with a MY2013 or newer engine that meets 2010 emissions. AB 118 funds, if available, may be added for projects utilizing a zero-emission engine. 2. $40,000/truck for a used replacement truck with a MY2010 or newer HHD engine that meets 2010 emissions. Notes: The maximum grant amount will be reduced by the amount received if the Program previously funded the installation of a diesel particulate filter. Class 7 truck: 1. $35,000/truck for a new or used replacement truck with a MY2010 or newer engine that meets 2010 emissions. AB 118 funds, if available, may be added for projects utilizing a zero-emission engine. Notes: The maximum grant amount will be reduced by the amount received if the Program previously funded the installation of a diesel particulate filter. Class 6 truck: 1. $25,000/truck for a new replacement truck with a MY2013 or newer engine that meets 2010 emissions. AB 118 funds, if available, may be added for projects utilizing a zero-emission engine.
Requirements	Program-funded replacement projects shall be purchased and operational (post-inspection completed, except scrappage) prior to a regulatory requirement for that technology or level of emissions control under applicable provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing operational deadlines for the applicable project option. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of at least 5 years or 500,000 miles, whichever comes first. • Scrap the old truck(s). • Purchase a minimum of a 1-year or 100,000-mile major component engine warranty for the replacement vehicle that covers parts and labor (if the truck is no longer under warranty or has less than 1 year of warranty). • Provide a copy of ARB Executive Order documenting that the replacement truck engine meets 2010 emissions.

Heavy Duty Diesel Trucks (cont.)

Option (3) Three-Way Truck Transaction	1. Replace an eligible truck that has a MY1998-2006 engine and Level 3 PM retrofit (Truck A) with a diesel or alternative fuel truck (Truck C) with an engine that meets 2010 emissions. 2. Scrap a MY1993 or older diesel truck (Truck B) and replace with Truck A. Truck A: Heavy duty diesel truck with MY1998-2006 engine and Level 3 PM retrofit. Truck B: Heavy duty diesel truck with MY1993 or older engine that has demonstrated compliance with the Statewide Truck and Bus Rule until 12/31/2015 or later. Truck C: Heavy duty truck (diesel or alternative) that meets 2010 emissions. Notes: • Truck C must be the same class as Truck A. • Truck C must have less than 500,000 miles if Class 8 (250,000 miles if Class 7 or 6), with odometer verification at the post-inspection. • Truck B may be Class 8, Class 7, or Class 6. • Truck A shall be equipped with an operational diesel particulate filter.
Funding Options	1. $50,000 for new Truck C if Truck A is Class 8. 2. $40,000 for used Truck C if Truck A is Class 8. 3. $35,000 for new or used Truck C if Truck A is Class 7. 4. $25,000 for new Truck C if Truck A is Class 6.
Requirements	Truck C shall be purchased and operational (post-inspection completed, except scrappage) prior to a regulatory requirement for that technology or level of emissions control under applicable provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing deadlines for the applicable project option. In addition to the applicable General Requirements listed previously, the original owner of Truck A and new owner of new Truck C shall: • Transfer ownership (if applicable) of Truck A to the owner of old Truck B. • Commit to a project life of 5 years or 500,000 miles, whichever comes first, on Truck C. • Commit to 90% or 100% California-only operation for the duration of the project life. • Purchase a minimum of a 1-year or 100,000-mile major component engine warranty for Truck C that covers parts and labor (if Truck C is no longer under warranty or has less than 1 year of warranty). • Provide a copy of ARB Executive Order documenting that the new truck engine in Truck C meets 2010 emissions. • Demonstrate that any mid-1990s engine subject to the software upgrades for diesel trucks (i.e., chip reflash) has completed the upgrade on Truck A. In addition to the applicable General Requirements listed previously, the original owner of old Truck B must scrap Truck B.

Heavy Duty Diesel Trucks (cont.)

Option (4) Truck Electrification Infrastructure	Truck stops, intermodal facilities, distribution centers, and other places where heavy duty diesel trucks congregate within the four California trade corridors.
Funding Option	Landside truck electrification infrastructure to reduce diesel engine idling and use of diesel-fueled internal combustion auxiliary power systems may be funded at the lower of 50% of eligible project costs or a level commensurate with a cost-effectiveness of 0.10 pounds of weighted emissions reduced per State dollar invested. Projects shall be eligible to compete for funding only if the cost-effectiveness is equal to or greater than 0.10 pounds of weighted emissions reduced per State dollar invested. Eligible costs include purchase and installation of electrical infrastructure or equipment to: enable heating, cooling, and the use of cab power for parked trucks at truck stops; and enable the use of power for transport refrigeration units (TRUs) and auxiliary power systems at distribution centers, intermodal facilities, and other places where trucks congregate. Total reimbursement of eligible costs shall be based on demonstrated use over the first year of operation. If the actual usage for the first year of operation is less than the projected usage, the maximum allowable reimbursement payment shall be pro-rated based on the following formula: $\text{Maximum Reimbursement (\$)} = \left(\text{Original Maximum Reimbursement (\$)} \ X \ \frac{\text{Actual Usage (\# of hours)}}{\text{Projected Usage (\# of hours)}}\right)$ Ineligible costs include on-board auxiliary power units and other equipment installed on trucks, equipment, and services unrelated to heating and cooling (e.g., telephone, internet, television, etc.); TRUs; electricity costs; and operation and maintenance costs.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Commit to 10 years of operation. • Comply with all local permitting requirements.
Project Cost Assumptions	• Option (1): Total cost of a repower project is expected to be ~$40,000 for a Class 8 or Class 7 truck and ~$20,000 for a Class 6 truck. • Options (2) & (3): Total cost of a truck meeting 2010 emissions is expected to be ~$30,000 for a Class 6 truck to ~$300,000 for a Class 8 electric truck. • Option (4): Total cost for distribution centers is $1,500-$7,000/plug at dock; $2,500-$9,000/plug in parking areas; $500-$2,000/adapter for trailers and TRUs. Total cost for truck stops is $6,000-$18,000/parking space and $3,000/truck modification.

B. Major Milestones for Project Completion

1. Heavy duty diesel trucks

- Equipment order.
- Equipment acquisition/installation.
- Submittal of invoice to local agency for payment.
- Scrappage of old truck or engine.

2. Truck electrification infrastructure

The equipment project schedule shall include, but is not limited to, the following milestones:

- Completion and certification of any required California Environmental Quality Act (CEQA) documents.
- Bid solicitation, evaluation and award, and construction contract.
- Acquisition of any local permits, or other requirements.
- Electrification system design, unit acquisition, and delivery.
- Project completion.
- Post-inspection by local agency.
- Reporting to local agency of actual electrical use by trucks during first year of operation.
- 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. The local agency shall enter or import the equipment application information into the Goods Movement Online Database.

All equipment project applications must include the information specified below in:

- Section 1 – General information.
- Section 2 – Current equipment and activity information.
- Section 3 – Proposed equipment project information (include, as applicable, for each equipment project option.)

1. General information

a) Heavy duty diesel trucks

- Name of applicant (current legal owner of existing truck).
- Business name.
- Truck Regulation Upload, Compliance, and Reporting System Identification Number (TRUCRS ID Number).
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner) for companies and partnerships with multiple employees.
- 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) Truck electrification infrastructure

- Name of applicant.
- Business name.
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner) for companies and partnerships with multiple employees.
- Number of truck spaces (for truck stops) or number of docks (distribution centers).
- 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) Heavy duty diesel trucks

- Truck data.
    - Truck make and model year.
    - Vehicle identification number (VIN).
    - Original manufacturer's gross vehicle weight rating (GVWR) as shown on the vehicle door tag (if the door tag is not available, see Chapter IV.A.5. for assistance).
    - Vehicle license plate number.
    - Engine year and serial number.
    - Engine fuel type.
    - Current odometer reading (estimate total engine mileage if odometer is missing or broken).
    - Date a diesel particulate filter was previously installed on truck and verified control level of that filter (if applicable).

- Truck documentation.
    - Current ownership (copy of title of truck or registration).
        - For any truck that will be scrapped or reused.
        - Not applicable to repower projects.
    - Vehicle miles traveled (VMT) in California for the past 2 years.
        - Two (2) odometer readings (required) at least 6 months apart including any of the following records or combination of records:
            - Pre-inspection reading.
            - Maintenance records.
            - Biennial Inspection of Terminals (BIT inspection).
            - International Fuel Tax Agreement (IFTA) records.
            - Alternate documentation, as approved by the local agency.
    - California registration.
        - Eligible registration types include:
            - California base-plated registration, OR
            - California International Registration Plan (California IRP), OR
            - Dual-plated registration (California based-plated/California IRP and Mexico only) for trucks carrying goods across the California-Mexico border, as they are required to be dual-plated.
        - Current registration.
        - Registration for the past 2 years.
            - Current year (1-12 months prior to application date) and prior year (13-24 months prior to application date).
            - California Department of Motor Vehicles (DMV) registration cards for the past 2 years or California DMV Vehicle Registration Information Record (DMV printout).
                - The DMV printout may be obtained by submitting a Request for Driver Record Information form (INF 1125) to the DMV.
                - The DMV printout must show registration in both the current year and prior year (as defined above) with a minimum of 6 months of total registration.
                - If the DMV printout shows registration in the current year of 8 months and no registration in the prior year, alternative documentation (insurance certificate or BIT inspection) may be used to show operation in the prior year.

- Vocation and activity data for the past 2 years (unless noted otherwise).
    - Vocation(s) – the types of goods typically transported.
    - Estimated percentage of annual VMT in:
        - Bay Area trade corridor.
        - Central Valley trade corridor.
        - Los Angeles/Inland Empire trade corridor.
        - San Diego/Border trade corridor.
    - For concrete mixer trucks, dump trucks, bulk blower trucks, and other truck types specifically identified by ARB staff, the owner may provide the Power Take Off (PTO) hours in conjunction with VMT:
        - Documentation from the hour meter unit is required. Include information that verifies whether or not PTO hours are accumulated independently of VMT.
        - PTO hours will be converted to miles based on a factor of 20 miles for every hour. These converted miles may then be combined with VMT in the calculation of emission reductions and cost-effectiveness if the local agency determines PTO hours are accumulated independently of VMT.
        - Where PTO hours and VMT are not accumulated independently, the local agency may use either PTO hours or VMT.

Additional documentation may be requested by the local agency.

b) Truck electrification infrastructure

- Location and description of facility where truck electrification infrastructure is proposed for installation.
- Quantification of current annual truck operations and truck refrigeration unit (TRU) operations at the facility.
- Baseline emissions (without the project) for first 10 years of operation of proposed truck electrification infrastructure (developed with the concurrence of the local agency) – this emission estimate shall fully reflect the benefits of all adopted regulations including ARB rules for trucks, idling, auxiliary power systems, TRUs, and TRUs with generators sets.
- 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): Repower

- Engine repower data.
  - Engine make, engine model, and engine year.
  - Engine fuel type.
  - Specify 90 percent or 100 percent future operation in California.
- Repower documentation.
  - Documentation of all engine/truck modifications planned as part of the repower project. Include description of upgrades to such things as exhaust systems, electronics, etc.
- Itemized cost information for eligible expenses (verifiable quote).
- Equipment project funding demonstration.
  - Program dollars requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Documentation of match funding availability, if requested by the local agency.

b) Option (2): Replacement

- New truck data.
  - Original manufacturer's GVWR.
  - Engine model year.
  - Engine fuel type.
  - Specify 90 percent or 100 percent future operation in California.
- Equipment project funding demonstration.
  - Program dollars requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Documentation of match funding availability, if requested by the local agency.

c) Option (3): Three-way truck transaction

- Truck A (retrofitted truck) data.
  - Engine model year.
  - ARB-verified retrofit device manufacturer and name of device.
- Truck B (scrapped truck) data.
  - Engine model year.
  - Equipment owner name (if different from Truck A).
  - TRUCRS ID Number.
  - Mailing address.
  - Primary contact name and phone number.
- Truck C (new truck) data.
  - Original manufacturer's gross vehicle weight rating (GVWR).
  - Engine model year.
  - Engine fuel type.
  - Specify 90 percent or 100 percent future operation in California.

- Equipment project funding demonstration.
    - Program dollars requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Documentation of match funding availability, if requested by the local agency.

d) Option (4): Truck electrification infrastructure

- Truck electrification infrastructure 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).
- Predicted activity data with new equipment.
    - Estimated annual truck connections to electric power and average connection time.
    - Estimated annual TRU connections to electrical power and average connection time.
    - Expected power usage for trucks and TRUs (separately), each year for the first 10 years of operation.
- Projected emissions and benefits of the project.
    - Emissions with the project over a 10-year period.
    - Emission reductions attributable to the project (beyond those required by law or regulation) for a 10-year period beginning in the first year of operation.
    - Demonstration that the weighted emission reductions per State dollar invested is equal or better than 0.10 pounds per State dollar.
- Equipment project funding demonstration.
    - Program dollars requested.
    - Funding sources and amounts of other funding (private, local, other State, federal).
    - Total project cost (Program dollars 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.

D. Scrap Requirements

In addition to the general scrappage requirements listed in Chapter IV.A.14., specific requirements for repower, replacement, and three-way truck transaction projects are shown in Table A.1 below.

Table A.1 Truck Equipment Project Scrap Requirements

Source Category	Equipment Project Option	Additional Requirements
Heavy Duty Diesel Trucks	Option (1) Repower	• The local agency shall ensure the impound and transport of the old engine to the licensed dismantler up to 30 calendar days after the new engine is placed into operation. • The licensed dismantler must dismantle and destroy the old engine within 60 calendar 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 and use of any components. • The licensed dismantler shall provide proof of scrappage to the local agency within 10 calendar 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 calendar days of the destruction of the engine. • The following digital photos must be taken and labeled for the project file: 1. Engine tag with serial number. 2. Destroyed engine block.

Table A.1 Truck Equipment Project Scrap Requirements (cont.)

Source Category	Equipment Project Option	Additional Requirements
Heavy Duty Diesel Trucks	Option (2) Replacement	In addition to the requirements listed above for engine repower projects, replacement projects require: • The local agency shall ensure the impound and transport of the old truck(s) to the dismantler up to 30 calendar days after the replacement vehicle is placed into operation. • The licensed dismantler must dismantle and destroy the old truck(s) within 60 calendar days of receipt. The destruction must be done in accordance with these Guidelines. • Sever the old vehicle frame rails to ensure that the vehicle is rendered useless and to prevent repeated use. • The following digital photos must be taken and labeled for the project file: 1. Engine tag with serial number. 2. Destroyed engine block either inside or outside truck body. 3. Vehicle identification number (VIN) printed by manufacturer inside cab or from the vehicle's frame rail. 4. Truck view from front angle capturing entire truck, including readable license plate when available. • The equipment owner or licensed dismantler must file a VIN hold with DMV and submit either a REG 488C "Non-Repairable Vehicle Certificate" or REG 42 "Notice to Dismantler" to DMV. Any additional substitute documentation must be verified by ARB to ensure that the scrapped equipment is permanently removed from service. • The licensed dismantler shall provide proof of scrappage and a copy of the form submitted to DMV (REG 488C, REG 42, or substitute documentation as described above) to the local agency within 10 calendar days of the destruction of the vehicle.
	Option (3) Three-Way Truck Transaction	• Truck B (old truck) must be scrapped in accordance with the equipment project scrap requirements listed in Option (2).

E. Post-Inspection

- For truck replacement equipment projects, the post-inspection shall occur within 60 calendar days after the old truck(s) is delivered to a certified dismantler.

- For truck stop/distribution equipment projects, the post-inspection shall occur within 60 calendar days after the equipment is fully operational.

Table A.2 Truck Equipment Post-Inspection Requirements

Source Category	Equipment Project Option	Additional Requirements
Heavy Duty Diesel Trucks	Option (1) Repower	• Name, address, and telephone number of company(s) that installed the new engine. • Engine make and model year. • Engine family name and number. • Engine serial number. • Date the new engine was installed. • If not in the application file, copy of ARB Executive Order documenting that the new engine meets 2010 emissions. The ARB Executive order supersedes the engine tag in case of conflict in the emission levels shown.

	Options (2) & (3) Replacement and Three-way Truck Transaction	• Vehicle type.
		• Vehicle identification number (VIN).
		• Vehicle make.
		• Fuel type.
		• Vehicle license plate number. For new vehicles, the equipment owner shall provide:
		  ○ Invoice including the cost of tax and license fees indicating the intent to register with the DMV.
		  ○ Vehicle license plate number with the first annual report to the local agency.
		• CA Highway Patrol number.
		• Engine make and model year.
		• Engine family name and number.
		• If not in the application file, copy of ARB Executive Order documenting that the replacement truck engine meets 2010 emissions. The ARB Executive order supersedes the engine tag in case of conflict in the emission levels shown.

Table A.2 Truck Equipment Post-Inspection Requirements (cont.)

Source Category	Equipment Project Option	Additional Requirements

Heavy Duty Diesel Trucks	Option (4) Truck Electrification Infrastructure	• Name of power system manufacturer.
		• Serial number and date of manufacture.
		• Rated amperage/voltage.
		• Verification that each project's pedestal and/or external air conditioning/power system is operational.
		• Inspection shall include verification of operation by connecting heavy duty truck cab and/or transport refrigeration unit (as appropriate) to a random number of pedestals or external air conditioning/power system.
		• Inspections:
		  ○ An initial inspection shall be completed within 60 calendar days of installed and fully operational equipment.
		  ▪ The initial inspection shall include a review of equipment owner's procedures to collect use data for first year of operation.
		  ○ A second inspection (which corresponds to the proper post-inspection) shall be completed within 60 calendar days of owner completion of first year of operation.
		  ▪ Reimbursement of equipment costs can only be requested after obtaining a satisfactory second inspection.

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

1. Heavy duty diesel trucks

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

- Contact information (owner name, address, phone, etc.).
- Proof of current California registration.
- Fleet size.
- Current odometer reading, including the date read (estimate total vehicle mileage if odometer is missing or broken).
- Certification of annual California VMT since last report.
- Certification of the required 90 percent California or 100 percent California-only operation.
- Certification of at least 50 percent of travel within the four California trade corridors as well as provide the percentage of annual VMT in the following:
    - Bay Area trade corridor.
    - Central Valley trade corridor.
    - Los Angeles/Inland Empire trade corridor.
    - San Diego/Border trade corridor.
- Certification of insurance.
- Certification that the bond-funded project was operated in accordance with the signed contract, and that all information submitted is true and accurate.
- Documentation of the number of port/railyard visits within 12 month period. Local agencies may use alternate methods to verify the port/railyard visits including, but not limited to gate activity information from ports. This reporting requirement applies only to trucks serving ports and intermodal railyards receiving FY2007-08 (Year 1) funding.
- Other information as requested by the local agency.

2. Truck electrification infrastructure

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

- Contact information (owner name, company, address, phone).
- Facility location.
- Project completion date.
- Actual number of truck and TRU connections to equipment per unit (parking space) each month in the reporting period.

- Actual number of hours the equipment was used per unit (parking space) each month in the reporting period. Include only equipment hours that enabled usage of heating and cooling to the cab or electrical power to TRUs or auxiliary power systems.
- Actual electrical usage by trucks or equipment documented by electric utility billing statements, electric meter readings, equipment monitoring data or other approved method in the reporting period. Include only electrical power that enabled usage of heating and cooling to the cab or electrical power to TRUs or auxiliary power systems.
- Date, duration, and general description of any equipment failure or other event that prevented trucks from using the system for more than 1 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 local agency is true and accurate.
- Other information as requested by the local agency.

In addition to annual reporting, the equipment owner shall be responsible for quarterly reporting of the above items to the local agency during the first year of operation. Quarterly reports must include **monthly** equipment connections, monthly operational hours, and electricity usage during the reporting period.

APPENDIX B Locomotives and Railyards

A. Equipment Project Specifications

Eligible Equipment	**Locomotive projects**: Diesel-powered freight locomotives with no or minimal emissions control technology (i.e., uncontrolled, or meeting Tier 0 through Tier 2 standards). Equipment owner must demonstrate: • Operation or equivalent locomotive horsepower operation in California for the past 2 years. • At least 50% 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. **Locomotive emissions capture and control system projects**: Existing freight railyards within the four California trade corridors.
General Requirements (applicable to all project options)	Equipment owner shall: • Commit to the project life specified with 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 milestone 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. • Certify that there are no outstanding ARB violations or non-compliance with ARB 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)	Partial funding (see options below) to replace, repower, or rebuild an uncontrolled, Tier 0 through Tier 1+ 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).
Funding Options	1. The lower of 60% of the eligible cost or $1,800,000/locomotive if operational by December 31, 2015. 2. The lower of 50% of the eligible cost or $1,500,000/locomotive if operational on January 1, 2016 or later. Eligible costs may include a new chassis, freshly manufactured engine(s), diesel PM filter, diesel oxidation catalyst, exhaust gas recirculation, selective catalytic reduction device for NOx control, and mechanical/electrical systems 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 an ARB Verification Letter of the emission levels achieved. In addition to the General Requirements, equipment owner shall: • Commit to 90% or 100% operation within the four California trade corridors for the duration of the project life and be permitted to have equipment temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner. • Commit to a project life of 15 years. • Scrap old engine/locomotive, or ban old engine/locomotive from California operation. • Install an active GPS device on both old (if not scrapped) and new equipment, fund data collection, and report location data.

Locomotives and Railyards (cont.)

Option (2): (Medium Horsepower) Locomotive (2,301 hp - 4,000 hp)	Partial funding (see options below) to replace, repower, or rebuild an uncontrolled, Tier 0 through Tier 1+ 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).
Funding Options	1. The lower of 60% of the eligible cost or $1,800,000/locomotive if operational by December 31, 2015. 2. The lower of 50% of the eligible cost or $1,500,000/locomotive if operational on January 1, 2016 or later. Eligible costs may include a new chassis, freshly manufactured or rebuilt engine(s), diesel PM filter, diesel oxidation catalyst, exhaust gas recirculation, 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 an ARB 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 and be permitted to have equipment 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. • Commit to the funded locomotive using only California ARB diesel fuel. • Scrap or ban old engine/locomotive from California operation. • Install an active GPS device on both old (if not scrapped) and new equipment, fund data collection, and report location data.

Locomotives and Railyards (cont.)

Option (3): Line-Haul Locomotive (4,001 hp or higher)	Partial funding (see options below) to replace, repower, or rebuild an uncontrolled or 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).
Funding Options	1. The lower of 70% of the eligible cost or $2,100,000/locomotive if operational by December 31, 2015. 2. The lower of 60% of the eligible cost or $1,800,000/locomotive if operational on January 1, 2016 or later. Eligible costs may include a new chassis, freshly manufactured or rebuilt engine(s), new generator set(s), diesel PM filter, diesel oxidation catalyst, exhaust gas recirculation, 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 standards as evidenced by a U.S. EPA Certificate of Conformity (if available) and an ARB 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 and be permitted to have equipment 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. • Commit to the funded locomotive only using California ARB diesel fuel. • Scrap or ban old (uncontrolled through Tier 1+) engine/locomotive from California operation. • If upgrading a Tier 2 engine/locomotive, the Tier 2 equipment may remain in California and a Tier 0 through Tier 1+ engine/locomotive be scrapped or banned from California operation. • Install an active GPS device on both old (if not scrapped) and new equipment, fund data collection, and report location data.

Locomotives and Railyards (cont.)

Option (4): Locomotive Emissions Capture and Control System	Partial funding for the lower of 50% of eligible costs or a level commensurate with a cost-effectiveness of at least 0.15 pounds of weighted emissions reduced per State dollar invested for the purchase and installation of an ARB-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 may include purchase and installation of the emission treatment system and ducting, and hoods or bonnets necessary to connect to locomotives. Ineligible costs may include those associated with increasing the capacity of electrical power 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 85% 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. 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 85% using ARB approved methods for flow rate (Methods 1 to 4), NOx (ARB Method 100) and PM (ARB Method 5). Any alternative test methods must be approved by ARB. • 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 ARB. • Comply with all local permitting requirements.
Excluded Funding Components	• Electricity costs required to operate the hood control system. • Other operation and maintenance costs.
Project Cost Assumptions	• Estimated total cost of a Tier 4 switcher, medium horsepower, or line-haul locomotive is ~$2-$3 million (repower and new, respectively). • Estimated capital cost for the locomotive emissions capture and control system of one 12,500 scfm unit with 12 bonnets is ~$9 million.

B. Major Milestones for Project Completion

- Equipment order.
- Equipment acquisition/installation.
- 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.
- 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 at least 50 percent 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.
    - ARB staff shall 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

- New switcher data.
  - Locomotive type (diesel-electric, gen-set, alternative technology).
  - Builder name.
  - Locomotive make.
  - Locomotive family name.
  - U.S. EPA Certificate of Conformity (if available) and an ARB Verification Letter of the emission levels achieved.
  - 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.
  - Emission control equipment installed (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.
- Itemized cost information for eligible expenses.
  - Locomotive, engine, or generator set (as applicable).
  - Emission control equipment (as applicable).
  - Other equipment/materials.
- Predicted activity data with new equipment.
  - Specify 100 percent 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.

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 an ARB Verification Letter of the emission levels achieved.

    - 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.
    - Emission control equipment installed (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.
- 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 90 percent or 100 percent future operation California.
    - 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.

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 0.15 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.

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), or (3) Repower or Replacement	• The local agency shall ensure the impound and transport of the old engine(s) to the licensed dismantler up to 30 days after the new engine(s) being placed into operation.
		• The licensed 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 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:
		  ○ Engine serial number either stamped on the block or on the tag.
		  ○ Destroyed engine block.

E. Alternative to Scrapping

If the equipment owner has elected to ban the old locomotive or locomotive engine from future operations 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), and (3) Switcher, Medium Horsepower, and Line-Haul	• Locomotive engine 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 (4) 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.

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, ARB, or ARB 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, medium horsepower, and line-haul locomotive

- Contact information (owner name, company, address, phone).
- Build number, date, builder, builder model.
- Date of equipment installation.
- Locomotive type.
- Name and location of home railyard.
- Annual megawatt-hours of operation, and fuel consumed since last report.
- Representative profile data to determine engine duty cycle.
- Certification and documentation of 90 percent or 100 percent operation in the four California trade corridors for switcher locomotives.
- Certification of 90 percent California or 100 percent California-only operation for medium horsepower and line-haul locomotives.
- Certification and documentation of 50 percent operation in the four California trade corridors for medium horsepower and 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 ARB or the local agency.

2. Locomotive emissions capture and control system

- Contact information (owner name, company, address, 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 ARB.

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APPENDIX C Ships at Berth

A. Equipment Project Specifications

Eligible Equipment	Existing cargo ship berth or existing cargo ship terminal at a seaport located within the four California trade corridors that does **not** receive visits by vessels (e.g., container ships, reefers, and cruise ships) subject to ARB's Ships at Berth Rule.

General Requirements (applicable to all project options)	Equipment owner shall:
	• Commit to the project life specified with the applicable equipment project option.
	• Have written commitments from the tenant shipping line(s) to:
	  o Meet the minimum number of ship visits or hours.
	  o Sign the equipment project contract (or other written agreement as approved by ARB).
	• Adhere to all Program requirements during the project life.
	• Comply with record-keeping, reporting, and Program review or fiscal audit requirements.
	• Sign a legally binding contract with the local agency and the port (if the local agency is not a port), including project milestone 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 ARB 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 ARB violations or non-compliance with ARB regulations associated with the equipment or the owner.

Option (1) Grid-Based Power	Partial funding (see options below) to install permanent, grid-based electrical power at a cargo ship berth that does **not** receive visits by vessels (e.g., container ships, reefers, and cruise ships) subject to ARB's Ships at Berth Rule. Project shall be eligible to compete for funding only if the cost-effectiveness is equal or greater than 0.10 pounds of weighted emissions reduced per State dollar invested. 1. The lower of 50% of the eligible cost or $2,500,000 if the cost-effectiveness is equal or greater than 0.10 pounds of weighted emissions reduced per State dollar invested. 2. The lower of 60% of the eligible cost or $3,500,000 if the cost-effectiveness is equal or greater than 0.20 pounds of weighted emissions reduced per State dollar invested. Up to 80% of eligible project costs are authorized for early reimbursement in accordance with the requirements of Chapter IV.B.2.e. Final payment of funds held in retention shall be paid upon completion of a satisfactory post-inspection. Eligible costs may include design, engineering, equipment necessary to purchase and install infrastructure to supply electrical power, utility construction, and costs associated with increasing the capacity of electrical power to the port. Ineligible costs include shipside modifications to accept shore-based electrical power, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • 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.

Ships at Berth (cont.)

Option (2) Non-Grid-Based Power	Partial funding of up to $200,000 per megawatt of the eligible costs of an electricity generating unit that provides power at a cargo ship berth or multiple berths that do **not** receive visits by vessels (e.g., container ships, reefers, and cruise ships) subject to ARB's Ships at Berth Rule. This unit can be portable or fixed on the terminal. Only zero emission units (e.g., fuel cell, solar), or natural gas engines equipped with selective catalytic reduction to control NOx emissions are eligible. Eligible costs may include equipment necessary to generate electrical power and connect the equipment to cargo ships at berth. Ineligible costs include construction and protection of infrastructure (e.g., natural gas lines) used to supply fuel for non-grid-based electrical generation, shipside modifications to accept electrical power, barge 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 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 5 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 ARB.
	• Perform source testing to measure emissions from the unit every 1,000 hours of operation, according to the source test requirements contained in ARB's Ships at Berth Rule.

Ships at Berth (cont.)

Option (3) Ship Emissions Capture and Control System	Partial funding of up to the lower of 50% of the eligible costs or a level commensurate with a cost-effectiveness of at least 0.15 pounds of weighted emissions reduced per State dollar invested for the purchase and installation of a ship emissions capture and control system (a.k.a. hood or bonnet) to reduce diesel PM and NOx emissions at 85% from ships at berths that do **not** receive visits by vessels (e.g., container ships, reefers, and cruise ships) subject to ARB's Ships at Berth Rule. Only units that have ARB-approved capture and treatment efficiency rates for PM and NOx consistent with ARB's Ships at Berth Rule are eligible for funding.

Requirements	Eligible costs may include purchase and installation of the emission treatment system and ducting, and hoods or bonnets necessary to connect to cargo ships at berth.
	
	Ineligible costs include shipside modifications to accept capture and control system, barge 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.
	
	In addition to the General Requirements listed previously, equipment owner shall:
	• Commit to a project life of 10 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.
	• Commit to 100% operation within the four California trade corridors for the duration of the project life.
	• Document the system is commercially available and achieves an overall efficiency rate of at least 85% for the capture and removal of NOx and PM.
	• Demonstrate system performance and efficiency with source testing prior to funding and annually thereafter by capturing emissions from a cargo ship at port. 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 85% using ARB approved methods for flow rate (Methods 1 to 4), NOx (ARB Method 100), and PM (ARB Method 5). Any alternative test methods must be approved by ARB.
	• 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 ARB.

Project Cost Assumptions	• Option (1): Total shore-side cost of equipping a berth with permanent grid-based electrical power is ~$3-$5 million/berth; some ports may incur higher costs to bring new/additional power capacity to the port that may increase the total cost to $5-$7 million/berth. • Option (2): Total cost of distributed generation power is anticipated to be $4 million/2 MW unit. • Options (1) & (2): Shipside modifications will cost ~$500,000-$1 million/ship. • Option (3): Ship emissions capture and control system estimated capital cost is approximately $6 million for the current standard design of one 12,500 scfm unit with single bonnet.

B. Major Milestones for Project Completion

- Preliminary design.
- Environmental clearance, if applicable.
- Final design.
- Equipment acquisition, if applicable.
- Construction bid award.
- Construction completion/equipment installation.
- 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

This section applies to all equipment project options.

- Organization/agency/company name.
- Mailing address.
- Primary contact name and phone number.
- Person(s) with equipment contract signing authority (owner).
- Proof of identity of equipment owner.

2. Current equipment and activity information

Not applicable

3. Proposed equipment project information

a) Grid-based shore power

- Project Information.
  - Port where the berth is located.
  - Berth name/identifier and location within port.
  - Owner and operator of berth.
  - Project description, design, maximum power demand (kWh-hr).
  - Itemized cost information by phase (e.g., design, environmental, construction).
- Berth activity data for the past 2 years.
  - Number of ship visits to the berth.

- Ship information (per ship).
    - Number of visits per year.
    - Average hotelling time per visit (hours/visit).
    - Ship type, size (e.g., twenty-foot equivalent unit (TEU) capacity), description (e.g., number of engines, fuel type), power demand (total auxiliary power (kW), net hotelling load (kW)).
- Predicted berth activity data with new equipment.
    - Total estimated annual ship visits.
    - Estimated annual ship visits using electrical power.
    - Estimated ship types, description, power demands.
    - Estimated annual hotelling hours.
    - Estimated annual MW usage.
    - Information demonstrating future visits by vessels will **not** be subject to ARB's Ships at Berth Rule.
- 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.
- Project acknowledgement.
    - If the applicant does not own the site where the equipment will be installed, the applicant shall obtain and include a written project acknowledgement from the site owner with the application submittal or thereafter if allowed by the local agency. The project acknowledgement shall acknowledge/agree in writing, at a minimum:
        - 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.
        - The project acknowledgement is valid over the entire project life.

b) Non-grid-based shore power

- Project Information.
    - Port where the berths are located.
    - Berth(s) name/identifier and location within port.
    - Owner and operator of berth.
    - Project description, design, maximum power demand (megawatts).
    - Itemized cost information for eligible expenses (verifiable quote).
- Berth activity data for the past 2 years (per berth).
    - Number of ship visits to the berth.

- Ship information (per ship).
  - Number of visits per year.
  - Average hotelling time per visit (hours/visit).
  - Ship type, size (e.g., TEU capacity), description (e.g., number of engines, fuel type), power demand (total auxiliary power (kW)), net hotelling load (kW)).
- Predicted activity data with new equipment.
  - Total estimated annual ship visits.
  - Estimated annual ship visits using electrical power.
  - Estimated ship types, description, power demands.
  - Estimated annual hotelling hours.
  - Estimated annual MW usage.
  - Information demonstrating future visits by vessels will **not** be subject to ARB's Ships at Berth Rule.
- 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.

c) Ship emissions capture and control system

- Project description and design, including:
  - Number of emissions capture subsystems (bonnets) per unit.
  - Number of emissions treatment subsystems.
  - Support structure.
  - Any other components (ducts, etc.).
- Emission control equipment data.
  - Equipment vendor(s).
  - Documentation of percent PM and NOx emission reductions.
- Itemized cost for each eligible expense.
- Predicted ship activity data with new system over project life (per ship type).
  - Number and type of ships under the hood.
  - Average time ships will spend under the hood.
  - Power usage (kWh) 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.
  - Information demonstrating the equipment shall be utilized exclusively by vessels that are **not** subject to ARB's Ships at Berth Rule.
- Projected emissions and benefits with the project.
  - Emissions with and without the project over 10 years of operation.
  - Emission reductions attributable to the project (beyond those required by any law or regulation) for 10 years.
  - Demonstration that the weighted emission reductions are equal to or higher than 0.15 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.

D. Post-Inspection

Table C.1 Ships at Berth Post-Inspection Requirements

Source Category	Equipment Project Option	Additional Requirements
Ships at Berth	Option (1) Grid-Based Shore Power	• A ship must be plugged into shore power at the designated berth, with the engines turned off, and drawing power to demonstrate to the inspector that it is in proper working order. • Verification that this project serves the intended berth(s).
	Option (2) Non-Grid-Based Shore Power	• Ship must be plugged into shore power at the designated berth, with the engines turned off, and drawing power to demonstrate to the inspector that it is in proper working order. • Verification that this project serves the intended berth(s).
	Option (3) Ship Emissions Capture and Control System	• The fully operational system must be connected to a ship and complying with performance measures stated in the specification. • Verification that this project serves the intended berth(s).

E. 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.

F. Annual Reporting Requirements

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

1. Shore power (grid- and non-grid-based power)

- Contact information (owner name, company, address, phone).
- Equipment description and type providing electrical power.
- Port and berth name(s)/identifier(s).
- Date of installation of equipment.
- Vessel type, name, and Lloyd's number utilizing berth.
- Total ship visits utilizing berth.
- Ship visits utilizing Program-funded equipment.
- Documentation of Program-funded equipment's electricity usage at berth (for grid-based power).
- Power, in megawatts, supplied to the vessels (for non-grid-based power).
- Episodes of electrical service interruption by local utility company (for grid-based power).
- Date and description of any equipment failure that prevented a ship from using the shore-based power (for non-grid-based power).
- Summary of maintenance and inspections conducted.
- Signed certification statement that the bond-funded project was operated in accordance with the signed contract and that all information submitted is true and accurate.
- Project records must be retained for at least 2 years after contract expiration or 3 years after final project payment, whichever is later.
- Summary of source testing (for non-grid-based power).
- Other information as requested by the local agency.

2. Ship emissions capture and control system

- Contact information (owner name, company, address, phone).
- Description of ship emissions capture and control system.
- 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.
- Power usage (kW-hr) to run the hood and source of power (grid- vs. non-grid-based).
- Natural gas usage (if any) for heating selective catalytic reduction duct burner.
- Date and description of any equipment failure that prevented a ship from using the system to reduce emissions.
- 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 local agency.

APPENDIX D Commercial Harbor Craft

A. Equipment Project Specifications

Eligible Equipment	Existing commercial diesel harbor craft vessels involved in goods movement with: a home port located within the four California trade corridors, 2 years of at least 75% operation in California Coastal (and inland) Waters, Tier 0 or Tier 1 diesel engine(s) for repower or replacement projects and Tier 2 or Tier 3 diesel engine(s) for hybrid projects. Vessel upgrades must achieve a minimum cost-effectiveness value of 0.10 pounds of weighted emissions reduced per State dollar invested. Eligible vessel types (as defined in section 93118.5, title 17, chapter 1, subchapter 7.5, California Code of Regulations (d) Definitions) include: • Tugboats and towboats. • Work boats. • Pilot vessels. • Commercial fishing boats.
General Requirements (applicable to all project options)	Equipment owner shall: • Commit to 8 years of California home port operation within the four California trade corridors. • Commit to 100% operation within California Coastal (and inland) Waters (or 90% if that option has been selected). • Scrap old engine(s) or vessel, as applicable. • 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 milestone and completion deadlines. • Demonstrate proof of insurance on upgraded or replaced equipment. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Certify that there are no outstanding ARB violations or non-compliance with ARB regulations associated with the equipment or the owner. • Install an active GPS device (if 90% California operation is selected) or agree to install an active GPS device (if 100% California operation is selected) on the upgraded equipment, fund data collection, and report location data.

Commercial Harbor Craft (cont.)

Option (1) Repower/ Replacement of Tugboats or Towboats	Partial funding of up to the lower of 50% of the eligible cost or $175/horsepower of the old engine(s) to repower or replace an eligible tugboat or towboat equipped with Tier 0 or Tier 1 engine(s) with Tier 3 or better engine(s), as described in the project options. Tier 3 emission standards are defined in section 93118.5, title 17, chapter 1, subchapter 7.5, California Code of Regulations, Tables 1 through 3. Available project options: 1. Repower existing Tier 0 or Tier 1 engine(s) with new engine(s) meeting U.S. EPA Tier 3 emission standards (or better) and make necessary vessel modifications to accommodate the new engine(s). 2. Replace a vessel with existing Tier 0 or Tier 1 engine(s) with a new vessel powered by engine(s) meeting the latest Tier 3 emission standards (or better). 3. Additional funding to further upgrade the vessel with a hybrid power system (see Option (3) below). Eligible costs may include purchase of replacement vessel (diesel or hybrid) or purchase and installation of new engine(s) or hybrid system including vessel modifications directly related to the new engine(s) or system. Ineligible costs include GPS devices and associated monitoring and reporting costs, out of service time (dry dock) costs, fuel, design, engineering, consulting, legal fees, license, registration, taxes, insurance, operation, maintenance, and repair.
Additional Requirements	Program-funded engine repower and vessel replacement projects shall be operational (post-inspection completed, except scrappage) at least 1 year prior to any regulatory requirement for that technology or level of emissions control.
Option (2) Repower/ Replacement of Other Vessels	Partial funding of up to the lower of 80% of the eligible cost or $280/horsepower of the old engine(s) to repower or replace an eligible other vessel equipped with Tier 0 or Tier 1 engine(s) with Tier 3 or better engine(s) as described in the project options. Other vessel types may include work boats or pilot vessels involved in goods movement and high use commercial fishing vessels. Tier 3 emission standards are defined in section 93118.5, title 17, chapter 1, subchapter 7.5, California Code of Regulations, Tables 1 through 3. Available project options: 1. Repower existing Tier 0 or Tier 1 engine(s) with new engine(s) meeting the latest Tier 3 emission standards (or better) and make necessary vessel modifications to accommodate the new engine(s). 2. Replace a vessel with existing Tier 0 or Tier 1 engine(s) with a new vessel powered by engine(s) meeting the latest Tier 3 emission standards (or better). 3. Additional funding to further upgrade the vessel with a hybrid power system (see Option (3) below). Eligible costs may include purchase of replacement vessel (diesel or hybrid) or purchase and installation of a new engine or hybrid system including vessel modifications directly related to the new engine or system. Ineligible costs include GPS devices and associated monitoring and reporting costs, out of service time (dry dock) costs, fuel, design, engineering, consulting, legal fees, license, registration, taxes, insurance, operation, maintenance, and repair.

Commercial Harbor Craft (cont.)

Option (3) Retrofit/ Replacement with Hybrid Power System	Partial funding of up to the lower of 80% of the eligible cost or $100/horsepower of the existing engine(s) for a hybrid power system that reduces PM and NOx emissions by 30% through retrofit or replacement of an eligible tugboat, towboat, work or pilot boat, or high use commercial fishing vessel. Equipment owner may receive funds to repower or replace a vessel under Option (1) or (2) and to add a hybrid power system on the same upgraded vessel under Option (3). Available project options: 1. Retrofit an existing vessel with Tier 2 or Tier 3 engine(s) with a hybrid power system, and make necessary vessel modifications to accommodate the new hybrid system. 2. Replace an existing vessel with a new vessel powered by a hybrid system that includes Tier 3 (or better) engine(s). Tier 3 emission standards are defined in section 93118.5, title 17, chapter 1, subchapter 7.5, California Code of Regulations, Tables 1 through 3. Eligible costs may include purchase of replacement vessel (diesel or hybrid) or purchase and installation of new engine(s) or hybrid system including vessel modifications directly related to the new engine(s) or system. Ineligible costs include GPS devices and associated monitoring and reporting costs, out of service time (dry dock) costs, fuel, design, engineering, consulting, legal fees, license, registration, taxes, insurance, operation, maintenance, and repair.
Additional Requirements	• The hybrid power system must include a manufacturer's warranty for a minimum period of 8 years. • Project eligibility is subject to an ARB staff determination that a hybrid power system installed on a vessel reduces PM and NOx emissions by at least 30% each, compared to a similar vessel with the same operating hours and a similar duty cycle, but without the hybrid system.
Project Cost Assumptions	• Total cost of a Tier 3 engine is estimated at $290-$350/hp. • Total cost to repower a vessel with a hybrid power system is estimated at $350-$450/hp. The incremental cost to install a hybrid power system is estimated at $60-$120/hp.

B. Major Milestones for Project Completion

- Equipment order.
- Dry dock scheduled.
- Equipment acquisition.
- Dry dock start date.
- Equipment installation complete.
- 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

- Organization/agency/company name.
- 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 harbor craft.
    - Number of employees.

2. Current equipment and activity information

- Harbor craft data.
    - Harbor craft name, home port.
    - Harbor craft type (tug, tow, commercial fishing, etc.).
    - Vessel model year.
    - Engine data.
        - Number of propulsion engines and U.S. EPA “Tier” level.
        - Number of auxiliary engines and U.S. EPA “Tier” level.
        - Make, model, engine year, number of cylinders, and serial numbers for each engine.
        - Engine family.
        - Rated brake horsepower/total engine displacement.
        - Fuel type.
- Documentation of harbor craft ownership.
- Harbor craft documentation.
    - U.S. Coast Guard (USCG) documentation number, if applicable.
    - CA Department of Fish and Game (DFG) license number, if applicable.
    - International Maritime Organization (IMO) number, if applicable.

- Vocation and activity data for the past 2 years (local agency may require documentation to substantiate vocation or activity data).
    - Vocation(s).
    - Percent operation within 24 nautical miles of the California coast.
    - Percent operation within California Coastal (and inland) Waters, as described in Appendix K.
    - Identification of the trade corridors in which the harbor craft routinely operated, specifically:
        - Bay Area trade corridor.
        - Central Valley trade corridor.
        - Los Angeles/Inland Empire trade corridor.
        - San Diego trade corridor.
    - Estimated average number of operating hours per engine within 24 nautical miles of the California coast.
    - Estimated average number of operating hours per engine within California Coastal (and inland) Waters.
    - Annual hours of operation.

3. Proposed equipment project information

a) Options (1) and (2): Repowers and replacements

- Vessel type.
- Engine data.
    - Number of new engines and U.S. EPA “Tier” level.
    - Make, model year, number of cylinders by engine.
    - Engine horsepower and fuel type by engine.
- Documentation of all engine modifications planned as part of the repower project, including description of upgrades to exhaust systems, electronics, etc. (for repower projects only).
- Itemized cost for each eligible expense (verifiable quote).
- Predicted vocation and activity data with new equipment.
    - Vocation.
    - Specify 90 percent or 100 percent future operation within California Coastal (and inland) Waters.
- Equipment project funding demonstration.
    - Program funds requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Request for a direct payment to vendor, if applicable.
    - Total project cost (Program funds requested plus other match funding).
    - Documentation of match funding availability.

b) Option (3): Hybrid power system

- Vessel type.
- Hybrid power system information.
    - Hybrid system make/model.
    - Horsepower of battery pack.
    - Fuel type and horsepower of hybrid system generators.
    - Engine data.
        - Number of engines and U.S. EPA “Tier” level.
        - Make, model year, number of cylinders by engine.
        - Engine horsepower and fuel type by engine.
- Documentation of all engine-related modifications planned as part of the repower project, including description of upgrades to such things as exhaust systems, electronics, etc.
- Itemized cost information for eligible expenses (verifiable quote).
- Predicted vocation and activity data with new equipment.
    - Vocation.
    - Specify 90 percent or 100 percent future operation within California Coastal (and inland) Waters.
- Equipment project funding demonstration.
    - Program funds requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Request for a direct payment to vendor, if applicable.
    - Total project cost (Program funds requested plus other match funding).
    - Documentation of match funding availability.

D. Scrap Requirements

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

Table D.1 Harbor Craft Equipment Project Scrap Requirements

Source Category	Equipment Project Option	Additional Requirements

Harbor Craft	Options (1), (2), & (3) (specific to repower)	• The local agency shall ensure the impound and transport of the old engine to the licensed dismantler up to 30 days after new engine is placed into operation.
		• The licensed dismantler must dismantle and destroy the old engine within 60 days of receipt. The engine destruction must be done in accordance with these Guidelines.
		• The licensed dismantler shall provide proof of scrappage to the local agency within 10 days of the destruction of the engine.
		• The engine block shall be punctured and destroyed in such a manner to eliminate the possibility of future operation.
		• 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:
		  ○ View of the vessel with the identification tags visible.
		  ○ Engine serial number either stamped on the block or on the tag.
		  ○ Destroyed engine block.

	Options (1), (2), & (3) (additional requirements for replacements)	In addition to the scrap requirements listed above for engine repower projects: • The local agency shall ensure the impound and transport of the old vessel to the dismantler up to 30 days after the new vessel is placed into operation. • The licensed dismantler must dismantle and destroy the old vessel within 60 days of receipt of the old vessel. The destruction must be done in accordance with these Guidelines. • The vessel shall be physically destroyed in such a manner to eliminate the possibility of future operation. • Include at least one additional digital photo which documents the destruction of the vessel along with the photos described above. • The licensed dismantler shall provide proof of scrappage to the local agency within 10 days of the destruction of the old vessel.

E. Post-Inspection

- For harbor craft repower and replacement equipment projects, the post-inspection shall occur within 90 days of the owner receiving the fully operational equipment.

Table D.2 Harbor Craft Equipment Post-Inspection Requirements

Source Category	Equipment Project Option	Additional Requirements
Commercial Harbor Craft	Options (1), (2), & (3) Repower	• Inspection shall occur within 90 days of equipment owner receiving the fully operational equipment. • For all repowered main engines, document the family name, make, model year, serial number, U.S. EPA "Tier" level, and the fuel type of the new engine(s). • Name and contact information of company that performed the engine repower.
	Options (1), (2), & (3) Replacement	• Inspection shall occur within 90 days of equipment owner receiving the fully operational replacement equipment. • For all vessel replacements, document the family name, make, model year, serial number, U.S. EPA "Tier" level, and the fuel type of the engine(s) in the new vessel. • Name and contact information of company that replaced the vessel.

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).
- Home port.
- Vessel type.
- Vessel identifier (e.g., USCG documentation number, DFG license number, IMO number, or other relevant vessel identifier).
- Engine make, model, year, serial number, and engine horsepower.
- Annual engine hours of operation within 24 nautical miles.
- Annual engine hours of operation within California Coastal (and inland) Waters.
- For hybrid options, annual hybrid power system hours of operation.
- Percent of operation within 24 nautical miles.
- Percent of operation within California Coastal (and inland) Waters.
- Percentage of annual travel within 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.
- Summary of maintenance and inspections conducted.
- Signed certification statement that the bond-funded equipment was installed on or replaced the vessel 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.

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APPENDIX E Cargo Handling Equipment

A. Equipment Project Specifications

Eligible Equipment **General Requirements (applicable to all project options)**	Existing diesel-powered rubber-tired gantry (RTG) crane or diesel-powered yard truck operating at a seaport or intermodal railyard in a trade corridor. • Agree to accept an on-board electronic monitoring unit at any time 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty for the project life and insurance on upgraded 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 Repower/ Replacement

Cargo Handling Equipment (cont.)

Option (2) Yard Truck Replacement	Partial funding of up to the lower of 50% of the eligible cost or $50,000/truck to replace an existing yard truck with a zero-emission yard truck. Eligible costs may include the purchase of a zero-emission yard truck. Ineligible costs include license, registration, taxes (other than federal excise and sales tax), insurance, operation, maintenance, and repair.
Requirements	Equipment owner shall: • Commit to 5 years of 100% California operation in port or intermodal railyard service in the four California trade corridors. • Demonstrate proof of equipment warranty for the project life and insurance on upgraded equipment.
Project Cost Assumptions	• Total estimated cost of repowering an existing RTG crane with a zero-emission power system is ~$400,000/crane. • Total estimated cost to modify port for space to electrify an RTG crane is ~$200,000/connection. • Total estimated cost of a zero-emission power system for an RTG crane is ~$1 million. • Total estimated cost of a zero-emission power system for a yard truck is ~$200,000, with an incremental cost (above a complying diesel engine) of ~$100,000.

B. Major Milestones for Project Completion

- Equipment order.
- Equipment acquisition/installation.
- 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.

The following sections apply to all equipment project options.

1. General information

- Organization/agency/company name.
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner).
- Proof of identity of equipment owner.
- Number of pieces of diesel cargo handling equipment.
- 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 or railyard 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 or railyard 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.

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.
- Itemized cost information for eligible expenses (verifiable quote).
- 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.

b) Yard truck

- Zero-emission yard truck data.
  - Truck make, model, model year.
  - Equipment power rating.
- Itemized cost for each eligible expense (verifiable quote).
- New equipment information to calculate emission reductions, as determined by ARB.
- Equipment project funding demonstration.
  - Total project cost.
  - Program funds requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Request for a direct payment to vendor (if applicable).
  - Total project cost (Program funds requested plus other match funding).
  - Documentation of match funding availability.

D. Scrappage

Table E.1 Cargo Handling Equipment Project Scrap Requirements

Source Category	Equipment Project Option	Additional Requirements

Cargo Handling Equipment	Option (1) RTG Crane Replacement	• The local agency shall ensure the impound and transport of the old engine 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 engine 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 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:
		  ○ Existing RTG crane or yard truck (as applicable) view from front angle.
		  ○ Engine serial number either stamped on the block or on the tag.
		  ○ Destroyed engine block.

	Option (2) Yard Truck Replacement	In addition to the requirements listed above for RTG crane replacement projects: • The local agency shall ensure the impound and transport of the old yard truck to the dismantler up to 30 days after the new vehicle is placed into operation. • The licensed dismantler must dismantle and destroy the old yard truck within 60 days of receipt. The destruction must be done in accordance with these Guidelines. • Sever the old vehicle frame rails to ensure that the vehicle is rendered useless and to prevent repeated use. • Include at least one additional digital photo which documents the destruction of the vehicle along with the photos listed above. • The licensed dismantler shall provide proof of scrappage to the local agency within 10 days of the destruction of the vehicle.

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 Repower/ Replacement	• Name of power system manufacturer. • Serial number and month/year of power system manufacture. • Inspection shall occur within 60 days of owner receipt of fully operational equipment.
	Option (2) Yard Truck Replacement	• Vehicle type. • Vehicle identification number (VIN). • Vehicle make, model, model year. • Gross vehicle weight rating (GVWR). • Fuel type.

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 or railyard.
- RTG crane or yard truck 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.

APPENDIX F

Project Specifications for FY2008-09 (Year 2) and FY2011-12 (Year 3) Funds for March-April 2011 Solicitations – Heavy-Duty Diesel Truck Source Category

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Heavy Duty Diesel Trucks

(Combines Port/Railyard and Other Trucks)

A. Equipment Project Specifications

Eligible Equipment	Heavy duty diesel trucks used to move goods (a majority of the time) with a manufacturer's gross vehicle weight rating (GVWR) of 26,001 lbs or greater listed on the application and verified at pre-inspection.
	
	Equipment owner must demonstrate:
	• At least 75% operation within California for the past 2 years.
	• At least 5,000 vehicle miles traveled (VMT) each year for the past 2 years.
	• Registration:
	  ○ Continuous registration (California base-plated or California International Registration Plan (California IRP)) in California for the past 2 years. Dual plates and out-of-state registrations are prohibited, except for trucks that carry goods across the California-Mexico border which are required to be dual-plated (California and Mexico only), or
	  ○ Current California registration and minimum 8 months available California Department of Motor Vehicles (DMV) registration history supplemented by alternate documentation showing California operation for the past 2 years.
	  ○ Partial year registration may be allowed for trucks that, due to their vocation, register on a partial year basis. These trucks must have a consistent pattern of registration that establishes California operation over the past 2 years, and the pattern of operation must be consistent with the equipment owner's vocation. Mileage documentation and registration information shall be reviewed by the local agency for consistency.
	• New engines for repower or replacement projects meet the applicable Program requirements:
	  ○ 2010 emissions means 0.20 g/bhp-hr or less NOx (FEL and CERT values) and 0.01 g/bhp-hr or less PM (CERT value) as certified by an ARB Executive Order for on-road use.
	  ○ 2007+ emissions means 0.50 g/bhp-hr or less NOx (FEL and CERT values) and 0.01 g/bhp-hr or less PM (CERT value) as certified by an ARB Executive Order for on-road use.
	  ○ 2007 emissions means 1.20 g/bhp-hr or less NOx (FEL and CERT values) and 0.01 g/bhp-hr or less PM (CERT value) as certified by an ARB Executive Order for on-road use.
	  ○ For Class 8 trucks the engines must be certified by an ARB Executive Order for on-road use with an intended service of Heavy Heavy Duty Diesel (HHDD) for diesel engines or Heavy Duty Otto (HDO) for applicable alternative fuel vehicles.
	• New or used trucks purchased for a truck replacement project must have a manufacturer's GVWR of 26,001 lbs – 33,000 lbs (Class 7) or of 33,001 lbs or greater (Class 8). The replacement truck must be in the same weight classification range (Class 7 or Class 8) as the existing truck, except when the equipment owner chooses to replace 2 eligible trucks for 1 replacement truck under Option (4).

Heavy Duty Diesel Trucks (cont.)

Eligible Equipment (continued)	A drayage truck means any in-use on-road vehicle (GVWR of 26,001 lbs or greater) that pulls a trailer or chassis that is used for transporting cargo (such as containerized, bulk, or break-bulk goods) that operates: • On or transgresses through port or intermodal railyard property for the purpose of loading, unloading, or transporting cargo, including transporting empty containers and chassis, or • Off-port or intermodal railyard property transporting cargo or empty containers or chassis that originated from or is destined to a port or intermodal railyard property. Drayage truck owners are eligible to apply for priority drayage truck funding that may be available (not available in every solicitation) for truck replacement or PM + NOx retrofit projects if the owner demonstrates all of the following for the existing truck: • Meets all of the other requirements of this section. • Made at least 12 visits to California ports and railyards (combined) over the last 12 months. • **For truck replacement projects (Option 4)**, has a MY1994-2003 engine, and was registered in the California Drayage Truck Registry and was retrofitted with an ARB-verified Level 3 diesel particulate filter by June 30, 2010. • **For PM + NOx retrofit projects (Option 2)**, has a MY2004-2006 engine, was registered in the California Drayage Truck Registry by June 30, 2010, and would be upgraded with a PM + NOx retrofit no later than December 31, 2010. • **For three-way truck transactions (Option 5)**, please see page A-6. Note: If priority drayage truck funding is not available or is exhausted before all eligible drayage trucks are funded, any remaining, unfunded drayage trucks will compete with other trucks.
Ineligible Equipment	• Trucks subject to ARB's public and utility fleet rule. • Trucks subject to ARB's solid waste collection vehicle rule. • Trucks subject to ARB's diesel cargo handling equipment rule.

Heavy Duty Diesel Trucks (cont.)

General Requirements (applicable to all project options)	Equipment owner shall: • Commit to the project life specified with the applicable equipment project option. • Adhere to all Program requirements during the project life. • Commit to 100% California-only operation (or 90% California-only operation as selected by the equipment owner) and California base-plated registration or California IRP. Dual plates and out-of-state registrations are prohibited, except for trucks that carry goods across the California-Mexico border which are required to be dual-plated (California and Mexico only). • Commit to at least 50% of travel within the four trade corridors for the duration of the project life. • Maintain current DMV registration at all times during the project life. • Agree to accept an on-board electronic monitoring unit at any time during 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 milestone and completion deadlines. • Properly maintain truck in good operating condition and according to manufacturer's recommendations. • Maintain collision/comprehensive insurance on the truck for replacements. • Demonstrate proof of equipment warranty on the program-funded equipment. • Correct outstanding ARB equipment violations associated with the owner's entire fleet of vehicles. ARB will post and update information on the Program website describing operational deadlines and when the program-funded vehicle will become eligible to be included in the equipment owner's Statewide Truck and Bus Rule fleet compliance strategy for the applicable project option.
Modifying an Application	Equipment owners may change the project option or lease-to-own program participation after the local agency solicitation period has closed if permitted by the local agency and subject to the following requirements: • The change must result in a funding amount equal to or less than the amount that was requested in the original application. • The change must result in a calculated project cost-effectiveness equal to or greater than the project listed in the original application. Equipment owners cannot substitute a different vehicle or change the ownership of the existing vehicle identified on the application after the local agency solicitation period has closed.

Heavy Duty Diesel Trucks (cont.)

Option (1) **PM Retrofit**	Partial funding (see options below) to retrofit an eligible MY1994-2006 heavy duty diesel engine with an ARB verified Level 3 Plus diesel particulate filter that reduces PM by 85% or more. Drayage trucks are not eligible.
Funding Options	1. $5,000/truck with a project life of 2 years. Program-funded diesel particulate filter shall be installed and operational (post-inspection completed) prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing operational deadlines for the applicable project option. 2. $10,000/truck with project life of 4 years. Program-funded diesel particulate filter shall be installed and operational (post-inspection completed) prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing operational deadlines for the applicable project option.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Demonstrate that any mid-1990s engine subject to the software upgrades for diesel trucks (i.e., chip reflash) has completed the upgrade.
Option (2) **PM + NOx Retrofit**	Partial funding of up to $20,000/truck to retrofit an eligible MY2004-2006 heavy duty diesel truck engine with an ARB-verified diesel emission control strategy (VDECS) that reduces diesel PM by 85% or more and reduces NOx exhaust emissions as shown below: • For 2007 emissions: a reduction of NOx exhaust emissions by at least 40% (ARB Mark 2 rating). • For 2010 emissions: a reduction of NOx exhaust emissions by at least 85% (ARB Mark 5 rating).
Requirements	Program-funded VDECS and diesel particulate filter shall be installed and operational (post-inspection completed) prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing operational deadlines for the applicable project option. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years or 500,000 miles, whichever comes first.
Option (3) **Repower**	Partial funding of up to $30,000/truck to repower a truck with an eligible MY1994-2006 heavy duty diesel engine with a new engine that meets 2010 emissions.
Requirements	Program-funded engine shall be installed and operational (post-inspection completed, except scrappage) prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing operational deadlines for the applicable project option. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years or 500,000 miles, whichever comes first. • Scrap the old engine. • Purchase a minimum of a 1-year or 100,000-mile major component engine warranty for the replacement engine that covers parts and labor. • Provide a copy of ARB Executive Order documenting that the new engine meets 2010 emissions.

Heavy Duty Diesel Trucks (cont.)

Option (4) Replacement	Partial funding (see options below) to replace 1 or 2 truck(s) equipped with eligible MY2003 or older heavy duty diesel engine(s) with a diesel or alternative fuel truck
Funding Options (drayage trucks)	Owners of eligible drayage trucks with a MY1994-2003 engine that commit to 90% or 100% California-only operation may have the option to compete for funding as follows. Class 8 truck (GVWR of 33,001 lbs or greater): 1. $50,000/truck for a replacement truck with a heavy heavy duty engine that meets 2010 emissions (0.20 g/bhp-hr or less NOx). Note: To be eligible, the replacement truck must have less than 500,000 miles with odometer verification at the post-inspection. Class 7 truck (GVWR of 26,001 lbs – 33,000 lbs): 1. $30,000/truck for a replacement truck with an engine that meets 2010 emissions (0.20 g/bhp-hr or less NOx). Note: To be eligible, the replacement truck must have less than 250,000 miles with odometer verification at the post-inspection. The maximum funding amount for replacement trucks will be reduced if Program funds were previously received to install a diesel particulate filter.
Funding Options (other trucks)	Owners of all eligible non-drayage trucks that commit to 90% or 100% California-only operation can compete for funding as follows. Class 8 truck (GVWR of 33,001 lbs or greater): 1. $60,000/truck for a replacement truck with a heavy heavy duty engine that meets 2010 emissions (0.20 g/bhp-hr or less NOx). 2. $50,000/truck for a replacement truck with a heavy heavy duty engine that meets 2007+ emissions (0.50 g/bhp-hr or less NOx). 3. $40,000/truck for a replacement truck with a heavy heavy duty engine that meets 2007 emissions (1.20 g/bhp-hr or less NOx). Note: To be eligible, the replacement truck must have less than 500,000 miles with odometer verification at the post-inspection. Class 7 truck (GVWR of 26,001 lbs – 33,000 lbs): 1. $40,000/truck for a replacement truck with an engine that meets 2010 emissions (0.20 g/bhp-hr or less NOx). 2. $30,000/truck for a replacement truck with an engine that meets 2007+ emissions (0.50 g/bhp-hr or less NOx). 3. $25,000/truck for a replacement truck with an engine that meets 2007 emissions (1.20 g/bhp-hr or less NOx). Note: To be eligible, the replacement truck must have less than 250,000 miles with odometer verification at the post-inspection. The maximum funding amount for replacement trucks will be reduced if Program funds were previously received to install a diesel particulate filter.
Requirements	Program-funded replacement projects shall be purchased and operational (post-inspection completed, except scrappage) prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing operational deadlines for the applicable project option. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of at least 5 years or 350,000 miles (for priority drayage trucks)/500,000 miles (for other trucks), whichever comes first. • Scrap the old truck(s). Purchase a minimum of a 1-year or 100,000-mile major component engine warranty for the replacement vehicle that covers parts and labor. • Provide a copy of ARB Executive Order documenting that the new truck engine meets the applicable 2007, 2007+, or 2010 emissions.

Heavy Duty Diesel Trucks (cont.)

Option (5) Three-Way Truck Transactions	1. Replace an eligible truck that has a MY1998-2006 engine (Truck A) with a diesel or alternative fuel truck (Truck C) with an engine that meets 2010 emissions (0.20 g/bhp-hr or less NOx). 2. Retrofit Truck A with an ARB-verified Level 3 Plus diesel particulate filter that reduces diesel PM by 85% or more. 3. Scrap a MY1993 or older diesel truck (Truck B) and replace with Truck A. Truck A: Heavy duty diesel truck with MY1998-2006 engine. Truck B: Heavy duty diesel truck with MY1993 or older engine. Truck C: Heavy duty truck (diesel or alternative) that meets 2010 emissions.
Funding Options (drayage trucks)	1. $50,000 for Truck C if Truck A is Class 8 (GVWR of 33,001 lbs or greater).
Funding Options (other trucks)	1. $60,000 for Truck C if Truck A is Class 8 (GVWR of 33,001 lbs or greater). 2. $40,000 for Truck C if Truck A is Class 7 (GVWR of 26,001 lbs – 33,000 lbs). 3. Up to $5,000 to retrofit Truck A.
Requirements	Truck C shall be purchased and operational (post-inspection completed, except scrappage) prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing deadlines for the applicable project option. Truck C must be the same class as Truck A. Note: To be eligible, Truck C must have less than 500,000 miles if Class 8 (250,000 miles if Class 7) with odometer verification at the post-inspection. Truck B may be Class 7 or Class 8. Truck A shall be equipped with an operational diesel particulate filter by the operational deadlines for a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks if optional retrofit funding is received for Truck A. ARB will post and update information on the Program website describing operational deadlines for the applicable project option. In addition to the applicable General Requirements listed previously in Appendix A, the original owner of Truck A and new owner of new Truck C shall: • Equip Truck A with an ARB verified Level 3 Plus diesel particulate filter and transfer ownership (if applicable) to the owner of old Truck B. • Commit to a project life of 5 years or 500,000 miles, whichever comes first, on Truck C. • Commit to 90% or 100% California-only operation. • Purchase a minimum of a 1-year or 100,000-mile major component engine warranty for Truck C that covers parts and labor. • Provide a copy of ARB Executive Order documenting that the new truck engine in Truck C meets 2010 emissions. • Demonstrate that any mid-1990s engine subject to the software upgrades for diesel trucks (i.e., chip reflash) has completed the upgrade on Truck A. In addition to the applicable General Requirements listed previously in Appendix A, the original owner of old Truck B and new owner of retrofit Truck A shall: • Scrap Truck B. • Commit to a project life of 2 years and all applicable Program requirements on Truck A, if retrofit funding is received. • Commit to 90% or 100% California-only operation.

Heavy Duty Diesel Trucks (cont.)

Eligible Equipment	Truck stops, intermodal facilities, distribution centers, and other places where Class 8 heavy duty diesel trucks (GVWR of 33,001 lbs or greater) congregate in a trade corridor.
Option (6) Electrification Infrastructure for Truck Stop or Distribution Center	Landside electrification infrastructure to reduce diesel engine idling and use of diesel-fueled internal combustion auxiliary power systems may be funded at the lower of 50% of eligible project costs or a level commensurate with a cost-effectiveness of 0.20 pounds of weighted emissions reduced per State dollar invested. Truck stop/distribution center electrification infrastructure projects shall be eligible to compete for funding only if the cost-effectiveness is equal or greater than 0.20 pounds of weighted emissions reduced per State dollar invested. Eligible costs include purchase and installation of electrical infrastructure to: enable heating, cooling, and the use of cab power for parked trucks at truck stops; and enable the use of power for transport refrigeration units and auxiliary power systems at distribution centers, intermodal facilities, and other places where trucks congregate. Reimbursement for the eligible costs shall be based on demonstrated use over the first year of operation. Ineligible costs include on-board auxiliary power units and other equipment installed on trucks, transport refrigeration units, electricity costs, and operation and maintenance costs.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Commit to 10 years of operation. • 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty. • Comply with all local permitting requirements.
Project Cost Assumptions	• Option (1): Average cost of a diesel particulate filter is expected to be ~$15,000. • Option (2): Total cost of a NOx + PM retrofit is expected to be ~$40,000. • Option (3): Total cost of a repower project is expected to be ~$60,000. • Options (4) & (5): Total cost of a new 2010 emissions truck is expected to be ~$80,000 (Class 7 diesel) to ~$180,000 (Class 8 natural gas). Total cost of a 2007 or 2007+ emissions truck (in 2011-2012) is expected to be ~$50,000 (Class 7 diesel) to ~$80,000 (Class 8 diesel). • Option (6): Total cost for distribution centers is $1,500-$7,000/plug at dock; $2,500-$9,000/plug in parking areas; $500-$2,000/adapter for trailers and TRUs. Total cost for truck stops is $6,000-$18,000/parking space; $3,000/truck modification.

B. Major Milestones for Project Completion

1. Heavy duty diesel trucks

- Equipment order.
- Equipment acquisition/installation.
- Submittal of invoice to local agency for payment.
- Scrappage of old truck or engine.

2. Truck stop/distribution center electrification

The equipment project schedule shall include, but is not limited to, the following milestones:

- Completion and certification of any required CEQA documents.
- Bid solicitation, evaluation and award, and construction contract.
- Acquisition of any local permits, or other requirements.
- Electrification system design, unit acquisition, and delivery.
- Project completion.
- Post-inspection by the local agency.
- Reporting to local agency of actual electrical use by trucks during first year of operation.
- 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. The local agency shall enter the equipment application information into the Goods Movement Online Database.

All equipment project applications must include the information specified below in:

- Section 1 – General information.
- Section 2 – Current equipment and activity information.
- Section 3 – Proposed equipment project information. (Include information, as applicable, for each equipment project option.)

1. General information

This section applies to all equipment project options.

- Name or applicant (current owner of existing truck, including for potential lease-to-own institutions).
- Business name.
- Mailing address.
- Primary contact name and phone number.
- Person with equipment contract signing authority (owner).
- Proof of identity of current equipment owner (and lessor for lease-to-own).
- Business information:
    - Fleet size.
    - Number of employees (optional).
    - Number of truck spaces (truck stops).
    - Number of docks (distribution centers).
- A statement signed and dated by the current equipment owner acknowledging all application items are true/correct and all outstanding ARB violations on any equipment within the owner's entire fleet will be corrected.

2. Current equipment and activity information

a) Heavy duty diesel trucks

- Truck data.
    - Truck make, model, and model year.
    - Vehicle identification number (VIN).
    - Gross vehicle weight rating (GVWR).
    - Vehicle license plate number.
    - Engine make, model, engine year, and serial number.
    - Engine horsepower and fuel type.
    - Current odometer reading (estimate total engine mileage if odometer is missing or broken).
    - Date a diesel particulate filter was previously installed on truck and verified control level of that filter (if applicable).

- Truck documentation.
    - Current California registration including registered owner (California base-plated registration or California IRP; dual plates and out-of-state registrations are prohibited, except for trucks that carry goods across the California-Mexico border, as they are required to be dual-plated (California and Mexico only)).
    - Registration showing California operation for the past 2 years or 8 months of available California DMV registration history supplemented by alternate documentation showing California operation for the past 2 years.
        - Partial year registration may be allowed for trucks that, due to their vocation, register on a partial year basis. These trucks must have a consistent pattern of registration that establishes California operation over the past 2 years, and the pattern of operation must be consistent with the equipment owner's vocation. Mileage documentation and registration information shall be reviewed by the local agency for consistency.
    - Documentation of current ownership (copy of title of truck) for any truck that will be scrapped or reused. This requirement does not apply to retrofit or repower projects.
- Vocation and activity data for the past 2 years (unless noted otherwise).
    - Vocation(s) – the types of goods typically transported.
    - Drayage Truck Registry (DTR) status as of June 30, 2010.
    - Number of California port and railyard visits (combined) in the past 12 months.
    - Annual vehicle miles of travel (VMT) in California.
    - Estimated percentage of annual VMT in:
        - Bay Area trade corridor.
        - Central Valley trade corridor.
        - Los Angeles/Inland Empire trade corridor.
        - San Diego/Border trade corridor.
    - Documentation to verify reported VMT is required. Examples of documentation include logbooks, fuel records, maintenance records, or tax records.
    - For concrete mixer trucks, dump trucks, and other truck types specifically identified by ARB staff, the owner may provide the Power Take Off (PTO) hours in conjunction with VMT:
        - Documentation from the hour meter unit is required.
        - PTO hours will be converted to miles based on factors supplied by ARB and combined with VMT in the calculation of emission reductions and cost-effectiveness.

Additional documentation may be requested by the local agency.

b) Truck stop/distribution center electrification

- Location and description of facility where electrification infrastructure is proposed for installation.
- Quantification of current annual truck operations and TRU operations at the facility.
- Baseline emissions (without the project) for first 10 years of operation of proposed electrical infrastructure (developed with the concurrence of the local air district) – this emission estimate shall fully reflect the benefits of all adopted regulations including ARB rules for trucks, idling, auxiliary power systems, TRUs, and TRUs with generators sets.

Additional documentation may be requested by the local agency.

3. Proposed equipment project information

a) Option (1): PM retrofit

- Retrofit device data.
  - ARB-verified retrofit device company and name of device.
  - ARB Executive Order number for retrofit device.
  - ARB-verified NOx reduction and PM reduction (percentages).
- Itemized cost information for eligible expenses (verifiable quote).
- Equipment project funding demonstration.
  - Total project cost.
  - Program dollars requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Request for a direct payment to vendor (if applicable).
  - Total project cost (Program dollars requested plus other match funding).
  - Documentation of match funding availability.

b) Option (2): PM + NOx retrofit

- Retrofit device data.
  - ARB-verified retrofit device company and name of device.
  - ARB Executive Order number for retrofit device.
  - ARB-verified NOx reduction and PM reduction (percentages).
- Itemized cost information for eligible expenses (verifiable quote).
- Equipment project funding demonstration.
  - Program dollars requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Request for a direct payment to vendor (if applicable).
  - Total project cost (Program dollars requested plus other match funding).
  - Documentation of match funding availability.

c) Option (3): Repower

- Engine repower data.
  - Engine make, engine model, and engine year.
  - Engine horsepower and fuel type.
- Repower documentation.
  - Documentation of all engine/truck modifications planned as part of the repower project. Include description of upgrades to such things as exhaust systems, electronics, etc.
- Itemized cost information for eligible expenses (verifiable quote).
- Equipment project funding demonstration.
  - Total project cost.
  - Program dollars requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Total project cost (Program dollars requested plus other match funding).
  - Documentation of match funding availability.

d) Option (4): Replacement

- New truck data.
  - Truck make, model, and model year.
  - Manufacturer's gross vehicle weight rating (GVWR).
  - Engine make, engine model, and engine year.
  - Engine horsepower and fuel type.
- Itemized cost information for eligible expenses (verifiable quote).
- Equipment project funding demonstration.
  - Total project cost.
  - Program dollars requested.
  - Source and amounts of other funding (private, local, other State, federal).
  - Request for a direct payment to vendor (if applicable).
  - Total project cost (Program dollars requested plus other match funding).
  - Documentation of match funding availability.
  - Interest in lease-to-own option or loan assistance program.

e) Option (5): Three-way truck transaction

- Truck A (retrofitted truck) data.
  - ARB-verified retrofit device company and name of device.
  - ARB Executive Order number for retrofit device.
  - ARB-verified NOx reduction and PM reduction (percentages).
  - Itemized cost information for eligible expenses (verifiable quote).
- Truck B (scrapped truck) data.
  - Equipment owner name (if different from Truck A).

- Equipment project funding demonstration.
    - Total project cost.
    - Program dollars requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Request for a direct payment to vendor (if applicable).
    - Total project cost (Program dollars requested plus other match funding).
    - Documentation of match funding availability.
- Truck C (new truck) Data
    - Truck make, model, and model year.
    - Manufacturer's gross vehicle weight rating (GVWR).
    - Engine make, engine model, and engine year.
    - Engine horsepower and fuel type.
- Truck C itemized cost information for eligible expenses (verifiable quote).
- Equipment project funding demonstration (combined Truck A and Truck C).
    - Total project cost.
    - Program dollars requested.
    - Source and amounts of other funding (private, local, other State, federal).
    - Request for a direct payment to vendor (if applicable).
    - Total project cost (Program dollars requested plus other match funding).
    - Documentation of match funding availability.

f) Option (6): Truck stop/distribution center electrification

- Electrification infrastructure 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 (e.g., design, environmental, construction).
- Predicted activity data with new equipment.
    - Estimated annual truck connections to electric power and average connection time.
    - Estimated annual TRU connections to electrical power and average connection time.
    - Expected power usage for trucks and TRUs (separately), each year for the first 10 years of operation.
- Projected emissions and benefits of the project.
    - Emissions with the project over a 10-year period.
    - Emission reductions attributable to the project (beyond those required by law or regulation) for a 10-year period beginning in the 1st year of operation.
    - Demonstration that the weighted emission reductions per State dollar invested is equal or better than 0.20 pounds per State dollar.

- Equipment project funding demonstration.
  - Program dollars requested.
  - Funding sources and amounts of other funding (private, local, other State, federal).
  - Total project cost (Program dollars requested plus other match funding).
  - Documentation of match funding availability.

D. Scrap Requirements

In addition to the general scrappage requirements listed in Chapter IV.A.14., specific requirements for repower, replacement, and three-way truck transaction projects are shown in Table F.1 below.

Table F.1 Truck Equipment Project Scrap Requirements

Source Category	Equipment Project Option	Additional Requirements
Heavy Duty Diesel Trucks	Option (3) Repower	• The local agency shall ensure the impound and transport of the old engine to the licensed dismantler within 30 calendar days of the new engine being placed into operation. • The licensed dismantler must dismantle and destroy the old engine within 60 calendar days of receipt. The engine destruction must be done in accordance with these Guidelines. • The engine block shall be punctured and crushed in such a manner to eliminate the possibility of future operation and use of any components. • The licensed dismantler shall provide proof of scrappage to the local agency within 10 calendar 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 calendar days of the destruction of the engine. • The following digital photos must be taken and labeled for the project file: 1. Engine tag with serial number, engine family number, and engine model year. 2. Destroyed engine block.

Table F.1 Truck Equipment Project Scrap Requirements (cont.)

Source Category	Equipment Project Option	Additional Requirements
Heavy Duty Diesel Trucks	Option (4) Replacement	In addition to the requirements listed above for engine repower projects, replacement projects require: • The local agency shall ensure the impound and transport of the old truck(s) to the dismantler within 30 calendar days of the replacement vehicle being placed into operation. • The licensed dismantler must dismantle and destroy the old truck(s) within 60 calendar days of receipt. The destruction must be done in accordance with these Guidelines. • Sever the old vehicle frame rails to ensure that the vehicle is rendered useless and to prevent repeated use. • The following digital photos must be taken and labeled for the project file: 1. Engine tag with serial number, engine family number, and engine model year. 2. Destroyed engine block either inside or outside truck body. 3. Vehicle identification number (VIN) printed by manufacturer inside cab or from the vehicle's frame rail. 4. Truck view from front angle capturing entire truck, including readable license plate when available. • The equipment owner or licensed dismantler must file a VIN hold with DMV and submit either a REG 488C "Non-Repairable Vehicle Certificate" or REG 42 "Notice to Dismantler" to DMV. Any additional substitute documentation must be verified by ARB to ensure that the scrapped equipment is permanently removed from service. • The licensed dismantler shall provide proof of scrappage and a copy of the form submitted to DMV (REG 488C, REG 42, or substitute documentation as described above) to the local agency within 10 calendar days of the destruction of the vehicle.
	Option (5) Three-way Truck Transaction	• Truck B (old truck) must be scrapped in accordance with the equipment project scrap requirements listed in Option 4.

E. Post-Inspection

- For truck replacement equipment projects, the post-inspection shall occur within 60 calendar days of the old truck(s) being delivered to a certified dismantler.

- For truck retrofit equipment projects, the post-inspection shall occur within 30 calendar days of installation of the fully operational equipment.

- For truck stop/distribution equipment projects, the post-inspection shall occur within 60 calendar days of owner receipt of fully operational equipment.

Table F.2 Truck Post-Inspection Requirements

Source Category	Equipment Project Option	Additional Requirements
Heavy Duty Diesel Trucks	PM Retrofit or PM + NOx Retrofit	• Name, address, and telephone number of company(s) that installed the retrofit. • Name of the retrofit manufacturer(s). • Retrofit model and serial number(s). • Year that the retrofit was manufactured (if not listed on device label, information may be obtained from the retrofit manufacturer by reference to serial number). • Date the retrofit was installed. • If not in the application file, copy of ARB Executive Order documenting the retrofit meets the specifications.
	Repower	• Name, address, and telephone number of company(s) that installed the new engine. • Engine make, model, model year. • Engine family name and number. • Engine serial number. • Date the new engine was installed. • If not in the application file, copy of ARB Executive Order documenting that the new engine meets 2010 emissions.

Table F.2 Truck Post-Inspection Requirements (cont.)

Source Category	Equipment Project Option	Additional Requirements

Heavy Duty Diesel Trucks	Replacement	• Vehicle type.
		• Vehicle identification number (VIN).
		• Vehicle make, model, model year.
		• Fuel type.
		• Vehicle license plate number. For new vehicles, the equipment owner shall provide:
		  ○ Invoice including the cost of tax and license fees indicating the intent to register with the DMV.
		  ○ Vehicle license plate number with the first annual report to the local agency.
		• CA Highway Patrol number.
		• Engine make, model year, engine year.
		• Engine family name and number.
		• If not in the application file, copy of ARB Executive Order documenting that the replacement truck engine meets 2010 emissions, 2007+ emissions, or 2007 emissions, as applicable.

	Three-way Truck Transaction	• See individual post-inspection requirements for retrofit and replacement.

	Truck Stop/ Distribution Center	• Name of power system manufacturer.
		• Serial number and date of manufacture.
		• Rated amperage, voltage.
		• Verification that each project's pedestal and/or external air conditioning/power system is operational.
		• Inspection shall include verification of operation by connecting heavy duty truck cab and/or transport refrigeration unit (as appropriate) to a random number of pedestals or external air conditioning/power system.
		• Inspections:
		  ○ An initial inspection shall be completed within 60 calendar days of owner receipt of fully operational equipment.
		  ▪ The initial inspection shall include a review of equipment owner's procedures to collect use data for first year of operation.
		  ○ A second inspection (which corresponds to the proper post-inspection) shall be completed within 60 calendar days of owner completion of first year of operation.
		  ▪ Reimbursement of equipment costs can only be requested after obtaining a satisfactory second inspection.

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

1. Heavy duty diesel trucks

Equipment owners shall be responsible for annual reporting to the local agency except for owners with PM retrofits with a 2-year contract who only need to report at the end of the 2 year project life. The equipment owner shall submit annual reports for the equipment project life. The equipment owner's annual report shall include, but is not limited to:

- Contact information (owner name, address, phone, etc.).
- Fleet size.
- Proof of California registration.
- Proof of insurance.
- Current odometer reading, including the date read (estimate total vehicle mileage if odometer is missing or broken).
- Annual VMT since last report.
- Certification of the required 90 percent or 100 percent California-only operation. Certification of at least 50 percent of travel in the four trade corridors as well as provide the percentage of annual vehicle miles of travel in:
    - Bay Area trade corridor.
    - Central Valley trade corridor.
    - Los Angeles/Inland Empire trade corridor.
    - San Diego/Border trade corridor.
- Summary of maintenance performed and inspections conducted.
- Certification that the bond-funded project was operated in accordance with the signed contract, and that all information submitted is true and accurate.
- Other information as requested by the local agency.

2. Truck stop/distribution center electrification

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).
- Facility location.
- Project completion date.
- Monthly truck and TRU connections to electrical power and electricity usage for each month in the reporting year.
- Summary of maintenance and inspections conducted.
- 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 local agency is true and accurate.
- Other information as requested by the local agency.

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APPENDIX G

Project Specifications for FY2008-09 (Year 2) and FY2011-12 (Year 3) Funds by Source Category

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A Heavy Duty Diesel Trucks

(Combines Port/Railyard and Other Trucks)

Equipment Project Specifications

Eligible Equipment	Heavy-duty diesel trucks used to move goods (a majority of the time) with a declared Gross Vehicle Weight (GVW) or declared Combined Gross Vehicle Weight (CGW) of 60,001 lbs or greater on current Department of Motor Vehicle (DMV) registration (DMV weight code "K" or higher) and a manufacturer's gross vehicle weight rating (GVWR) of 31,000 lbs or greater listed on the application and verified at pre-inspection.
	
	Equipment owner must demonstrate:
	• At least 75% operation within California for the past 2 years.
	• Registration:
	  ○ Continuous registration (California base-plated or California International Registration Plan (IRP)) in California for the past 2 years, or
	  ○ Current California registration and minimum 8 months available California DMV registration history supplemented by alternate documentation showing California operation for the past 2 years.
	  ○ Partial year registration may be allowed for trucks that, due to their vocation, register on a partial year basis. These trucks must have a consistent pattern of registration that establishes California operation over the past 2 years, and the pattern of operation must be consistent with the equipment owner's vocation. Mileage documentation and registration information shall be reviewed by the local agency for consistency.
	• New engines for repower or replacement projects meet the applicable Program requirements:
	  ○ MY2010 emissions means 0.20 g/bhp-hr or less NOx (FEL and CERT values) and 0.01 g/bhp-hr or less PM (CERT value) as certified by an ARB Executive Order for on-road use with an intended service of Heavy-Heavy Duty Diesel (HHDD) for diesel engines or Heavy Duty Otto (HDO) for applicable alternative fuel vehicles.
	  ○ MY2007 emissions means 1.20 g/bhp-hr or less NOx (FEL and CERT values) and 0.01 g/bhp-hr or less PM (CERT value) as certified by an ARB Executive Order for on-road use with an intended service of HHDD for diesel engines or HDO for applicable alternative fuel vehicles.
	• New or used trucks purchased for a truck replacement project have a manufacturer's GVWR of 33,001 lbs or greater (Class 8).
	
	Drayage truck owners are eligible to apply for priority drayage truck funding that may be available for truck replacement or PM + NOx retrofit projects if the owner demonstrates all of the following for the existing truck to be upgraded:
	• Meets all of the other requirements of this section.
	• Made at least 12 visits to California ports and railyards (combined) over the last 12 months.
	• **For truck replacement projects (Option 1)**, has a MY1994-2003 engine, and was registered in the California Drayage Truck Registry and was retrofitted with an ARB-verified Level 3 diesel particulate filter by June 30, 2010.
	• **For PM + NOx retrofit projects (Option 2)**, has a MY2004-2006 engine, was registered in the California Drayage Truck Registry by June 30, 2010, and would be upgraded with a PM + NOx retrofit no later than December 31, 2010.

Heavy Duty Diesel Trucks (cont.)

Ineligible Equipment	• Trucks subject to ARB's public and utility fleet rule. • Trucks subject to ARB's solid waste collection vehicle rule. • Trucks subject to ARB's diesel cargo handling equipment rule.
General Requirements (applicable to all project options)	Equipment owner shall: • Commit to the project life specified with the applicable equipment project option. • Adhere to all Program requirements during the project life. • Commit to 100% California-only operation (or 90% California-only operation for a replacement project, if that option is offered by the local agency and has been selected by the equipment owner) and California base-plated registration or California IRP. Dual plates and out-of-state registrations are prohibited, except for trucks that carry goods across the California-Mexico border which are required to be dual-plated (California and Mexico only). • Commit to at least 50% of travel within the four trade corridors for the duration of the project life. • Maintain current DMV registration with a declared GVW or CGW of 60,001 lbs or greater (DMV weight code "K" or higher) at all times during the project life. • Agree to accept an on-board electronic monitoring unit at any time 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 milestone and completion deadlines. • Properly maintain truck in good operating condition and according to manufacturer's recommendations. • Maintain collision/comprehensive insurance on the truck for replacements. • Demonstrate proof of equipment warranty on the Program-funded equipment. • Correct outstanding ARB equipment violations associated with the owner's entire fleet of vehicles. ARB will post and update information on the Program website describing the installation and operational deadlines and when the Program-funded vehicle will become eligible to be included in the equipment owner's Statewide Truck and Bus Rule fleet compliance strategy for the applicable project option.
Modifying an Application	Equipment owners may change the project option, funding option or lease-to-own program participation after the local agency solicitation period has closed if permitted by the local agency and subject to the following requirements: • The change must result in a funding amount equal to or less than the amount that was requested in the original application. • The change must result in a calculated project cost-effectiveness equal to or greater than the project listed in the original application. Equipment owners cannot substitute a different vehicle or change the ownership of the existing vehicle identified on the application after the local agency solicitation period has closed.

Heavy Duty Diesel Trucks (cont.)

Option (1) **PM Retrofit**	Partial funding (see options below) to retrofit an eligible MY1994-2006 heavy duty diesel engine with an ARB verified Level 3 Plus diesel particulate filter that reduces PM by 85% or more. Trucks serving ports and intermodal railyards (as indicated by the Drayage Truck Registry) are not eligible.
Funding Options	1. $5,000/truck with a project life of 2 years. Program-funded diesel particulate filter shall be installed and operational (post-inspection completed) at least 6 months prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. 2. $10,000/truck with project life of 4 years. Program-funded diesel particulate filter shall be installed and operational (post-inspection completed) at least 12 months prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Commit to 100% California-only operation. • Demonstrate that any mid-1990s engine subject to the software upgrades for diesel trucks (i.e., chip reflash) has completed the upgrade.
Option (2) **PM + NOx Retrofit**	Partial funding of up to $20,000/truck to retrofit an eligible MY2004-2006 heavy duty diesel truck engine with an ARB-verified diesel emission control strategy (VDECS) that reduces NOx exhaust emissions by an amount that meets the 2007 or 2010 Model Year NOx Emissions Equivalent and reduces diesel PM by 85% or more.
Requirements	Program-funded VDECS and diesel particulate filter shall be installed and operational (post-inspection completed) at least 3 years prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. For fleets of 3 or fewer trucks subject to the Statewide Truck and Bus Rule, the equipment project shall be installed and operational at least 2 years prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. The 2007 Model Year NOx Emissions Equivalent is defined by the California Code of Regulations, Section 2025 as a 2004-2006 model year heavy-duty diesel engine equipped with a VDECS that reduces NOx exhaust emissions by at least 40% (ARB Mark 2 rating). The 2010 Model Year NOx Emissions Equivalent is defined by the California Code of Regulations, Section 2025 as a 2004-2006 model year heavy-duty diesel engine equipped with a VDECS that reduces NOx exhaust emissions by at least 85% (ARB Mark 5 rating). In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years or 500,000 miles, whichever comes first. • Commit to 100% California-only operation.

Heavy Duty Diesel Trucks (cont.)

Option (3) Repower	Partial funding of up to $30,000/truck to repower a truck with an eligible MY1994-2006 heavy duty diesel engine with a new engine that meets MY2010 emissions.
Requirements	Program-funded engine shall be installed and operational (post-inspection completed, except scrappage) at least 3 years prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. For fleets of 3 or fewer trucks subject to the Statewide Truck and Bus Rule and all eligible 1999 or older trucks, the equipment project shall be installed and operational at least 2 years prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years or 500,000 miles, whichever comes first. • Commit to 100% California-only operation. • Scrap the old engine. • Purchase a minimum of a 1-year or 100,000-mile major component engine warranty for the replacement engine that covers parts and labor. • Provide a copy of ARB Executive Order documenting that the new engine meets MY2010 emissions.

Heavy Duty Diesel Trucks (cont.)

Option (4) Replacement	Partial funding (see options below) to replace 1 or 2 truck(s) equipped with eligible MY2003 or older heavy duty diesel engine(s) with a diesel or alternative fuel truck.
Funding Options (drayage trucks)	Owners of eligible drayage trucks with a MY1994-2003 engine that commit to 90% or 100% California-only operation may have the option to compete for prioritized funding as follows: 1. $50,000/truck for a replacement truck with an engine that meets MY2010 emissions. 2. $30,000/truck for a replacement truck with an engine that meets MY2007 emissions. To be eligible, the replacement truck must have less than 500,000 miles with odometer verification at the post-inspection. Note: Program funding may be reduced by $15,000/truck for the replacement of trucks that were designated as "drayage" on an applicant's Program application, but could no longer access the ports or railyards because the truck did not have a retrofit installed. This option provides an alternative to installing a retrofit on an existing truck that would be scrapped after the replacement truck is purchased. Note: If priority drayage truck funding is exhausted before all eligible drayage trucks are funded, any remaining, unfunded drayage trucks will compete with other trucks.
Funding Options (other trucks)	Owners of all eligible non-drayage trucks that commit to 90% or 100% California-only operation can compete for funding as follows: 1. $60,000/truck for a replacement truck with an engine that meets MY2010 emissions. 2. $40,000/truck for a replacement truck with an engine that meets MY2007 emissions. To be eligible, the used replacement truck must have less than 500,000 miles with odometer verification at the post-inspection.
Requirements	Program-funded replacement projects shall be purchased and operational (post-inspection completed, except scrappage) at least 3 years prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. For fleets of 3 or fewer trucks subject to the Statewide Truck and Bus Rule and all eligible 1999 or older trucks, the equipment project shall be installed and operational at least 2 years prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of at least 5 years or 350,000 miles (for priority drayage trucks)/500,000 miles (for other trucks), whichever comes first. • Commit to 100% California-only operation (or 90% if that option has been selected). • Scrap the old truck(s). • Purchase a minimum of a 1-year or 100,000-mile major component engine warranty for the replacement vehicle that covers parts and labor. • Provide a copy of ARB Executive Order documenting that the new truck engine meets the applicable MY2007 or MY2010 emissions.

Heavy Duty Diesel Trucks (cont.)

Option (5) Three-Way Truck Transactions	1. $60,000/truck to replace an eligible truck that has a MY1998-2006 engine (Truck A) with a diesel or alternative fuel truck (Truck C) meeting MY2010 emissions. 2. Optional $5,000/truck to equip Truck A with an ARB-verified Level 3 Plus diesel particulate filter that reduces diesel PM by 85% or more; and 3. Scrap a MY1993 or older diesel truck (Truck B) and replace with Truck A. Truck A: Heavy duty diesel truck with MY1998-2006 engine. Truck B: Heavy duty diesel truck with MY1993 or older engine. Truck C: Heavy duty truck (diesel or alternative) that meets MY2010 emissions.
Requirements	Truck C shall be purchased and operational (post-inspection completed, except scrappage) at least 3 years prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. For fleets of 3 or fewer trucks subject to the Statewide Truck and Bus Rule and all eligible 1999 or older trucks, the equipment project shall be installed and operational at least 2 years prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. Truck A shall be equipped with an operational diesel particulate filter at least 6 months prior to a regulatory requirement for that technology or level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks if optional retrofit funding is received for Truck A. In addition to the applicable General Requirements listed previously, the original owner of Truck A and new owner of new Truck C shall: • Equip Truck A with an ARB verified Level 3 Plus diesel particulate filter and transfer ownership (if applicable) to the owner of old Truck B. • Commit to a project life of 5 years or 500,000 miles, whichever comes first, on Truck C. • Commit to 90% or 100% California-only operation. • Purchase a minimum of a 1-year or 100,000-mile major component engine warranty for Truck C that covers parts and labor. • Provide a copy of ARB Executive Order documenting that the new truck engine in Truck C meets MY2010 emissions. • Demonstrate that any mid-1990s engine subject to the software upgrades for diesel trucks (i.e., chip reflash) has completed the upgrade on Truck A. In addition to the applicable General Requirements listed previously, the original owner of old Truck B and new owner of retrofit Truck A shall: • Scrap Truck B. • Commit to a project life of 2 years and all applicable Program requirements on Truck A. • Commit to 100% California-only operation.

Heavy Duty Diesel Trucks (cont.)

Eligible Equipment	Truck stops, intermodal facilities, distribution centers, and other places where Class 8 heavy diesel trucks (over 33,000 lbs) congregate in a trade corridor.
Option (6) Electrification Infrastructure for Truck Stop or Distribution Center	Landside electrification infrastructure to reduce diesel engine idling and use of diesel-fueled internal combustion auxiliary power systems may be funded at the lower of 50% of eligible project costs or a level commensurate with a cost-effectiveness of 0.20 pounds of weighted emissions reduced per State dollar invested. Truck stop/distribution center electrification infrastructure projects shall be eligible to compete for funding only if the cost-effectiveness is equal or greater than 0.20 pounds of weighted emissions reduced per State dollar invested. Eligible costs include purchase and installation of electrical infrastructure to: enable heating, cooling, and the use of cab power for parked trucks at truck stops; and enable the use of power for transport refrigeration units and auxiliary power systems at distribution centers, intermodal facilities, and other places where trucks congregate. Reimbursement for the eligible costs shall be based on demonstrated use over the first year of operation. Ineligible costs include on-board auxiliary power units and other equipment installed on trucks, transport refrigeration units, electricity costs and operation and maintenance costs.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Commit to 10 years of operation. • 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty. • Comply with all local permitting requirements.
Project Cost Assumptions	• Option (1): Average cost of a diesel particulate filter is ~$15,000. • Option (2): Total cost of a NOx+PM retrofit is expected to be $40,000. • Option (3): Total cost of a repower project is expected to be $60,000. • Option (4,5): Total cost of a new MY2010 compliant truck is ~$120,000 (diesel) to ~$180,000 (natural gas). Total cost of a used MY2007 truck (in 2011-2012) is expected to be $60,000-$80,000 (diesel). • Option (6): Total cost for distribution centers is $1,500-$7,000/plug at dock; $2,500-$9,000/plug in parking areas; $500-$2,000/adapter for trailers and TRUs. Total cost for truck stops is $6,000-$18,000/parking space; $3,000/truck modification.

B Locomotives and Railyards

Equipment Project Specifications

Eligible Equipment	**Locomotive projects**: Diesel-powered freight locomotives with no or minimal emissions control technology (i.e., uncontrolled, or meeting Tier 0 or Tier 1 standards). Equipment owner must demonstrate: • Operation or equivalent locomotive horsepower operation in California for the past 2 years. • At least 50% operation or equivalent locomotive horsepower operation within trade corridor(s) for the past 2 years. • Estimated diesel fuel usage of 20,000 gallons per year or greater. **Railyard projects**: Existing freight railyards in a trade corridor.
General Requirements (applicable to all project options)	Equipment owner shall: • Commit to the project life specified with 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 milestone 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. • Certify that there are no outstanding ARB violations associated with the equipment or owner. • Exclude any Program-funded equipment from the compliance calculations for the 1998 agreement for Locomotives in the South Coast Air Basin for the duration of the project life (applicable to UP and BNSF only). Equipment owners participating in a 90% California operation option may compete at a funding level that is 20% less than the applicable funding option described below, and must do the following at their own expense: (1) install an approved, active GPS device in the funded locomotive; (2) pay for monthly electronic service for the project life; and (3) provide electronic monitoring and activity reports when requested by the local agency or ARB, in the format defined by ARB staff.

Locomotives and Railyards (cont.)

Option (1): Switcher Locomotive (1,006 hp - 2,300 hp)	Partial funding (see options below) to replace, repower, or rebuild an uncontrolled, Tier 0, or Tier 1 switcher locomotive with a new generator-set, hybrid, or alternative technology.
Funding Options	1. The lower of 50% of the eligible cost or $750,000/locomotive to meet emission limits of 3.5 g/bhp-hr or less for NOx and 0.10 g/bhp-hr or less for PM. 2. $1,000,000/locomotive to meet U.S. EPA Tier 4 or lower emission standards for NOx only or PM only. 3. $1,200,000/locomotive to meet U.S. EPA Tier 4 or lower emission standards for both NOx and PM. Eligible costs include a new chassis, freshly manufactured engine(s), diesel PM filter, selective catalytic reduction device for NOx control, and mechanical/electrical systems components necessary for safe operation. Ineligible costs include auto start/stop devices required by regulation or agreements, GPS units and associated monitoring and reporting costs, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and repair.
Requirements	The new equipment must meet the required emission levels or standards as evidenced by an ARB verified U.S. EPA engine certification test results (funding Option 1 only) or a U.S. EPA Certificate of Conformity (funding Options 1, 2, or 3) under the switcher duty-cycle. In addition to the General Requirements, equipment owner shall: • Be permitted to have equipment temporarily travel out-of-state for periodic maintenance if outlined in the contract between the local agency and equipment owner. • Commit to a project life of 15 years. • Commit to 90% or 100% operation within the four California trade corridors for the duration of the project life. • Scrap or ban old engine/locomotive from California operation. • Install an active GPS unit on both old (if not scrapped) and new equipment, fund data collection, and report location data.

Locomotives and Railyards (cont.)

Option (2): (Medium Horsepower) Line-haul Locomotive (2,301 hp - 4,000 hp)	Partial funding (see options below) to replace, repower, or rebuild an uncontrolled, Tier 0, or Tier 1 line-haul locomotive with a new engine or alternative technology.
Funding Options	1. The lower of 50% of the eligible cost or $750,000/locomotive to meet emission limits of 4.0 g/bhp-hr or less for NOx and 0.10 g/bhp-hr or less for PM. 2. $1,000,000/locomotive to meet U.S. EPA Tier 4 or lower emission standards for NOx only or PM only. 3. $1,500,000/locomotive to meet U.S. EPA Tier 4 or lower emission standards for both NOx and PM. Eligible costs include a new chassis, freshly manufactured or rebuilt engine(s), diesel PM filter, 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 units and associated monitoring and reporting costs, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and repair.
Requirements	The new equipment must meet the required emission levels or standards as evidenced by an ARB verified U.S. EPA engine certification test results (funding Option 1 only) or a U.S. EPA Certificate of Conformity (funding Options 1, 2 or 3) under the line-haul duty-cycle. In addition to the General Requirements listed previously, equipment owner shall: • Be permitted to have equipment temporarily travel out-of-state for periodic maintenance if outlined in the contract between the local agency and equipment owner. • Commit to a project life of 15 years. • Commit to 90% or 100% California-only operation for the duration of the project life. The funded intrastate line-haul locomotive shall use California ARB diesel fuel. • Commit to at least 50% of operation within the four California trade corridors for duration of the project life. • Scrap or ban old engine/locomotive from California operation. • Install an active GPS unit on both old (if not scrapped) and new equipment, fund data collection, and report location data.

Locomotives and Railyards (cont.)

Option (3): Line-Haul Locomotive (4,001 hp or higher)	Partial funding (see options below) to replace, repower, or rebuild an uncontrolled, Tier 0, or Tier 1 line-haul locomotive with a new engine or alternative technology.
Funding Options	1. The lower of 50% of the eligible cost or $1,200,000/locomotive to meet U.S. EPA Tier 3 or lower emission standards for both NOx and PM through use of a Tier 3 engine or Tier 2 engine with certified "Tier 2 Plus" kit. 2. $1,500,000/locomotive to meet U.S. EPA Tier 4 or lower emission standards for NOx only or PM only. 3. $2,000,000/locomotive to meet U.S. EPA Tier 4 or lower emission standards for both NOx and PM. Eligible costs include a new chassis, freshly manufactured or rebuilt engine(s), new Tier 2 engine(s), a U.S. EPA Certified "Tier 2 Plus" retrofit kit, new generator set(s), diesel PM filter, 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 units and associated monitoring and reporting costs, design, engineering, consulting, license, registration, taxes, insurance, operation, maintenance, and repair.
Requirements	The new equipment must meet the required emission standards as evidenced by a U.S. EPA Certificate of Conformity under the line-haul duty-cycle. Any equipment project which utilizes a "Tier 2 Plus" retrofit kit must have the post-inspection completed (except scrappage) by December 31, 2012. In addition to the General Requirements listed previously, equipment owner shall: • Be permitted to have equipment temporarily travel out-of-state for periodic maintenance if outlined in the contract between the local agency and equipment owner. • Commit to a project life of 15 years. • Commit to 90% or 100% California-only operation for the duration of the project life. The funded intrastate line-haul locomotive shall use California ARB diesel fuel. • Commit to at least 50% of operation within the four California trade corridors for the duration of the project life. • Scrap or ban old engine/locomotive from California operation. • Install an active GPS unit on both old (if not scrapped) and new equipment, fund data collection, and report location data.
Project Cost Assumptions	• Estimated total cost of new switcher generator-set is ~$1.5-$2 million. • Estimated cost for a line-haul repower is ~$1-$2 million. • Estimated total cost of a new line-haul locomotive is ~$2-$3 million. • Estimated cost of a "Tier 2 Plus" retrofit device kit is ~$250,000.

Locomotives and Railyards (cont.)

Option (4): Locomotive Emissions Capture and Control System	Partial funding for the lower of 50% of eligible costs or a level commensurate with a cost-effectiveness of at least 0.15 pounds of weighted emissions reduced per State dollar invested for the purchase and installation of an ARB-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 purchase and installation of the emission treatment system and ducting, and hoods or bonnets necessary to connect to locomotives. Ineligible costs include those associated with increasing the capacity of electrical power 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 a project life of 10 years. • Commit to 90% or 100% operation within the four California trade corridors for the duration of the project life. • Document the system is commercially available and achieves an overall capture and control efficiency rate of at least 85% 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. 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 85% using ARB approved methods for flow rate (Methods 1 to 4), NOx (ARB Method 100) and PM (ARB Method 5). Any alternative test methods must be approved by ARB. • 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 ARB. • Comply with all local permitting requirements.
Excluded Funding Components	• Electricity costs required to operate the hood control system. • Other operation and maintenance costs.
Project Cost Assumptions	• Estimated total cost of new switcher generator-set is ~$1.5-$2 million. • Estimated cost for a line-haul repower is ~$1-$2 million. • Estimated total cost of a new line-haul locomotive is ~$2-$3 million. • Estimated cost of a "Tier 2 Plus" retrofit device kit is ~$250,000. • Estimated capital cost for the locomotive emissions capture and control system of one 12,500 scfm unit with 12 bonnets is ~$9 million.

C Ships at Berth

Equipment Project Specifications

Eligible Equipment	Existing cargo ship berth or existing cargo ship terminal at a seaport located in a trade corridor.
General Requirements (applicable to all project options)	Equipment owner shall: • Commit to the project life specified with the applicable equipment project option. • Adhere to all Program requirements during the project life. • Comply with record-keeping, reporting, and Program review or fiscal audit requirements. • Sign a legally binding contract with the local agency and the port (if not the same entity) including project milestone 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 ARB 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.
Option (1) Grid-Based Power	Partial funding up to the lower of 50% of eligible shore-side costs to install permanent, grid-based electrical power at a cargo ship berth or: 1. $3,500,000/berth for completed projects that begin operation by January 2012. 2. $3,000,000/berth for completed projects that begin operation by January 2013. 3. $2,500,000/berth for completed projects that begin operation by January 2014. For purposes of determining the funding level only, a berth may be considered complete and operational if a successful system test is completed and approved by the local agency. System testing procedures shall be approved by ARB. Up to 80% of eligible project costs are authorized for early reimbursement in accordance with the requirements of Chapter IV. B.2.e. Final payments, including any project funds held in retention, are paid upon completion of a satisfactory post-inspection. Eligible costs include design, engineering, equipment necessary to purchase and install infrastructure to supply electrical power, utility construction, and costs associated with increasing the capacity of electrical power to the port. Ineligible costs include shipside modifications to accept shore-based electrical power, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair.

Requirements	In addition to the General Requirements listed previously, equipment owner shall:
	• Commit to a project life of 10 years for the use of grid-based shore power at the berth at the following levels or greater:
	  ○ 50% of the ship visits in 2012-2013, if applicable.
	  ○ 60% of the ship visits in 2014-2016.
	  ○ 80% of the ship visits in 2017-2019.
	  ○ 90% of the ship visits in 2020 and beyond.
	• Demonstrate operability with a cargo ship fully powered by shore-based electrical power supplied by the grid-based equipment.

Ships at Berth (cont.)

Option (2) Non-Grid-Based Power	Partial funding of up to $200,000 per megawatt of the eligible costs of an electricity generating unit that provides power at a cargo ship berth or multiple berths. This unit can be portable or fixed on the terminal. Only zero emission units (e.g., fuel cell, solar), or natural gas engines equipped with selective catalytic reduction to control NOx emissions are eligible. Eligible costs include equipment necessary to generate electrical power and connect the equipment to cargo ships at berth. Ineligible costs include construction and protection of infrastructure (e.g., natural gas lines) used to supply fuel for non-grid-based electrical generation, shipside modifications to accept electrical power, barge 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 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:
	  ▪ 2,000 hours per year in 2012-2013.
	  ▪ 3,000 hours per year in 2014 and beyond.
	  ○ All other ports in the four trade corridors:
	  ▪ 1,000 hours per year in 2012-2013.
	  ▪ 1,500 hours per year in 2014 and beyond.
	• Demonstrate operability with a cargo ship fully powered by shore-based electrical power supplied by the electricity generating unit.
	• Obtain a 5 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 ARB.
	• Perform source testing to measure emissions from the unit every 1,000 hours of operation, according to the source test requirements contained in ARB's Ships at Berth Rule.

Ships at Berth (cont.)

Option (3) Ship Emissions Capture and Control System	Partial funding of up to the lower of 50% of the eligible costs or a level commensurate with a cost-effectiveness of at least 1.0 lbs/State dollar for the purchase and installation of a ship emissions capture and control system (a.k.a. hood or bonnet) to reduce diesel PM and NOx emissions at 85% from ships at berth. Only units that have ARB-approved capture and treatment efficiency rates for PM and NOx consistent with ARB's Ships At-Berth Rule are eligible for funding.

Requirements	Eligible costs include purchase and installation of the emission treatment system and ducting, and hoods or bonnets necessary to connect to cargo ships at berth.
	
	Ineligible costs include shipside modifications to accept capture and control system, barge 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.
	
	In addition to the General Requirements listed previously, equipment owner shall:
	• Commit to a project life of 10 years of 100% California operation at the following levels or greater:
	  ○ Port of Los Angeles and Port of Long Beach:
	  ▪ 2,000 hours per year in 2012-2013.
	  ▪ 3,000 hours per year in 2014-2016.
	  ▪ 4,000 hours per year in 2017-2019.
	  ▪ 4,500 hours per year in 2020 and beyond.
	  ○ All other ports in the four trade corridors:
	  ▪ 1,000 hours per year in 2012-2013.
	  ▪ 1,500 hours per year in 2014-2016.
	  ▪ 2,000 hours per year in 2017-2019.
	  ▪ 2,500 hours per year in 2020 and beyond.
	• Commit to 100% operation within the four California trade corridors for the duration of the project life.
	• Document the system is commercially available and achieves an overall efficiency rate of at least 85% for the capture and removal of NOx and PM.
	• Demonstrate system performance and efficiency with source testing prior to funding and annually thereafter by capturing emissions from a cargo ship at port. 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 85% using ARB approved methods for flow rate (Methods 1 to 4), NOx (ARB Method 100), and PM (ARB Method 5). Any alternative test methods must be approved by ARB.
	• 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 ARB.

Project Cost Assumptions	• Option (1): Total shore-side cost of equipping a berth with permanent grid-based electrical power is ~$3-$5 million/berth; some ports may incur higher costs to bring new/additional power capacity to the port that may increase the total cost to $5-$7 million/berth. • Option (2): Total cost of distributed generation power is anticipated to be $4 million/2 MW unit. • Options (1) & (2): Shipside modifications will cost ~$500,000-$1 million/ship. • Option (3): Ship emissions capture and control system estimated capital cost is approximately $6 million for the current standard design of one 12,500 scfm unit with single bonnet.

D Commercial Harbor Craft

Equipment Project Specifications

Eligible Equipment	Existing commercial diesel harbor craft vessels involved in goods movement with: a home port located in a trade corridor, 2 years of operation in California waters, Tier 0 or Tier 1 diesel propulsion engine(s) for repower or replacement projects and Tier 2 or Tier 3 diesel propulsion engines for hybrid projects. Eligible vessel types include: • Tugboats and towboats. • Crew and supply vessels. • Work boats. • Pilot vessels. • Commercial fishing boats with at least 700 operational hours per year. These vessel types are defined in section 93118.5, title 17, chapter 1, subchapter 7.5, California Code of Regulations (d) Definitions.
General Requirements (applicable to all project options)	Equipment owner shall: • Commit to 8 years of California home port operation in the trade corridors. • Scrap old engine or vessel (as applicable). • Agree to accept an electronic monitoring unit at any time 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 milestone and completion deadlines. • Demonstrate proof of insurance on upgraded or replaced equipment. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Certify that there are no outstanding ARB violations associated with the equipment or the owner. Equipment owners participating in a 90% California operation option may compete at a funding level that is 20% less than the applicable funding option described below, and must do the following at their own expense: (1) install an approved, active GPS system in the funded vessel; (2) pay for monthly electronic service for the project life; and (3) provide electronic monitoring and activity reports when requested by the local agency or ARB, in the format defined by ARB staff.

Commercial Harbor Craft (cont.)

Option (1) Repower/ Replacement of Tugboats/ Towboats, Crew and Supply Vessels	Partial funding of up to the lower of 50% of the eligible cost or $140/horsepower of the old engine to repower or replace an eligible tugboat, towboat, crew and supply vessel* equipped with a Tier 0 or Tier 1 propulsion engine with a Tier 2 or Tier 3 engine as described in the project options. Available project options: 1. Repower an existing Tier 0 propulsion engine with a new engine meeting the latest emission standards (Tier 2 or Tier 3) and make necessary vessel modifications to accommodate the new engine. 2. Replace a vessel with an existing Tier 0 propulsion engine(s) with a new vessel powered by an engine meeting the latest emission standards (Tier 2 or Tier 3). 3. Repower an existing Tier 1 propulsion engine with a new engine meeting the Tier 3 emission standard and make necessary vessel modifications to accommodate the new engine. 4. Replace a vessel with an existing Tier 1 propulsion engine(s) with a new vessel powered by an engine(s) meeting the Tier 3 emission standard. 5. In addition to any one of these options, also retrofit the upgraded vessel with a hybrid system (see Option 3). Eligible costs include purchase of replacement vessel (diesel or hybrid) or purchase and installation of a new engine or hybrid system including vessel modifications directly related to the new engine or system. Ineligible costs include out of service time (dry dock) costs, fuel, design, engineering, consulting, legal fees, license, registration, taxes, insurance, operation, maintenance, and repair. *Note: If the Board does not adopt Rule amendments that require upgrades on existing crew and supply vessels, these vessels would be eligible for funding under Option 2.
Additional Requirements	Program-funded engine repower and vessel replacement projects shall be operational (post-inspection completed, except scrappage) at least 2 years prior to any regulatory requirement for that technology or level of emissions control.
Option (2) Repower/ Replacement of Other Vessels	Partial funding of up to the lower of 80% of the eligible cost or $190/horsepower of the old engine to repower or replace an eligible other vessel equipped with a Tier 0 or Tier 1 propulsion engine with a Tier 2 or Tier 3 engine as described in the project options. Other vessel types may include work boats or pilot vessels involved in goods movement and high use commercial fishing vessels. Available project options: 1. Repower an existing Tier 0 or Tier 1 propulsion engine with a new engine meeting the latest emission standards (Tier 2 or Tier 3) and make necessary vessel modifications to accommodate the new engine. 2. Replace a vessel with an existing Tier 0 or Tier 1 propulsion engine(s) with a new vessel powered by an engine(s) meeting the latest emission standards (Tier 2 or Tier 3). Eligible costs include purchase of replacement vessel (diesel or hybrid) or purchase and installation of a new engine or hybrid system including vessel modifications directly related to the new engine or system. Ineligible costs include out of service time (dry dock) costs, fuel, design, engineering, consulting, legal fees, license, registration, taxes, insurance, operation, maintenance, and repair.

Commercial Harbor Craft (cont.)

Option (3) Retrofit/ Replacement with Hybrid Power System	Partial funding of up to the lower of 80% of the eligible cost or $100/horsepower of the old engine for a hybrid power system that reduces PM and NOx emissions by 30% through retrofit or replacement of an eligible tugboat, towboat, or crew and supply vessel. An equipment owner may receive a grant to repower/replace a vessel (under Option 1) and to add a hybrid power system on the same upgraded vessel Available project options: 1. Retrofit an existing vessel with Tier 2 or Tier 3 propulsion engine(s) with a hybrid power system, and make necessary vessel modifications to accommodate the new hybrid system. 2. Replace an existing vessel with a new vessel powered by a hybrid system that includes Tier 2 or Tier 3 propulsion engine(s). Eligible costs include purchase of replacement vessel (diesel or hybrid) or purchase and installation of a new engine or hybrid system including vessel modifications directly related to the new engine or system. Ineligible costs include out of service time (dry dock) costs, fuel, design, engineering, consulting, legal fees, license, registration, taxes, insurance, operation, maintenance, and repair.
Additional Requirements	• The hybrid power system must include a manufacturer's warranty for a minimum period of 8 years. • Project eligibility is subject to an ARB staff determination that a hybrid power system installed on a vessel with Tier 2 propulsion engines reduces PM and NOx emissions by at least 30% each, compared to a similar vessel with Tier 2 propulsion engines, the same operating hours, and a similar duty cycle, but without the hybrid system.
Project Cost Assumptions	• Total cost of a Tier 2 engine is estimated at $230/hp. • Total cost of a Tier 3 engine is estimated at $290-$350/hp. • Total cost to repower a vessel with a hybrid power system is estimated at $300-$350/hp. The incremental cost is of hybrid power system is estimated at $60-$120/hp.

E Cargo Handling Equipment

Equipment Project Specifications

Eligible Equipment	Existing diesel-powered rubber-tired gantry (RTG) crane, or diesel-powered yard truck with MY2004-2006 off-road diesel engine, operating at a seaport or intermodal railyard in a trade corridor.
General Requirements (applicable to all project options)	• Agree to accept an on-board electronic monitoring unit at any time 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty for the project life and insurance on upgraded equipment.
Option (1) Repower RTG Crane w/ Electric or Zero-Emission Power System	Partial funding of up to the lower of 50% of the eligible cost or $100,000/crane to repower the diesel engine with an electric or zero-emission power system. Eligible costs include purchase and installation of a new electric engine and necessary parts for an existing RTG crane including directly related vehicle modifications. Ineligible costs include design, engineering, consulting, legal fees, license, registration, taxes, insurance, operation, maintenance, and repair.
Requirements	Equipment owner shall: • Commit to 15 years of 100% California operation in port or intermodal railyard service in trade corridors. • Agree to accept an on-board electronic monitoring unit at any time 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty for the project life and insurance on upgraded equipment. • Comply with all local permitting requirements. • Certify that there are no outstanding ARB violations associated with the equipment or the owner.

Cargo Handling Equipment (cont.)

Option (2) Electric or Zero-Emission Yard Truck	Partial funding of up to the lower of 50% of the eligible cost or $50,000/truck to replace a yard truck equipped with MY2004-2006 off-road diesel engine with a new electric or zero-emission yard truck. Eligible costs include purchase of a new electric or zero-emission yard truck. Ineligible costs include license, registration, taxes (other than federal excise and sales tax), insurance, operation, maintenance, and repair.
Requirements	Project needs to achieve 2 years of early reductions. For fleets of 1-3 trucks, this means the project needs to be operational 2 years before the applicable compliance date. For larger fleets, this means the Program-funded truck is not eligible to be counted as a compliant truck in the fleet percentage calculations for a 2-year period. Equipment owner shall: • Commit to 5 years of 100% California operation in port or intermodal railyard service in trade corridors. • Agree to accept an on-board electronic monitoring unit at any time 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty for the project life and insurance on upgraded equipment. • Certify that there are no outstanding ARB violations associated with the equipment or the owner.
Project Cost Assumptions	• Total estimated cost of repowering an existing RTG crane with an electric power system is between $330,000-$590,000/crane. • Total estimated cost of an electric yard truck is ~$190,000, with an incremental cost (above a complying diesel engine) of ~$100,000.

APPENDIX H

Project Specifications for FY2007-08 (Year 1) Funds by Source Category

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A. Trucks Serving Ports and Intermodal Railyards

Equipment Project Specifications

Eligible Equipment	Class 8 (>33,000 lbs gross vehicle weight rating) heavy-duty diesel trucks used to move goods. Equipment owner must demonstrate: • Continuous registration (California base-plated or California International Registration Plan (IRP)) in California for the past 2 years, or • Partial year registration - a pattern of monthly or seasonal registration or other approved documentation that establishes California operation over the past 2 years. A minimum of 10,000 vehicle miles traveled (VMT) per year during each of the past 2 years is required to be eligible for this option. • At least 50% operation within trade corridor(s) for the past 2 years.
Ineligible Equipment	• Trucks subject to ARB's public and utility fleet rule. • Trucks subject to ARB's solid waste collection vehicle rule. • Trucks subject to ARB's diesel cargo handling equipment rule.
Option (1) Retrofit	Partial funding of up to $5,000/truck to retrofit an eligible MY2006 or older heavy duty diesel truck with an ARB verified Level 3 diesel particulate filter that reduces diesel PM by 85% or more.
Requirements	• Program-funded diesel particulate filter shall be installed and operational at least 6 months prior to a regulatory requirement for that technology or level of emissions control. Equipment owner shall: • Commit to at least 2 years of 100% California-only operation and California base-plated registration. Dual plates, IRP, and any other out-of-state registrations are prohibited. • Commit to at least 2 years of frequent port or inter-modal railyard service (150+ visits/year). • Commit to at least 50% of travel in trade corridors for duration of contract term. • Agree to accept an on-board electronic monitoring unit at any time during the contract term. • 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 milestone and completion deadlines. • Properly maintain filter in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty on filter. • Demonstrate that any mid-1990s engine subject to the software upgrades for diesel trucks (i.e., chip reflash) has completed the upgrade. • Certify that there are no outstanding ARB equipment violations associated with the equipment project application.

Trucks Serving Ports and Intermodal Railyards (cont.)

Option (2) Repower	The lower of 50% or $20,000 to repower an eligible MY2003 or older heavy duty diesel truck with a new engine that meets MY2007 emission levels or lower and ARB's requirements for engine manufacturer diagnostics.
Requirements	• Program-funded truck repower project shall be completed and operational at least 3 years prior to a regulatory requirement for that technology or level of emissions control. For independent owner operators, the equipment project shall be completed and operational at least 2 years prior to a regulatory requirement for that technology or level of emissions control. Equipment owner shall: • Commit to at least 5 years or 350,000 miles of 100% California-only operation and California base-plated registration. Dual plates, IRP, and any other out-of-state registrations are prohibited. • Commit to at least 4 years of frequent port or intermodal railyard service (150+ visits/year). • Commit to at least 50% of travel in trade corridors for duration of contract term. • Agree to accept an on-board electronic monitoring unit at any time during the contract term. • Agree to equipment inspections. • Scrap the old engine. • Comply with record-keeping, reporting, and Program review or fiscal audit requirements. • Sign a legally binding contract with the local agency including project milestone and completion deadlines. • Properly maintain new engine, emission controls, and diagnostics in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and comprehensive insurance on upgraded equipment. • Provide a copy of ARB Executive Order documenting that the new truck engine meets 2007 emission levels. • Certify that there are no outstanding ARB equipment violations associated with the equipment project application.

Trucks Serving Ports and Intermodal Railyards (cont.)

Option (3) Replacement	Partial funding of up to $50,000/truck to replace an eligible MY2003 or older heavy duty diesel truck with a diesel or alternative fuel truck meeting MY2007 emission levels or lower.
Requirements	• Program-funded truck replacement project shall be completed and operational at least 3 years prior to a regulatory requirement for a truck meeting MY2007 emission standards. For independent owner operators, the new truck must be operational at least 2 years prior to a regulatory requirement for a truck meeting MY2007 emission standards. Equipment owner shall: • Commit to at least 5 years or 350,000 miles of 100% California-only operation and California base-plated registration. Dual plates, IRP, and any other out-of-state registrations are prohibited. • Commit to at least 4 years of frequent port or intermodal railyard service (150+ visits/year). • Commit to at least 50% of travel in trade corridors for duration of contract term. • Agree to accept an on-board electronic monitoring unit at any time during the contract term. • Agree to equipment inspections. • Scrap the old truck. • Comply with record-keeping, reporting, and Program review or fiscal audit requirements. • Sign a legally binding contract with the local agency including project milestone and completion deadlines. Under a lease program, the owner and lessee must sign the contract. • Properly maintain new truck in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and comprehensive insurance on new truck. • Provide copy of ARB Executive Order documenting that the new truck engine meets 2007 emission levels. • Certify that there are no outstanding ARB equipment violations associated with the equipment project application.
Project Cost Assumptions	• Option (1): Total cost of a diesel particulate filter is ~$10,000. • Option (2): Total average cost of a repower is ~$40,000. • Options (3) & (4): Total cost of a new MY2007 truck is ~$100,000 (diesel) to ~$180,000 (natural gas).

B. Other Heavy Duty Diesel Trucks

Equipment Project Specifications

Eligible Equipment	Class 8 (>33,000 lbs gross vehicle weight rating) heavy-duty diesel trucks used to move goods. Equipment owner must demonstrate: • Continuous registration (California base-plated or California IRP) in California for the past 2 years, or • Partial year registration - a pattern of monthly or seasonal registration or other approved documentation that establishes California operation over the past 2 years. A minimum of 10,000 vehicle miles traveled (VMT) per year during each of the past 2 years is required to be eligible for this option. • At least 50% operation within trade corridor(s) for the past 2 years.
Ineligible Equipment	• Trucks subject to ARB's public and utility fleet rule. • Trucks subject to ARB's solid waste collection vehicle rule. • Trucks subject to ARB's diesel cargo handling equipment rule. • A truck funded via a contract executed after adoption of the *Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, and Greenhouse Gases from In-Use Heavy-Duty Diesel-Fueled Vehicles* must comply with the additional restrictions on fleet averaging included in these Guidelines.

Other Heavy Duty Diesel Trucks (cont.)

Option (1) Retrofit	Partial funding of up to $5,000/truck to retrofit an eligible MY2006 or older heavy duty diesel truck with an ARB verified Level 3 diesel particulate filter that reduces diesel PM by 85% or more.
Requirements	• Program-funded diesel particulate filter shall be installed and operational at least 6 months prior to a regulatory requirement for that level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. In this 6 month time period, a truck funded under this Program is not eligible to be included in any fleet averaging. Equipment owner shall: • Commit to at least 2 years of 100% California-only operation and California base-plated registration. Dual plates, IRP, and any other out-of-state registrations are prohibited. • Commit to at least 50% of travel in trade corridors for duration of contract term. • Agree to accept an on-board electronic monitoring unit at any time during the contract term. • 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 milestone and completion deadlines. • Properly maintain filter in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty on filter. • Demonstrate that any mid-1990s engine subject to the software upgrades for diesel trucks (i.e., chip reflash) has completed the upgrade. • Certify that there are no outstanding ARB equipment violations associated with the equipment project application.

Other Heavy Duty Diesel Trucks (cont.)

Option (2) Repower	The lower of 50% or $20,000 to repower an eligible MY2003 or older heavy duty diesel truck with a new engine that meets MY2007 emission levels or lower and ARB's requirements for engine manufacturer diagnostics.
Requirements	• Program-funded truck repower projects shall be completed and operational at least 3 years prior to a regulatory requirement for that level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. In this 3 year period, a truck funded under this Program is not eligible to be included in any fleet averaging. For independent owner operators and owners of all eligible MY1997 or older trucks, the equipment project shall be completed and operational at least 2 years prior to a regulatory requirement for that level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. Equipment owner shall: • Commit to at least 5 years or 500,000 miles of 100% California-only operation and California base-plated registration. Dual plates, IRP, and any other out-of-state registrations are prohibited. • Commit to at least 50% of travel in trade corridors for duration of contract term. • Agree to accept an on-board electronic monitoring unit at any time during the contract term. • Agree to equipment inspections. • Scrap the old engine. • Comply with record-keeping, reporting, and Program review or fiscal audit requirements. • Sign a legally binding contract with the local agency including project milestone and completion deadlines. • Properly maintain new engine, emission controls, and diagnostics in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and comprehensive insurance on upgraded equipment. • Provide copy of ARB Executive Order documenting that the new truck engine meets 2007 emission levels. • Certify that there are no outstanding ARB equipment violations associated with the equipment project application.

Other Heavy Duty Diesel Trucks (cont.)

Option (3) Replacement	Partial funding of up to $50,000/truck to replace an eligible MY2003 or older heavy duty diesel truck with a diesel or alternative fuel truck meeting MY2007 emission levels or lower.
Requirements	• Program-funded truck replacement projects shall be completed and operational at least 3 years prior to a regulatory requirement for that level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. In this 3 year period, a truck funded under this Program is not eligible to be included in any fleet averaging. For independent owner operators and owners of all eligible MY1997 or older trucks, the equipment project shall be completed and operational at least 2 years prior to a regulatory requirement for that level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. Equipment owner shall: • Commit to at least 5 years or 500,000 miles of 100% California-only operation and California base-plated registration. Dual plates, IRP, and any other out-of-state registrations are prohibited. • Commit to at least 50% of travel in trade corridors for duration of contract term. • Agree to accept an on-board electronic monitoring unit at any time during the contract term. • Agree to equipment inspections. • Scrap the old truck. • Comply with record-keeping, reporting, and Program review or fiscal audit requirements. • Sign a legally binding contract with the local agency including project milestone and completion deadlines. Under a lease program, the owner and lessee must sign the contract. • Properly maintain new truck in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and comprehensive insurance on new truck. • Provide copy of ARB Executive Order documenting that the new truck engine meets 2007 emission levels. • Certify that there are no outstanding ARB equipment violations associated with the equipment project application.

Other Heavy Duty Diesel Trucks (cont.)

Additional Requirements for Eligible Equipment	Truck A: MY2003-2006 heavy duty diesel truck. Truck B: MY1990 or older heavy duty diesel truck.
Option (4) Three-Way Truck Transactions	Partial funding of up to $50,000/transaction to: 1. Replace an eligible MY2003-2006 truck (Truck A) with a diesel or alternative fuel truck (Truck C) meeting MY2007 emissions levels or lower; and 2. Equip Truck A with an ARB-verified Level 3 diesel particulate filter that reduces diesel PM by 85% or more; and 3. Scrap a MY1990 or older diesel truck (Truck B) and replace with Truck A.
Requirements	• Program-funded three-way truck transaction shall be completed and the new truck operational at least 2 years prior to a regulatory requirement for a truck meeting MY2007 emission standards under the best available control technology provisions of any adopted rule for in-use trucks. In this 2 year period, a truck funded under this Program is not eligible to be included in any fleet averaging. If the original owner of Truck A and new owner of Truck C is an independent owner operator, Truck C must be operational at least 2 years prior to a regulatory requirement for a truck meeting MY2007 emission standards. • Truck A shall be equipped with a diesel particulate filter at least 6 months prior to a regulatory requirement for a Level 3 PM device under the best available control technology provisions of any adopted rule for in-use trucks. Original owner of Truck A and new owner of new Truck C shall: • Equip Truck A with a Level 3 diesel particulate filter and transfer ownership (if applicable) to the owner of old Truck B. • On Truck C, commit to at least 5 years or 500,000 miles of 100% California-only operation and California base-plated registration. Dual plates, IRP, and any other out-of-state registrations are prohibited. • On Truck C, commit to at least 50% of travel in trade corridors for duration of contract term. • Agree to accept an on-board electronic monitoring unit at any time during the contract term. • 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 milestone and completion deadlines. • Properly maintain new truck in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and comprehensive insurance on new truck. • Provide copy of ARB Executive Order documenting that Truck C engine meets 2007 emission levels, and the Truck A is certified for sale in California. • Certify that there are no outstanding ARB equipment violations associated with any of the trucks involved in the equipment project.

Other Heavy Duty Diesel Trucks (cont.)

Option (4) Three-Way Truck Transactions **Requirements** (cont.)	Original owner of old Truck B and new owner of retrofit Truck A shall: • Scrap Truck B. • On Truck A, commit to at least 4 years of 100% California-only operation and California base-plated registration. Dual plates, IRP, and any other out-of-state registrations are prohibited. • On Truck A, commit to at least 50% of travel in trade corridors for duration of contract term. • 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 milestone and completion deadlines. • Properly maintain filter in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty on filter. • Certify that there are no outstanding ARB equipment violations associated with any of the trucks involved in the equipment project.
Project Cost Assumptions	• Option (1): Total cost of a diesel particulate filter is ~$10,000. • Option (2): Total average cost of a repower project is ~$40,000. • Options (3) & (4): Total cost of a new MY2007 truck is ~$100,000 (diesel) to ~$180,000 (natural gas).

C. Locomotives

Equipment Project Specifications

Eligible Equipment	Diesel-powered freight locomotives with no or minimal emissions control technology (i.e., uncontrolled, or meeting Tier 0 or Tier 1 standards). Equipment owner must demonstrate: • Operation of locomotive or equivalent locomotive horsepower in California for the past 2 years. • At least 50% operation of locomotive or equivalent locomotive horsepower within trade corridor(s) for the past 2 years. • Estimated diesel fuel usage greater than 20,000 gallons per year.
Option (1): Switcher Locomotive	Partial funding for the lower of 50% or $750,000 per locomotive to replace, rebuild, or repower an uncontrolled, Tier 0 or Tier 1 switcher locomotive with a new generator-set that achieves emissions of 3.5g/bhp-hr or less for NOx, and 0.14 g/bhp-hr or less for PM, or an alternative technology with equivalent emission levels using U.S. EPA engine certification test results with ARB verification. Eligible locomotive costs include a new chassis, a new or rebuilt engine, and mechanical/electrical systems components necessary for safe operation.
Requirements	Equipment owner shall: • Commit to 15 years of 100% operation within the trade corridors; periodic out-of-state maintenance may be permitted if outlined in the contract between the local agency and equipment owner. • Scrap or ban old engine/locomotive from California operation. • Install an active GPS unit on both old (if not scrapped) and new equipment, fund data collection, and report location data. • 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and comprehensive insurance on upgraded equipment. • (For UP and BNSF) Demonstrate how the railroad intends to comply with the 1998 agreement for the South Coast Air Basin by submitting a compliance plan to ARB prior to application for bond funding in the Los Angeles/Inland Empire corridor.

Locomotives and Railyards (cont.)

Option (2): Line-Haul Locomotive	Partial funding for the lower of 50% or $1 million/locomotive to replace or rebuild an uncontrolled, Tier 0 or Tier 1 line-haul locomotive with a new Tier 2 or lower-emission engine. Eligible locomotive costs include a new chassis, a new or rebuilt engine, and mechanical/electrical systems components necessary for safe operation.
Requirements	Equipment owner shall: • Commit to 15 years of 100% California-only operation. This new intrastate line-haul locomotive shall use California ARB diesel fuel. Periodic out-of-state maintenance may be permitted if outlined in the contract between the local agency and equipment owner. • Commit to at least 50% of operation in trade corridors for duration of contract term. • Scrap or ban old engine/locomotive from California operation. • Install an active GPS unit on both old (if not scrapped) and new equipment, fund data collection, and report location data. • 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and comprehensive insurance on upgraded equipment. • (For UP and BNSF) Demonstrate how the railroad intends to comply with the 1998 agreement for the South Coast Air Basin by submitting a compliance plan to ARB prior to application for bond funding in the Los Angeles/Inland Empire corridor.
Project Cost Assumptions	• Estimated total cost of new switcher generator-set is ~$1.5 million. • Estimated total cost of an eligible Tier 2 locomotive is ~$2.0-$2.5 million.
Excluded Funding Components	• Auto start/stop devices required by regulation or agreements. • GPS units and monitoring and reporting costs.

D. Shore Power

Equipment Project Specifications

Eligible Equipment	Existing cargo ship berth or existing cargo ship terminal at a seaport located in a trade corridor.

Option (1) Grid-Based Power
 	
Requirements
	The lower of $2.5 million/berth or 50% of the covered shore-side costs of installing permanent, grid-based electrical power at a cargo ship berth.
	
	• Program-funded grid-based shore power shall be installed and in operation at least 2 years prior to a regulatory requirement for that technology or level of emissions control.
	
	Equipment owner shall:
	• Commit to at least 20 years of the use of grid-based shore power at the berth at the following levels or greater:
	  ○ 25% of ship visits in 2011-2013.
	  ○ 60% of the ship visits in 2014-2016.
	  ○ 70% of the ship visits in 2017-2019.
	  ○ 90% of the ship visits in 2020 and beyond.
	• Agree to equipment inspections that include demonstrated operability with a cargo ship fully powered by shore-based electrical power.
	• Comply with record-keeping, reporting, and Program review or fiscal audit requirements.
	• Sign a legally binding contract with the local agency including project milestone and completion deadlines.
	• Comply with all permitting requirements.

Shore Power (cont.)

Option (2) Non-Grid-Based Power	Partial funding of up to $200,000 per megawatt of the covered costs of an electricity generating unit that provides power at a cargo ship berth or multiple berths. This unit can be portable or fixed on the terminal. Only zero emission units (e.g., fuel cell, solar), or natural gas engines equipped with selective catalytic reduction to control NOx emissions are eligible.

Requirements	• Program-funded non-grid-based shore power shall be installed and in operation by January 1, 2010.
	
	Equipment owner shall:
	• Commit to 7 years of 100% California operation at the following levels or greater:
	  ○ 1,000 hours per year in 2010-2011.
	  ○ 2,000 hours per year in 2012-2013.
	  ○ 3,000 hours per year in 2014 and beyond.
	• Agree to equipment inspections that include demonstrated operability with a cargo ship fully powered by shore-based electrical power supplied by the electricity generating unit.
	• Comply with record-keeping, reporting, and Program review or fiscal audit requirements.
	• Sign a legally binding contract with the local agency including project milestone and completion deadlines.
	• Properly maintain equipment in good operating condition and according to manufacturer's recommendations.
	• Demonstrate proof of equipment warranty.
	• Comply with all local permitting requirements.
	• Perform source testing to measure emissions from the unit every 1,000 hours of operation, according to the source test requirements contained in ARB's shore power regulation.

Pro-rated Alternative	Equipment owners may opt for a pro-rated alternative consisting of duplicate requirements, except that the Program will pay up to $140,000 per megawatt for a 5 year commitment to use non-grid-based shore power in 100% California operation.
Project Cost Assumptions	• Total shoreside cost of equipping a berth with permanent grid-based electrical power is ~$5.0 million/berth; some ports may incur additional costs to bring new/additional power capacity to the port. • Total cost of distributed generation power is anticipated to be $4.0 million/2 MW unit. • Shipside modifications will cost ~$1 million/ship.
Excluded Funding Components	• Providing additional electrical power to the port. • Construction and protection of infrastructure (e.g., natural gas lines) used to supply fuel for non-grid-based electrical generation. • Shipside modifications to accept shore-based electrical power.

E. Commercial Harbor Craft

Equipment Project Specifications

Eligible Equipment	Existing commercial diesel harbor craft vessels involved in freight movement operations with: a home port located in a trade corridor, 2 years of operation in California waters, and uncontrolled (Tier 0) diesel propulsion engine(s). Eligible vessel types include: • Tugboats and towboats. • Work, pilot, crew, and supply boats. • Commercial fishing boats with at least 700 operational hours per year.
Option (1) Replacement/ Repower of Tugs/Tows	For repowers on tugs and tows, the lower of 50% of total cost or $135/horsepower of the old engine to replace a Tier 0 propulsion engine with a new model engine meeting latest emission standards (Tier 2 or lower emissions) and make necessary vessel modifications to accommodate the new engine. For replacements of tugs and tows, the lower of 50% of total cost or $135/horsepower of the engine in the old vessel to replace a vessel with a Tier 0 propulsion engine with a new vessel powered by an engine meeting latest emission standards (Tier 2 or lower emissions).
Requirements	• Program-funded engine repowers and replacements for tugboats and towboats shall be in operation at least 2 years prior to a regulatory requirement for that technology or level of emissions control. Equipment owner shall: • Commit to 15 years of California home port operation in the trade corridors. • Scrap old engine or vessel (as applicable). • Agree to accept an electronic monitoring unit at any time during the contract term. • 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 milestone and completion deadlines. • Demonstrate proof of comprehensive insurance on upgraded equipment. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Certify that there are no outstanding ARB equipment violations associated with the equipment project application.
Pro-rated Alternative	Equipment owner may opt for a pro-rated alternative consisting of duplicate requirements, except that the Program will pay up to half of the Program funding level described above for a 7 year commitment of California home port operation in the trade corridors.

Commercial Harbor Craft (cont.)

Option (2) Replacement/ Repower of Other Vessels	Other vessel types may include: work, pilot, crew, or supply boats involved in freight movement operations; and high use commercial fishing vessels. For repowers of other vessels, the lower of 80% or $215/horsepower of the old engine to replace a Tier 0 propulsion engine with a new model meeting latest emission standards (Tier 2 or better) and make necessary vessel modifications to accommodate the new engine. For replacements of other vessels, the lower of 80% or $215/horsepower of the engine in the old vessel to replace a vessel with a Tier 0 propulsion engine with a new vessel powered by an engine meeting latest emission standards (Tier 2 or lower emissions).
Requirements	Equipment owner shall: • Commit to 10 years of 100% California home port operation in trade corridors. • Scrap old engine or vessel (as applicable). • Agree to accept an electronic monitoring unit at any time during the contract term. • 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 milestone and completion deadlines. • Demonstrate proof of comprehensive insurance on upgraded equipment. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. Certify that there are no outstanding ARB equipment violations associated with the equipment project application.
Pro-rated Alternative	Equipment owner may opt for a pro-rated alternative consisting of duplicate requirements, except that the Program will pay up to half of the Program funding level described above for a 5 year commitment of California home port operation in the trade corridors.
Project Cost Assumptions	• Total cost of a Tier 2 engine is estimated at $270/horsepower.
Excluded Funding Components	• Out of service time (dry dock) costs.

F. Cargo Handling Equipment

Equipment Project Specifications

Eligible Equipment	Existing diesel-powered rubber-tired gantry crane with a Tier 4 engine or Level 3 verified diesel emission control device operating at a seaport or intermodal railyard in a trade corridor. To meet this eligibility requirement, equipment owners may propose to upgrade existing cranes concurrent with the installation of a Program-funded energy storage system. No Program funds shall be used to upgrade existing cranes to meet the eligibility requirements under this Program.
Option (1) Energy Storage System **Requirements**	The lower of 50% of the total project cost or $160,000 per crane for purchase and retrofit of an energy storage system that ARB has verified to Level 1 (25% PM control) or higher. Equipment owner shall: • Commit to 15 years of 100% California operation in port or intermodal railyard service in trade corridors. • Agree to accept an on-board electronic monitoring unit at any time during the contract term. • 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty and comprehensive insurance on upgraded equipment. • Comply with all local permitting requirements. • Not use the energy storage system to comply with ARB's rule for diesel cargo handling equipment. • Certify that there are no outstanding ARB equipment violations associated with the equipment project application. • Demonstrate proof that the existing crane was upgraded to meet Program eligibility requirements if the improvements were done concurrent with the installation of a Program-funded energy storage system.
Pro-rated Alternative	Equipment owners may opt for a pro-rated alternative consisting of duplicate requirements, except that the Program will pay the lower of 25% or $80,000 for a 10 year commitment of 100% California-only operation in port or intermodal railyard service in trade corridors.
Project Cost Assumptions	• Total cost of energy storage unit is ~$160,000-$320,000 per crane.

G. Truck Stop/Distribution Center Electrification

Equipment Project Specifications

Eligible Equipment	Truck stops, intermodal facilities, distribution centers, and other places where Class 8 heavy diesel trucks (over 33,000 lbs) congregate in a trade corridor.
Option (1) Electrification Infrastructure	Landside electrification infrastructure to reduce diesel engine idling and use of diesel-fueled internal combustion auxiliary power systems may be funded at the lower of 50% of eligible costs or a level commensurate with the weighted reductions per State dollar invested for truck replacement projects. Eligible costs include purchase and installation of electrical infrastructure to: enable heating, cooling, and the use of cab power for parked trucks at truck stops; and enable the use of power for transport refrigeration units and auxiliary power systems at distribution centers, intermodal facilities, and other places where trucks congregate. Reimbursement for the eligible costs shall be based on demonstrated use over the first year of operation.
Requirements	Equipment owner shall: • Commit to 10 years of operation. • 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 milestone and completion deadlines. • Properly maintain upgraded equipment in good operating condition and according to manufacturer's recommendations. • Demonstrate proof of equipment warranty. • Comply with all local permitting requirements.
Project Cost Assumptions	• Total cost for distribution centers is $1,500-$7,000/plug at dock; $2,500-$9,000/plug in parking areas; $500-$2,000/adapter for trailers and TRUs. • Total cost for truck stops is $6,000-$18,000/parking space; $3,000/truck modification.
Excluded Funding Components	• On-board auxiliary power units and other equipment installed on trucks are not eligible for funding. Transport refrigeration units are not eligible for funding. Electricity costs are not reimbursable.

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APPENDIX I

Truck Projects from FY2008-09 (Year 2) and Later Funds – Maintaining Eligibility for Inoperable, Destroyed, or Stolen Equipment

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Truck Projects from FY2008-09 (Year 2) and Later Funds – Maintaining Eligibility for Inoperable, Destroyed, or Stolen Equipment

The local agency may allow an equipment project to remain eligible for Program funds if the existing equipment is accidentally rendered inoperable, destroyed, or stolen prior to replacement. The equipment owner must promptly notify the local agency and take action using an appropriate remedy, as described below.

Table I.1 Requirements for Maintaining Eligibility for Inoperable, Destroyed or Stolen Equipment

Timing	Type of Inoperable Equipment
Case 1: Equipment owner has submitted application, but local agency has **not** closed solicitation period.	**Inoperable, Destroyed, or Stolen Truck** • Equipment owner repairs the truck and/or engine at the owner's expense; or • Equipment owner withdraws the original application and submits a new application for a different truck.
Case 2: Solicitation period has closed, but local agency has **not** posted ranked list on website.	**Inoperable Truck** Equipment owner repairs the truck and/or engine at the owner's expense. **Destroyed Truck** • Local agency verifies that the vehicle identification number (VIN) of the destroyed truck matches application. • Equipment owner provides local agency with documentation that truck was operational up until the event of destruction. • Equipment owner replaces destroyed truck with a substitute truck that meets Program Guidelines, as confirmed by local agency inspection. • Local agency updates application information with substitute truck data and uses updated project data for ranking. • The project follows typical Program procedures. **Stolen Truck** The equipment project is no longer eligible for Program funding.

Table I.1 Requirements for Maintaining Eligibility for Inoperable, Destroyed or Stolen Equipment (cont.)

Timing	Type of Inoperable Equipment
Case 3: Local agency has posted ranked list on website but has **not** completed pre-inspection.	**Inoperable Truck** Equipment owner repairs the truck and/or engine at the owner's expense. **Destroyed Truck- Alternative Pre-Inspection** • Local agency verifies that the VIN of the destroyed truck is legible and matches application. • Equipment owner provides local agency with documentation that truck was operational up until the event of destruction. • Equipment owner replaces the destroyed truck with a substitute truck that meets Program Guidelines, as confirmed by local agency inspection. This substitute truck is scrapped prior to taking possession of the Program-funded replacement truck. • The original truck cannot be brought back into service and the equipment owner provides the local agency with DMV documentation of dismantling or non-repairable status (DMV REG 42 "Notice to Dismantler" or REG 488C "Non-Repairable Vehicle Certificate"). **Stolen Truck** The equipment project is no longer eligible for Program funding.

Table I.1 Requirements for Maintaining Eligibility for Inoperable, Destroyed or Stolen Equipment (cont.)

Timing	Type of Inoperable Equipment
Case 4: Local agency has posted ranked list on website and completed pre-inspection.	**Inoperable Truck** • Equipment owner repairs the truck and/or engine at the owner's expense or replaces the inoperable truck with a substitute truck that meets Program Guidelines, as confirmed by local agency inspection. This substitute truck is scrapped prior to taking possession of the Program-funded replacement truck. • The original truck cannot be brought back into service and the equipment owner must provide the local agency with DMV documentation of dismantling or non-repairable status (REG 42 or 488C). **Destroyed Truck** • Equipment owner replaces the destroyed truck with a substitute truck that meets Program Guidelines, as confirmed by local agency inspection. This substitute truck is to be scrapped prior to taking possession of the Program -funded replacement truck. • The original truck cannot be brought back into service and the equipment owner must provide the local agency with DMV documentation of dismantling or non-repairable status (REG 42 or 488C). **Stolen Truck** • Local agency verifies independent documentation of theft (e.g., police report, insurance claim), and that the documented VIN of the stolen truck matches application. • Equipment owner replaces the stolen truck with a substitute truck that meets Program Guidelines, as confirmed by local agency inspection. The substitute truck is to be scrapped prior to taking possession of the Program-funded replacement truck.
Case 5: Local agency has posted ranked list on website, completed pre-inspection, and has scheduled but not completed post-inspection.	**Inoperable, Destroyed, or Stolen Truck** • Equipment owner provides local agency with documentation that the truck was in operation up to the time that post-inspection was scheduled. • Local agency verifies independent documentation of incident and that the documented VIN of the truck matches application • The inoperable or destroyed truck is scrapped prior to taking possession of the Program-funded replacement truck.

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APPENDIX J

Early Grants from FY2007-08 (Year 1) Funds

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Early Grants from FY2007-08 (Year 1) Funds

SB 88 made available no more than $25 million of the FY2007-08 (Year 1) appropriation available for the purpose of executing grant agreements directly with ports, railroads, or local air districts for eligible projects to achieve the earliest possible health risk reduction. SB 88 required that ARB allocate funds under this "early grant" provision consistent with these Guidelines, and that ARB provide sufficient opportunity for the public to review and comment on any projects proposed for funding.

In order to bring early grant proposals to the Board as quickly as possible, ARB staff directly contacted local air districts within the trade corridors to request proposals for local agency projects that could be under contract with equipment owners and mostly complete by July 31, 2008. ARB staff focused on local air districts due to their demonstrated experience and expertise implementing incentive programs through the Carl Moyer program.

To ensure that the early grant project proposals would be consistent with the eligibility and equipment project requirements included in the Guidelines, ARB staff advised the local air districts to use the *Staff Draft Concepts for Implementation* document, released September 19, 2007, as the primary basis for equipment project requirements under the early grant provision. In early November 2007, ARB staff also provided the local air districts with *ARB Staff Expectations for Early Grant Proposals* (attached) to further specify the content of the early grant proposals as well as other critical information (e.g., per equipment funding levels) pertinent to the air district's development of an early grant proposal.

On November 20, 2007, ARB staff held a conference call with air districts interested in submitting an early grant proposal to clarify questions. In response to comments from the air districts regarding the potential for harbor craft projects that could be quickly implemented, ARB staff expanded the early grant eligibility requirements to allow harbor craft projects at $135 per horsepower.

ARB requested that the proposals include only the information necessary for ARB staff to subsequently calculate the proposal benefits using methods, calculations, and emission factors consistent with those included in the Guidelines.

ARB staff received five early grant proposals, posted on the Program website at: http://www.arb.ca.gov/gmbond.

ARB staff recommendations for early grant funding include truck projects and one grid-based shore power proposal. Most of the truck proposals submitted by the air districts are based on actual equipment project applications that the air districts received through other incentive programs (like the Carl Moyer program) or direct solicitations based on air district staff assumptions about what this Program would require, as described in the air district early grant applications. Due to the expedited nature and

intent of the early grant proposals, these applications may be considered for funding under this Program.

In order to maintain consistency between the early grants and the other provisions of these Guidelines, the following sections of these Guidelines are applicable to the early grant equipment projects:

- Chapter II, Section E.10
- Chapter III
  - Section B.1
  - Section E.9
- Chapter IV
  - Sections A.1, 3, 5-8, 10-14, and 16-18
  - Sections B, D, and E
- Chapter VI
- Appendix F

These sections apply to the early grant projects to ensure that the equipment projects considered for funding by each air district are consistent with these Guidelines. In particular, although the projects may have been initially identified through a solicitation process or identified from an existing incentive program, the air district must still verify the equipment projects' eligibility for Program funds and competitively rank them against each other to ensure that the projects with the greatest benefits are funded first.

In addition, since the air districts did not have the benefit of the detailed provisions in the draft Guidelines while identifying equipment projects for their early grant applications, the equipment project provisions in Appendices A-H apply except where ARB staff provided equipment specifications that differ in the *ARB Staff Expectations for Early Grant Proposals.* In these cases, the air district may choose which equipment specifications work best for their early grant projects.

For example, for grid-based shore power projects under the early grants, ARB staff set the Program funding limit at the lower of $2.5 million or 70 percent. In response, the Bay Area Air Quality Management District (BAAQMD) proposed a grid-based shore power project in Oakland that is requesting $1.4 million per berth for two berths ($2.8 million total Program funds) for a project with a total cost of $4 million. Although these Guidelines currently propose a per berth funding cap in these Guidelines of $2.5 million, or 50 percent, whichever is lower, ARB's early grant recommendation for BAAQMD's grid-based shore power project maintains the funding caps originally offered.

In another example, for trucks, *ARB Staff Expectations for Early Grant Proposals* set the operational commitment at 5 years for truck retrofits and 10 years for truck replacements. Since the current Guidelines are less restrictive, air districts may allow equipment projects to sign equipment contracts with commitments set according to these Guidelines instead of the original concepts.

Goods Movement Emission Reduction Program
FY2007/2008 (Year 1)

ARB Staff Expectations for Early Grant Proposals

This document includes ARB staff's expectations for FY2007-08 (Year 1) Early Grant Proposals submitted by local air district applicants. We have also included specific information that supplements and/or modifies the eligibility and operational requirements described in the September 19, 2007 concept paper for the early grant proposals.

In general, ARB staff expects the early grant proposals to follow the staff draft concept paper. We have listed several key expectations for emphasis and clarification.

- The early grant proposals represent a commitment by the applicant to sign a grant agreement with ARB if the Board approves the full or partial proposal, as submitted. We understand that the applicant may reserve the right to withdrawal the proposal should the Board change the conditions or eligibility requirements of the early grants. To provide the Board maximum flexibility in allocating the full $25 million in early grant dollars, **we request that you design the proposals to allow pro-rated funding and acknowledge your willingness to accept a lower funding amount**.
- Local agency and equipment eligibility requirements remain as stated in the September 19, 2007 staff draft concept paper, with the exception of the modifications included in this document.
- Equipment operational requirements remain as stated in the September 19, 2007 staff draft concept paper, with the exception of the modifications included in this document.
- Pre/post equipment inspections will be conducted to ensure both the old (as applicable) and new equipment are eligible and operational.
- Legally binding contracts will be signed between the implementing local agency and equipment owners to ensure program accountability.
- Implementing local agencies and equipment owners agree to the reporting and record keeping requirements of the bond program.
- Implementing local agencies will monitor bond-funded equipment for compliance with contract provisions.

The following outline provides the content requirements for the early grant proposals. As indicated, we request that the submittals be no more than 10 pages in length, and preferably shorter. We intend to append these proposals to our proposed Guidelines for public review and comment prior to Board consideration.

- Summary of proposal (1-2 pages).
    - Briefly state the air quality and health concerns addressed.
    - Summarize project types, corridor(s), and costs.
    - Identify the implementation schedule (with major milestones).
        - What/how much can you accomplish by June 30, 2008?
        - Why these accomplishments are achievable.

- Detailed proposal (5-10 pages).
    - Geographic coverage
        - Identify the targeted trade corridor(s).
        - Does the proposal target equipment upgrades in specific highly impacted communities? If so, which ones?
        - Describe marketing/outreach (must include entire corridor).
    - Old equipment
        - Certify that old equipment eligibility is based on the equipment project information tables in the staff draft concept paper, as modified by this document.
        - Identify the number of pieces of equipment targeted, by sector.
            - Describe the basis for proposing this number of equipment for expedited implementation under the early grants.
            - For trucks, identify the number of retrofits and the number of replacements being proposed.
        - Operating assumptions for old equipment.
            - Trucks (list retrofits and replacements separately).
                - Average age (model year).
                - Average annual vehicle miles traveled.
            - Locomotives (only switchers).
                - Average age (years).
                - Control level (uncontrolled, Tier 0, Tier 1).
                - Average annual fuel use.
                - Average annual operating hours.
            - Shore power.
                - Identify type(s) of cargo vessel (container, bulk, reefer).
    - New equipment
        - Certify that old equipment eligibility is based on the equipment project information tables in the staff draft concept paper, as modified by this document.
        - Operating assumptions for new equipment.
            - Trucks.
                - Must be model year 2007 or 2008 truck.
                - Average annual vehicle miles traveled (if different from old equipment).
                - Identify fuel type.
            - Locomotives (switchers only).
                - Identify fuel type.
                - ARB staff shall use annual operating hours reported for old equipment to calculate emission benefits.
            - Shore power.
                - Ship visits per year using shore power (per berth).

(ARB staff shall use operating assumptions to do the calculations consistent with factors/ formulas/methodologies that will be included in the draft Guidelines.)

- Staff resources.
  - Describe staff resources available to implement proposal.
- Funding proposals. (Note: Please separate by sector. ARB will consider each sector as a separate proposal.)
  - Total cost.
    - Identify truck costs for retrofits and replacements.
  - Bond funds requested.
  - Matching funds.
    - Detail funding source.
      - Demonstrate that these funds are available.
      - DMV $4 and $2 fees may be used as non-state match *(since clarified to be $4 fees only).*
  - Administration funds requested.
    - Must comply with staff concept limits.
- Early grant milestone requirements.
  - 100 percent of contracts signed with equipment owners by June 30, 2008.
  - Trucks.
    - Majority of proposed truck upgrades completed and operational by June 30, 2008.
    - All of proposed truck upgrades completed and operational by December 31, 2008.
  - Locomotives.
    - All of new locomotives ordered by June 30, 2008.
    - All of new locomotives operational by December 31, 2009.
  - Shore power.
    - All completed and operational by December 31, 2010.
- Provide a project schedule that includes interim milestones.
  - Outline specific accomplishments by June 30, 2008.
- Implementation.
  - Describe how you will secure equipment projects.
  - Describe how you will select projects for funding.

Table J-1. Goods Movement Emission Reduction Program Early Grant Proposals – Updated Requirements *(Updates to project options identified in staff concept paper)*

Category	**Eligibility**	**Amounts**	**Contract Length**	**Surplus**
Truck retrofits	- at least 50% of operation of old equipment must take place within the four trade corridors	$5,000 per retrofit	5 years	6 months
Truck replacement	- at least 50% of operation of old equipment must take place within the four trade corridors - old truck must have annual VMT of 10,000 miles or greater	$50,000 per truck	10 years	3 years
Shore power	- grid-based power only	$2.5M/berth (grid-based), or 70% of the shoreside cost to bring power to berth, whichever is less	20 years	3 years
Locomotives	- switchers only - at least 50% of operation of old equipment must take place within the four trade corridors - uncontrolled locomotives eligible with 35,000 gal/yr minimum	$500,000/switcher (no DPF required)	20 years	N/A
Harbor craft	Not eligible for early grants			

Note: Early grants must maintain requirement for 100 percent California operation for new equipment (except for periodic locomotive maintenance).

APPENDIX K

Maps

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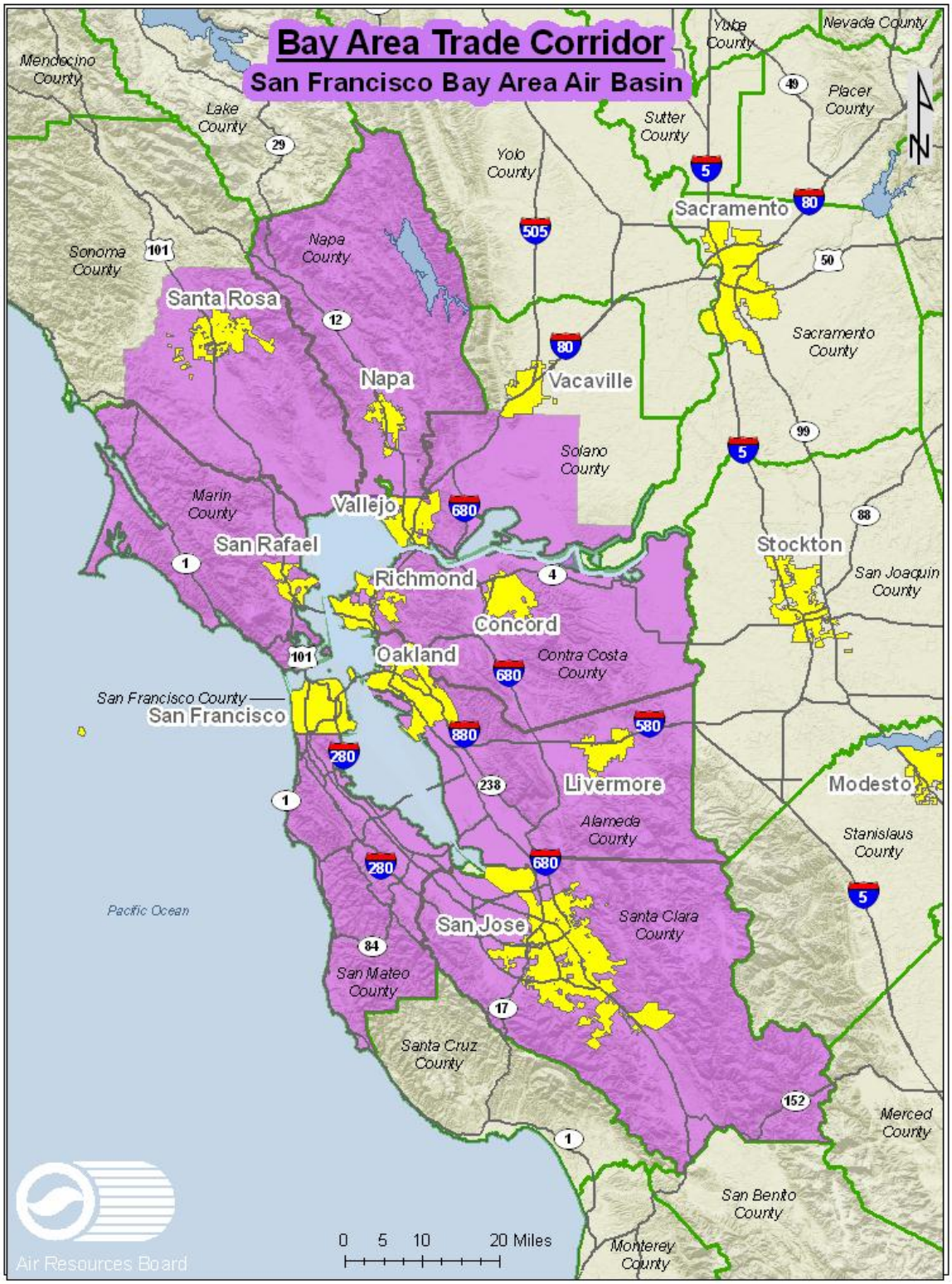
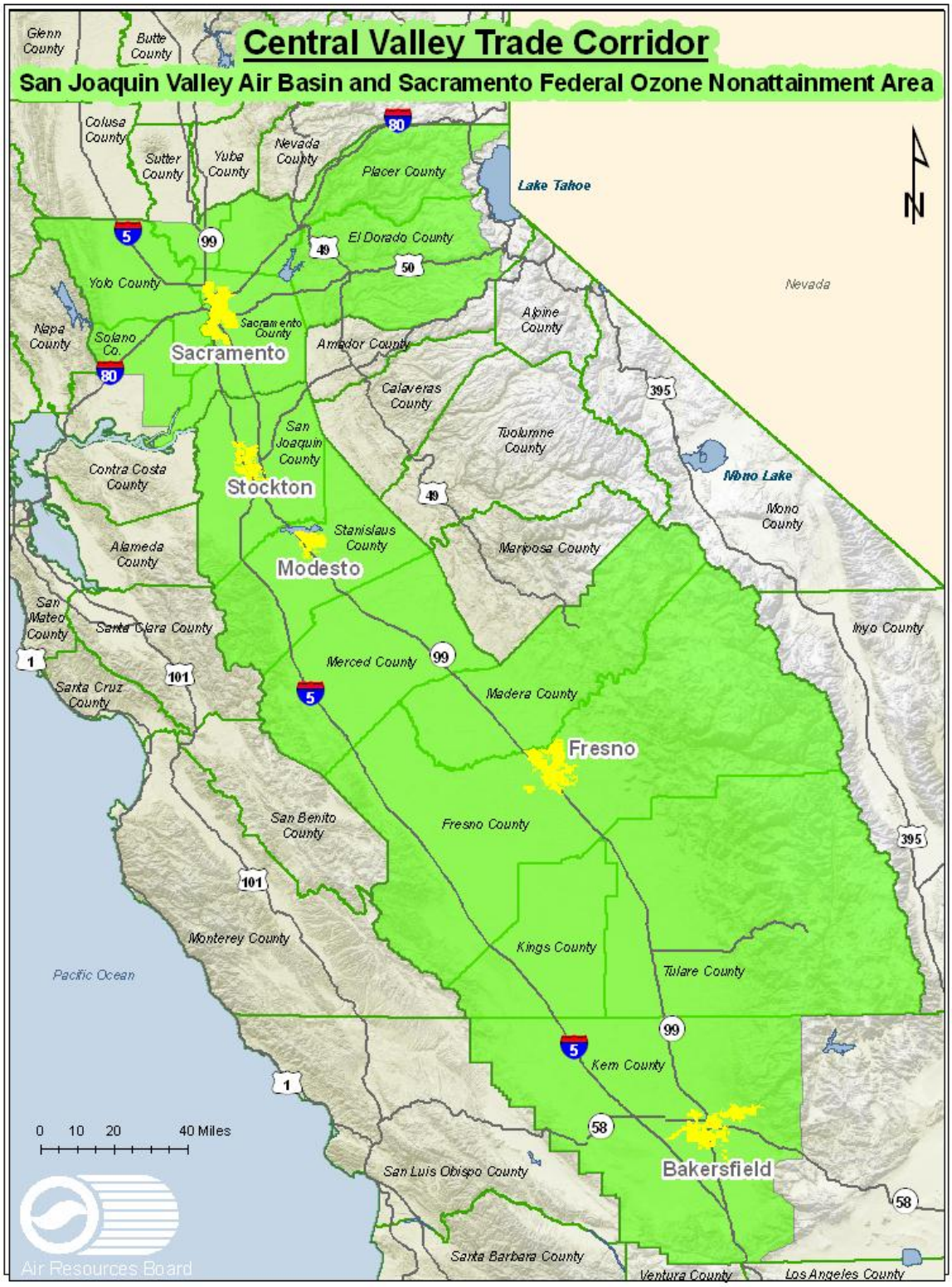
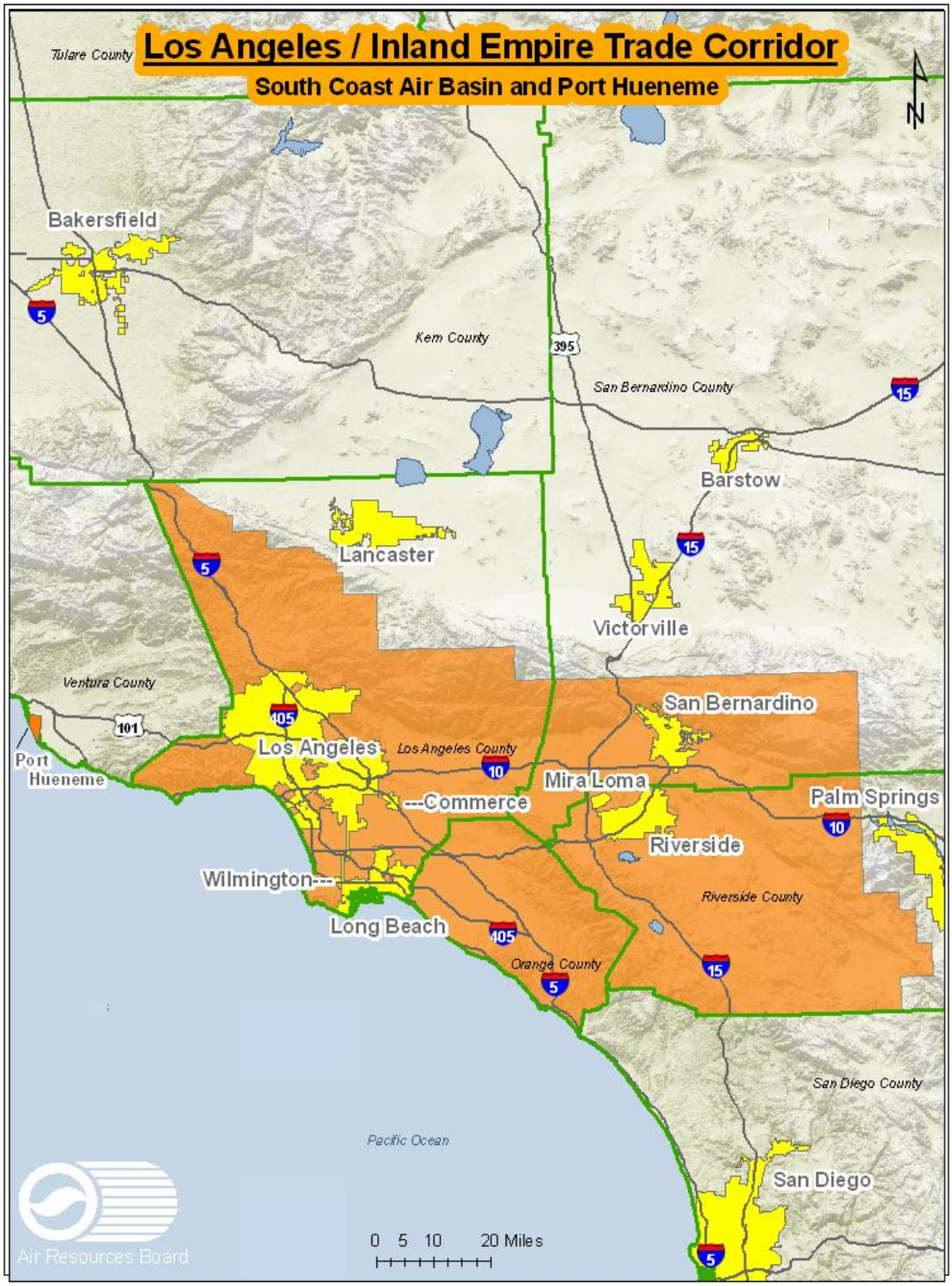
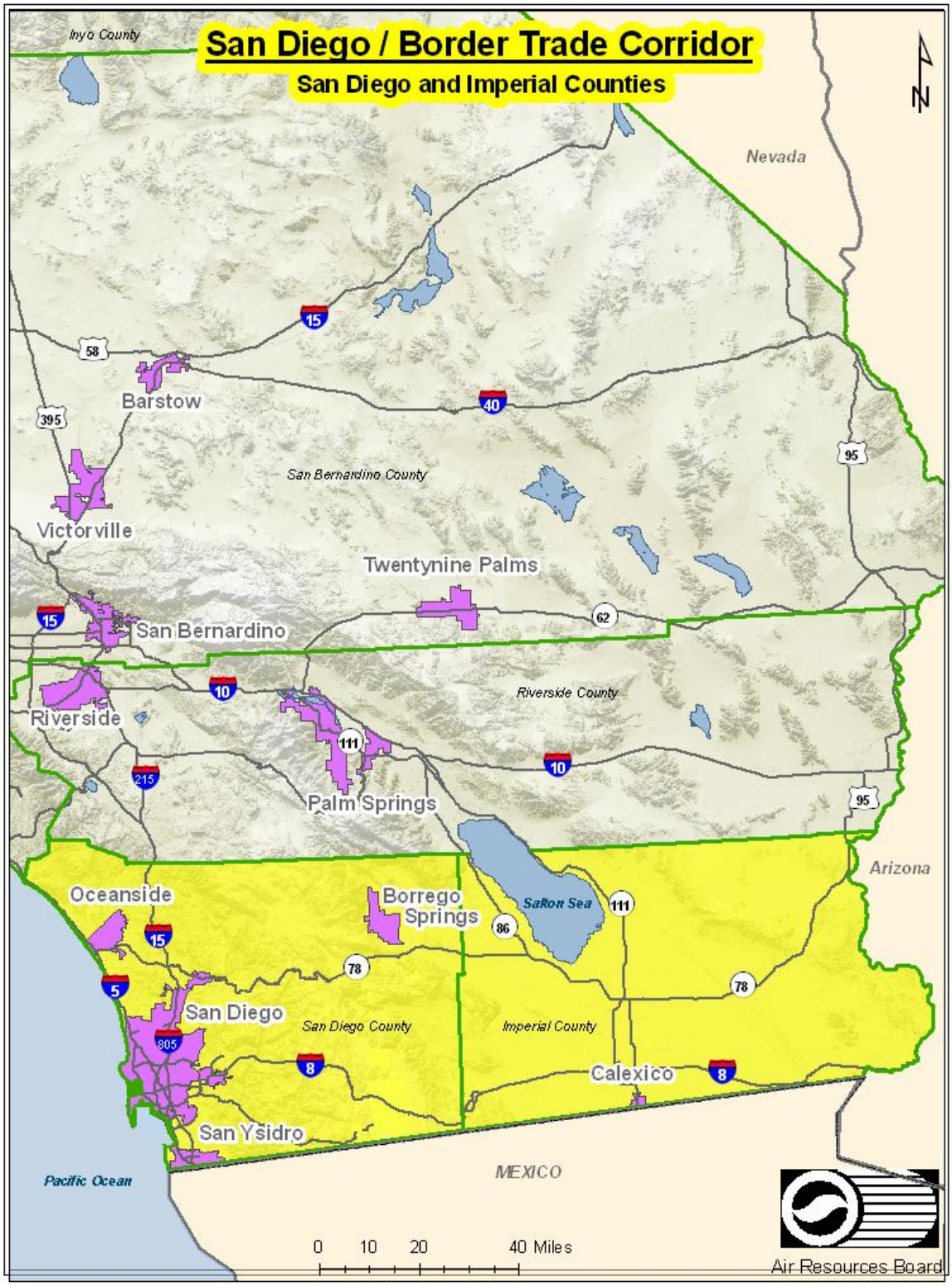
Oregon
Idaho
Trade Corridors
Bay Area
Central Valley
Los Angeles / Inland Empire
San Diego / Border
Central Valley
San Joaquin Valley Air Basin and
Sacramento Federal Ozone Nonattainment Area
Bay Area
San Francisco
Bay Area
Air Basin
Nevada
Arizona
Pacific Ocean
Port Hueneme
Los Angeles / Inland Empire
South Coast Air Basin
and Port Hueneme
San Diego / Border
San Diego County
and Imperial County
MEXICO
0 15 30 60 Miles
Air Resources Board


Bay Area Trade Corridor
San Francisco Bay Area Air Basin
Mendocino County
Lake County
Sonoma County
Napa County
Yolo County
Sutter County
Yuba County
Nevada County
Placer County
Sacramento County
Solano County
Marin County
San Francisco County
San Joaquin County
Contra Costa County
Alameda County
Santa Clara County
San Mateo County
Santa Cruz County
Stanislaus County
Merced County
San Benito County
Monterey County
Pacific Ocean
Santa Rosa
Napa
Vacaville
Sacramento
Vallejo
San Rafael
Richmond
Concord
Oakland
San Francisco
Livermore
Stockton
Modesto
San Jose
0 5 10 20 Miles
Air Resources Board

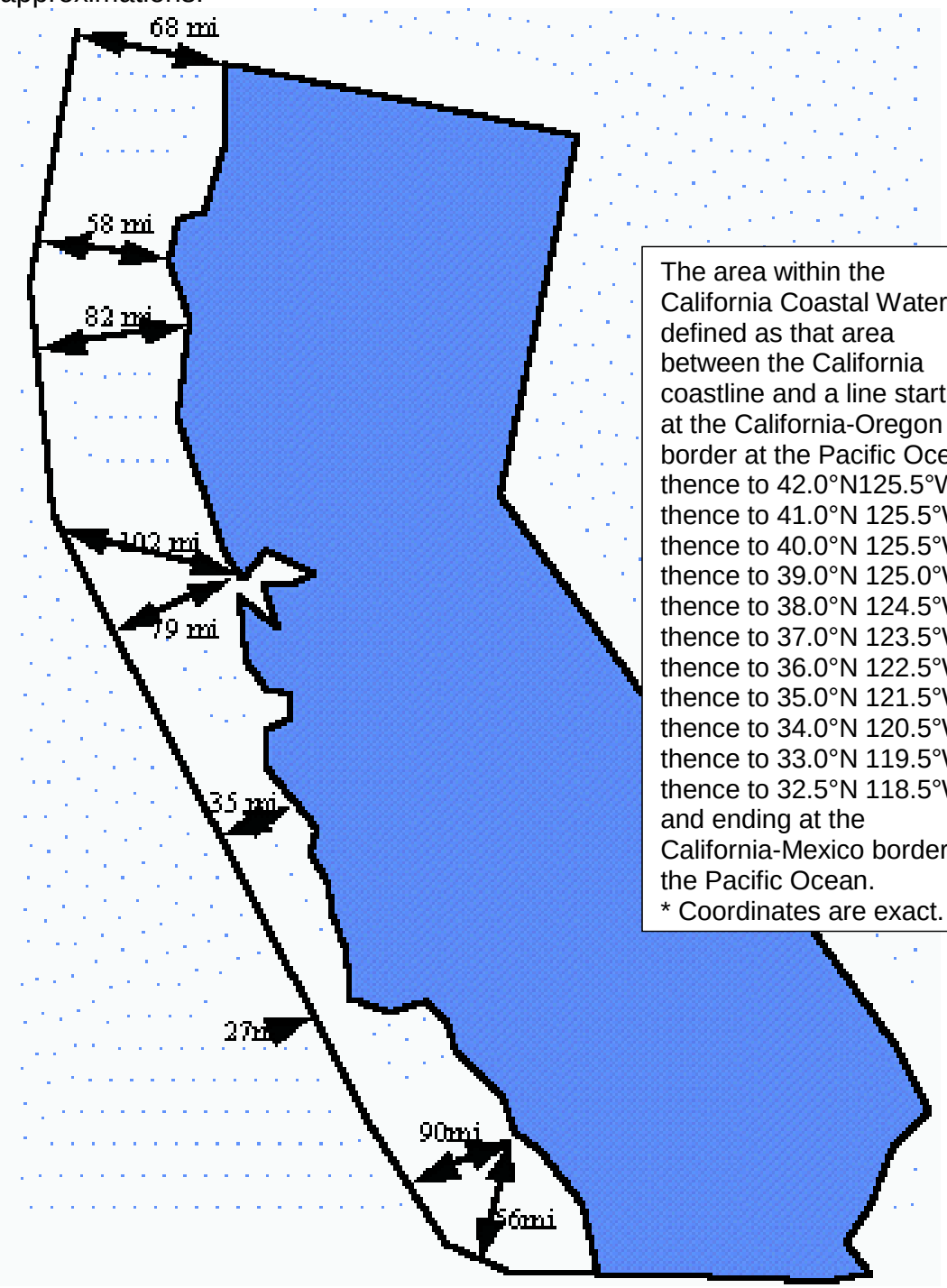

Central Valley Trade Corridor
San Joaquin Valley Air Basin and Sacramento Federal Ozone Nonattainment Area
Glenn County
Butte County
Colusa County
Sutter County
Yuba County
Nevada County
Placer County
Lake Tahoe
El Dorado County
Yolo County
Nevada
Napa County
Solano Co.
Sacramento County
Sacramento
Amador County
Alpine County
Calaveras County
Tuolumne County
San Joaquin County
Stockton
Contra Costa County
Mono Lake
Mono County
Stanislaus County
Modesto
Alameda County
Mariposa County
San Mateo County
Santa Clara County
Inyo County
Merced County
Santa Cruz County
Madera County
Fresno
San Benito County
Fresno County
Monterey County
Kings County
Pacific Ocean
Tulare County
Kern County
0 10 20 40 Miles
San Luis Obispo County
Bakersfield
Santa Barbara County
Ventura County
Los Angeles County
Air Resources Board


Los Angeles / Inland Empire Trade Corridor
South Coast Air Basin and Port Hueneme
N
Tulare County
Bakersfield
Kern County
San Bernardino County
Barstow
Lancaster
Victorville
Ventura County
San Bernardino
Los Angeles
Los Angeles County
Port Hueneme
Mira Loma
---Commerce
Palm Springs
Riverside
Wilmington---
Riverside County
Long Beach
Orange County
San Diego County
Pacific Ocean
San Diego
0 5 10 20 Miles
Air Resources Board


San Diego / Border Trade Corridor
San Diego and Imperial Counties
Inyo County
Nevada
Barstow
Victorville
San Bernardino County
Twentynine Palms
San Bernardino
Riverside
Riverside County
Palm Springs
Arizona
Oceanside
Borrego Springs
Salton Sea
San Diego
San Diego County
Imperial County
Calexico
San Ysidro
Pacific Ocean
MEXICO
0 10 20 40 Miles
Air Resources Board

California Coastal Waters

The California Coastal Waters boundary ranges from approximately 25 miles off the coast at the narrowest to just over 100 miles at the widest. Distances shown are approximations.



The area within the California Coastal Waters is defined as that area between the California coastline and a line starting at the California-Oregon border at the Pacific Ocean, thence to 42.0°N125.5°W,* thence to 41.0°N 125.5°W, thence to 40.0°N 125.5°W, thence to 39.0°N 125.0°W, thence to 38.0°N 124.5°W, thence to 37.0°N 123.5°W, thence to 36.0°N 122.5°W, thence to 35.0°N 121.5°W, thence to 34.0°N 120.5°W, thence to 33.0°N 119.5°W, thence to 32.5°N 118.5°W, and ending at the California-Mexico border at the Pacific Ocean.
* Coordinates are exact.