# State of California AIR RESOURCES BOARD

# **Proposition 1B: Goods Movement Emission Reduction Program**

Resolution 13-34

July 25, 2013

Agenda Item No: 13-7-6

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

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

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

WHEREAS, sections 43013 and 43018 of the Health and Safety Code direct the Board to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources, including marine vessels to the extent permitted by federal law, to attain State air quality standards by the earliest practicable date;

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

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

WHEREAS, section 39626.5(b) of the Health and Safety Code requires the local agencies receiving grants from ARB to award contracts and liquidate funds within set

timeframes or the funds revert back to the legislatively-controlled California Ports Infrastructure, Security, and Air Quality Improvement Account;

WHEREAS, section 39625.02(4)(b) of the Health and Safety Code specifies administrative costs, including audit and Program oversight costs for the agency administering the Program funded pursuant to this chapter, recoverable by bond funds shall not exceed 5 percent of the Program's costs;

WHEREAS, section 39625.3 of the Health and Safety Code and the Proposition 1B: Goods Movement Emission Reduction Program Guidelines for Implementation (Guidelines) provide that the Board may make Program funding available for loan or loan guarantee programs to be administered by any State agency, including ARB;

WHEREAS, on January 25, 2013, in Resolution 13-5, the Board adopted updated Guidelines, priorities for the use of Fiscal Year (FY) 2012-13 and later funds, project specifications, and project implementation deadlines;

WHEREAS, in Resolution 13-5 the Board established the following funding priorities for FY2012-13 and later funds as shown in the Program Guidelines:

- 1. Truck upgrade projects to reduce the health risk and also provide reductions to help meet federal air quality standards for regional air pollutants. This is consistent with statutory direction to give priority to projects that achieve the earliest possible reduction of health risk in heavily impacted communities.
- 2. Locomotive projects to cut the elevated, excess cancer risks in neighborhoods near rail yards, 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 particulate matter and ozone standards in the South Coast and San Joaquin Valley Air Basins.
- 3. Enhanced funding for zero-emission trucks to provide an added incentive to applicants and to promote transition to the cleanest zero-emission technology for future projects. A broader deployment of these zero-emission technologies will be needed in the South Coast and San Joaquin Valley Air Basins to attain healthbased air quality standards as well as attain future long-term greenhouse gas reduction goals.

WHEREAS, the Guidelines provide that the Board adopt a resolution approving specific local or State agency projects and corresponding funding amounts for each project;

WHEREAS, ARB received an appropriation of \$154 million in Program funding through the Legislature;

WHEREAS, ARB received \$25 million in commercial paper from the Spring 2013 bond sales, and anticipates receiving up to the \$154 million appropriation either through Fall 2013 bond proceeds or commercial paper in accordance with Department of Finance procedures;

WHEREAS, on February 7, 2013, ARB released a Notice of Funding Availability (NOFA) announcing that ARB will award approximately \$150 million for new projects to local and State agencies;

WHEREAS, the NOFA requested applications by March 15, 2013, from local and State agencies involved in freight movement or air quality improvements associated with goods movement activities;

WHEREAS, ARB staff received applications for over \$550 million in funding from six local agencies and one State agency for projects that directly reduce air pollution through the use of cleaner equipment or alternative technologies;

WHEREAS, ARB staff received applications for trucks, locomotives, ships/equipment, and harbor craft projects;

WHEREAS, ARB staff reviewed the local and State agency applications, evaluated their consistency with the Guidelines, and clarified any inconsistencies with applicants;

WHEREAS, ARB staff scored any competing local agency applications consistent with the protocols established in the Guidelines;

WHEREAS, ARB staff recommends prioritizing truck projects due to regulatory deadlines and Board priorities, with the ability to reallocate any unused funds according to the protocols established in the Guidelines;

WHEREAS, all truck projects have an operational deadline of December 31, 2014;

WHEREAS, from July 11, 2013 to July 15, 2013, ARB staff conducted three public workshops in Fresno, Los Angeles, and Sacramento to discuss preliminary staff recommendations for the award of \$150 million in FY2013-14 (Year 4) in project funds, and the ability to reserve up to \$4 million for ARB administration;

WHEREAS, on July 15, 2013, ARB staff released the 2013 Funding Awards and Proposed Update to the Guidelines Staff Report (Staff Report) for public review and comment;

WHEREAS, Table 1 of the Staff Report and Attachment A hereto details the projects that ARB staff recommends the Board adopt for funding;

WHEREAS, Attachment B hereto details the projects that ARB staff recommends the Board adopt as backup projects for funding;

WHEREAS, the Staff Report includes revisions to the Guidelines which expand the truck funding options to include a limited truck filter substrate replacement program;

WHEREAS, if the truck loan assistance and the truck filter substrate replacement programs are not fully utilized, the Executive Officer may reallocate those funds to expedite project completion, according to the protocols established in the Guidelines;

WHEREAS, ARB staff proposes that the Board delegate to the ARB Executive Officer the responsibility to adopt the specific changes to the Guidelines once ARB has completed the coordination work with the Department of Finance and local agencies;

WHEREAS, in consideration of the Staff Report, staff presentation, public testimony and comments, the Board finds that adoption of the recommended award of local and State agency projects shown in Attachment A:

- Meets all applicable requirements and provisions of the adopted Guidelines, Resolution 13-5, Senate Bill 88 (Stats. 2007, ch.181), Assembly Bill 201 (Stats. 2007, ch. 187), all other conditions and criteria provided by the Legislature, all other applicable provisions of law, and Governor's Executive Order S-02-07;
- 2) Prioritizes funds due to regulatory deadlines, Board priorities, and emission reductions;
- 3) Realigns the trade corridor funding awards to the target percentages adopted by the Board in 2008;
- 4) Maintains transparency and public accountability.

WHEREAS, the Board further finds that staff's proposed revisions to the Guidelines expand the truck funding options to include a limited truck filter substrate replacement program.

NOW, THEREFORE, BE IT RESOLVED that the Board adopts the recommended award of local and State agency projects and corresponding Program funding amounts, as set forth in Attachment A hereto and as further detailed in the Staff Report. The Board directs the Executive Officer, and his or her designee, to enter into grant agreements with these local agencies and take any other action the Executive Officer deems necessary to implement these projects.

BE IT FURTHER RESOLVED that the Board adopts the backup award of local and State agency projects, as set forth in Attachment B hereto. The Board directs the Executive Officer or his or her designee to enter into grant agreements with these local agencies and take any other action the Executive Officer deems necessary to implement these projects.

BE IT FURTHER RESOLVED that the Board directs that if there are funds reserved for ARB administration that ARB staff determines are not needed for that purpose, the Executive Officer or his or her designee shall re-direct those funds to supplement existing grants in proportion to the corridor allocations.

BE IT FURTHER RESOLVED that the Board adopts the revisions to the Guidelines that expand the truck funding options to include a limited truck filter substrate replacement program, as shown in Attachment C.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer or his or her designee to adopt appropriate changes to the administrative procedures of the Program in order to decrease the time between bond issuance and expenditure, while still maintaining a viable process for the local agencies.

BE IT FURTHER RESOLVED that the Board directs ARB staff to closely monitor local agency implementation of grant agreements to ensure funds are being used effectively and expeditiously, and to implement the recapture provisions of the Guidelines if ARB staff believes that the grants cannot be fully utilized by the specified deadlines.

BE IT FURTHER RESOLVED that the Board directs ARB staff to continue fostering involvement with all interested parties – public and private – to gain input and to ensure continuing Program transparency and accountability.

correct copy of Resolution 13-34, as adopted by the Air Resources Board.
/s/
Tracy Jensen, Clerk of the Board

I hereby certify that the above is a true and

# Resolution 13-34

July 25, 2013

# **Identification of Attachments to the Board Resolution**

**Attachment A**: Summary of Recommendations by Trade Corridor and Recipient

Agency

**Attachment B**: Summary of Backup Projects

**Attachment C:** Revisions to Guidelines

# Attachment A

# Attachment A. Summary of Recommendations by Trade Corridor and Recipient Agency

Trade Corridor	Target Corridor Percent	Corridor Percent Prior to Allocation	Funding Category	Local Agency	FY201: (Year Fund (millio	· 4) Is¹
LA/Inland 55.00/		E4 C0/	Trucks	South Coast	\$	78.5
Empire	55.0%	54.6%	Corridor Total		\$	78.5
Central Valley	25.0%	24.6%	Trucks	San Joaquin Valley	\$	29.5
				Sacramento Metro	\$	7.4
valioy			Corridor Total		\$	36.9
D A	44.00/	45 70/	Trucks	Bay Area	\$	9.9
Bay Area 14.0%		15.7%	Corridor Total		\$	9.9
		5.1%	Trucks	San Diego	\$	6.15
San Diego/ Border Region	6.0%			Imperial	\$	6.15
			Harbor Craft	San Diego	\$	0.80
			Corridor Total		\$	13.1
Subtotal				\$ ^	138.4	
Multi-Corridor Truck Programs		Truck Loan Assistance	- All	\$	5.3	
		Truck Filter Substrate Replacement		\$	6.3	
Subtotal					\$	11.6
ARB Administration <sup>2</sup>					\$	4.0

Includes dollars for equipment projects, plus administration funds where permitted.
 Limited to actual costs. Remaining funds will be used to supplement other projects.

# **Attachment B**

# Attachment B. Summary of Backup Projects

Trade Corridor	Recipient Agency	Funding Category	Bond Funds <sup>1,2</sup> (millions)
	South Coast	Trucks	Up to \$210.0
LA/Inland Empire		Locomotive	Up to \$9.3
		Ships/Equipment	Up to \$10.3
	San Joaquin	Trucks	Up to \$121.2
Control Valley	Valley	Locomotive	Up to \$28.8
Central Valley	Sacramento Metro	Trucks	Up to \$15.8
	Sacramento Metro	Locomotive	Up to \$41.2
Day Area	Boy Area	Trucks	Up to \$38.0
Bay Area	Bay Area	Locomotive	Up to \$17.0
		Trucks	Up to \$15.8
	San Diego	Locomotive	Up to \$1.0
San Diego/ Border		Ships/Equipment	Up to \$1.0
		Harbor Craft	Up to \$0.8
	Imperial	Trucks	Up to \$8.4
All Trade Corridors ARB <sup>3</sup>		Truck Loan Assistance	Up to \$31.5

Assistance Op to \$31.5

Includes dollars for equipment projects, plus administration funds where permitted.

The funds applied for by each local/State agency; actual funds will only be allocated up to the current appropriation.

State agency.

# **Attachment C**

#### Attachment C. Revisions to Guidelines

Shown below are staff's revisions to the Proposition 1B: Goods Movement Emission Reduction Program Final 2013 Guidelines for Implementation to include a limited truck filter substrate replacement program as part of the existing trucks source category. Revisions are shown in <u>underline</u> to indicate additions, and <u>strikeout</u> to indicate deletions.

# **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:
  - o 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<sup>1</sup>. 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.

<sup>1</sup>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, as applicable.
- 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.

# 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.

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 Engines** for Repower Replacement **Project**

**Options** 

# 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.

## 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.

# 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:

 \$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.

## 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.

# 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:

Maximum Reimbursement (\$) = Original Maximum Reimbursement (\$) X Actual Usage (# of hours)

Projected Usage (# of hours)

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.

Option (5)
Truck Filter
Substrate
Replacement

The Truck Filter Substrate Replacement option is intended to be a limited, one-time option to address a unique situation involving specific recalled truck particulate filters, and will not be available to all local agencies as a truck project option. Truck owners that meet specific eligibility requirements will be offered the opportunity for funding to replace the metal substrate in these recalled filters with a ceramic substrate.

This limited option will be available only if ARB determines there is a need for this funding and will be implemented by the local agency or agencies that ARB selects. The implementing local agency or agencies will notify eligible truck owners.

# Funding Option

<u>Full funding of the replacement ceramic substrate and installation, up to an amount determined by ARB, will be included in the notification materials.</u>

## Requirements

Program-funded truck filter substrate replacement projects shall be installed and operational (post-inspection completed) by August 30, 2014. The ceramic substrate replacement shall be performed by a company that has been trained and authorized by a verified diesel particulate filter manufacturer.

In addition to the General Requirements to be determined, the equipment owner shall:

Commit to a project life of at least 1 year.

# 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.
- Option (5): Total cost for a truck filter substrate replacement project is expected to be no greater than \$3,000/truck.