Report on Reductions Achieved from Incentive-Based Emission Reduction Measures in the San Joaquin Valley

APPENDIX D: Prop 1B Goods Movement – 2008 Program Guidelines for Implementation

Release Date: September 22, 2014
Hearing Date: October 23, 2014

California Environmental Protection Agency

Air Resources Board

PROPOSITION 1B:
GOODS MOVEMENT
EMISSION REDUCTION PROGRAM

FINAL
GUIDELINES FOR IMPLEMENTATION
Adopted February 28, 2008

California Environmental Protection Agency
Air Resources Board

[this page intentionally blank]

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 Board's Public Information Office, 1001 I Street, 1st Floor, Visitors and Environmental Services Center, Sacramento, California, 95814, (916) 322-2990.

For individuals with sensory disabilities, this document is available in Braille, large print, audiocassette or computer disk. Please contact ARB's Disability Coordinator at (916) 323-4916 by voice or through the California Relay Services at 711, to place your request for disability services. If you are a person with limited English and would like to request interpreter services, please contact ARB's Bilingual Manager at (916) 323-7053.

DISCLAIMER

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

ARB CONTACT

Mr. Douglas Ito, Manager
Goods Movement Strategies Section
Planning and Technical Support Division

Air Resources Board
P.O. Box 2815
Sacramento, California 95812

Information Line: (916) 44-GOODS (444-6637)
Email: gmbond@arb.ca.gov
Website: http://www.arb.ca.gov/gmbond

ARB CONTRIBUTORS

Primary Author: Douglas Ito
Co-authors: Matthew Botill, Bridget Brown, Nicole Dolney, Jim Fischer, P.E., Chris Halm, Ph.D., Ajay Mangat, Hurshbir Shahi, Luis Woodhouse, Ph.D.

Andy Alexis	Mike Jaczola	Judy Tanimoto
Michael Benjamin, D.Env.	Kathy Jaw, Ph. D	Mike Tollstrup
Tony Brasil	Deborah Kerns, Esq.	Floyd Vergara, Esq., P.E.
Joe Calavita	Rachel Kirlis	Mike Waugh
Grant Chin	Leslie Krinsk, Esq.	Bill Welty
Dan Donohoue	Mike Miguel	Erik White
Judith Friedman	Cherie Rainforth	Lisa Williams
John Gruszecki, P.E.	Todd Sax, D. Env.	Todd Wong
Harold Holmes	Todd Sterling	Seungju Yoon, Ph.D.

Reviewed and Approved by: Cynthia Marvin, Assistant Division Chief, Planning and Technical Support Division

ACKNOWLEDGMENTS

This proposal would not have been possible without the support of Jack Kitowski, Lucina Negrete, Heather Arias, and John Kato of ARB's Carl Moyer team who so generously shared their time to help us launch this new program.

We would like to recognize the staff of the Bay Area Air Quality Management District, the Imperial Air Pollution Control District, the Sacramento Metropolitan Air Quality Management District, the San Diego Air Pollution Control District, the San Joaquin Valley Air Pollution Control District, and the South Coast Air Quality Management District for offering their "on the ground" experiences in running air quality incentive programs.

Table of Contents

I. Overview 1
A. Introduction 1
B. Authority 2
1. Proposition 1B 2
2. Senate Bill 88 and Assembly Bill 201 2
3. Governor Schwarzenegger's directives 9
C. Definitions 9

II. ARB Program Administration 14
A. Program Guidelines 14
B. Program Funding Targets and Priorities 15
1. Trade corridor funding targets 15
2. Source category funding targets 16
3. Priorities for FY2007-08 funds 16
C. Project Specifications and Emissions 17
1. Project specifications for each funding cycle 17
2. Quantifying project benefits 19
a) Pollutants 19
b) Project benefits calculators 20
D. Application Process for Local Agency Projects 20
1. Notice of funding availability 20
2. Registration of local public entities 20
3. ARB review of applicant and project eligibility 21
a) Completeness 21
b) Qualification as an applicant 22
c) Consistency with legal and equipment project specifications 22
d) Consistency with air quality plans for goods movement 22
e) Availability of full funding 22
f) Project schedule and milestones 22
g) Data to determine air quality benefits and cost-effectiveness 23
h) Local agency project implementation demonstration 23
4. Evaluation of local agency capability to implement the project scope 24
5. Match funding 24
a) Carl Moyer program 24
6. Competitive ranking of local agency projects 25
a) Emission reduction score 25
b) Cost-effectiveness and match score 26
c) Competitive ranking 27
7. Public workshops on eligible local agency projects 28
8. Recommendations for funding local agency projects 28
a) Consideration of available funds and funding priorities 28
b) Funding level for local agency project proposals 28
9. Public hearing and Board action 29
10. Local agency project grant agreement 29
a) Standard grant agreement provisions 30

b) General Program provisions 30
c) Source category-specific elements 31
11. $25 million in early grants for FY2007-08 funds 32
E. ARB Program Oversight 32
1. ARB obligations to local agencies 32
2. ARB expenditures 33
a) Administration funds 33
b) Equipment project costs 34
3. Earned interest 35
4. Ongoing evaluations 35
a) Ongoing evaluations of local agency projects 35
b) Ongoing evaluations of equipment projects 36
5. Auditing 38
a) ARB audits of local agency projects 38
6. ARB reporting 41
a) Public website 41
b) Annual community meetings 41
c) Updates to Department of Finance 41
d) ARB annual report 42
7. Local agency non-performance 42
a) Non-performance finding 42
b) Local agency appeal process 43
c) Remedies for non-performance 43

III. Local Agency Project 46
A. Local Public Entity Registration 46
B. Local Agency Project Application Packet 47
1. Legal restrictions 47
a) Environmental mitigation 47
b) Railroad agreements 48
c) Existing ARB regulations 48
d) Upcoming ARB Regulations 49
2. Project alternatives for local agencies 49
a) Technology alternatives 50
b) Project implementation approaches and contractors 51
c) Procedure/process alternatives 52
d) Geographic operations 52
e) Ineligible project alternatives 54
3. Completed application 55
a) General local agency information 55
b) Local agency project proposal 56
c) Air quality benefits 56
d) Project schedule 57
e) Funding demonstration 57
f) Staff resources 58
g) Local agency project implementation demonstration 59
4. Local agency board/commission resolutions 60
C. Local Agency Project Grant Agreement 60

D. Local Agency Project Implementation Requirements 61
1. Community and public participation 61
a) Community meetings 61
b) Public and interested stakeholder participation 61
c) Public website 61
2. Equipment project marketing tools 62
a) Marketing tools 62
b) Outreach to independent truck owner/operators 62
c) Information on truck efficiency upgrades 62
d) Outreach to small businesses for infrastructure construction 63
3. Local agency solicitation of equipment projects 64
4. Review of equipment project applications 64
5. Match funding for equipment projects 65
6. Competitive ranking and selection of equipment projects 65
a) Emission reduction score 66
b) Cost-effectiveness and match score 66
c) Competitive ranking 67
d) Application of available funding 67
e) Equipment project backup list 67
7. Compliance check 67
8. Equipment project pre-inspections 68
9. Notifications to equipment owners 69
10. Equipment project contracts 69
a) Standard contract provisions 70
b) General Program provisions 70
c) Source category-specific elements 71
11. Tax reporting 72
12. Provisions for lease-to-own programs 72
13. Equipment project scrap requirements 73
14. Equipment project post-inspections 77
15. Local agency requests to ARB for grant funds 81
16. Local agency non-performance provisions 82
E. Obligations, Expenditures, and Earned Interest 82
1. Local agency obligation of funds to equipment owners 82
2. Local agency expenditures on equipment projects 82
a) Expenditure deadlines for equipment projects 82
b) Equipment project purchase restrictions 83
c) Invoice payments (reimbursements) 83
d) Direct payment to vendor 84
3. Earned interest 84
a) Calculation of earned interest 84
b) Reporting requirement for earned interest 85
c) Earned interest expenditure provisions 85
F. Ongoing Local Agency Evaluations of Equipment Projects 86
G. Local Agency Reporting Requirements 86
1. Quarterly data updates 86
2. Semi-annual report 87
3. Local agency project completion report 88

IV. General Equipment Project Requirements 90
A. Ownership Requirements 90
B. Third Party Applications 90
C. Equipment Project Specifications 90
D. Equipment Project Application Requirements 90
1. Equipment project information 90
2. Equipment project schedule 91
3. Case-by-case equipment projects 91
4. Disclosures 91
5. Equipment project funding demonstration 92
6. Equipment owner signature 92
E. Equipment Project Contract Requirements 92
F. Equipment Sales Requirements 93
G. Equipment Project Non-Performance 93

APPENDIX A Trucks Serving Ports and Intermodal Rail Yards A-1
A. Equipment Project Specifications A-1
B. Major Milestones for Equipment Project Completion A-4
C. Recordkeeping Requirements A-4
D. Annual Reporting Requirements A-4
E. Ongoing Evaluations and Audits A-4
F. Application Information A-5
1. General contact information A-5
2. Option (1): retrofit A-5
a) Current equipment and activity information A-5
b) Proposed equipment project information A-6
3. Option (2): repower A-6
a) Current equipment and activity information A-6
b) Proposed equipment project information A-7
4. Option (3): replacement A-7
a) Current equipment and activity information A-7
b) Proposed equipment project information A-8

APPENDIX B Other Heavy Duty Diesel Trucks B-1
A. Equipment Project Specifications B-1
B. Major Milestones for Project Completion B-5
C. Recordkeeping Requirements B-5
D. Annual Reporting Requirements B-5
E. Ongoing Evaluations and Audits B-6
F. Application Information B-6
1. General contact information B-6
2. Option (1): retrofit B-6
a) Current equipment and activity information B-6
b) Proposed equipment project information B-7
3. Option (2): repower B-7
a) Current equipment and activity information B-7
b) Proposed equipment project information B-8

4. Option (3): replacement B-8
a) Current equipment and activity information B-8
b) Proposed equipment project information B-9
5. Option (4): three-way truck transaction B-9
a) TRUCK A: Current equipment and activity information B-9
b) TRUCK B: Current equipment and activity information B-10
c) Proposed equipment project information B-10

APPENDIX C Locomotives C-1
A. Equipment Project Specifications C-1
B. Major Milestones for Project Completion C-2
C. Recordkeeping Requirements C-2
D. Annual Reporting Requirements C-3
E. Ongoing Evaluations and Audits C-3
F. Application Information C-3
1. General contact information C-3
2. Option (1): switcher locomotive C-4
a) Current equipment and activity information C-4
b) Proposed equipment project information C-4
3. Option (2): line-haul locomotive C-5
a) Current equipment and activity information C-5
b) Proposed equipment project information C-6

APPENDIX D Shore Power D-1
A. Equipment Project Specifications D-1
B. Major Milestones for Project Completion D-3
C. Recordkeeping Requirements D-3
D. Reporting Requirements D-3
1. Annual reporting for grid based power D-3
2. Annual reporting for non-grid based power (every 1,000 hours) D-4
E. Ongoing Evaluations and Audits D-4
F. Application Information D-4
1. General contact information D-4
2. Option (1): grid-based shore power D-5
a) Proposed equipment project information D-5
3. Option (2): non-grid shore power D-5
a) Proposed equipment project information D-5

APPENDIX E Commercial Harbor Craft E-1
A. Equipment Project Specifications E-1
B. Major Milestones for Project Completion E-2
C. Recordkeeping Requirements E-2
D. Reporting Requirements E-3
E. Ongoing Evaluations and Audits E-3
F. Application Information E-3
1. General contact information E-3
2. Options (1) and (2): repowers E-4
a) Current equipment and activity information E-4

b) Proposed equipment project information E-4
3. Options (1) and (2): replacements E-5
a) Current equipment and activity information E-5
b) Proposed equipment project information E-6

APPENDIX F Cargo Handling Equipment F-1
A. Equipment Project Specifications F-1
B. Major Milestones for Project Completion F-2
C. Recordkeeping Requirements F-2
D. Reporting Requirements F-2
E. Ongoing Evaluations and Audits F-2
F. Application Information F-2
1. General contact information F-3
2. Option (1): energy storage systems F-3
a) Current equipment and activity information F-3
b) Proposed equipment project information F-3

APPENDIX G Truck Stop/Distribution Center Electrification G-1
A. Background G-1
B. Analysis G-1
C. Equipment Project Specifications G-2
D. Major Milestones for Project Completion G-3
E. Recordkeeping Requirements G-3
F. Reporting Requirements G-3
G. Ongoing Evaluations and Audits G-4
H. Application Information G-4
1. General contact information G-4
2. Option (1): electrification infrastructure G-4
a) Current equipment and activity information G-4
b) Proposed equipment project information G-5

APPENDIX H: Early Grants H-1

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 current goods movement operations greatly impacts the health of community residents near ports, rail yards, 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 each trade corridor's air pollution challenges. The Los Angeles/Inland Empire region has the largest concentration of goods movement facilities (like ports and rail yards), with high near source health risks and high levels of regional ozone and fine particulate (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 rail yard 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 standards.

Proposition 1B authorizes 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 risk from freight movement along California's priority trade corridors. The State Fiscal Year (FY) 2007-08 budget includes the first installment of $250 million, plus implementing legislation via Senate Bill 88 (Chapter 181, Statutes of 2007) that created the Goods Movement Emission Reduction Program (Program). Assembly Bill 201 (Chapter 187, Statutes of 2007) includes a minor clarification. SB 88 requires ARB to adopt Program Guidelines to ensure the Program achieves the statutory objectives.

The implementing statutes direct ARB to maximize the emission reduction benefits and achieve the earliest possible health risk reduction in communities heavily impacted by goods movement. This Program will supplement 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), an air toxic, and nitrogen oxides (NOx) that contribute to formation of both PM2.5 and ozone. The projects funded under the Program will also provide co-benefits by reducing greenhouse gas and black carbon emissions that contribute to climate change.

ARB will award 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 will then be responsible for providing financial incentives to owners of equipment used in freight movement to upgrade to cleaner

technologies, consistent with Program Guidelines adopted by ARB. Bond funds will flow via grants from ARB to local agencies, then to equipment owners via contracts or other binding agreements with those local agencies. At both steps, there is competition based on the projected emission reductions and reductions per State dollar invested to ensure the most beneficial projects are funded.

ARB staff developed these *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 are designed to fund qualifying projects that reduce emissions and health risk, incorporate simplicity and efficiency, ensure cost-effectiveness, leverage other funding sources, and provide transparency and accountability.

B. Authority

The legal authority for the Program is found in Proposition 1B and the implementing statutes discussed below. Governor Schwarzenegger provided additional direction to ARB in his Executive Order S-02-07 on bond accountability and his signing statement on the budget bill -- Senate Bill 77 (Chapter 171, Statutes of 2007).

1. Proposition 1B

In November 2006, California voters approved the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, also known as Proposition 1B. Proposition 1B, among other things, authorizes $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

In August 2007, the California Legislature passed and Governor Schwarzenegger signed SB 88 and AB 201, which 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 Program Guidelines, establish funding criteria and procedures, and provide periodic reports.

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

- An application process for the funds, and any limits on administrative 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 the 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 audit 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 will take to allocate funding 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 1.1 – 1.3 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 Legislature summarizing its activities related to the administration of this program on January 10 [§39627.5].
- The local agency shall complete semiannual 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 1.1 ARB Funding Priorities/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))* ***Chap II.B.1.***	Population relative to other corridors	The combination of population and goods movement emissions: considers the public health risk associated with good 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 good 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 corridors	
	State Implementation Plan (SIP) needs relative to other 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 corridor.
2. Recommend source category funding targets *(categories in §39625.1(c))* ***Chap II.B.2.***	Emissions from each category	Considers the severity and magnitude of the emission 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 good movement facilities [§39625.5(b)(1)]
	Funding category	Requires competition for funding between local agency projects in six funding categories that represent a single source category or combination of categories (i.e., other trucks are combined with electrification of truck stops/etc. 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)].
3. Recommend funding priorities for each appropriation ***Chap II.B.3.***	Projects that can be quickly implemented	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 rail yards or distribution centers, have elevated emissions and exposure from these truck operations [§39625.5(b)(2)(K)].
	Truck retrofits with diesel PM filters	
	Los Angeles/Inland Empire port truck replacements	

Table 1.1 ARB Funding Priorities/Project Options and Statutory Funding Requirements (cont.)

ARB Action ***Guidelines reference***	**Based On**	**Statutory Requirements** [references to Health and Safety Code]
4. List eligible equipment project options and project specifications for each appropriation *(project types identified in §39625.5(a)(2))* ***Chap II.C.1. and Appendices A-G***	Equipment and/or emission level	Begins with list of projects eligible for funding [§39625.5(a)(2)]. List of 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 MOU and requires railroads to submit a compliance plan for the 1998 MOU before seeking funding for locomotives that operate in the South Coast Air Basin.
	Funding caps/match funding	Requires a specified contribution of funds leveraged from other sources or in-kind contributions to the project [§396269(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.
	Project life	Considers sustainability of the reduction 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)	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.
	Conditions on future operations	Considers whether reductions are likely to occur in area with elevated emissions and exposure [§39625.5(b)(2)(K)]via requirements for 100% California operation or home port, plus visitation frequency for trucks serving ports and intermodal rail yards.

Table 1.2 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 ***Chap II.D.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 ***Chap II.D.2. and II.D.3.b.***	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.
3. Review local agency project eligibility ***Chap II.D.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 nominations (applications) to have project delivery milestones [§39625.02(e)(3)].
	Data for competitive ranking process	Requires project nominations (applications) to identify the useful life of the project [§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 website ***Chap II.D.3.***	Public access	Makes available preliminary list of projects being considered for funding for public input and comment [§39626(c)(1)].

Table 1.2 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]
5. Evaluate local agency capability to implement project scope ***Chap II.D.4.***	Resources to implement project scope within allowed time	Considers local agency's ability to deliver equipment projects and emission reductions to achieve the earliest possible health risk reduction [§39625(e)] and [§39625.5(b)(1)].
6. Require match funding ***Chap II.D.5. and Appendices A-G***	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)].
7. Competitively rank local agency projects ***Chap II.D.6.***	Emission reduction score	Requires projects to compete within a source category based on greatest emission reductions [§39625.5(a)(1)] and magnitude of the emission reduction [§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 and match score	Considers cost-effectiveness of the reductions [§39625.5(b)(2)(C)] and ability to leverage funds from other sources [§39625.5(b)(2)(H)] by assessing total reductions over project lifetime per State dollar invested [§39625.5(b)(2)(J)].
	Competitive ranking	Equally weights the above scores.
8. Hold workshops ***Chap II.D.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 ***Chap II.D.8.***	Competitive ranking	Allocates funds on a competitive basis for projects that achieve 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 ***Chap II.D.9.***	Public hearing and Board adoption of local 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 grant agreements ***Chap II.D.10.***	ARB and local agency to sign	Implement grant funding via legal agreements between ARB and recipient local agencies [§39625.3]. Ensures statutory and Guideline requirements for local agency projects are met.

Table 1.3 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 ***Chap III.D.2. and III.D.3.***	Marketing/outreach and application elements including data for competitive ranking process	Requires project nominations (applications) to identify the useful life of the project [§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 3 below. Also requires local agencies to promote truck efficiency upgrades to reduce greenhouse gases [§39625.5(b)(2)(F)]. For 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 ***Chap III.D.5. and Appendices A-G***	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 vehicle or piece of equipment competes separately) ***Chap III.D.6.***	Emission reduction 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 reduction [§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 and match score	Considers cost-effectiveness of the reductions [§39625.5(b)(2)(C)] and ability to leverage funds from other sources [§39625.5(b)(2)(H)] by assessing total reductions over project lifetime per State dollar invested [§39625.5(b)(2)(J)].
	Competitive ranking	Equal weighting of the above scores.
4. Post ranked projects ***Chap III.D.6.***	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 ***Chap III.D.10.***	Local agency and equipment owner (and any lessee) to sign	Ensures statutory and Guideline requirements for equipment projects are met.

3. Governor Schwarzenegger's directives

In January 2007, Governor Schwarzenegger issued Executive Order S-02-07 highlighting the importance of transparency and accountability in administering the over $40 billion in bond funding approved by 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 Department of Finance.
- Follow-up accountability, which requires audits to ensure expenditures achieved the intended outcomes and were consistent with legal requirements.

The Governor's signing message on the FY2007-08 budget via SB 77 also:

- Calls on ARB to move quickly -- without sacrificing accountability -- to provide relief for the individuals who reside along California's busy trade corridors.
- Directs ARB to ensure funding is allocated consistent with the accountability safeguards in the Executive Order.
- Charges ARB to develop Program Guidelines that make sense, reduce bureaucratic red tape, simplify and expedite project application and award procedures, and ensure projects are completed in record time.
- Calls 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 1.4 Definitions

Term	Definition
Administrative Agency	"Administrative agency" (henceforth ARB) 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 available up to the limits defined 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." These Guidelines clarify how ARB will assess a local public entity's eligibility as a Program applicant. Also referred to as an applicant local agency.

Term	Definition
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 SB 88 and AB 201.
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 who are authorized to sign or act on behalf of the local agency.
Baseline Emissions	"Baseline emissions" are defined as the emissions level of a diesel engine, except interstate line-haul locomotives, using CARB diesel fuel prior to any equipment upgrades funded by this Program.
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: 1) equipment project completion; and 2) the equipment project life. (Also referred to as an 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.
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).
Earned Interest	"Earned interest" means accrued interest from Program funds being held by the local agency in interest-bearing accounts.
Equipment Owner	"Equipment owner" means the legal owner of Program-eligible equipment, except that for grid-based shore power, the term "equipment owner" shall encompass any party with the authority to co-fund, implement, and operate improvements resulting in provision of grid-based shore power, which may include, but not be limited to the port, a marine terminal operator, and shipping companies.
Equipment Project	"Equipment project" means an upgrade of existing equipment via retrofit, repower, or replacement, or installation of electrical infrastructure according to Program requirements. Each individual truck, locomotive, piece of cargo equipment, harbor craft, or ship berth proposed for upgrade is considered a separate equipment project.
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.

Term	Definition
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 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).
Expenditure	"ARB expenditure" means ARB's payment of Program funds to a local agency. "Local agency expenditure" means a local agency's payment of Program funds to an equipment owner.
Funding Category	"Funding category" means the source category or combination of source categories for purposes of establishing funding targets. 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.
Guidelines	"Guidelines" means the *Proposition 1B: Goods Movement Emission Reduction Program - Guidelines for Implementation.*
Grant	"Grant" (also referred to as "grant funds" and "grant award") means the Program funding allocated by ARB to a local agency under a Local Agency Project Grant Agreement.
Grant Agreement	"Grant agreement" means the legally binding agreement between ARB and a local agency. (Also referred to as a Local Agency Project Grant Agreement)
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.
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.
Liquidation	"ARB liquidation" means the full expenditure of all Program funds identified in an executed local agency project grant agreement. "Local agency liquidation" means the full expenditure of all Program funds identified in an executed equipment project contract.
Local Agency	"Local agency" means an eligible applicant or recipient of Program funds from ARB. A local agency that is administering Program funds under an executed grant agreement is also referred to as a recipient agency in SB 88.

Term	Definition
Local Agency Board/ Commission	"Local agency board/commission" means the popularly elected or appointed governing body of a local public entity.
Local Agency Project	"Local agency project" means the source category-specific incentive program that the local agency proposes to implement with Program funding. The local agency project may include one or more equipment project options within the same source category.
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 are implementation approaches.
Local Public Entity	A "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.
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.
Model Year 2007 Truck Emission Levels	"Model year 2007 truck emissions levels" are defined as emissions of 1.2 grams per brake horsepower-hour (g/bhp-hr) or less of NOx, and 0.01 g/bhp-hr or less of PM, as certified by the U.S. Environmental Protection Agency (U.S. EPA) or ARB.
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 agency's authority as a market participant or municipal proprietor or the agency's authority to enter into contracts with equipment owners and operators.
Notice of Funding Availability	"Notice of Funding Availability" is defined by statute as ARB's public announcement to begin solicitation of local agency project applications.
Obligation	"ARB obligation" means the execution of a local agency project grant agreement between ARB and a local agency. "Local agency obligation" means the execution of an equipment project contract between a local agency and equipment owner. (Obligation is also commonly referred to as "encumbrance")

Term	Definition
Program	"Program" means the Goods Movement Emission Reduction Program, except as otherwise noted.
Recipient Agency	"Recipient agency" means the local agency that receives Program funds under an executed grant agreement.
Replacement	"Replacement" means the act of replacing a higher-emitting diesel vehicle, piece of diesel equipment, or diesel harbor craft with a lower-emitting vehicle, piece of equipment, or craft (i.e., replacement of an old truck 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.
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.
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: trucks serving ports and intermodal rail yards, other trucks, truck stop/distribution center electrification, locomotives, shore power for ships, cargo handling equipment at ports and intermodal rail yards, and commercial harbor craft. To establish funding targets and promote appropriate competition between projects, ARB may combine multiple source categories within a "funding category."
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 (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.)

II. ARB Program Administration

This chapter identifies the proposed requirements for ARB to administer the Program. SB 88 requires that the Board hold public hearings, adopt Program Guidelines, and adopt a final list of local agency projects that will receive funding from each appropriation. ARB staff shall implement the Board's direction as defined in Board resolutions, the Program 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 the proposed Guidelines and project specifications; issuing the Notice of Funding Availability; soliciting, reviewing and recommending local agency projects for funding; executing and implementing grant agreements with local agencies; auditing local 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 SB 88, ARB shall develop and adopt initial Program Guidelines in a public process. The Guidelines shall include, at a minimum, all of the following:

- An application process for the funds, and any limits on administrative 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 the 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 audit of project expenditures and outcomes.

Following each appropriation of Program funds to ARB, staff shall develop and the Board will consider adoption of any appropriate updates to these Program Guidelines prior to issuing the Notice of Funding Availability for that funding cycle. 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 the Guidelines for public review prior to Board consideration at a noticed public hearing.

The Guidelines are designed and intended to effectuate the provisions of SB 88 and AB 201. However, in the event a provision of the Guidelines conflicts with either SB 88 or

AB 201, or any other statute enacted to implement Proposition 1B, the relevant statutory provisions shall control.

B. Program Funding Targets and Priorities

ARB staff shall propose and the Board may approve funding targets for each trade corridor and each source category or groups of categories (referred to as a funding category) to provide overall direction on the Program and guide each trade corridor in the development of viable project proposals. Such targets can ensure that all of the statutory criteria are effectively implemented in a straightforward and transparent manner. Any such targets shall not commit the Board to specific allocations in future years and shall not be considered a programming of funds to specific local agency projects. Funding for local agency projects in each individual funding cycle shall be responsive to priorities established by the Board and may not be directly proportional to the targets. ARB staff shall recommend funding levels for local 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 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 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 Staff Report describes the basis for the proposed targets.

The proposed 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 agencies in other corridors.

The funding for trucks serving ports and intermodal rail yards (allocated to the corridors where those facilities are located) will be 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 go to trucks carrying agricultural products to and from the Valley. Likewise, funds for the ports in the Los Angeles area may go to trucks based in the San Diego/Border region.

2. Source category funding targets

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

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

Dollars	Funding Category
• $400 million:	Heavy duty diesel trucks serving seaports and intermodal rail yards.
• $360 million:	Other heavy duty diesel trucks that haul goods, plus any truck stop or distribution center electrification.
• $100 million:	Diesel freight locomotives.
• $100 million:	Shore power for cargo ships at berth, plus cargo handling equipment used at a port or intermodal rail yard.
• $ 40 million:	Commercial harbor craft.

3. Priorities for FY2007-08 funds

ARB staff proposes that the Board adopt these priorities for FY2007-08:

- 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 FY2007-08 funding.

- Port truck replacement projects in the Los Angeles/Inland Empire corridor to support 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.

C. Project Specifications and Emissions

1. Project specifications for each funding cycle

Following each appropriation of Program funds to ARB, ARB staff shall evaluate and recommend for Board adoption specifications for equipment project options eligible to compete for funding in that cycle. 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.

Appendices A-G of these Guidelines detail the proposed equipment project options for FY2007-08 funds, including upgrade specifications, funding caps, minimum project life, and key operating conditions. Local agencies can choose to propose projects from all of the options in a category, or just a subset of those options, to best address the air pollution problem in that corridor. For future appropriations and updates to these Guidelines, ARB staff shall also consider the funding demand for eligible 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 FY2007-08 funds include all of these approaches.*
- The replacement, repower, or retrofit of diesel locomotive engines, with priority given to switching locomotive engines.
  - *The equipment project options for FY2007-08 funds include replacement and repower approaches. Retrofit devices and a stationary system to capture and control locomotive emissions in the rail yard are in development – once these technologies are demonstrated, verified by ARB for effectiveness and durability (if applicable), and commercially available, ARB staff will evaluate them for addition to the list of project options for the subsequent funding cycles.*

- The replacement, repower, or retrofit of harbor craft that operates at the state's seaports.
  - *The equipment project options for FY2007-08 funds include replacement and repower approaches. Once retrofit devices are demonstrated, verified by ARB for effectiveness and durability (if applicable), and commercially available, ARB staff will evaluate them for addition to the list of project options for the subsequent funding cycles.*
- 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.
  - *The equipment project options for FY2007-08 funds include this technology.*
- Mobile or portable shoreside distributed power generation projects that eliminate the need to use the electricity grid.
  - *The equipment project options for FY2007-08 funds include this type of technology.*
- The replacement, repower, or retrofit of cargo handling equipment that operates at the state's seaports and rail yards.
  - *ARB's adopted regulation for diesel cargo handling equipment operating at ports and intermodal rail yards 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 FY2007-08 funds include only retrofit of energy storage systems for rubber-tired gantry cranes that already comply with the ARB rule. ARB will consider expanding the project options for the next funding cycle to include removal of the existing diesel engine and installation of electric power for these same cranes.*
- 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 FY2007-08 funds include this technology.*

ARB staff proposes that certain types of projects or activities <u>not</u> be eligible for funding under the Program. Such 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; rail yards, 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 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.
- Any other projects that cannot meet all of the requirements of these Guidelines.

The timing and resource demands to get FY2007-08 funds obligated effectively preclude case-by-case consideration of projects for this funding cycle. If a local agency supports demonstration of a cost-effective technology or approach that is consistent with the statute, ARB staff will evaluate that technology for possible inclusion in the defined equipment project options in the next update to the Guidelines.

2. Quantifying project benefits

a) Pollutants

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

- Diesel particulate matter (diesel PM), which ARB identified as a toxic air contaminant.
- Nitrogen oxides (NOx) and sulfur oxides (SOx) that contribute to fine particles (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, ARB staff recommends quantifying 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 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 dock 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 and also should not be a determining factor in project selection.

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 source categories, there is not a 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 at: http://www.arb.ca.gov/gmbond a Project Benefits Calculator (Calculator) for each source category eligible for funding under these Guidelines, with one exception. Projects to install 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 must be individually evaluated to determine the appropriate quantification method in consultation with the local air district and ARB.

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 equipment owners to quantify the emission reductions and cost-effectiveness of proposed equipment projects.

D. Application Process for Local Agency Projects

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 by the Legislature. For FY2007-08 funding, ARB shall issue the NOFA within two weeks of Board adoption of the Program Guidelines.

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 submittal of the local agency project application to ARB (see Chapter III.D.1).

2. Registration of local public entities

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. Local public entities do not include states or the federal government. 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.

The first step in the application process is simply registration as a local public entity with ARB through the process described in the NOFA to obtain access to the electronic application form. ARB shall staff 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.

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

3. ARB review of applicant and project eligibility

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

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

ARB staff shall evaluate any deficiencies and determine, at staff discretion, whether to disqualify the application or pursue updates with the local public entity.

ARB staff shall post a list of eligible local agency project applications on ARB's Program website (http://www.arb.ca.gov/gmbond) for public review no later than 30 days after local agency project applications are due to ARB.

a) Completeness

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

b) Qualification as an applicant

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 local agency or a local agency.

c) Consistency with legal and equipment project specifications

ARB staff shall review the local agency project application and assess the local 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 of one or more equipment project options for that source category. Proposals that combine multiple source 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).

d) Consistency with air quality plans for goods movement

ARB staff shall assess the local 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.

e) Availability of full funding

ARB staff shall assess the local 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 local agency project schedule.

f) Project schedule and milestones

ARB staff shall assess the local 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 the Guidelines for fund obligation and expenditure.

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

ARB staff shall evaluate the local agency project application to verify that it includes sufficient data on equipment, project life, and project option(s) to support and document the local agency's calculation of the emission reduction factor and cost-effectiveness and match factor for the proposed project.

h) Local agency project implementation demonstration

ARB staff shall evaluate the local agency project application to determine if it effectively demonstrates that the local agency is prepared to administer the proposed project consistent with the detailed provisions of Chapter III.D Local Agency Project Implementation Requirements. This demonstration shall include a description of how the local agency will structure its program to meet each requirement summarized below, including substantive detail (wherever possible) regarding the procedures the agency will use to implement each provision.

- 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 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 and fiscal audits.

ARB staff shall also rely on this demonstration in its evaluation of the local agency's ability to deliver the proposed project scope (see Chapter II.D.4 below) and its overall determination of a local agency's readiness to quickly begin implementation and deliver air quality results (see Chapter II.B.3, Priorities for FY2007-08 Funds).

4. Evaluation of local agency capability to implement the project scope

ARB staff shall also assess the local agency project application to determine if it affirmatively demonstrates that the 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 the Guidelines.

ARB staff will examine the local agency's documented statistics or other basis for establishing the relationship between the number of pieces of equipment that can upgraded in a given timeframe and the number of program staff needed to accomplish those upgrade projects. ARB staff will rely on the documentation provided by the local agency and ARB's experience with the Carl Moyer Program and other incentive programs to assess the adequacy of the proposed staff resources. If ARB staff determines that the local 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 the 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, staff will 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 source category. In the FY2007-08 funding cycle, 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 sources. It also directs ARB to maximize the amount of match funds used to supplement Program funds. The match required to cover the difference between the Program funding cap and the total project cost can come from the private sector, local agencies, or the federal government. Private match funding can be provided by the equipment owner, an industry sponsored program, or other sources.

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 involving the accelerated retirement, repowering, or retrofitting of trucks. Conversely, the $2 surcharge cannot be used under this Program for match funding on non-motor vehicle sources, such as locomotives, harbor craft, cargo ships, and off-road cargo equipment.

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 option(s) to be funded includes only trucks, (b) the equipment project meets both bond Program eligibility requirements and Carl Moyer funding criteria, (c) the equipment project does not exceed the Carl Moyer Program cost-effectiveness limit, with the project cost including both Program and AB923 funds, and (d) the $2 surcharge funds are not counted as part of an air district's Carl Moyer 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 State funds since the surcharge monies would otherwise be used in the Moyer Program.

6. Competitive ranking of local agency projects

ARB staff shall use a quantitative approach to develop a prioritized list of eligible local 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 projects on the ARB website.

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.

a) Emission reduction score

For each equipment project option that a local agency proposes to implement within a source category, ARB staff shall review the local agency's estimate of the total pollutant-weighted emission reductions in California, over the average project life, based on the Project Benefits Calculator for that source category.

Emission reductions = Reduction in NOx + (combustion PM x 20) emissions in California over the average project life in tons

If a local agency proposal combines multiple equipment project options within a source category, ARB staff shall confirm that the calculation repeats this process for each option, and adds the reductions together for the source category.

ARB staff shall list projects in descending order of emission reductions, with the greatest emission reductions on top and the lowest emission reductions on the bottom. 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 1 for an example.

Emission Reduction Score = number from above evaluation

b) Cost-effectiveness and match score

For each proposed equipment project option in a source category, ARB staff shall review the local agency's estimate of the total pollutant-weighted emission reductions (as determined above and converted from tons to pounds), divided by the total State funding proposed for the project, based on the Project Benefits Calculator for that source category. Total State funding includes requested Program funds (project and administration funds), plus any other State dollars – see discussion under Chapter II.D.5, Match Funding, on treatment of the $2 vehicle registration fee surcharge under AB 923 as State dollars.

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

If the proposal includes multiple equipment project options, ARB staff shall confirm that the calculation repeats this process for each option, and adds the costs together and the benefits together to determine the average cost-effectiveness and match number for the source category.

ARB staff shall list projects in descending order of emission reductions per State dollar, with the highest number on top and the lowest number on the bottom. 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 1 for an example.

Cost-Effectiveness and Match 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 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 emission reductions, the Program recognizes the benefits of non-State match funds and offers a competitive advantage to projects with greater match.

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

Note: projects to repower or replace switcher locomotives shall be considered a higher priority than other types of locomotive equipment project options, consistent with the statutory direction to give funding priority to switchers.

Figure 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		Cost-Effectiveness and Match Score	
A-7,570 tons	Score: 3	B-0.5 lbs/$	Score: 3
B-6,056 tons	Score: 2	C-0.4 lbs/$	Score: 2
C-5,299 tons	Score: 1	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

7. Public workshops on eligible local agency projects

ARB staff shall hold no less than three public workshops statewide to discuss the competitively ranked list of eligible local agency projects and any preliminary staff recommendations for funding local agency projects. At least one workshop each will be held in northern California, the Central Valley, and southern California. At staff's discretion, these workshops may be conducted between release of the competitive ranking and development of funding recommendations or after development of staff's funding recommendations. For FY2007-08 funds, these workshops are not required by statute. H&S §39626(c)(2).

8. Recommendations for funding local 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 corridor and funding category. This approach shall consider the availability of Program funds, the corridor and source category funding targets, and priorities established by the Board for each funding cycle.

ARB staff shall make these funding recommendations for local agency projects available to the public via ARB's Program website (http://www.arb.ca.gov/gmbond) prior to the public hearing conducted by the Board.

Within each corridor and funding category, ARB staff shall follow this process:

a) Consideration of available funds and funding priorities

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

b) Funding level for local agency project proposals

ARB staff shall recommend whether the most competitive local agency project in each 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.

Board priorities may result in preferential funding for one of the equipment project options proposed in the local agency application for a source category (i.e., if the Board makes funding for PM filter retrofits a priority for FY2007-08 funds, ARB could provide more funding for that equipment project option relative to the other options within the source category). If Board priorities do not favor a specific equipment project option within a source category, ARB will assume that any pro-rated funding will be applied proportionally to all of the equipment project options the local agency proposes to implement.

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. Staff shall continue until the appropriate level of funding for that 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.

9. Public hearing and Board action

The Board will hold a noticed public hearing to consider public testimony, written comments, and staff recommendations for funding local agency projects with the available Program monies. At that hearing, the Board may adopt a resolution approving a final list of primary local agency projects and corresponding funding amounts for each project. This Board resolution provides ARB staff with the authority to enter into local agency project grant agreements with the selected local agencies. H&S §39626(c)(3). The ARB Executive Officer may delegate in writing the ability to sign these local agency project grant 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 agency projects or increases in funding levels for the approved projects). These backup proposals may be awarded funding if local agency project grant agreements cannot be executed for one or more of the primary projects within the timeframe specified by the Board in the resolution.

10. Local agency project grant agreement

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

ARB staff shall prepare and submit for review and signature two signed copies of the local agency grant agreement to each local agency approved for bond funding. After an authorized representative from the local agency signs both copies of the grant agreement, the local agency shall retain one fully executed copy for its files, and return one fully executed copy to ARB.

Each local agency project grant agreement 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
- 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

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 the Program Guidelines
- Reporting requirements—local agency is responsible for submitting to ARB quarterly data updates, semi-annual reports, and local agency project completion reports
- Ongoing evaluations and audits—local agency agrees to allow ongoing evaluations and audits by ARB, other State agencies, or their designated representative(s)
- Records access requirements—local agency agrees to allow ARB or its designated representative(s) access to evaluate or audit Program records
- Recordkeeping requirements—local agency agrees to retain Program records, i.e. invoices, contracts, and correspondence, for at least two years after the project ends or three years after final payment, whichever is later
- Enforcement—provisions authorizing ARB or its designee to inspect equipment projects
- Non-performance includes, but is not limited to:
  - Failure to comply with the Program Guidelines or statutes
  - Failure to obligate or expend Program funds within established timelines
  - Insufficient performance or widespread deficiencies with program oversight, enforcement, record keeping, contracting provisions, inspections, audit procedures or any other Program element as determined by ARB
  - Misuse of Program funds
  - Funding of ineligible equipment projects or other items
  - Exceeding administrative 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 an audit conducted by ARB, DOF or other designee
- Remedies for non-performance include:
    - Probation
    - Recovery of funds
    - Constraints on opportunity to compete for future Program funds
- Direct payments to vendor—allowance for local agency payments directly to vehicle or equipment dealers or manufacturers if requested by equipment owner
- 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 the Program Guidelines.

c) Source category-specific elements

- Local agency project description (including each equipment project option within the source category).
- Estimated total cost for project and subtotals for each equipment project option.
- Project cost breakdown (including technology/equipment purchase, labor for retrofit/installation, etc.) and subtotals for each equipment project option.
- Eligible costs—costs directly tied to the purchase and installation of upgraded equipment or other expenses as defined in the equipment project specifications.
- Funding caps for each equipment project.
- Ineligible costs.
- Total grant amount and subtotals for each equipment project option.
- 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 prior to execution of an equipment project contract and post-inspections prior to reimbursement, except in the case of direct payment to vendor.
- Equipment project contracts—local agency agrees to include all equipment project requirements and conditions (i.e., 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.
- Small businesses—outreach to small businesses for infrastructure construction.

11. $25 million in early grants for FY2007-08 funds

SB 88, as set forth in H&S §39626.5(c), makes available up to $25 million in FY2007-08 funds for the purpose of executing grant agreements directly with ports, railroads, or local air districts for eligible projects to achieve the earliest possible heath risk reduction. SB 88 requires 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. Appendix H outlines the process and applicable requirements of the Guidelines for the early grants.

The public review process started with release of the Staff Report on January 3, 2008. This Report lists the $177 million in early grant proposals from air districts and staff's recommendations for funding early grant projects totaling $25 million. Staff is soliciting public input on these recommendations via workshops, meetings, written comments, and testimony at the Board hearing.

E. 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 statute (SB 88 and AB 201) and these Guidelines.

Through the budget bills for upcoming FY2008-09 (SB 1067 and AB 1770), the Administration proposes a technical modification to align the standard timeframes for ARB to obligate and liquidate Program funds with the extended timeframes provided for local agencies under SB 88. Under the current requirements applicable to ARB and other State agencies, ARB must liquidate funds (i.e., make final payment to local agencies) up to four years before those local agencies would be required to liquidate the funds for completed projects. The budget bill will align the timelines so that the State retains control of Program funds until they are necessary to complete an equipment project, consistent with sound fiscal and accountability practices. These Guidelines are structured to rely on the alignment, but also include references to the existing law to allow Board adoption of the Guidelines and execution of local agency project grant agreements prior to passage of the FY2008-09 State budget.

1. ARB obligations to local agencies

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

2. ARB expenditures

ARB shall liquidate Program funds for each fiscal year's appropriation according to the liquidation deadlines set forth in State law.

- Once Program funds are obligated, with the exception of earned interest, any funds returned or unspent by a local agency 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, 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 agency representative acting under a fully executed Local Agency Project Grant Agreement.

a) Administration funds

Administration funds expended by ARB for this Program may be used by a local agency for the administration of any local agency project covered by a fully executed local agency grant agreement. If a local agency has more than one fully executed local agency grant agreement with ARB, administration funds identified under one grant agreement may be used to assist in the implementation of another grant agreement. 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 grant awarded to that agency).

(1) Initial expenditure

Of the maximum grant award allowed for administration funds, ARB may initially expend up to 50 percent of a local agency's administration funds for all source categories except shore power.

For the shore power source category, ARB may initially expend up to 25 percent of the local agency's administration funds.

(2) Additional expenditures

For truck and commercial harbor craft source categories, ARB shall expend the remaining Program funds for administration only after 50 percent of the Program funds for equipment projects are expended by the local agency or ARB comes within six months of a liquidation deadline, whichever is sooner. ARB staff shall verify the local agency's documentation that 50 percent of the equipment project funds were expended prior to the additional expenditure.

For the remaining source categories (locomotives, shore power, truck stop/distribution center electrification, and cargo handling equipment), ARB shall expend the remaining Program funds for administration only after 100 percent of the Program funds for equipment projects are liquidated by the local agency or ARB comes within six months of ARB's liquidation deadline, whichever is sooner. ARB staff shall verify the local agency's documentation that the equipment project funds were liquidated prior to expenditure.

b) Equipment project costs

(1) Initial expenditure

ARB may initially expend Program funds for equipment projects according to the provisions for each source category listed in Table 2.1 below.

Table 2.1 Initial Expenditures for Equipment Project Funding

Source Category	% of Funds	Requirements
Trucks serving ports and intermodal rail yards	up to 100%	Initial expenditure may be requested once the competitively ranked equipment project list is posted on the local agency website as a demonstration of the local agency's readiness to execute equipment project contracts; or within six months of ARB's liquidation deadline as specified in State law, whichever comes first.
Other heavy duty diesel trucks	up to 100%	
Cargo handling equipment	up to 100%	
Shore power	up to 10%	
Locomotive	up to 10%	
Harbor craft	up to 10%	
Truck stop/distribution center electrification	up to 10%	

(2) Additional expenditures

ARB may expend the remaining Program funds for equipment projects according to the provisions for each source category listed Table 2.2 below.

Table 2.2 Additional Expenditures for Equipment Project Funding

Source Category	% of Funds	Requirements
Trucks serving ports and intermodal rail yards	remaining	Additional expenditures may be requested at any time after the initial expenditure from ARB, but shall be requested no later than six months before ARB's liquidation deadline under State law.
Other heavy duty diesel trucks	remaining	
Cargo handling equipment	remaining	
Shore power	remaining	Additional expenditures may be requested no sooner than six months prior to the anticipated post-inspection date, but shall be requested no later than six months before ARB's liquidation deadline under State law.
Locomotives	remaining	
Harbor craft	remaining	
Truck stop/distribution center electrification projects	remaining	Additional expenditures may be requested no sooner than six months ***after*** the post-inspection date, but shall be requested no later than six months before ARB's liquidation deadline under State law.

3. Earned interest

ARB shall receive local agency reports on the interest earned and expended from Program funds held in local agency accounts. Earned interest provisions for local agencies are detailed in Chapter III.E.3.

If a local agency is unable to expend earned interest according to the provisions of these Guidelines, ARB shall reallocate the interest payments collected from these local agencies in the manner specified in these Guidelines.

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 SB 88 and the Executive Order S-02-07. Any Program funds expended on equipment projects that ARB finds are not eligible for funding shall be documented as an adverse finding in the local agency's audit. The ARB Executive Officer 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 Program Guidelines and emission reduction goals.

Evaluations may occur as ARB Program staff deems necessary and feasible with available resources.

Local agencies shall permit the ARB, the Department of Finance, the Bureau of State Audits, or any authorized designee, access, during normal business hours, to conduct Program and fiscal audits.

b) Ongoing evaluations of equipment projects

Ongoing evaluation of equipment projects includes reviewing equipment project records to ensure consistency with Program 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 Program staff deems necessary and feasible with available resources.

Equipment owners shall permit the local agency, ARB, the 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.

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 (CA 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, 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 shall determine if the equipment received bond funding via an equipment database 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 is considering the widespread use of electronic monitoring devices on bond-funded equipment for the primary purpose of tracking equipment operational requirements (100 percent California operation) and equipment activity within the four trade corridors. In a subset of equipment projects, ARB is considering more sophisticated devices to collect additional activity or engine operational data for ARB inventory needs.

Staff recognizes the privacy concerns that equipment owners may have about any type of electronic monitoring device. Staff intends to develop a proposal for public review and seek comment prior to including requirements for specific electronic monitoring devices and data reporting protocols in future updates to these Guidelines.

In developing the electronic tracking component of this Program, ARB staff recognizes the detailed reporting and database requirements associated with other ARB truck programs as well as the recently adopted truck replacement plans at the Ports of Los Angeles and Long Beach. ARB staff is working to coordinate the Program requirements and specifications with these other efforts, where possible.

Examples of electronic monitoring devices include, but are not limited to, the following:

- Passive GPS (Global Positioning System) tracking devices
  - Passive GPS systems are less expensive (potentially lower than $300/unit) than real-time GPS systems, and do not have associated subscription costs. The trade-off, however, is that each unit would require local agency or ARB inspectors to physically download data from each unit.
- Real-time GPS tracking devices
  - Real-time GPS systems are more expensive (upward of $5,000/unit for the equipment and 5 years of monitoring), but have the capability of capturing real-time location information and remotely downloadable data.
- RFID (Radio-Frequency Identification)
  - RFID systems are best used in a controlled gate environment to identify equipment entering or exiting a facility (like a port or rail yard). These systems may be used to track the number of visits to a port, but cannot be used to verify 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. Further, notwithstanding the nature of data collected, each equipment project contract shall expressly specify that no data collected from these monitoring devices shall be construed in any way as constituting non-disclosable personal or locational identifiers.

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 this Guideline. 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. Auditing

Audits are 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 audit a sufficient number of local agency projects and equipment projects each year to ensure effective Program implementation and accountability, subject to available resources.

a) ARB audits of local agency projects

Pursuant to H&S §39625.02(e)(1), ARB staff or its designees shall conduct program and fiscal audits of the local agencies.

To ensure objectivity and the efficient use of resources, ARB shall use a risk-based approach to select specific local agency projects for audit during a given year. Consistent with this approach, local agencies demonstrating good performance when audited will likely be audited less frequently in the future than similarly-funded local agencies with poorer audit results.

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 audit. The ARB Executive Officer 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 an audit include, but are not limited to, the following:

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

The responsibilities of a local agency during an audit shall include, but are not limited to, the following:

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

To assist ARB with the audit process, local agencies shall provide to ARB staff, 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 accounting designated liaisons.
  - Copies of grant agreements (with amendments) between ARB and the local agency, and contracts between the local agency and the equipment owner.
  - 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 during the audit period.
  - Copies of audit reports covering financial statements, operations, and internal controls during the 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 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.

Local agency shall retain all records subject to the recordkeeping requirements for local agency projects. 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, and other relevant information.

Local agencies shall provide access to all required records and personnel with knowledge of such records to the ARB, the Department of Finance, the Bureau of State Audits, or any authorized designee during normal business hours, to conduct Program and fiscal audits.

In conjunction with local agency audits, ARB staff or an authorized designee, shall also use a risk-based approach to select specific equipment projects. If ARB staff discover non-performance issues with specific equipment projects, the local agency shall be notified to take appropriate action. If ARB staff discover that the equipment project is not in compliance with ARB regulations, the ARB Enforcement Division shall be notified to take appropriate enforcement action.

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: http://www.arb.ca.gov/gmbond. At a minimum, ARB shall post:

- Local agency semiannual reports.
- Local agency project completion reports.
- ARB annual reports.

ARB shall also develop and maintain an on-line database showing information and progress on local agency projects, as well as individual equipment projects. This searchable data will allow the public to find out about projects funded in a specific area and the implementation status of each project. ARB staff will develop the local agency project tracking element first. The equipment project element will follow. Once this element is operational, local agencies shall be required to update the equipment project information quarterly.

b) Annual community meetings

In each trade corridor, ARB staff shall co-host along with the local agencies administering local agency projects in that corridor, at least one annual community meeting to provide an update on and opportunity to discuss implementation of the Program.

c) Updates to Department of Finance

ARB shall forward semi-annual and project completion reports submitted by local agencies along to the Department of Finance. H&S §39625.02(f)(1)-(2).

d) ARB annual report

ARB staff shall prepare an annual report on progress implementing the Goods Movement Emission Reduction Program once the Board has adopted the Program Guidelines and local agency projects have been selected for funding. Pursuant to H&S §39627.5, this report shall be submitted to the Legislature with the Governor's proposed State budget for the ensuing fiscal year, by January 10, 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.
- Total funds allocated, obligated, and expended under the Program to date by trade corridor and funding category.
- Actions undertaken to ensure local agency funded projects are being implemented in a timely fashion and within the budget for Program funds.
- Accomplishments and challenges in implementing the Program.

7. Local agency non-performance

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

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 the Program 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, audit procedures or any other Program element as determined by ARB.

- Exceeding administrative 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 an audit conducted by ARB, DOF or other designated agency or contractor.

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.

If the disagreement over the validity of the non-performance finding cannot be resolved at the management level, local agency management may appeal to the ARB Executive Officer or his designated representative, whose decision shall be final and binding.

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 working 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 one 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 earned interest, 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 local agency 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 earned interest, 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 the 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 two years of executing a local agency project grant agreement with ARB, or expend funds within four 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 revert once the local agency withdraws from the Program or its grant agreement is terminated, 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, equipment project option(s), 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 audits of the local agency.

III. Local Agency Project

A. Local Public Entity Registration

Interested local public entities shall submit registration information as required by the Notice of Funding Availability (NOFA) sufficient for ARB to assess the entity's qualification as a local public entity, by the deadline identified in the NOFA. Registration information shall include, at minimum, the following:

- Type of agency (air district, seaport, transportation agency, etc.).
- Jurisdiction, including geographic boundary and trade corridor.
- Mission statement or purpose.
- General information on the entity (total budget, overall work plan or program, etc.).
- Certification 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.
- Local public entity contact information.

To facilitate ARB review of a local public entity's qualification as an applicant according to the requirements of the statute and the Guidelines, the entity shall submit concurrently with the registration:

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

Local public entities shall successfully register with ARB staff prior to submittal of a project application packet.

B. Local Agency Project Application Packet

Local public entities that have registered shall submit **one completed local agency project application packet for each source category**. Application packets shall be submitted to ARB by the NOFA deadline. The completed application packet 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.B.4).

On-line local agency project applications are scheduled to be available in time for the FY2007-08 funding cycle. If available, local agencies shall utilize the on-line application to submit local agency project application packets.

Local agency project applications are also subject to the statutory legal restrictions described below.

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 agency's authority as a market participant or municipal proprietor or the 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. Sub-section (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 California Environmental Quality Act (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 emissions 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).

The Staff Report discusses two Memoranda of Understanding (MOU) that ARB has signed with the Class I railroads – Union Pacific and Burlington Northern-Santa Fe – 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 provided 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, title 13, division 3, chapter 1 §1956.8).
- Heavy-duty truck idling – *Requirements to Reduce Idling Emissions From New and In-Use Trucks* (Code of Regulations, title 13, division 3, §1956.8, §2404, §2424, §2425, §2485).
- Cargo handling equipment – *Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards* (Code of Regulations, title 13, division 3, chapter 1 §2479).
- Ships at berth (shore power) – *Operational Hour Limits and Other Requirements for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port. (*Code of Regulations, title 13, division 3, chapter 5.1, §2299.3).
- Commercial harbor craft engines – *Emission Limits and Requirements for Diesel Engines on Commercial Harbor Craft Operated Within California Waters and 24 Nautical Miles of the California Baseline. (*Code of Regulations, title 13, division 3, chapter 1, article 4.5 §2299.5).
- Trucks serving ports and intermodal rail yards – *Regulation to Control Emissions from In-Use On-Road Diesel-Fueled Heavy-Duty Drayage Trucks. (*Code of Regulations, title 13, division 3, chapter 1, article 3 §2027).

- Truck smoke and emission control inspections – *Heavy-Duty Diesel Smoke Emission Testing, and Heavy-Duty Vehicle Emission Control System Inspections*. (Code of Regulations, title 13, division 3, chapter 3.5, §2180-2194).

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 (OAL): 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., three 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. For example, port truck replacements with model year 2007 or newer trucks must be completed three years prior to the regulatory requirement for this replacement.

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.

Local agencies are encouraged to pay specific attention to the ongoing development of the *Proposed Regulation to Reduce Emissions of Diesel Particulate Matter, and Other Pollutants From In-Use Heavy Duty Diesel-Fueled Vehicles*, which may impact a significant number of Program-eligible truck projects.

2. Project alternatives for local agencies

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

This section lists the alternatives that a local agency may and may not propose to make to the specifications for each equipment project option described in these Guidelines. If a local agency wants to implement one or more acceptable alternatives, the local agency shall clearly describe the alternative(s) for each equipment project option in the local agency application, along with the basis for the alternative(s) proposed.

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.

a) Technology alternatives

The local agency may propose to customize its source-category specific proposal by incorporating any of the following alternatives:

- Within a source category, a local agency may propose to implement one or more of the equipment project options defined in these Guidelines. The local agency shall identify each desired equipment project option on the local agency project application. If the local agency is requesting funding for multiple equipment project options within a source category, the local agency shall describe each option and itemize the associated emissions, reductions, costs, Program funding requested, and cost-effectiveness for each option within the application. If that local agency project is funded, ARB will expect the local agency to solicit applications for the proposed equipment project options, and then evaluate and competitively rank all of the applications within the source category against each other. Because of the need for competition across equipment project options, the final mix of equipment projects funded by the local agency may differ from the local agency project application.

- Within an equipment project option, 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. 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 equipment project option).

  For example, a local agency may propose a truck retrofit program that does not require but offers additional funds for both diesel PM and NOx controls; with the Program paying $5,000 per truck towards the PM control element and the local agency providing supplemental funding from another, non-State source for the additional NOx control. Following ARB approval of the local agency project, the local agency shall solicit equipment applications for both the lower emission PM/NOx retrofit approach as well as the truck retrofit approach listed in the program Guidelines.

Similarly, 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 $50,000 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 program Guidelines.

- Within an equipment project option, a local agency may propose to offer non-Program funding for equipment monitoring or tracking devices (like global positioning systems or radio-frequency identification 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 for access to the data collected on individual vehicles, vessels or equipment and periodic data reports.

- Within an equipment project option, a local agency may propose to offer non-Program funding for efficiency upgrades, like aerodynamic devices on trucks.

b) Project implementation approaches and 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, an air district 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 source-category specific proposal by incorporating any of the following alternatives:

- Within a source category or an equipment project option, 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 also 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 the Guidelines for local agency administration funds.

  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 source 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 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. These contractors can each market their project implementation approach and solicit applications for eligible truck projects, consistent with the Guidelines and local agency project grant agreement. The port 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.

c) Procedure/process alternatives

The local agency may propose to customize its source-category specific proposal by incorporating any of the following alternatives:

- Within an equipment project option, a local agency can shorten the time allowed from execution of the equipment project contract to project completion. Staff recommends that local agencies carefully consider the potential of this alternative to increase fund reversion due to non-performance. 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 specifications.

- Within a source category or equipment project option, a local agency can expand the list of information required on an equipment project application or the reporting requirements for equipment owners.

- Within a source category or equipment project option, a local agency can expand the equipment inspection or scrappage requirements.

d) 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 source-category specific proposal by incorporating 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 provided 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 serving ports. A local agency that applies for funds to administer a retrofit, repower, or replacement program for port trucks may propose to restrict eligibility to trucks serving one or more major seaports in the trade corridor where the local agency has jurisdiction. The local agency shall specify which seaport(s) the proposed project would cover and the estimated number of eligible trucks serving that seaport. The local agency shall recruit all eligible trucks serving the specified seaport(s), regardless of where in California the trucks are based. The local agency shall similarly fund eligible trucks serving the specified seaport(s), subject to review of equipment project applications and the competitive ranking process.

- Trucks serving intermodal rail yards. A local agency that applies for funds to retrofit, repower, or replace trucks serving intermodal rail yards must recruit all eligible trucks serving intermodal rail yards that are located in the trade corridor where the local agency has jurisdiction and covered by ARB's December 2007 rule. The local agency shall similarly fund all eligible trucks serving intermodal rail yards in the corridor, subject to review of equipment project applications and the competitive ranking process.

- Other trucks. A local agency that applies for funds to retrofit, repower, or replace other trucks, or to implement a three-way transaction shall recruit eligible trucks that travel 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% 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 both the old and new trucks travel at least 50% of their annual miles within the four trade corridors, and that the new trucks travel 100% of their miles in California.

- Switcher locomotives. A local agency that applies for funds to repower or replace switcher locomotives 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.

- Line-haul locomotives. A local agency applies for funds to repower or replace line-haul locomotives may require that both the old and new line-haul locomotive operate at least 10% 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 locomotives operating in the trade corridor, regardless of where in California the locomotives are based. The local agency shall similarly fund all eligible line-haul locomotives serving that trade corridor and others, subject review of equipment project applications and the competitive ranking process.

- Harbor craft. A local agency that applies for funds to administer a harbor craft repower or replacement program may propose to restrict eligibility to vessels that are

home-ported in the trade corridor where the local agency has jurisdiction. The local agency shall specify which seaport(s) the proposed project would cover and the estimated number of eligible harbor craft serving that seaport, including the number of craft that are subject to ARB's November 2007 commercial harbor craft regulation.

- Shore power. A local agency that applies for funds to administer a shore power program may restrict eligibility to one or more seaports within the trade corridor where the local agency has jurisdiction. The local agency shall specify which seaport(s) the proposed project would cover and the estimated number of berths at each seaport that are subject to ARB's December 2007 regulation for ocean-going vessels at dock.

- Cargo handling equipment. A local agency that applies for funds to administer a cargo handling equipment program to install energy storage systems on rubber-tired gantry cranes may restrict eligibility to equipment operating at one or more seaports, or all intermodal rail yards, within the trade corridor where the local agency has jurisdiction.

- Truck stop or distribution center electrification. A local agency that applies for funds to administer a program for 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 may restrict eligibility to facilities within the trade corridor where the local agency has jurisdiction. The local agency shall recruit all eligible truck stops and distribution centers operating in the trade corridor and shall similarly fund all eligible projects within that trade corridor, subject to review of equipment project applications and the competitive ranking process.

e) Ineligible project alternatives

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

- A local agency shall not restrict funding eligibility to a preferred individual, company, business entity, or other defined group of equipment owners. Other than the exceptions specifically described above, a local agency shall not restrict funding eligibility to equipment that operates solely or primarily within its jurisdictional boundaries. 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 restrict equipment projects to replacement or retrofit equipment manufactured or sold by a single company. 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 impose travel restrictions on Program-funded equipment beyond the operating limitations defined in these Guidelines and any approved alternatives described in the preceding section. 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.

- The local agency shall not fund equipment projects failing to meet the minimum equipment project requirements listed in Appendices A-G of these Guidelines. 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.

3. Completed application

Local agencies shall complete a local agency project application, and submit it with an original signature by an authorized local agency representative.

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.

a) General local agency information

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

- A general description of the local agency, its geographic boundaries, regional demographics and statistics, agency roles and functions, and its relationship to goods movement and air quality.
- 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 source category that is being applied for 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.
  - 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.
- Other general information as requested on the online application.

b) Local agency project proposal

The local agency shall include information about the local agency's proposed local agency project. The local agency shall, at a minimum:

- Identify the trade corridor(s) targeted.
- Describe the air quality problems and key contributing pollutants in the trade corridor.
- Identify the source category.
- Identify the specific equipment project options targeted, along with all equipment project assumptions necessary to calculate project benefits as described below.
- Identify any proposed local agency project implementation approaches.
- Identify and detail any proposals to allow lease-to-own programs.
- Identify any proposed project alternatives consistent with Chapter III.B.2.
- Describe how the local agency 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*. 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.

c) Air quality benefits

The local agency shall use the Project Benefits Calculator provided by ARB to quantify the emission reductions and cost-effectiveness of a proposed local agency project (see the Program website at: http://www.arb.ca.gov/gmbond). If a local agency identifies an eligible local agency project that cannot be quantified with the Project Benefits Calculator for that source category, the local agency should contact ARB staff for guidance.

If the proposal includes multiple equipment project options, the local agency shall quantify and report the emission reductions, costs, and reductions per State dollar separately for each, as well as the total for the source category.

If a local agency is seeking funding for implementation approaches for a single equipment project option (for example, three distinct truck replacement programs run by different contractors with different levels of State funding and/or different emission

performance levels), the local agency shall quantify and report the emission reductions, costs, and reductions per State dollar separately for each approach, as well as the total for the equipment project option.

d) Project schedule

The local agency shall include a detailed local agency project schedule. At minimum, the local agency project schedule shall provide either the anticipated date or the approximate number of weeks necessary to accomplish each of the milestones identified below.

The local agency project schedule shall incorporate local agency obligation and liquidation deadlines identified in Chapter III.E.1 & 2.

The local agency project schedule shall include, but is not limited to:

- Date of community participation event (see Chapter III.D.1).
- Anticipated (ARB) Board approval of local agency projects (see NOFA, when published).
- Anticipated execution date of local agency project grant agreement.
- Anticipated date of initial grant expenditure request to ARB and amount.
- Equipment project solicitation period, including marketing/outreach.
- Equipment project application review period.
- Competitive ranking of equipment projects and webposting.
- Selection of equipment projects from the competitively ranked list.
- Anticipated date of next grant expenditure request to ARB and amount.
- Equipment owner notification period.
- Equipment pre-inspection period (as applicable).
- Local agency obligation deadline (all contracts must be signed).
- Equipment post-inspection period.
- Local agency liquidation deadline (all equipment funds must be liquidated).
- Anticipated submittal of local agency project completion report.

e) Funding demonstration

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

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

- The total cost of the local agency project. 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.

- The specific sources of the matching funds (private, local, other State, federal). If a local air district proposes to co-fund truck 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 other State funds in this demonstration.
- For each source of match funding, the amount, any conditions or restrictions associated with its use, as well as any timeframe requirements associated with its expenditure.
- A demonstration that all non-Program match funds are reasonably available within the timeframes of the local agency project schedule.
- Documentation of the local agency's fiscal ability to implement the proposed local agency project.
- A copy of the local agency's most recent final fiscal audit.

Administration funds. 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 administrative Program funds.

In all other cases, requests for administration funds are capped as follows:

- 2% of the grant amount for grid-based shore power.
- 3% of the grant amount for locomotives, cargo cranes, truck stop/distribution center electrification, and non-grid shore power.
- 4% of the grant amount for harbor craft.
- 5% of the grant amount for trucks.

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

f) Staff resources

The local agency 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 type and scope. Agencies with prior experience implementing diesel engine or other incentive programs should provide documentation on their own statistics regarding the relationship between the number of pieces of equipment that can upgraded in a given timeframe and the number of program staff needed to accomplish those upgrade projects. Agencies without prior experience should contact the local air district in the region to obtain relevant statistics.

The staff resources demonstration shall include the following minimum documentation:

- Description of the local agency's staffing levels and experience in administering other incentive program funds (if applicable).
- Description of the basis for the proposed staffing levels if the local agency does not have prior incentive program experience.
- Description/list of the staff classifications that are available or will be available to implement the project, including:
  - At least one supervisor/manager to oversee the local agency project.
  - Program staff to solicit, evaluate, competitively rank, inspect, fund, and audit equipment projects; as well as prepare database updates and reports.
  - Other staff in the following categories:
    - Field inspectors for equipment inspections.
    - Fiscal/accounting staff.
    - Computer assistance/database management staff.
    - Legal staff.
    - Clerical support staff.
    - Temporary staff (students, limited term, etc.).

g) Local agency project implementation demonstration

The local agency shall describe in detail how it will implement the local agency project to demonstrate its ability to fully and effectively satisfy each of the proposed local agency project implementation requirements detailed in Chapter III of these Guidelines.

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.

This demonstration shall include a description of how the local agency will structure its program to meet each requirement summarized below; including substantive detail (wherever possible) regarding the procedures the agency will use to implement each provision.

- 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 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 and fiscal audits.

This demonstration shall also be evidence of the local agency's ability to deliver the proposed project scope (see Chapter II.D.4) and its readiness to quickly begin implementation and deliver air quality results (see Chapter II.B.3).

4. Local agency board/commission resolutions

The local agency shall include a resolution of the local agency governing board or commission that authorizes the local agency to enter into a local agency 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 local agency project grant agreement between ARB and the local agency.
- The approval of a competitively ranked equipment project list indicated 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.

C. Local Agency Project Grant Agreement

Local agency project grant agreements and requirements are described in Chapter II.D.10 above.

D. Local Agency Project Implementation Requirements

1. Community and public participation

a) Community meetings

For FY2007-08 funds, 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 source categories and equipment project options to be addressed in the local agency project proposal. The local agency shall consider public input as it develops the local agency project application. In subsequent funding cycles, the local agency shall expand the opportunities for community participation in the development of the application.

At minimum, the local agency project application shall identify when and where the community meeting(s) was held, and include documentation of the attendance and a brief summary of the comments received.

The local agency shall also commit to co-hosting with ARB staff at least one community meeting in the trade corridor each year to provide updates on the implementation of the local agency project.

b) Public and interested stakeholder participation

The local agency application shall include a description of the local agency's strategy for involving the public and interested stakeholders during the implementation of the proposed local agency project.

The local agency shall identify 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).

c) Public website

The local agency shall maintain a public website containing, at minimum, the following 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 Goods Movement Emission Reduction 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 identify and use at least three marketing tools (more are encouraged, but not required). Examples include:

- Develop and maintain list of interested parties.
- Use web-based marketing.
- Advertise and post announcements in local newspaper(s), including non-English publications.
- Use radio advertisements.
- Issue public notices.
- Distribute brochures/fact sheets/community newsletters.

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. This 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.
- Outreach during typical off-times for truck drivers.
- A toll free number for equipment project applicants to check the status of applications or get phone assistance in completing an application.
- 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 two to three year payback period through lower fuel costs. The benefits are variable based on the type of truck operations.

Truck owners may be interested in including efficiency upgrades that fit their operating profile when purchasing a new truck or retrofitting a PM filter with bond funding under this Program. 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. For example, U.S. EPA in collaboration with the freight industry has developed the SmartWay Transport Partnership to increase energy efficiency while significantly reducing greenhouse gases and criteria pollutants. This program also designates technology packages as SmartWay Upgrade Kits, which can be purchased at various SmartWay partner centers, dealerships, and service centers. (http://www.epa.gov/otaq/smartway/documents/420f07027.htm) Some California air districts are working to expand this program in California.

ARB is developing a regulation for truck efficiency upgrades to cut greenhouse gases, for consideration by the Board in 2008.

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 Goods Movement Emission Reduction 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 stop/distribution center electrification 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.

3. Local agency solicitation of equipment projects

A local agency may include provisions for more than one solicitation for each Program grant. If multiple solicitations are conducted, they shall not occur until equipment project applicants in the prior solicitation are notified of the results of their applications.

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.

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, 100% California operation, scrap old equipment, legally binding contract and contract terms, etc.).
- Limits on available funding per piece of equipment.
- Equipment application disclosure language, and clear statement that new equipment funded by this program can only be purchased or ordered once the contract is signed between the equipment owner and local agency.
- The equipment project review and competitive ranking process for equipment projects.
- The payment process, including invoice payments and direct payments to vendors (as applicable).
- Remedies for contract non-performance.
- The reporting requirements.
- The ongoing equipment evaluation and auditing process.

4. Review 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, or in compliance with the Program Guidelines.

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

- Assignment of a unique equipment project number for tracking purposes as specified by ARB staff.

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

5. Match funding for equipment projects

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 involving the accelerated retirement, repowering, or retrofitting of trucks. Conversely, the $2 surcharge cannot be used under this Program for match funding on non-motor vehicle sources, such as locomotives, harbor craft, cargo ships, and off-road cargo equipment.

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 option(s) to be funded includes only trucks, (b) the equipment project meets both bond Program eligibility requirements and Carl Moyer funding criteria, (c) the equipment project does not exceed the Carl Moyer Program cost-effectiveness limit, with the project cost including both Program and AB923 funds, and (d) the $2 surcharge funds are not counted as part of an air district's Carl Moyer 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 State funds since the surcharge monies would otherwise be used in the Moyer Program.

6. Competitive ranking and selection of equipment projects

Local agencies shall use a quantitative approach to develop a competitively ranked list of eligible equipment projects. This process will be applied to competing equipment projects within each trade corridor, source category, and funding category. 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.D.6 provides additional explanation of the elements of this process and Figure 1 in that section 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 list of competitively ranked projects on the agency website and provide a link to ARB's Program website.

a) Emission reduction score

For each equipment project within a source category, the local agency shall review the equipment owner's estimate of the total pollutant-weighted emission reductions in California, over the project life, based on the Project Benefits Calculator.

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 source 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 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 and match score

For each equipment project within a source category, the local agency staff shall review the equipment owner's estimate of the total pollutant-weighted emission reductions in pounds (as determined above), divided by the total State funding proposed for the project. Total State funding includes requested Program funds, plus any other State dollars – see discussion under Chapter II.D.5 Match Funding, on treatment of the $2 vehicle registration fee surcharge under AB 923 as State dollars.

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

The local agency shall list all equipment projects within the same source 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 and Match 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 source category covered by the grant agreement from highest points to lowest points to create the competitive ranking list.

Note: 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) Application of available funding

The local agency shall apply the available grant dollars (minus allowed administration funding) to the list of competitively ranked equipment projects within the source 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.

e) Equipment project backup list

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 doesn't 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 agency may proceed with the next equipment project on the backup list.

7. Compliance check

The local agency shall conduct a compliance check on the old vehicle for all truck replacement, repower or retrofit projects proposed for funding prior to executing an equipment project contract to ensure the equipment owner does not have any outstanding air pollution-related equipment violations. To complete the compliance check, the local agency shall email the following information for each truck to designated ARB Program staff:

- Name of registered owner of the equipment.
- Name of the equipment operator (if different).
- Vehicle identification number.
- Vehicle license plate number.
- California Highway Patrol number (CA Number).
- U.S. Department of Transportation number or Interstate Commerce Commission number.

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

ARB Program staff shall work with Enforcement Division staff to obtain the information and email the results of the compliance check to the local agency within ten working days.

If the compliance check indicates there is an outstanding violation, the equipment project application shall be disqualified. The local agency shall inform the engine 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.

8. 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-inspections shall occur prior to the execution of an equipment project contract and must be conducted by local agency equipment inspectors or their designated contractors.

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 the engine block with the Program equipment project number. 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.
- 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.

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 minimum, written notifications shall include the following:
- A clear statement whether or not the equipment project is eligible for Program funds.
- If 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 funded, 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.
  - 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 or the ability to participate for Program funding in future years.

10. Equipment project contracts

The local agency shall obligate funds for each equipment project as described in these Guidelines. These funding commitments shall become legally enforceable only through executed contracts between the local agency and equipment owner.

Equipment project contracts shall be executed within one year following execution of the local agency project grant agreement between ARB and the local agency. For FY2007-08, all equipment project contracts shall be executed within 18 months of the execution of the local agency project grant agreement.

Local agency staff shall prepare and submit for review and signature two signed copies of the contract for Program funding to be signed by the equipment owner. After an equipment owner signs 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.

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.
- 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.
- Ongoing evaluations and audits— equipment owner agrees to allow ongoing evaluations and audits of equipment and documentation by the local agency, ARB, or their designated representative(s).
- Records access requirements—equipment owner agrees to allow the local agency, ARB, or their designated representative(s) access to evaluate or audit Program records.
- Recordkeeping requirements—equipment owner agrees to retain all records pertaining to the Program, i.e. invoices, contracts, and correspondence for at least two years after equipment project ends or three 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 includes, but is not limited to:
    - Failure to meet the terms and conditions of an executed equipment project contract.
    - Equipment/engine is non-operational or malfunctioning.
    - 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 non-performance include, but are not limited to:
    - Recovery of 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 transfer provisions—provisions allowing for the transfer of the remaining contract terms to a new equipment owner.
- Direct payments to dealers or manufacturers—allowance for local agency payments to go directly to vehicle or equipment dealers or manufacturers in the case of approved direct payments to vendors.
- 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.
- 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.
- Project performance benchmarks—the expected activity and emission reductions from the new equipment.
- Project inspections—equipment owner agrees to pre-inspection by the local agency of old equipment prior to the execution of a contract and post-inspection of the new/upgraded equipment prior to final payment.
- 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 direct payments to vendors (if applicable).
- 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.

11. 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.

12. Provisions for lease-to-own programs

The local agency may propose to use lease-to-own program(s) as part of the truck replacement option for both truck source categories. A description of the lease-to-own program shall be included in the local agency project application. 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 new truck, and must include information on the truck to be replaced and the proposed lessee.

- Equipment project contracts shall hold both the equipment owner and lessee legally liable (i.e. jointly and severally) for complying with the contract and Program requirements.

- The equipment project contract may allow certain provisions to apply solely to the equipment owner (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, including the recovery of funds or repossession of the truck, if necessary.
- A local agency may also establish separate legally binding agreements with the equipment owner and the truck operator (lessee). In this case, both agreements must specify the ability of the local agency and equipment owner to enforce all remedies for any lessee's non-performance under an equipment project contract.

- 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 owner shall not impose a charge on the lessee for any portion of the Program funds as a component of the lease payments. The owner 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 truck owner, 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. If the funded local agency project includes multiple equipment project options, or multiple implementation approaches, a local agency shall not preferentially fund trucks in the lease-to-own program – they must compete against all other truck projects within that source category and trade corridor.

- Local agencies interested in proposing Program funding for lease-to-own programs shall contact ARB staff for a list of financial data that must be collected as part of the equipment project application.

13. 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, and
- Locomotive engine repowers and new 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 evaluations or 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 as documented in the equipment pre-inspection.
- The old equipment engine block (for repower projects) or vehicle/vessel/locomotive, including the frame and engine (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 and/or demolished to render the equipment useless to prevent repeated use.
- 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 Department of Motor Vehicles (DMV) (for auto-dismantlers), and have 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 inspector.
- The local agency or its designee must obtain digital documentation, see below, 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 pictures to be taken before the engine is destroyed as well as photos after the engine is destroyed.

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 following additional requirements for each piece of equipment is undertaken:

Table 3.1 Equipment Project Scrap Requirements

Source Category	Equipment Project Option	Additional Scrappage Requirements
Trucks Serving Ports and Intermodal Rail Yards **and** **Other Heavy Duty Diesel Trucks**	Option (1) Retrofit	Not applicable.
	Option (2) Repower	• The licensed dismantler must dismantle and destroy the old vehicle's engine and destroy within 60 days of receipt. The engine destruction must be done in accordance with program guidelines. • 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 business days of the engine being scrapped. • The following digital photos must be taken and labeled for the project file: 1. Front of vehicle with hood down. 2. Right side of vehicle with hood down. 3. Left side of vehicle with hood down. 4. Serial number that is printed either on the tag inside in the cab or on the frame rail. 5. Engine side view (within and outside of engine compartment). 6. Engine serial number either stamped on the block or on the tag. 7. Destroyed engine block either inside or outside truck body.
	Option (3) Replacement	In addition to the requirements listed above for engine repower projects, replacement projects must also: • Cut the old vehicle frame rails to ensure that the vehicle shall not be used again. • Have digital photo documentation to show the old vehicle was dismantled/ destroyed. • The equipment owner must file a VIN hold with DMV, and a "Non-Repairable Vehicle Certificate" with the DMV and submit a copy to the local agency at the time of the post-inspection.
Other Heavy Duty Diesel Trucks	Option (4) Three-way Truck Transactions	For this equipment project option, Truck B, which is a MY1990 or older heavy duty diesel truck, must: • Dismantle and destroy the vehicle's engine in accordance to the scrappage requirements list for this source category, equipment project option (2) repower; and • Follow the scrappage requirements listed above for this source category, equipment project option (3) replacement.

Table 3.1 Equipment Project Scrap Requirements (continued)

Source Category	Equipment Project Option	Additional Scrappage Requirements
Locomotives	Options (1) & (2) Locomotives	(for locomotive engine scrappage) The licensed dismantler must dismantle and destroy the old locomotive engine. • The local agency or its designee must provide digital photographs, described below, showing the destruction of the old locomotive engine. The local agency must receive these photos within 10 business days of the engine being scrapped. • The following digital picture views must be taken and stored appropriately for later identification in record files: 1. Locomotive DOT certification or equivalent tag(s). 2. Engine side view (within or outside of engine compartment). 3. Engine serial number either stamped on the block or on the tag. 4. Destroyed engine block. (For locomotive replacements subject to scrappage) • The licensed dismantler must dismantle and destroy the locomotive engine within 60 days of receipt of the old locomotive engine. • The local agency or its designee must provide digital photographs, described below, showing the destruction of the old locomotive engine. The local agency must receive these photos within 10 business days of the engine being scrapped. • The following digital picture views must be taken and labeled or catalogued appropriately for later identification in record files: 1. Locomotive DOT certification or equivalent tag(s). 2. Locomotive views (front, side, rear). 3. Serial number printed on the locomotive chassis. 4. Engine side view (within or outside of engine compartment). 5. Engine serial number either stamped on the block or on the tag. 6. Destroyed engine block either (installed or removed from engine housing area).

Table 3.1 Equipment Project Scrap Requirements (continued)

Source Category	Equipment Project Option	Additional Scrappage Requirements
Harbor Craft	Options (1) & (2) (specific to repower)	• The licensed dismantler must dismantle and destroy the old vessel engine within 60 days of receipt. The engine destruction must be done in accordance with program guidelines. • The local agency or its designee must provide digital photographs, described below, showing the destruction of the old vessel engine. The local agency must receive these photos within 10 business days of the engine being scrapped. • The following photos must be taken and labeled for the project file: 1. Serial number printed either on the tag inside the marine vessel showing the ID and US Coast Guard registration (if applicable). 2. Engine side view (within or outside of engine compartment). 3. Engine serial number either stamped on the block or on the tag. 4. Destroyed engine block either (installed or removed from engine housing area). 5. Marine vessel identification tags and photos taken of the hull and stern of the marine vessel.
	Options (1) & (2) (additional requirements for replacements)	• In addition to the requirements listed above for harbor craft engine repower projects, replacement vessel projects must also: • The licensed salvage yard 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 Program Guidelines. • Have photo documentation to show evidence of the old vessel being destroyed.

14. Equipment project post-inspections

The local agency shall conduct and document equipment project post-inspections on all Program-funded equipment projects.

The post-inspection shall occur before final grant funding payments are made by the local agency to the equipment owner, and after the local agency has a valid invoice from the equipment owner.

If the equipment project was approved for a direct payment to a vendor, the post-inspection shall occur within 30 days of the equipment owner receiving the fully operational equipment (unless otherwise stated in the specific post-inspection requirement table).

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 number 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 plates or other distinguishing identification that are visible on the equipment; and
    - A photograph of the 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 up and mobile equipment projects operating properly.
- Verification of the destruction of the old/replaced equipment (engine, vehicle, vessel, or locomotive), where applicable.

In addition to the general post-inspection requirements above, Table 3.2 provides additional post-inspection requirements for each source category and equipment project option.

Table 3.2 Post-Inspection Requirements

Source Category	Equipment Project Option	Additional Requirements
Trucks Serving Ports and Intermodal Rail Yards	Option (1) Retrofit	• Name of retrofit manufacturer. • Product serial number. • Month and year the device was manufactured (if not listed on retrofit label, information can be obtained from the retrofit manufacturer by reference to serial number). • DECS family name. • Engine family name and number. • Dates of when retrofit device was installed (start and end). • Name and address of company that installed the device.
	Option (2) Repower	• Month and year that the engine was manufactured. • Address and name of company that installed the repowered engine. • Start and end dates to install this repower project. • Copy of ARB Executive Order documenting that the new engine is certified to 2007 emission levels for this Program. • Engine family name and number. • Engine make, model, model year. • Engine serial number.
	Option (3) Replacement	• Vehicle type. • Vehicle identification number (VIN). • Vehicle make, model, model year. • Gross vehicle weight rating (GVWR). • Fuel type. • Vehicle license plate. • CA highway patrol number. • Engine family name and number. • Engine make, model year, engine year. • Copy of ARB Executive Order documenting that the new engine is certified to 2007 emission levels for this Program.
Other Heavy Duty Diesel Trucks	Option (1) Retrofit	• Name of retrofit manufacturer. • Product serial number. • Month and year the device was manufactured (if not listed on retrofit label, information may be obtained from the retrofit manufacturer by reference to serial number). • DECS family name. • Engine family name and number. • Date of when retrofit device was installed. • Name and address of company that installed the device.

Table 3.2 Post-Inspection Requirements (continued)

Source Category	Equipment Project Option	Additional Requirements
Other Heavy Duty Diesel Trucks (continued)	Option (2) Repower	• Month and year that the engine was manufactured. • Address and name of company that installed the repowered engine. • The start date and end date of the installation this repower project. • Copy of ARB Executive Order documenting that the new engine is certified to 2007 emission levels for this Program. • Engine family name and number. • Engine make, model, model year. • Engine serial number.
	Option (3) Replacement	• Vehicle type. • Vehicle identification number (VIN). • Vehicle make, model, model year. • Gross vehicle weight rating (GVWR). • Fuel type. • Vehicle license plate. • CA highway patrol number. • Engine family name and number. • Engine make, model year, engine year. • Copy of ARB Executive Order documenting that the new engine is certified to 2007 emission levels for this Program.
	Option (4) Three-way Truck Transaction	*See individual post inspection requirements for retrofit (applicable to the newer truck—truck A) and replacement (applicable to the new MY 2007 truck –truck C).
Truck stop/ distribution center	See Appendix G	See Appendix G.
Locomotives	Option (1) Switchers	• 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. • Address and name of company that repowered the locomotive engine.
	Option (2) Line-hauls	

Table 3.2 Post-Inspection Requirements (continued)

Source Category	Equipment Project Option	Additional Requirements
Shore Power	Option (1) Grid based shore power	• A ship must be plugged into berth to demonstrate to the inspector that it is in proper working order. • Inspection shall occur within 60 days of equipment owner receiving the fully operational equipment. • Verification that this project serves the intended berth.
	Option (2) Non-grid based shore power	• Ship must be plugged into berth to demonstrate to the inspector that it is in proper working order. • Inspection shall occur within 60 days of equipment owner receiving the fully operational equipment. • Verification that this project serves the intended berth(s).
Commercial Harbor Craft	Options (1) & (2) Repower	• Inspection shall occur within 60 days of equipment owner receiving the fully operational equipment. • For all repowered main engines, document the engine family name, engine make, model year, and serial number listed, and the engine fuel type. • Documentation of ARB engine certification. • Start and end dates of dry dock time. • Address and name of company that did the engine repower.
	Options (1) & (2) Replacement	• For all repowered main engines, document the engine family name, engine make, model year, and serial number listed, and the engine fuel type. • Start and end dates of dry dock time. • Address and name of company that replaced the engine(s). • Inspection shall occur within 90 days of equipment owner receiving the fully operational equipment.
Cargo Handing Equipment	Option (1) Energy Storage System	• Name of retrofit manufacturer. • Retrofit serial number, and month/year of manufacture. • If engine or equipment was installed to meet Program eligibility requirements concurrent with the energy storage system: engine family name, make, model year, serial number, fuel type, and horsepower; retrofit name, serial number, date of manufacture.

15. Local agency requests to ARB for grant funds

The local agency may request grant funds from ARB by submitting a valid Grant Expenditure Request by an authorized local agency representative acting under a fully executed Local Agency Project Grant Agreement. ARB's expenditure requirements and provisions are detailed in Chapter II.E.2.

16. Local agency non-performance provisions

The local agency shall be held responsible for the implementation of the local agency project. Local agency non-performance provisions and requirements are included in Chapter II.E.7 of these guidelines.

E. Obligations, Expenditures, and Earned Interest

1. Local agency obligation of funds to equipment owners

In FY2007-08 only, local agencies shall obligate Program funds via executed equipment project contracts no later than 18 months from the date of the executed Local Agency Project Grant Agreement between ARB and the local agency.

After FY2007-08, local agencies shall obligate Program funds no later than 1 year from the date of the executed Local Agency Project Grant Agreement between ARB and the local agency.

Note: Once a local agency has an executed equipment project contract, Program funds must be spent according to the terms of the contract, or they revert back to the California Ports Infrastructure, Security, and Air Quality Improvement Account. Local agencies are prohibited by statute from re-directing Program funds from failed contracts to another eligible equipment project.

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:

- 1 year to verify project completion/close out payment for cargo equipment projects.
- 18 months to verify project completion/close out payment for truck retrofit, repower, and replacement projects.
- 2 years to verify project completion/close out payment for locomotive projects and non-grid shore power projects.
- 3 years to verify project completion, obtain at least one year of data on actual use, and close out payment for truck stop or distribution center electrification projects.
- 4 years to verify project completion/close out payment for harbor craft projects and grid-based shore power projects.

b) Equipment project purchase restrictions

Local agencies shall not reimburse equipment project applicants for orders or any payments on a new engine, piece of equipment, or vehicle that take place prior to local agency approval of the project through contract execution.

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

An equipment owner may not receive 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.

c) Invoice payments (reimbursements)

With the exception of approved direct payments to vendors as described in Chapter III.E.2.d, local agencies shall only expend Program funds through invoice payments. Invoice payments provide Program funding to equipment owners on a reimbursement basis.

After receiving a satisfactory post-inspection from the local agencies on completed equipment projects, equipment owners shall complete and submit itemized invoices for currently operational new engines, vehicles, or pieces of equipment to the local agency for reimbursement.

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 local agency project 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; registration; insurance, or any other costs not eligible for Program funds.

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.

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 to vendor

Local agencies shall expend Program funds through invoice payments (described above) or according to the direct payment to vendor option described in this section.

- The direct payment to vendor option is only available to truck retrofit and replacement equipment projects, and harbor craft repower and replacement equipment projects.

- Local agencies shall approve all direct payment to vendor requests as part of their equipment project competitive ranking and selection process. Equipment owners are required to request direct payment funding in the equipment project application.

- 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 to the engine, truck, or retrofit dealer or manufacturer.

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.

a) Calculation of earned interest

The local agency shall maintain accounting records (e.g. general ledger) that track interest earned and expenditures on Program funds.

- If the local agency keeps its Program funds in a non-segregated account, the local agency shall maintain accounting records that first separates program funds from other funds administered by the local agency and then further separates earned interest and the related expenditures.

- The calculation of interest shall be based on an average daily balance or some other reasonable and demonstrable method of reallocating the proceeds from the fund back into the program.

- Earned interest shall be tracked such that it is separately identifiable from other program funds.

- Each agency's methodology for calculating Program interest shall be consistent with how it calculates earned interest for its other fiscal programs.

b) Reporting requirement for earned interest

The local agency shall indicate the amount of interest earned and expended on all Program funds in the semi-annual report.

- Documentation of earned interest generation and expenditure shall be retained for a minimum of the local agency project grant agreement term plus two years or date of the final equipment project invoice payment plus three years, whichever is longer.

c) Earned interest expenditure provisions

The local agency shall expend interest earned from Program funds on eligible equipment projects in the following priority:

- The first priority for expenditure shall be to fund equipment project options within the same source category identified in the grant agreement.
- If the local agency is unable to find or fund equipment project options within the source category, the earned interest may be applied to equipment project options within the funding category identified in the grant agreement. For example, a local agency with a grant agreement for the shore power source category may expend earned interest on rubber tired gantry cranes if another shore power project is not available or the amount of earned interest is not sufficient to complete a another shore power project.

If the local agency is authorized to use a portion of the grant for administration funds, the local agency may use up the maximum allowed by these Guidelines for that source category to implement additional projects with the earned interest.

If a local agency is unable to expend all or a portion of the earned interest, the remaining earned interest shall be returned to ARB for re-allocation.

F. Ongoing Local Agency Evaluations 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, the 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.

G. 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.

Local agency quarterly data updates shall begin at minimum one quarter after the execution of the grant agreement, 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.

Quarterly data updates to ARB shall include the following information:

- Start and end dates of most recent equipment project solicitation.
- A ranked equipment project list identifying each equipment project application received by the local agency through the solicitation process, and containing the following information for each equipment project:
  - Weighted emission reductions.
  - Total project cost.
  - Funding status (funded, funded from backup list, not funded).
  - Funding amount (amount of Program funds, amount of non-Program funds).
  - Equipment project contract status (executed/not executed).
  - Equipment pre-inspection status (scheduled/not-completed/completed).
  - Equipment post-inspection status (scheduled/not-completed/completed).
  - Equipment project status (active/withdrawn/ineligible/backup list).

- Total emission benefits for the local agency project.
- Total Program funds obligated.
- Total Program funds expended/remaining (breakdown by project funds and administration funds).
- Total non-Program funds expended per fiscal year of funding.

2. Semi-annual report

Local agencies shall submit to ARB semi-annual reports.

Local agency semi-annual reports shall begin the year following initial ARB obligation of Program funds to the local agency, and continue for the term of the Local Agency Project 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.

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

- Start and end dates of most recent equipment project solicitation.
- The competitively ranked equipment project list identifying each equipment project application received by the local agency through the solicitation process, and containing the following information for each equipment project:
  - Description of the equipment project.
  - The weighted emission reductions and reductions per State dollar invested.
  - Funding status (funded, funded from backup list, not funded).
  - Funding amount (amount of Program funds, amount of non-Program funds).
  - Equipment project contract status (executed/not executed).
  - Equipment pre-inspection status (scheduled/not-completed/completed).
  - Equipment post-inspection status (scheduled/not-completed/completed).
  - Equipment project status (active/withdrawn/ineligible/backup list).
- The following information for the local agency project:
  - Total emission reductions (combustion PM and NOx).
  - Total Program funds obligated.
  - Total Program funds expended/remaining (break down by project funds and administration funds).
  - Total non-Program funds expended by source of funds.
  - Amount of interest earned from Program funds.
  - Total interest earned from Program funds.

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

- Costs of funded local agency project compared to the approved budget for funded local agency project.
- 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.
- Actual timeline and milestones of funded local agency project compared to the planned timeline for funded local agency project.
- Actions undertaken to ensure funded local agency project is being implemented in a timely fashion.
- Status of equipment project tracking efforts to ensure compliance with operating conditions.
- Status of equipment owner reporting compliance.
- A document signed by the local agency's Chief Administrative Officer, Chief Financial Officer, and 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.

Local agencies shall also submit to ARB copies of executed equipment project contracts. Local agencies may make and submit one complete copy of their standard contract format and then submit only the pertinent pages (initial page, signature page and page(s) describing the equipment project) of the contract to ARB. Local agencies shall submit only one copy of each contract or the pertinent pages of each contract.

3. Local agency project completion report

Local agencies shall submit to ARB a local agency project completion report on the full local agency liquidation of Program funds identified in an executed local agency project grant agreement.

The project completion report shall be submitted no later than six months following the full local agency liquidation of Program funds under the local agency project 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 minimum, the local agency project completion report shall include the following:

- A list of the completed equipment projects that includes:
  - Description of each completed equipment project.
  - Copies of invoices that document the amount of Program funds expended for each equipment project.
  - Total cost of funded local agency project compared to the approved budget for funded local agency project.
  - Actions undertaken to ensure funded local agency project was implemented according to budget allocations.
  - Actual timeline and milestones of funded local agency project compared to the planned timeline for funded local agency project.
  - Action undertaken to ensure funded local agency project was implemented in a timely fashion.
  - Total emission reductions achieved for each equipment project.
- Amount of interest accrued on Program funds.
- List and description of equipment projects funded with earned interest.
- Copies of executed equipment project contracts that that were not previously submitted.
- A brief narrative specifying: ongoing evaluation and auditing efforts and results; enforcement actions, recaptured funds, and any reverted funds.
- A document signed by the local agency's Chief Administrative Officer, Chief Financial Officer, and 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.

IV. General Equipment Project Requirements

A. Ownership Requirements

Equipment project applications shall be signed and submitted only by equipment owners.

Individuals or companies that operate the existing equipment or will operate the replacement equipment under a lease agreement with the equipment owner are prohibited from applying for bond funding, but may participate if a lease-to-own program is offered by the local agency according to the provisions outlined in Chapter III.D.12.

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.

A third party may, however, complete an application (or 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-G for descriptions and specifications for the equipment projects eligible for FY2007-08 funds under this Program. However, as described in Chapter III.B.2., local agencies may submit local agency project applications that include allowable project alternatives.

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 project applications shall contain the equipment project application information identified in Appendices A-G of these Guidelines. 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

Equipment project applications shall include a schedule for the major milestones listed by source category in Appendices A-G and a commitment by the equipment owner to meet the schedule identified in the application. 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 FY2007-08 funds under this Program. Equipment project options beyond those identified in these Guidelines may be recommended to ARB staff for inclusion in future Guideline updates.

4. Disclosures

Equipment project applications shall include disclosures that the owner shall sign, that include, at minimum:

- Certification that once the equipment owner signs the equipment project application, the owner shall not submit other applications for funding for the same truck, locomotive, equipment, vessel, berth or facility under this Program or the Carl Moyer Program.
- 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 the equipment owner has reviewed the application and that the application information is correct.
- Certification that neither the owner nor equipment identified in the equipment project application has any outstanding violations of ARB regulations.
- Certification that equipment project match funding is reasonably available to complete the equipment project according to the proposed timeframe.
- Certification that Program funds were not used to previously upgrade the equipment identified in the equipment project application. For example, an owner of a truck that received funding for a retrofit device under this Program may not subsequently submit an application for Program funds to replace that truck.

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 shall, at a minimum, be disqualified from funding for that engine from this Program. The equipment owner may also be prohibited from submitting future applications to any and all ARB incentive programs or local agency incentive programs.

5. Equipment project funding demonstration

Equipment project applications shall require a demonstration of the availability of the necessary funds to complete the proposed equipment project, including the proposed Program funds, and matching funds from other State, local, federal, or private sources.

Equipment project applications shall identify any loan 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.

- 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 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.

6. Equipment owner signature

Equipment project applications shall be signed by the equipment owner and submitted to the local agency with an original signature.

E. Equipment Project Contract Requirements

Local agencies shall obligate all Program funds for equipment projects through funding commitments that shall become legally enforceable through executed equipment project contracts between the local agency and equipment owners. Equipment project contract requirements and terms are contained in Chapter III.D.10.

F. Equipment Sales 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 to replace the equipment with cleaner equipment prior to the end of the contract term, the original owner shall notify the local agency and receive prior written consent for the transaction from the local agency.

Prior to completing the 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 in order to facilitate the transfer of the contract provisions and terms.

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.

G. Equipment Project Non-Performance

All equipment project contracts 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 is non-operational or malfunctioning.
- 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 piece of equipment from participating in another State incentive program.

APPENDICES

[this page intentionally blank]

APPENDIX A Trucks Serving Ports and Intermodal Rail Yards

A. Equipment Project Specifications

Trucks Serving Ports and Intermodal Rail Yards

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 International Registration Plan) in California for the past 2 years. • At least 50 percent 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 **Requirements**	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 percent or more. • 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 4 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 4 years of frequent port or inter-modal rail yard 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 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 Rail Yards (continued)

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 8 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 inter-modal rail yard 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 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.
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 $10,000 for a 4 year commitment of 100% California-only operation and California base-plated registration.

Trucks Serving Ports and Intermodal Rail Yards (continued)

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 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 8 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 rail yard 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 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.
Pro-rated Alternative	Equipment owners may opt for a pro-rated alternative consisting of duplicate requirements, except that the Program will pay up to $25,000 for a 4 year commitment of 100% California-only operation and California base-plated registration.
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. Major Milestones for Equipment Project Completion

- Equipment order.
- Equipment acquisition/installation.
- Submittal of invoice to local agency for reimbursement.
- 1st reporting milestone 6 months after equipment project completion.

C. Recordkeeping Requirements

Equipment owners shall retain, at minimum, all documents, invoices, and correspondence associated with the application, award, contract, monitoring, enforcement, and reporting requirements at least two years after equipment project contact term or three years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or designee upon request for the purposes of ongoing evaluations or auditing.

D. Annual Reporting Requirements

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

- Contact information (owner name, address, phone, etc.).
- Proof of California registration.
- Annual vehicle miles of travel (including mileage/activity logs for documentation).
- Certification of California-only operation (including certification that permits were not utilized to make out-of-state trips).
- Certification and documentation of at least 50% of travel in trade corridors.
- Documentation of the number of port/rail yard visits within 12 month period.
- Summary of maintenance performed and inspections conducted.
- Certification 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.

E. Ongoing Evaluations and Audits

Equipment owners shall agree to ongoing equipment project evaluations and equipment project audits by the local agency, ARB, or authorized designees. ARB and local agency audit requirements and provisions are found in Chapter II.E.5.

F. Application Information

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

1. General contact information

This section applies to all equipment project options listed below.

- Name/organization/agency/company
- Mailing address
- Primary contact name and phone number
- Person with equipment contract signing authority (Owner)
- Proof of identity of equipment owner
- Small business information
    - Fleet size
    - Number of employees
    - Annual gross income

2. Option (1): retrofit

a) Current equipment and activity information

- Truck data
    - Truck make, model, model year
    - Vehicle Identification Number
    - Gross vehicle weight rating
    - License plate number
    - Engine make, model, engine year, serial number
    - Engine horsepower and fuel type
    - Current odometer reading (estimate total engine mileage if odometer is missing or broken)
- Truck documentation
    - Proof of DMV registration for current and prior two years
    - Documentation of current ownership (copy of title of truck)
- Vocation and activity data for the past 2 years
    - Vocation(s)
    - Annual vehicle miles of travel (VMT)
    - Annual VMT in California
    - Estimated percentage of annual VMT in trade corridors
    - Average number of port or rail yard visits per year
- Vocation and activity documentation for the past 2 years
    - Documentation of at least 50% of travel in corridors may be required
    - Identify the trade corridors in which the equipment is routinely operated

b) Proposed equipment project information

- Retrofit device data
  - ARB-verified retrofit device company and name of device
  - ARB-verified NOx reduction & PM reduction (%)
- Retrofit device documentation
  - ARB Executive Order for retrofit device listing the engine families for which the retrofit is verified, along with a picture of the engine label showing the engine family
- Itemized cost information for eligible expenses (verifiable quote)
- Predicted activity data with new equipment
  - Estimated annual VMT
  - Estimated percentage of annual VMT in trade corridors
  - Estimated number of port or rail yard visits per year (must be 150+)
- 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)
  - Documentation of match funding availability

3. Option (2): repower

a) Current equipment and activity information

- Truck data
  - Truck make, model, model year
  - Vehicle Identification Number
  - Gross vehicle weight rating
  - License plate number
  - Engine make, model, engine year, serial number
  - Engine horsepower and fuel type
  - Current odometer reading (estimate total engine mileage if odometer is missing or broken
- Truck documentation
  - Proof of DMV registration for current and prior two years
  - Documentation of current ownership (copy of title of truck)
- Vocation and activity data for the past 2 years
  - Vocation(s)
  - Annual vehicle miles of travel (VMT)
  - Annual VMT in California
  - Estimated percentage of annual VMT in trade corridors
  - Average number of port or rail yard visits per year
- Vocation and activity documentation for the past 2 years
  - Documentation of at least 50% of travel in corridors may be required
  - Identify the trade corridors in which the equipment is routinely operated

b) Proposed equipment project information

- Engine repower data
  - Engine make, 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)
- Predicted activity data with new equipment
  - Estimated annual VMT
  - Estimated percentage of annual VMT in trade corridors
  - Estimated number of port or rail yard visits per year (must be 150+)
- Equipment project funding demonstration
  - Total project cost
  - Program dollars requested, including option for pro-rated alternative
  - Source and amounts of other funding (private, local, other State, federal)
  - Documentation of match funding availability

4. Option (3): replacement

a) Current equipment and activity information

- Truck data
  - Truck make, model, model year
  - Vehicle Identification Number
  - Gross vehicle weight rating
  - License plate number
  - Engine make, model, engine year, serial number
  - Engine horsepower and fuel type
  - Current odometer reading (estimate total engine mileage if odometer is missing or broken
- Truck documentation
  - Proof of DMV registration for current and prior two years
  - Documentation of current ownership (copy of title of truck)
- Vocation and activity data for the past 2 years
  - Vocation(s)
  - Annual vehicle miles of travel (VMT)
  - Annual VMT in California
  - Estimated percentage of annual VMT in trade corridors
  - Average number of port or rail yard visits per year
- Vocation and activity documentation for the past 2 years
  - Documentation of at least 50% of travel in corridors may be required
  - Identify the trade corridors in which the equipment is routinely operated

b) Proposed equipment project information

- New truck data
    - Truck make, model, model year
    - Gross vehicle weight rating
    - Engine make, engine year
    - Engine horsepower and fuel type
- Itemized cost information for eligible expenses (verifiable quote)
- Predicted activity data with new equipment
    - Estimated annual VMT
    - Estimated percentage of annual VMT in trade corridors
    - Estimated number of port or rail yard visits per year (must be 150+)
- Equipment project funding demonstration
    - Total project cost
    - Program dollars requested, including option for pro-rated alternative
    - Source and amounts of other funding (private, local, other State, federal)
    - Request for a direct payment to vendor (if applicable)
    - Documentation of match funding availability

APPENDIX B Other Heavy Duty Diesel Trucks

A. Equipment Project Specifications

Other Heavy Duty Diesel Trucks

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 International Registration Plan) in California for the past 2 years. • At least 50 percent 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.
Option (1) Retrofit **Requirements**	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 percent or more. • 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 4 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 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 (continued)

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 8 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 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.
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 $10,000 for a 4 year commitment of 100% California-only operation and California base-plated registration.

Other Heavy Duty Diesel Trucks (continued)

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 8 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 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.
Pro-rated Alternative	Equipment owners may opt for a pro-rated alternative consisting of duplicate requirements, except that the Program will pay up to $25,000 for a 4 year commitment of 100% California-only operation and California base-plated registration.

Other Heavy Duty Diesel Trucks (continued)

Option (4) Three-Way Truck Transactions	
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 percent 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 six 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 8 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 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 (continued)

Option (4) Three-Way Truck Transactions **Requirements (continued)**	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 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. Option (3) & (4): Total cost of a new MY2007 truck is ~$100,000 (diesel) to ~$180,000 (natural gas).

B. Major Milestones for Project Completion

- Equipment order.
- Equipment acquisition/installation.
- Submittal of invoice to local agency for reimbursement.
- 1st reporting milestone 6 months after equipment project completion.

C. Recordkeeping Requirements

Equipment owners shall retain, at minimum, all documents, invoices, and correspondence associated with the application, award, contract, monitoring, enforcement, and reporting requirements at least two years after equipment project contact term or three years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or designee upon request for the purposes of ongoing evaluations or auditing.

D. Annual Reporting Requirements

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

- Contact information (owner name, address, phone, etc.).
- Proof of California registration.
- Annual vehicle miles of travel (including mileage/activity logs for documentation).

- Certification of California-only operation (including certification that permits were not utilized to make out-of-state trips).
- Certification and documentation of at least 50% of travel in trade corridors.
- Summary of maintenance performed and inspections conducted.
- Certification 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.

E. Ongoing Evaluations and Audits

Equipment owners shall agree to ongoing equipment project evaluations and equipment project audits by the local agency, ARB, or authorized designees. ARB and local agency audit requirements and provisions are found in Chapter II.E.5.

F. Application Information

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

1. General contact information

This section applies to all equipment project options listed below.

- Name/organization/agency/company
- Mailing address
- Primary contact name and phone number
- Person with equipment contract signing authority (Owner)
- Proof of identity of equipment owner
- Small business information
    - o Fleet size
    - o Number of employees
    - o Annual gross income

2. Option (1): retrofit

a) Current equipment and activity information

- Truck data
    - o Truck make, model, model year
    - o Vehicle Identification Number
    - o Gross vehicle weight rating
    - o License plate number
    - o Engine make, model, engine year, serial number
    - o Engine horsepower and fuel type

  - Current odometer reading (estimate total engine mileage if odometer is missing or broken
- Truck documentation:
  - Proof of DMV registration for current and prior two years
  - Documentation of current ownership (copy of title of truck)
- Vocation and activity data for the past 2 years
  - Vocation(s)
  - Annual vehicle miles of travel (VMT)
  - Annual VMT in California
  - Estimated percentage of annual VMT in trade corridors
- Vocation and activity documentation for the past 2 years
  - Documentation of at least 50% of travel in corridors may be required
  - Identify the trade corridors in which the equipment is routinely operated

b) Proposed equipment project information

- Retrofit device data
  - ARB-verified retrofit device company and name of device
  - ARB Executive Order number for retrofit device
  - ARB-verified NOx reduction & PM reduction (%)
- Itemized cost information for eligible expenses (verifiable quote)
- Predicted activity data with new equipment
  - Estimated annual VMT
  - Estimated percentage of annual VMT in trade corridors
- 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)
  - Documentation of match funding availability

3. Option (2): repower

a) Current equipment and activity information

- Truck data
  - Truck make, model, model year
  - Vehicle Identification Number
  - Gross vehicle weight rating
  - License plate number
  - Engine make, model, engine year, serial number
  - Engine horsepower and fuel type
- Truck documentation
  - Proof of DMV registration for current and prior two years
  - Documentation of current ownership (copy of title of truck)
- Vocation and activity data for the past 2 years

  - Vocation(s)
  - Annual vehicle miles of travel (VMT)
  - Annual VMT in California
  - Estimated percentage of annual VMT in trade corridors
- Vocation and activity documentation for the past 2 years
  - Documentation of at least 50% of travel in corridors may be required
  - Identify the trade corridors in which the equipment is routinely operated

b) Proposed equipment project information

- Engine repower data
  - Engine make, 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)
- Predicted activity data with new equipment
  - Estimated annual VMT
  - Estimated percentage of annual VMT in trade corridors
- Equipment project funding demonstration
  - Total project cost
  - Program dollars requested, including option for pro-rated alternative
  - Source and amounts of other funding (private, local, other State, federal)
  - Documentation of match funding availability

4. Option (3): replacement

a) Current equipment and activity information

- Truck data
  - Truck make, model, model year
  - Vehicle Identification Number
  - Gross vehicle weight rating
  - License plate number
  - Engine make, model, engine year, serial number
  - Engine horsepower and fuel type
- Truck documentation
  - Proof of DMV registration for current and prior two years
  - Documentation of current ownership (copy of title of truck)
- Vocation and activity data for the past 2 years
  - Vocation(s)
  - Annual vehicle miles of travel (VMT)
  - Annual VMT in California
  - Estimated percentage of annual VMT in trade corridors

- Vocation and activity documentation for the past 2 years
    - Documentation of at least 50% of travel in corridors may be required
    - Identify the trade corridors in which the equipment is routinely operated

b) Proposed equipment project information

- New truck data
    - Truck make, model, model year
    - Gross vehicle weight rating
    - Engine make, engine year
    - Engine horsepower and fuel type
- Itemized cost information for eligible expenses (verifiable quote)
- Predicted activity data with new equipment
    - Estimated annual VMT
    - Estimated percentage of annual VMT in trade corridors
- Equipment project funding demonstration
    - Total project cost
    - Program dollars requested, including option for pro-rated alternative
    - Source and amounts of other funding (private, local, other State, federal)
    - Request for a direct payment to vendor (if applicable)
    - Documentation of match funding availability

5. Option (4): three-way truck transaction

a) TRUCK A: Current equipment and activity information

- Truck data
    - Truck make, model, model year (must be MY2003-2006)
    - Vehicle Identification Number
    - Gross vehicle weight rating
    - License plate number
    - Engine make, model, engine year, serial number
    - Engine horsepower and fuel type
    - Current odometer reading (estimate total engine mileage if odometer is missing or broken
- Truck documentation
    - Proof of DMV registration for current and prior two years
    - Documentation of current ownership (copy of title of truck)
- Vocation and activity data for the past 2 years
    - Vocation(s)
    - Annual vehicle miles of travel (VMT)
    - Annual VMT in California
    - Estimated percentage of annual VMT in trade corridors
- Vocation and activity documentation for the past 2 years
    - Documentation of at least 50% of travel in corridors may be required
    - Identify the trade corridors in which the equipment is routinely operated

b) TRUCK B: Current equipment and activity information

- Truck data
  - Truck make, model, model year (must be MY1990 or older)
  - Vehicle Identification Number
  - Gross vehicle weight rating
  - License plate number
  - Engine make, model, engine year, serial number
  - Engine horsepower and fuel type
  - Current odometer reading (estimate total engine mileage if odometer is missing or broken
- Truck documentation
  - Proof of DMV registration for current and prior two years
  - Documentation of current ownership (copy of title of truck)
- Vocation and activity data for the past two years
  - Vocation(s)
  - Annual vehicle miles of travel (VMT)
  - Annual VMT in California
  - Estimated percentage of annual VMT in trade corridors
- Vocation and activity documentation for the past 2 years
  - Documentation of at least 50% of travel in corridors may be required
  - Identify the trade corridors in which the equipment is routinely operated

c) Proposed equipment project information

TRUCK A

- Retrofit device data
  - ARB-verified retrofit device company and name of device
  - ARB Executive Order number for retrofit device, NOx & PM reduction (%)
- Predicted vocation and activity data
  - Vocation(s)
  - Estimated annual VMT
  - Estimated percentage of annual VMT in trade corridors

TRUCK C

- New truck data
  - Truck make, model, model year (must be MY2007 or newer)
  - Gross vehicle weight rating
  - Engine make, engine year, engine horsepower and fuel type
- Itemized cost information for eligible expenses (verifiable quote)
- Predicted vocation and activity data
  - Vocation(s)
  - Estimated annual VMT
  - Estimated percentage of annual VMT in trade corridors
- Equipment project funding demonstration
  - Total project cost

- Program dollars requested, including option for pro-rated alternative
- Source and amounts of other funding (private, local, other State, federal)
- Request for a direct payment to vendor (if applicable)
- Documentation of match funding availability

APPENDIX C Locomotives

A. Equipment Project Specifications

Locomotives

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 in California for the past 2 years. • At least 50 percent operation within trade corridor(s) for the past 2 years. • Estimated diesel fuel usage greater than 20,000 gallons per year.
Option (1): Switcher Locomotive **Requirements**	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 0.1 g/bhp-hr or less for PM, or an alterative 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. 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 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 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 (continued)

Option (2): Line-Haul Locomotive	Partial funding for the lower of 50% or $1 million per 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 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. •

B. Major Milestones for Project Completion

- Equipment order.
- Equipment acquisition/installation.
- Submittal of invoice to local agency for reimbursement.
- 1st reporting milestone 6 months after equipment project completion.

C. Recordkeeping Requirements

Equipment owners shall retain, at minimum, all documents, invoices, and correspondence associated with the application, award, contract, monitoring, enforcement, and reporting requirements at least two years after equipment project contact term or three years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or designee upon request for the purposes of ongoing evaluations or auditing.

D. Annual Reporting Requirements

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

- Contact information (owner name, company, address, phone).
- Build number, date, builder, builder model.
- Date of equipment installation.
- Locomotive type and name of home rail yard.
- Report of Megawatt-hours of operation.
- Representative profile data to determine engine duty cycle.
- Certification of California-only operation.
- Summary of maintenance performed (including location) and inspections conducted.
- GPS data in a usable format.
- Certification and documentation of 100% of travel in trade corridors for switcher locomotives, and 50% operation in trade corridors for line-haul locomotives.
- Certification that the bond-funded project was used in accordance with signed contract and that all information submitted is true and accurate.
- Other information as requested by ARB or the local agency.

E. Ongoing Evaluations and Audits

Equipment owners shall agree to ongoing equipment project evaluations and equipment project audits by the local agency, ARB, or authorized designees. ARB and local agency audit requirements and provisions are found in Chapter II.E.5.

F. Application Information

- Equipment owners shall provide the following information and documentation in addition to the requirements described in Chapter IV and other information ARB or local agencies may request on the equipment project applications.
- UP and BNSF must 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.

1. General contact information

This section applies to all equipment project options listed below.

- 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
- Small business information
    - Number of locomotives
    - Number of employees
    - Annual gross income

2. Option (1): switcher locomotive

a) Current equipment and activity information

- Switcher data
    - Locomotive type (traditional switcher, alternative technology switcher)
    - Build number, date
    - Builder, builder model
    - Locomotive make, model, model year, serial number, roster number
    - Engine data (per engine)
        - Modifications (roots blown, turbo-charged, other)
        - Control level (uncontrolled, Tier 0, 1)
        - Engine family, make and type, model, engine year
        - Serial number
        - Horsepower, number of cylinders
        - Fuel type
    - Electronic monitoring unit device type and model (if equipped)
- Switcher documentation
    - Documentation of current ownership
- Activity data for the past 2 years
    - Annual fuel consumption (gallons of fuel)
    - Annual megawatt hours of operation
    - Profile of locomotive duty cycle (i.e., idle time, throttle notch settings per increment of time for each engine)
- Activity documentation for past 2 years
    - Documentation of at least 50% of operation in corridors may be required
    - Identify the trade corridors in which the equipment is routinely operated
    - Documentation of fuel consumption may be requested
    - Documentation of megawatt hours of operation may be requested

b) Proposed equipment project information

- New switcher data
    - Locomotive type (traditional switcher, alternative technology switcher)
    - Builder
    - Locomotive make and model year
    - Engine data (per engine)
        - Modifications (roots blown, turbo-charged, other)
        - Emission rate certified by U.S. EPA & verified by ARB (PM, NOx in g/bhp-hr)
        - Engine family, make and engine year

        - Horsepower, number of cylinders
        - Fuel type
    - Electronic monitoring device unit type and a description or sample of the type/format of reportable data
- Itemized cost information for eligible expenses (verifiable quote)
    - Locomotive, engine, or generator set (as applicable)
    - Other equipment/materials
- Predicted activity data with new equipment
    - Estimated annual fuel consumption (gallons of fuel)
    - Estimated annual megawatt hours of operation
    - Estimated profile of locomotive duty cycle (i.e., idle time, throttle notch settings per increment of time for each engine)
- Equipment project funding demonstration
    - Total project cost
    - Program dollars requested
    - Funding sources and amounts of other funding (private, local, other State, federal)
    - Documentation of match funding availability

3. Option (2): line-haul locomotive

a) Current equipment and activity information

- Line-haul data
    - Locomotive type
    - Build number, date
    - Builder, builder model
    - Locomotive make, model, model year, serial number, roster number
    - Engine data (per engine)
        - Modifications (roots blown, turbo-charged, other)
        - Control level (uncontrolled, Tier 0, 1)
        - Engine family, make and type, model, engine year
        - Serial number
        - Horsepower, number of cylinders
        - Fuel type
    - Electronic monitoring unit device type and model (if equipped)
- Line-haul documentation
    - Documentation of current ownership
- Activity data for the past 2 years
    - Annual fuel consumption (gallons of fuel)
    - Annual megawatt hours of operation
    - Profile of locomotive duty cycle (i.e., idle time, throttle notch settings per increment of time for each engine)
- Activity documentation for past 2 years
    - Documentation of at least 50% of travel in corridors may be required
    - Identify the trade corridors in which the equipment is routinely operated
    - Documentation of fuel consumption may be requested

  - Documentation of megawatt hours of operation may be requested

b) Proposed equipment project information

- New line-haul data
  - Locomotive type
  - Builder
  - Locomotive make and model year
  - Engine data (per engine)
    - Modifications (roots blown, turbo-charged, other)
    - Control level (must be certified to Tier 2 emission levels or lower)
    - Engine family, make and engine year
    - Horsepower, number of cylinders
    - Fuel type
  - Electronic monitoring device unit type and a description or sample of the type/format of reportable data
- Itemized cost information for eligible expenses (verifiable quote)
  - Locomotive or engine (as applicable)
  - Other equipment/materials
- Predicted activity data with new equipment
  - Estimated annual fuel consumption (gallons of fuel)
  - Estimated annual megawatt hours of operation
  - Estimated profile of locomotive duty cycle (i.e., idle time, throttle notch settings per increment of time for each engine)
- Equipment project funding demonstration
  - Total project cost
  - Program dollars requested
  - Funding sources and amounts of other funding (private, local, other State, federal)
  - Documentation of match funding availability

APPENDIX D Shore Power

A. Equipment Project Specifications

Shore Power

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:
	  o 25 percent of ship visits in 2011-2013.
	  o 60 percent of the ship visits in 2014-2016.
	  o 70 percent of the ship visits in 2017-2019.
	  o 90 percent 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 audit requirements.
	• Sign a legally binding contract with the local agency including project milestone and completion deadlines.
	• Comply with all permitting requirements.

Shore Power (continued)

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:
	    o
	    o 1,000 hours per year in 2010-2011.
	    o 2,000 hours per year in 2012-2013.
	    o 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 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.

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.
- 1st reporting milestone 6 months after equipment project completion.

C. Recordkeeping Requirements

Equipment owners shall retain, at minimum, all documents, invoices, and correspondence associated with the application, award, contract, monitoring, enforcement, and reporting requirements at least two years after equipment project contact term or three years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or designee upon request for the purposes of ongoing evaluations or auditing.

D. Reporting Requirements

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

1. Annual reporting for grid based power

- Contact information (owner name, company, address, phone).
- Equipment description and type providing electrical power.
- Berth name/identifier.
- Date of installation of equipment.
- Vessel type, name, and Lloyd's number of vessels utilizing berth.
- Date(s) and time each vessel was initially connected to shore power and subsequently disconnected.
- Monthly utility statements that separately identify electricity for shore power (if avail).
- Documentation of electricity usage at berth (if billing statements are unavailable).
- Episodes of electrical service interruption by local utility company, as confirmed and documented by local utility company.
- Summary of maintenance 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.
- Project records must be retained for at least two years after contract expiration or three years after final project payment, whichever is later.
- Other information as requested by the local agency.

2. Annual reporting for non-grid based power (every 1,000 hours)

- Contact information (owner name, company, address, phone).
- Equipment description and type providing electrical power.
- Berth name/identifier.
- Date and location of installation of equipment.
- Vessel type, name, and Lloyd's number of vessels utilizing shore power.
- Location of vessels serviced, by berth.
- Date(s) and time the vessel utilized non-grid based power.
- Power, in megawatts, supplied to the vessels.
- Date(s) and time each vessel was initially connected to shore power and subsequently disconnected.
- Date, time, and description of any equipment failure that affected the ability of vessel to turn off its auxiliary engines or use alternative control technologies to reduce emissions.
- Summary of maintenance 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.

E. Ongoing Evaluations and Audits

Equipment owners shall agree to ongoing equipment project evaluations and equipment project audits by the local agency, ARB, or authorized designees. ARB and local agency audit requirements and provisions are found in Chapter II.E.5.

F. Application Information

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

1. General contact information

This section applies to all equipment project options listed below.

- 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. Option (1): grid-based shore power

a) Proposed equipment project information

- 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 (megawatts)
  - Itemized cost information by phase (e.g. design, environmental, construction)
- Documentation of current ownership may be required
- Berth activity data for the past 2 years
  - Number of ship visits to the berth
- Ship information (per ship and berth)
  - 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 berth activity data with new equipment
  - Estimated monthly hours of operation
  - Estimated monthly MW usage
  - Estimated annual ship visits using electrical power
  - Estimated ship types, description, power demands
- Equipment project funding demonstration
  - Total project cost
  - Program dollars requested
  - Funding sources and amounts of other funding (private, local, other State, federal)
  - Documentation of match funding availability

3. Option (2): non-grid shore power

a) Proposed equipment project information

- 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)
- Documentation of current ownership may be required
- Berth activity data for the past 2 years (per berth)
  - Number of ship visits to the berth
- Ship information (per ship and berth)
  - 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
  - Estimated monthly hours of operation
  - Estimated monthly MW usage
  - Estimated annual ship visits using electrical power
  - Estimated ship types, description, power demands
- Equipment project funding demonstration
  - Total project cost
  - Program dollars requested, including option for pro-rated alternative
  - Funding sources and amounts of other funding (private, local, other State, federal)
  - Documentation of match funding availability

APPENDIX E Commercial Harbor Craft

A. Equipment Project Specifications

Commercial Harbor Craft

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 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.

Harbor Craft (continued)

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 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.

B. Major Milestones for Project Completion

- Equipment order.
- Dry dock scheduled.
- Equipment acquisition.
- Dry dock start/complete.
- Equipment installation complete.
- Submittal of invoice to local agency for reimbursement.
- 1st reporting milestone 6 months after equipment project completion.

C. Recordkeeping Requirements

Equipment owners shall retain, at minimum, all documents, invoices, and correspondence associated with the application, award, contract, monitoring,

enforcement, and reporting requirements at least two years after equipment project contact term or three years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or designee upon request for the purposes of ongoing evaluations or auditing.

D. Reporting Requirements

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

- Contact information (owner name, company, address, phone).
- Home port.
- Vessel type.
- Vessel identifier, such as US Coast Guard, CA Fish & Game, Call Sign, Maritime Mobile Service Identity, or other relevant vessel identifier.
- Date and location of installation/acquisition of equipment.
- Engine make, model, year, serial number and engine horsepower.
- Annual engine hours of operation.
- Percent of operation and distance from shore (0-3, >3-24, >24 nautical miles).
- 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.

E. Ongoing Evaluations and Audits

Equipment owners shall agree to ongoing equipment project evaluations and equipment project audits by the local agency, ARB, or authorized designees. ARB and local agency audit requirements and provisions are found in Chapter II.E.5.

F. Application Information

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

1. General contact information

This section applies to all equipment project options listed below.

- 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

- Small business information
    - Number of harbor craft
    - Number of employees
    - Annual gross income

2. Options (1) and (2): repowers

a) 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
        - Make, model, engine year, number of cylinders, and serial numbers for each
        - Engine family
        - Rated brake horsepower/total engine displacement
        - Fuel type
- Harbor craft documentation
    - USCG documentation number, if applicable
    - CA Fish & Game license number, if applicable
    - IMO number, if applicable
- Vocation and activity data for the past 2 years
    - Vocation(s)
    - Percent operation within 24 nautical miles of the California coast
    - Identify the trade corridors in which the equipment is routinely operated
    - Estimated average number of propulsion engine operating hours within 24 nautical miles of the California coast
    - Annual hours of operation
- Vocation and activity documentation for the past 2 years
    - Documentation of percent operation within 24 nautical miles of the California coast may be required

b) Proposed equipment project information

- New harbor craft engine repower information
    - Number of propulsion engines
    - 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 such things as exhaust systems, electronics, etc.
- Itemized cost information for eligible expenses (verifiable quote)
- Predicted vocation and activity data with new equipment

  - Vocation
  - Estimated percent operation within 24 nautical miles of the California coast
  - Estimated average number of propulsion engine operating hours within 24 nautical miles of the California coast
  - Annual hours of operation
- Equipment project funding demonstration
  - Total project cost
  - Program dollars requested, including option for pro-rated alternative
  - Source and amounts of other funding (private, local, other State, federal)
  - Request for a direct payment to vendor (if applicable)
  - Documentation of match funding availability

3. Options (1) and (2): replacements

a) 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
    - Make, model, engine year, number of cylinders, and serial numbers for each
    - Engine family
    - Rated brake horsepower/total engine displacement
    - Fuel type
- Harbor craft documentation
  - USCG documentation number, if applicable
  - CA Fish & Game license number, if applicable
  - IMO number, if applicable
- Vocation and activity data for the past 2 years
  - Vocation(s)
  - Percent operation within 24 nautical miles of the California coast
  - Identify the trade corridors in which the equipment is routinely operated
  - Estimated average number of propulsion engine operating hours within 24 nautical miles of the California coast
  - Annual hours of operation
- Vocation and activity documentation for the past 2 years
  - Documentation of percent operation within 24 nautical miles of the California coast may be required

b) Proposed equipment project information

- New harbor craft information
    - Vessel type
    - Propulsion engine data
        - Number of engines
        - 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 such things as exhaust systems, electronics, etc.
- Itemized cost information for eligible expenses (verifiable quote)
- Predicted vocation and activity data with new equipment
    - Vocation
    - Estimated percent operation within 24 nautical miles of the California coast
    - Estimated average number of propulsion engine operating hours within 24 nautical miles of the California coast
    - Annual hours of operation
- Equipment project funding demonstration
    - Total project cost
    - Program dollars requested, including option for pro-rated alternative
    - Source and amounts of other funding (private, local, other State, federal)
    - Request for a direct payment to vendor (if applicable)
    - Documentation of match funding availability

APPENDIX F Cargo Handling Equipment

A. Equipment Project Specifications

Cargo-Handling Equipment

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 rail yard 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	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 percent PM control) or higher.
Requirements	Equipment owner shall: • Commit to 15 years of 100% California operation in port or intermodal rail yard 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 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 rail yard service in trade corridors.
Project Cost Assumptions	• Total cost of energy storage unit is ~$160,000-$320,000 per crane.

B. Major Milestones for Project Completion

- Equipment order.
- Equipment acquisition/installation.
- Submittal of invoice to local agency for reimbursement.
- 1st reporting milestone 6 months after equipment project completion.

C. Recordkeeping Requirements

Equipment owners shall retain, at minimum, all documents, invoices, and correspondence associated with the application, award, contract, monitoring, enforcement, and reporting requirements at least two years after equipment project contact term or three years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or designee upon request for the purposes of ongoing evaluations or auditing.

D. Reporting Requirements

Equipment owners shall be responsible for annual reporting to the local agency that includes, 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 rail yard.
- Engine make, model, year, serial number and engine horsepower.
- Annual engine hours of operation.
- Annual fuel usage.
- 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.

E. Ongoing Evaluations and Audits

Equipment owners shall agree to ongoing equipment project evaluations and equipment project audits by the local agency, ARB, or authorized designees. ARB and local agency audit requirements and provisions are found in Chapter II.E.5.

F. Application Information

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

1. General contact information

This section applies to all equipment project options listed below.

- 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
- Small business information
    - Fleet size
    - Number of employees
    - Annual gross income

2. Option (1): energy storage systems

a) Current equipment and activity information

- Rubber tired gantry crane data
    - Name and address of location where RTG crane operates
    - Equipment make, model, model year
    - RTG crane identification number or VIN
    - Engine data (per engine)
        - Engine make, model, engine year
        - Serial number
        - Horsepower and fuel type
    - Existing energy storage system specifications (if applicable)
    - Proposed RTG crane upgrades to meet Program eligibility (if applicable)
- Activity data for the past 2 years
    - Annual hours of operation
    - Identify the trade corridors in which the equipment is routinely operated

b) Proposed equipment project information

- Energy storage system data
    - Equipment make, model, model year
    - Equipment power rating and specifications for power assist system
- Itemized cost information for eligible expenses (verifiable quote)
- Predicted activity data with new equipment
    - Estimated annual hours of operation
- Equipment project funding demonstration
    - Total project cost
    - Program dollars requested, including option for pro-rated alternative
    - Funding sources and amounts of other funding (private, local, other State, federal)
    - Documentation of match funding availability

[this page intentionally blank]

APPENDIX G Truck Stop/Distribution Center Electrification

A. Background

Emissions from the trucks themselves, together with their auxiliary power units for cabin comfort and transport refrigeration units that chill perishable loads, impact nearby communities. ARB already has several regulations in place that are substantially reducing emissions from heavy-duty trucks, truck idling, transport refrigeration units, and auxiliary power units over the next few years.

- On July 22, 2004, ARB adopted a rule limiting unnecessary diesel truck idling to 5 minutes, beginning in February 2005. On October 20, 2005, ARB amended the rule so sleeper berth equipped trucks must comply with the 5-minute idling rule, beginning in January 2008. In addition, auxiliary power systems and fuel fired heaters on 2007 and newer trucks are subject to more stringent emission performance standards.
- On February 26, 2004, ARB adopted a rule for diesel-fueled Transport Refrigeration Units (TRU) and TRU generator sets, and facilities where TRUs operate. This rule requires these sources to reduce diesel PM emissions to meet idling emission performance standards, beginning in January 2009.

ARB is also developing a comprehensive rule to accelerate the cleanup and replacement of commercial diesel trucks operating in California – this rule is scheduled for Board consideration in Fall 2008. Current proposals call for diesel PM filters by the end of 2009, upgrades to a model year 2007 or newer truck by the end of 2013, and subsequent upgrades to a model year 2010 or newer truck.

B. Analysis

To assess the potential benefits, ARB staff looked at internal analyses being done to support a health risk assessment for typical distribution centers of various sizes. To evaluate the optimum scenario, we considered a large distribution center where trucks and TRUs are operating. TRUs could account for over 80 percent of the diesel PM emissions at the facility, since trucks are subject to the 5-minute idling rule, and the TRUs may operate an average of 3 hours while loading/unloading at the dock. The emission reductions per dollar invested in electric infrastructure to replace some of these operations would diminish rapidly over time.

Large Distribution Center Emissions with Adopted ARB Rules

Large distribution center with trucks and transport refrigeration units (TRUs)				
	Diesel PM Emissions	**Expected diesel PM reductions from adopted ARB rules** (cumulative from 2006 levels)		
Source/Year	**2006**	**2010**	**2015**	**2020**
Trucks	<1 lb/day	45%	73%	84%
TRUs	9 lbs/day	30%	75%	>90%

Despite the diminishing returns, ARB staff acknowledges that electrification of a truck stop, intermodal facility, distribution center, or other place where trucks congregate may be useful to reduce emissions in the near term at high use facilities with neighborhoods nearby. This Appendix provides a general methodology and standard that an equipment owner shall meet to apply for bond funding.

The equipment owner shall work with the local air district to estimate the baseline emissions from existing operations, after accounting for the benefits of all adopted regulations. The equipment owner shall provide the proposed operating statistics for the project and calculate the resulting change in emissions over a ten year period. Based on the bond funding requested, if the weighted reductions per State dollar invested is better than the average for truck replacement projects, the electrification project shall be eligible to compete against other truck proposals for funding.

C. Equipment Project Specifications

Truck Stop/Distribution Center Electrification

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 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.

D. Major Milestones for Project Completion

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

- Contract execution between local agency and equipment owner
- Facility pre-inspection
- 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
- 50% project completion
- 80% project completion
- 100% project completion
- Post-inspection by the local agency
- 1st year of operation and collection of use data
- Reporting to local agency of electrical use by trucks during 1st year of operation
- Reimbursement and project close out
- Next reporting milestone

E. Recordkeeping Requirements

Equipment owners shall retain, at minimum, all documents, invoices, and correspondence associated with the application, award, contract, monitoring, enforcement, and reporting requirements at least two years after equipment project contact term or three years after final payment, whichever is later. Records shall be readily available and accessible to the local agency, ARB, or designee upon request for the purposes of ongoing evaluations or auditing.

F. Reporting Requirements

Equipment owners shall be responsible for annual reporting to the local agency that includes, 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.

G. Ongoing Evaluations and Audits

Equipment owners shall agree to ongoing equipment project evaluations and equipment project audits by the local agency, ARB, or authorized designees. ARB and local agency audit requirements and provisions are found in Chapter II.E.5.

H. Application Information

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

1. General contact information

Equipment project applicant shall identify all parties with the legal authority to sign contracts concerning equipment acquisition, land improvements, equipment operation and maintenance. The following information shall be provided for each party:

- 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
- Small business information
    - Number of employees
    - Annual gross income

2. Option (1): electrification infrastructure

a) Current equipment and activity information

- 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

b) Proposed equipment project information

- 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 ten years of operation
- Projected emissions and benefits of the project
  - Emissions with the project over a ten-year period
  - Emission reductions attributable to the project (beyond those required by law or regulation) for a ten-year period beginning in the 1st year of operation
  - Demonstration that the weighted emission reductions per State dollar invested is equal or better than the average for truck replacement projects
- Equipment project funding demonstration
  - Total project cost
  - Program dollars requested
  - Funding sources and amounts of other funding (private, local, other State, federal)
  - Documentation of match funding availability

.

[this page intentionally blank]

APPENDIX H: Early Grants

SB 88 makes available no more than $25 million of the FY2007-08 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 heath risk reduction. SB 88 requires 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 incentive program.

To ensure that the early grant project proposals would be consistent with the eligibility and equipment project requirements included in the Program 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/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's 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 III
    - Sections B.1 & 4
    - Section C
    - Sections D.1, 3-8, 10, 11-16
    - Sections E-G
- Chapter IV
- Appendices A-G

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-G 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. These Guidelines specify 4 years and 8 years, respectively. 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

ARB Staff Expectations for Early Grant Proposals

This document includes ARB staff's expectations for FY2007/2008 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 ARB Board approves the full or partial proposal, as submitted. We understand that the applicant may reserve the right to withdrawal the proposal should the ARB Board change the conditions or eligibility requirements of the early grants. To provide the ARB 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.

1. 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

2. 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 VMT
            - Locomotives (only switchers)
                - Average age (years)
                - Control level (uncontrolled, Tier 0, 1)
                - Average annual fuel use
                - Average annual operating hours
            - Shorepower
                - 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 VMT (if different from old equip.)
                - Identify fuel type

- Locomotives (switchers only)
  - Identify fuel type
  - ARB staff will 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 will use operating assumptions to do the calculations consistent with factors/ formulas/ methodologies that will be included in the draft program 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% 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

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 dpf	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 per 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% California operation for new equipment (except for periodic locomotive maintenance)