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 <i>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</i> must comply with the additional restrictions on fleet averaging included in these Guidelines.
Option (1) Retrofit	Partial funding of up to \$5,000/truck to retrofit an eligible MY2006 or older heavy duty diesel truck with an ARB verified Level 3 diesel particulate filter that reduces diesel PM by 85 percent or more.
Requirements	• Program-funded diesel particulate filter shall be installed and operational at least 6 months prior to a regulatory requirement for that level of emissions control under the best available control technology provisions of any adopted rule for in-use trucks. In this 6 month time period, a truck funded under this Program is not eligible to be included in any fleet averaging.
	 Equipment owner shall: Commit to at least 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

	Duty Diesel Trucks (continued)
Option (2)	The lower of 50% or \$20,000 to repower an eligible MY2003 or older heavy duty diesel
Repower	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, 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.

Option (3)	Partial funding of up to \$50,000/truck to replace an eligible MY2003 or older heavy duty
Replacement	diesel truck with a diesel or alternative fuel truck meeting MY2007 emission levels or
	lower.
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, 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.

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: Replace an eligible MY2003-2006 truck (Truck A) with a diesel or alternative fuel truck (Truck C) meeting MY2007 emissions levels or lower; and Equip Truck A with an ARB-verified Level 3 diesel particulate filter that reduces diesel PM by 85 percent or more; and 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 3 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 3 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. 	

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)
- Driver's license number of equipment owner
- Small business information
 - o Fleet size
 - o Number of employees
 - Annual gross income

2. Option (1): retrofit

- a) Current equipment and activity information
- Truck data
 - o Truck make, model, model year
 - Vehicle Identification Number
 - o Gross vehicle weight rating
 - o 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
 - o 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
- o 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

b) Proposed equipment project information

- Retrofit device data
 - o 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
 - o 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)
 - o Documentation of match funding availability

3. Option (2): repower

a) Current equipment and activity information

- Truck data
 - o Truck make, model, model year
 - o Vehicle Identification Number
 - o Gross vehicle weight rating
 - License plate number
 - o 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)
 - o Annual VMT in California
 - Estimated percentage of annual VMT in trade corridors
 - Vocation and activity documentation for the past 2 years
 - o Documentation of at least 50% of travel in corridors may be required

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
 - o Total project cost
 - o Program dollars requested, including option for pro-rated alternative
 - Source and amounts of other funding (private, local, other State, federal)
 - o Documentation of match funding availability

4. Option (3): replacement

a) Current equipment and activity information

- Truck data
 - o Truck make, model, model year
 - o Vehicle Identification Number
 - Gross vehicle weight rating
 - o 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
 - o Documentation of at least 50% of travel in corridors may be required

b) Proposed equipment project information

- New truck data
 - $\circ \quad \text{Truck make, model, model year} \\$
 - o 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
 - o Estimated percentage of annual VMT in trade corridors
- Equipment project funding demonstration
 - o Total project cost
 - o 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)
 - o Documentation of match funding availability

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

- a) TRUCK A: Current equipment and activity information
- Truck data
 - o Truck make, model, model year (must be MY2003-2006)
 - Vehicle Identification Number
 - Gross vehicle weight rating
 - License plate number
 - o 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)
 - o Annual VMT in California
 - Estimated percentage of annual VMT in trade corridors
- Vocation and activity documentation for the past 2 years
 - o Documentation of at least 50% of travel in corridors may be required

- Truck data
 - Truck make, model, model year (must be MY1990 or older)
 - Vehicle Identification Number
 - o Gross vehicle weight rating
 - License plate number
 - o 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 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
 - o Documentation of at least 50% of travel in corridors may be required

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
 - o Estimated percentage of annual VMT in trade corridors

TRUCK C

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