Chapter 5: ON-ROAD HEAVY-DUTY VEHICLES FLEET MODERNIZATION

This chapter describes the minimum criteria and requirements for the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) On-Road Heavy-Duty Vehicles (HDV) Fleet Modernization projects.

A. Projects Eligible for Funding

All funding eligibility provisions as described in Chapter 4, Section E. also apply in this chapter.

Fleet modernization provides incentives to replace old high-polluting heavy-duty vehicles with newer, lower-emission replacement vehicles, providing real emission benefits earlier than would have been expected through normal attrition.

Please see Section C (Project Criteria) for detailed minimum eligibility requirements. Most on-road vehicles are subject to more stringent requirements as described in Section C. (1).

The following HDV fleet modernization projects may be eligible for funding. Note: the existing old vehicle engine must be model year 2002 or older. Existing old school buses and log trucks may have an engine of any model year.

1. New Replacement Vehicle Purchase: The purchase of a new vehicle or school bus with an engine certified to the 2007 or newer emission standards to replace an existing vehicle that is to be scrapped.

2. Used Replacement Vehicle Purchase: The purchase of a used vehicle or school bus with an engine certified to the 2007 or newer emission standards to replace an existing vehicle that is to be scrapped.

B. Maximum Eligible Funding Amounts

Table 5-1 summarizes the maximum eligible funding for each fleet modernization project. All projects are also subject to the cost-effectiveness threshold defined in Appendix G.

Table 5-1
Maximum Funding Amounts for Fleet Modernization Projects

Oxides of Nitrogen (NOx) Certification Level[1] grams per brake horsepower hour (g/bhp-hr)	Maximum
0.20 g/bhp-hr (Heavy Heavy-Duty (HHD))	$60,000
0.50 g/bhp-hr (HHD)	$50,000
0.20 g/bhp-hr (Medium Heavy-Duty (MHD))	$40,000
1.20 g/bhp-hr (HHD)	$40,000
0.50 g/bhp-hr (MHD)	$30,000
1.20 g/bhp-hr (MHD)	$25,000
School bus (used)	100% of vehicle value
School bus (new)	100% of invoice

[1] applies to new or used vehicles unless otherwise noted

C. Project Criteria

The minimum qualifications for fleet modernization projects are listed below. All projects must also conform to the requirements in Chapter 2: General Criteria and in Chapter 3: Program Administration. Participating air districts retain the authority to impose additional requirements in order to address local concerns.

1. General Criteria

   (A) For vehicles that are subject to in-use regulations, please see the eligibility requirements in Section E of Chapter 4: On-Road Heavy-Duty Vehicles.

   (B) Any fleet modernization project that would replace an existing vehicle with an off-road engine that is subject to an on-road regulation must comply with the on-road surplus requirements. For example, a yard truck with an off-road engine that is subject to the Statewide Truck & Bus Regulation (including yard trucks used primarily in agricultural operations) must comply with all off-road Carl Moyer Program criteria described in Chapters 7 and/or 9, as well as all surplus criteria described in Section E of Chapter 4.

   (C) Existing glider kit vehicles are eligible. The replacement vehicle must be a complete original equipment manufacturer vehicle and not a glider kit.

2. Participant Requirements

Participants must meet the following requirements:

   (A) The participant must provide conclusive documentation of annual mileage or vehicle usage in California.

   (B) The participant must currently own and have operated the old vehicle for the previous twenty-four (24) months, documented through a copy of the

old vehicle title. If it is unclear whether a vehicle is owned or leased by a participant, the air district will determine whether the vehicle is eligible.

(C) The participant must submit documentation of annual miles traveled or gallons of fuel consumed for the previous twenty-four (24) months to determine cost-effectiveness. Examples of documentation include logbooks, fuel records, and maintenance records or tax records.

(D) The participant must provide copies of California registration as specified in Section 3 below.

(E) The participant must provide copies of proof of insurance for the old vehicle for the previous twenty-four (24) months.

(F) The participant must be in compliance with all applicable air quality laws and regulations; all outstanding citations must be paid.

(G) The participant must be the registered owner of the replacement vehicle for the project life.

(H) The participant must maintain replacement value insurance coverage for the project life.

(I) Throughout the contract term, the participant must complete the following minimum reporting requirements:

(1) Provide registration and proof of insurance to the air district annually.

(2) Provide annual reports that include information such as hours of operation, miles driven in the air district and California, the amount of fuel consumed in the twelve months preceding the report date, details regarding maintenance and servicing, and any other items specified by the air district.

(3) If the replacement vehicle is involved in an accident, report the accident to the air district within 10 business days. The participant must provide a police report of the accident, a letter from the insurance company regarding the accident and any other additional information requested by the air district. The participant must repair the vehicle and return it to operation, if possible. If the vehicle is totaled, the participant and the air district staff must come to an agreement regarding any requirements that still need to be met.

3. Existing Vehicle Requirements

All existing vehicles must meet the following conditions:

(A) The existing vehicle must have an engine of model year 2002 or older, except for school buses and log trucks which may have an engine and chassis of any model year.

(B) The existing vehicle must either be 1) currently registered and have been registered in California for the past twenty-four (24) months; or 2) must have been registered in California for the previous eight (8) consecutive months supplemented by alternate documentation showing California operation for the past twenty-four (24) months.

If the existing vehicle operates seasonally, then the existing vehicle may be eligible to participate if it has been registered in California for at least three (3) months per twelve (12) month period for the previous twenty four (24) months. DMV registration documentation for each month the vehicle was registered must be included with the application.

(C) The existing vehicle must meet the criteria for either a MHD vehicle or a HHD vehicle, as defined below:

(1) MHD vehicles must have a manufacturer Gross Vehicle Weight Rating (GVWR) of 19,501 through 33,000 pounds.

(2) HHD vehicles must have a manufacturer GVWR of 33,001 pounds or greater.

(3) GVWR may be documented with a photo of the vehicle manufacturer tag or a copy of the manufacturer build sheet. Air districts may request ARB approval of alternate GVWR documentation on a case-by-case basis.

(D) The existing vehicle must be in operational condition, as determined through a California Highway Patrol (CHP) Biennial Inspection of Terminals (BIT) or equivalent air district-approved inspection. If the air district does not conduct a pre-inspection, the following methods may be used:

(1) The vehicle owner may submit a completed CHP 90-Day Safety Inspection Form documenting an inspection that occurred within 90 days of the application date;
-or-

(2) An air district approved contractor may conduct the inspection of the old vehicle and provide pictures verifying that the vehicle is in operational condition. The participant will pay the cost of the inspection.

(E) All existing school buses must have a current CHP safety certification as of December 31, 2008, and at the time funding is awarded to replace the bus (i.e., the school bus may not have a lapsed CHP safety certification), and must be currently registered with the DMV.

(F) If the old vehicle engine tag is missing, then verification of the engine information can be satisfied with the engine serial number. The participant must provide verification of the engine make, model, model year, engine serial number, and horsepower from the manufacturer. The participant may also verify the horsepower with the results of a dynamometer test. The dynamometer test will take into account a 15 percent loss in actual horsepower, accounting for transmission loss. Verification can include a letter or a printout from an engine manufacturer or dealership. On a case-by-case basis, the Air Resources Board (ARB) may approve other means of obtaining the information.

4. Replacement Vehicle Requirements

All replacement vehicles must meet the following conditions:

(A) Emission Standards: Replacement vehicles with a 2007 model year or later engine certified to a particulate matter (PM) emission standard of 0.01 g/bhp-hr and a NOx family emission limit or NOx standard level of 1.20 g/bhp-hr or lower are eligible for funding.

(B) Mileage: A used HHD replacement vehicle must have less than 500,000 miles and a used MHD replacement vehicle must have less than 250,000 miles, with odometer verification to occur at the post inspection.

(C) Horsepower: If the replacement engine horsepower is more than 25 percent greater than the existing engine horsepower, it must be de-rated (reduced) to not exceed a 25 percent increase. In limited situations, the air district may approve a greater than 25 percent increase in horsepower.

(D) Weight Class: The replacement vehicle must be in the same weight class as the existing vehicle (either MHD or HHD).

(E) Body and Axle Configuration: The replacement vehicle must have the same axle and body configuration as the old vehicle. The air district may allow slight changes based on the latest technology. Changes must be requested and approved prior to the purchase of the replacement vehicle.

(F) Warranty Requirements: The following warranty requirements apply:

(1) Except for school buses, all participants must purchase a minimum of a one-year or 100,000-mile major component engine warranty for the replacement new or used vehicle. The warranty must cover parts and labor. If the purchase of a new or used replacement vehicle already includes a minimum one year or 100,000 mile warranty as specified above, a separate supplemental warranty is not required. However, it is recommended that the highest grade warranty be purchased in order to avoid expensive repairs in the future.

(2) No Carl Moyer Program funds will be issued for maintenance or repairs related to the operation of the vehicle. The participant takes sole responsibility for ensuring that the vehicle is in operational condition throughout the agreement period.

(G) Replacement vehicles may be purchased from a private party provided all required documentation is submitted. This includes warranty requirements and all other fleet modernization requirements.

(H) Engine and Emission Control Modifications: Emission controls on the replacement vehicle engine cannot be modified except as permitted by law. Unauthorized modification to engine performance including, but not limited to, changes in horsepower, emission characteristics, engine emission components (not including repairs with like-original equipment manufacturers replacement parts), and modifications to the engine's emission control function or the electronic monitoring unit are not allowed.

(I) Agricultural Vehicle Reporting: Replacement Agricultural Vehicles must comply with the Reporting Requirements for Agricultural Fleets as specified in California Code of Regulations, title 13, sections 2025(r) and (s).

5. Determining Grants

Grant award determinations must be made with the following considerations:

(A) Grant awards are based on the average usage during the previous twenty-four (24) months. Fleet averages cannot be used. Participants must submit conclusive documentation of mileage or fuel consumed including logbooks, fuel records, and maintenance records maintained for individual vehicles.

(B) The emission benefit of the project is calculated based on the difference in emission factors of the replacement, new vehicle engine (new emission factors) and the baseline vehicle engine (baseline emission factors).

(C) The grant amount will be the lesser of the following:

(1) The cost-effective value of the project based on the weighted emission benefits;
or,

(2) The maximum grant amount shown in Table 5-1.

(D) The replacement of two old, like trucks with one replacement truck is eligible for funding. Each old truck and the replacement truck must comply with all of the applicable guidelines. To determine cost-effectiveness, the annual emissions of the two old trucks are determined using emissions factors that correspond to the model year of each truck. The usage of the two old trucks is summed to establish projected replacement truck usage. The maximum allowable combined mileage is 60,000 miles per year (or 30,000 miles per truck per year). Replacement trucks are eligible for only one grant based on the combined usage – the amount of the grant award is not doubled.

(E) The eligible project life for cost-effectiveness calculations is as follows:

(1) For fleets of three or fewer vehicles that are subject to the Statewide Truck & Bus Regulation, the minimum project life is two years and the maximum project life is five years.

(2) Fleets in a targeted vocation category of agriculture, construction, mining, forestry, and public fleet vehicles in low-population areas have a maximum project life of five years.

(3) For all other fleets, the maximum project life is three years.

(4) The maximum project life for 1977 and newer school buses is 11 years.

(5) The surplus period may be less than the maximum project life due to compliance deadlines specified in the Statewide Truck & Bus Regulation (California Code or Regulations, title 13, § 2025). See Chapter 4 Section E.4. of these Guidelines for school bus surplus criteria.

(F) Grant funding can only be used to pay for items essential to the operation of the vehicle.

(G) The participant may obtain financing to assist in the purchase of a replacement vehicle.

6. Air District Administrative Requirements

(A) Air districts must include fleet modernization as a funding option in the air district's Carl Moyer Program Policies and Procedures before funding fleet modernization projects. The Policies and Procedures must include the administrative tools that are needed to manage fleet modernization projects, including memorandum of understandings (MOU) or agreements with vehicle dealerships and dismantlers, reimbursement procedures, inspections, monitoring and enforcement, contract development, etc. Air districts are not required to submit the initial fleet modernization policies and procedures to ARB for approval, but it must be available upon request.

(B) Air districts may fund fleet modernization projects through a regional program administered by one designated air district. The designated air district may be located within the region, or may be a large air district located outside the region.

(C) The air district may make full payment at the time the new vehicle is delivered to the applicant under the following framework:

(1) Air district staff or an air district approved contractor must complete the pre-inspection of the old vehicle and new vehicle to make sure the vehicles comply with program requirements.

(2) Air districts must sign a separate MOU with the dealer and the dismantler that contain, at a minimum, the program requirements (including, but not limited to, the requirement that the dealer delivers the existing vehicle to a qualified dismantler within 30 calendar days of the date that the old vehicle was turned in to the dealer by the applicant) that are expected of each entity and the repercussions for non-compliance with the terms of the MOU for each entity.

(3) Air districts must ensure the vehicle and engine are scrapped within 60 calendar days of the dismantler's receipt of the vehicle. This must be confirmed through post-inspection by the air district or an air district approved contractor. The destruction of the old vehicle and engine must be properly documented in accordance with the Carl Moyer fleet modernization program requirements.

7. Dealer Requirements

(A) Air districts are encouraged to establish contracts with dealers that sell replacement vehicles to fleet modernization participants. Reimbursement cannot be issued until all forms are submitted and approved by the air district.

(B) Vehicle dealers must:

(1) Provide basic information to vehicle owners about the fleet modernization program.

(2) Help participants complete the application, if necessary. It is important to make sure that all information is filled out correctly and that the participant understands the meaning of the program and the contract. Once complete, the dealer submits the application package to the air district.

8. Reimbursement: To ensure that an application package is complete, the following items must be included and complete prior to reimbursement:

(A) Signed and complete application and fully executed contract.

(B) Documentation showing that the existing vehicle is roadworthy. This includes documentation showing that the old vehicle has passed a CHP BIT inspection in the past 90 days or conduct an equivalent vehicle inspection and sign as appropriate. If documentation is provided by a dealership, the air district reserves the right to audit the dealership's record of inspection.

(C) Invoices of all work performed on the replacement vehicle. The invoices must include all engine, transmission, engine horsepower derating, body and other work performed on the replacement vehicle.

(D) Digital photographs of the existing vehicle and the replacement vehicle. The air district will specify the required digital format. Reimbursement will not be processed until all photographs are received and verified by the air district. All photographs must be clear, and all VIN and engine serial numbers must be legible.

(1) Photographs of the old vehicle must include the following views:
   a. Right Side - hood down
   b. Front - hood down
   c. Left Side - hood down
   d. VIN Tag - inside vehicle or on frame rail
   e. Engine - left side
   f. Engine - right side
   g. Engine Serial Number - either tag or stamp on block
   h. License plate
   i. Rear

(2) Photographs of the replacement vehicle must include the following views:
   a. Right Side - hood down
   b. Front - hood down
   c. Left Side - hood down

d. VIN Tag - inside vehicle
e. VIN Tag - on frame rail
f. Engine - left side
g. Engine - right side
h. Engine Serial Number and Engine Information – tag
i. License plate
j. Rear
k. Diesel Emission Control Device (if available)
l. Odometer Reading

(E) Certification that the old vehicle will be delivered to a qualified dismantler within 30 calendar days of receipt of the old truck. The certification must include the make, model, year, vehicle identification number (VIN), engine make, engine serial number, and the date the vehicle is expected to be delivered to the dismantler.

(F) Documentation of replacement vehicle warranty and registration.

(G) Proof of replacement vehicle financing. The financing package will enable the air district to determine the reimbursement costs that may be accrued in case the participant defaults on the contracted performance requirements.

(H) Dealerships must possess pre-inspection documentation of the existing and replacement vehicles prior to releasing the replacement vehicle to the participant. Upon request of the air district, ARB may waive inspection requirements.

(I) Proof of replacement vehicle sale after the application and all required documentation have been approved by the air district.

(J) A third party (e.g., engine dealer or distributor) may complete an application or part of an application on an owner's behalf only if the vehicle owner signs and agrees to the application. Applications must include a signature section for third parties. The third party signature section must include signature and date lines, and sections for the third party to disclose how much they are being paid, if anything, to complete the application and the source of funds used to pay them. To make the Carl Moyer Program accessible to all potential applicants, including those that cannot afford to hire third party assistance, air districts are encouraged to provide assistance to applicants.

9. Compliance Checks: Fleet modernization projects must complete the compliance check process described in Chapter 4, Section D.2.

10. Inspections: Air districts may enter into a contract, written agreement, or memorandum of understanding with a contractor to perform project inspections (pre-inspections, post-inspections, or dismantle inspections). If an air district chooses to use contractors to perform inspections, air district staff must conduct and document at least one inspection on each project without the use of a contractor. Air districts must ensure all inspection requirements are met and shall retain legal responsibility for full compliance with the inspection provisions of these Guidelines, regardless of the use of contractors.

11. Dismantler Requirements

(A) Fleet modernization requires that the existing truck be dismantled. This requirement has been established to ensure that emission reductions are real, preventing the truck from continuing to emit high levels of pollutants. Destruction of the existing vehicle chassis and engine permanently removes the old, high emitting vehicle from service. The existing vehicle and engine specified in the application must be dismantled, and may not be substituted with a different vehicle.

(B) To participate in the fleet modernization program, dismantlers must:

(1) Enter into an agreement with the air district.

(2) Be licensed by DMV as an auto-dismantler.

(3) Possess a current, valid California Environmental Protection Agency Hazardous Materials Generators Permit.

(4) Be in compliance with all local, state and federal laws and regulations.

(C) The dismantler must do the following for each vehicle:

(1) Dismantle the old vehicle in accordance with program guidelines within 60 calendar days of receipt. Upon dismantler request, the air district may approve an extension.

(2) Destroy and render useless the existing vehicle engine as specified in Chapter 3: Program Administration.

(3) Completely sever the frame rails of the old vehicle to ensure that the vehicle will not be used again.

(4) Air district staff or the dismantler must take photographs of the destroyed engine and severed frame rails. Dismantler photographs of the destroyed engine block and severed frame rails must be provided to the air district

within ten (10) business days of dismantling the vehicle. The following picture views must be taken:

a. Front of vehicle with hood down
b. Right side of vehicle with hood down
c. Left side of vehicle with hood down
d. Serial number printed either on the tag inside in the cab or on the frame rail
e. Engine side view
f. Engine serial number either stamped on the block or on the tag
g. Destroyed engine block either in-frame or out of frame as specified in Chapter 3: Program Administration
h. Completely severed frame rails

(5) Prepare and submit to DMV either a "Non-Repairable Vehicle Certificate" using an "Application for Salvage Certification or Non-Repairable Vehicle Certification" (REG 488C), or a Notice of Acquisition/Report of Vehicle To Be Dismantled (REG 42) ensuring the VIN can never be registered again in California.

(6) Upon request of the air district, ARB may approve an alternative disposition for the old vehicle.

12. Recovery of Grant Funds

(A) The air district must establish a mechanism to assure the participants fulfill all contractual obligations, including owning and operating the replacement vehicle for the project life. The air district will determine noticing requirements and the method to achieve fund recovery. Air districts may consider the following option:

(1) List the air district as co-lien holder on the title of the replacement vehicle for the term of the agreement. The participant must submit a completed Uniform Commercial Code-1 Financing Statement Form to the California Secretary of State, with a copy sent to the air district, within 30 days of the purchase of the replacement vehicle. The financing statement must have the air district as the secured party and the vehicle should be listed as collateral.

(2) If the replacement vehicle is sold during the project life, the new owner must assume the obligations under the participant's contract with the air district and comply with the terms and conditions of the contract. The air district must approve the change in ownership prior to the sale.