



Air Resources Board



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January 10, 2011

Mail-Out #MSC 11-01

TO: All Interested Parties

SUBJECT: APPROVED REVISIONS TO THE CARL MOYER PROGRAM
GUIDELINES

This mail-out describes the most recent approved revisions to the Carl Moyer Program Guidelines (Guidelines), including changes to the following specific programs:

- On-Road Voucher Incentive Program
- On-Road Heavy-Duty Vehicles
- Fleet Modernization Program
- Off-Road Equipment Replacement Program

Changes to the On-Road Voucher Incentive Program (VIP), On-Road Heavy-Duty Vehicle funding, and the Fleet Modernization Program include expanded applicant eligibility, higher mileage allowances for used replacement trucks, higher VIP funding amounts for the cleanest available engines, and a longer timeline for retrofit funding in small fleets. Detailed descriptions of these changes were released for public comment on November 16, 2010 under [Mail-Out MSC 10-50](#).

Changes to the Off-Road Equipment Replacement Program (ERP) include a simplified method to determine maximum grant amounts, simplified usage documentation requirements, clarification of criteria to determine engine availability when purchasing replacement equipment, and a streamlined process for air districts starting implementation of the Off-Road ERP. Detailed descriptions of these changes were released for public comment on November 22, 2010 under [Mail-Out MSC 10-52](#).

All of the revisions are intended to clarify guideline language, expand eligibility and/or encourage participation in the Carl Moyer Program.

Background:

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

Since 1998, the Carl Moyer Program has filled a critical niche in California's strategy to achieve clean air. The Carl Moyer Program provides grant funding for the incremental cost of cleaner-than-required engines, equipment, and emission reduction technologies. The Carl Moyer Program plays a complementary role to California's regulatory program by funding emission reductions that are surplus, i.e., early and/or in excess of what is required by regulation. State law (Health & Safety Code § 44287) authorizes the Air Resources Board to revise the Guidelines when necessary to improve the ability of the program to achieve its goals.

From time-to-time, minor changes to the Guidelines are needed, which are approved and implemented by the Executive Officer or designee after a public meeting and 45-day review period. The public meeting regarding the revisions outlined below was held on December 8, 2010. The 45-day review period for changes to the On-Road VIP and Fleet Modernization Program ended on December 30, 2010, and the review period for changes to the Off-Road ERP ended on January 6, 2011. This executed mail-out serves as notice that the following revisions are now effective.

REVISIONS:

Section 1 - Revisions to the On-Road VIP:

VIP Revision 1: Raise the maximum allowed mileage for used on-road trucks

Amend section 4(e)(5):

New or Used: The replacement vehicle can be new or used. ~~Used vehicles must have less than 200,000 miles of operation.~~ Used vehicles with a manufacturer GVWR of 33,001 or greater must have less than 500,000 miles of operation, and used vehicles with a manufacturer GVWR of 19,501 through 33,000 must have less than 250,000 miles of operation.

Amend section 4(h)(1)(k):

~~Ensure any used replacement vehicles have less than 200,000 miles of operation.~~ Ensure any used vehicles with a manufacturer GVWR of 33,001 or greater have less than 500,000 miles of operation, and used vehicles with a manufacturer GVWR of 19,501 through 33,000 have less than 250,000 miles of operation.

Amend Appendix E, District Review Checklist: Initial Review, Replacement Vehicle Requirements:

- ~~Used replacement vehicle has less than 200,000 miles~~
- Replacement vehicle with a manufacturer GVWR of 33001+ has less than 500,000 miles; or
- Replacement vehicle with a manufacturer GVWR of 19,501-33,000 has less than 250,000 miles

VIP Revision 2: Reduce the required California registration period for baseline trucks

Amend section 4(c)(5):

~~California Registration: The existing vehicle must have current California registration and have been registered in California for the previous twenty four (24) months. Copies of the DMV registration and proof of insurance for the existing vehicle for the previous twenty four (24) months must be submitted with the application package. 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. The application package must include copies of the DMV registration for the term specified above, and proof of insurance and California operation for the previous twenty four (24) months. The existing vehicle must be based in California. Applicants can provide proof of California registration by providing copies of California registration or California IRP (International Registration Plan) documents. Out-of-state registration or out-of-state IRP do not qualify for the VIP.~~

Amend section 4(d)(6):

~~California Registration: The existing vehicle must have current California registration and have been registered in California for the previous twenty four (24) months. Copies of the DMV registration and proof of insurance for the existing vehicle for the previous twenty four (24) months must be submitted with the application package. 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. The application package must include copies of the DMV registration for the term specified above, and proof of insurance and California operation for the previous twenty four (24) months. The existing vehicle must be based in California. Applicants can provide proof of California registration by providing copies of California~~

registration or California IRP (International Registration Plan) documents. Out-of-state registration or out-of-state IRP do not qualify for the VIP.

Amend Appendix A, Application Package, Eligibility Criteria

Registration: Applicant must prove that the existing vehicle has been registered in California for the previous twenty four (24) months, or for the previous eight (8) continuous months with 24 months of California operation documentation.

Amend Appendix A, Application Checklist, Applicant Requirements

Copy of existing vehicle DMV ~~Vehicle Registration (the previous twenty four (24) months— if existing vehicle is registered for part of a year, provide proof of registration for all months registered)~~ registration for the previous twenty four (24) months – if existing vehicle is registered for part of a year, provide proof of registration for all months registered; or DMV registration for previous eight (8) consecutive months with 24 months of California operation documentation.

Amend Appendix E, District Review Checklist: Initial Review, Documentation Requirements

- Copy of DMV Vehicle Registration (~~previous twenty four (24) months~~)
 - previous 24 months of CA registration, or
 - eight consecutive months of CA registration, with 24 months of California operation documentation

VIP Revision 3: Reduce the emission reduction surplus period for on-road small fleet retrofit projects

The following tables are added to Appendix O:

<u>VIP Retrofit Funding Matrix – HHD, Retrofits in operation by December 31, 2011</u>			
Engine Model Year	Minimum Annual Usage		Funding Amount
	Miles	Gallons	
2004-2006	45,000	7,100	\$5,000
	54,000	8,500	\$6,000
	63,000	9,900	\$7,000
	71,000	11,200	\$8,000
	80,000	12,600	\$9,000
	89,000	14,000	\$10,000

<u>VIP Retrofit Funding Matrix – MHD, Retrofits in operation by December 31, 2011</u>			
Engine Model Year	Minimum Annual Usage		Funding Amount
	Miles	Gallons	
2004-2006	52,000	5,100	\$5,000
	63,000	6,200	\$6,000
	73,000	7,200	\$7,000
	83,000	8,100	\$8,000
	94,000	9,200	\$9,000
	104,000	10,200	\$10,000

VIP Revision 4: Extend eligibility to trucks that previously operated as drayage trucks

Delete section 4(g)(18):

~~Districts do not have to request records or other information to verify that a truck does not operate as a drayage truck. However, the district must reject a project if usage verification demonstrates drayage truck operation. Drayage truck is defined in Section (5).~~

Add new section 4(a)(11):

Vehicles No Longer Operating in Drayage Truck Operations: A vehicle that operated one or more times as a drayage truck in the previous two (2) years, but no longer operates as a drayage truck, is eligible to participate. In order to ensure that the replacement or retrofitted vehicle does not operate as a drayage truck during the surplus emission reduction period, replacement and retrofitted vehicles will be added to the Drayage Truck Registry as non-compliant for the term specified on the Receipt of Replacement Voucher or Receipt of Retrofit Voucher (Appendix G and G1).

VIP Revision 5: Increase grant amount for on-road trucks equipped with cleanest engines

Replace section 4(e)(6):

~~Engine Emission Standards: The replacement vehicle must have an engine certified to an emissions standard or FEL level of 1.20 g/bhp-hr of~~

~~Oxides of Nitrogen (NOx) and 0.01 g/bhp-hr of Particulate Matter (PM) or cleaner. An ARB Executive Order certifying the engine meets this requirement must be included with the application package.~~

Engine Emission Standards: Replacement vehicles may qualify for funding by meeting either the 2007 or 2010 emissions standards, as specified below. The corresponding funding levels for each emissions standard are found in Appendix O.

- (1) To qualify for funding under the 2007 emissions standards, the replacement vehicle must have an engine certified to an emissions standard or FEL level of 1.20 g/bhp-hr of NOx and 0.01 g/bhp-hr of PM or cleaner.
- (2) To qualify for funding under the 2010 emissions standards, the replacement vehicle must have an engine certified to an emissions standard of 0.20 g/bhp-hr of NOx and 0.01 g/bhp-hr of PM or cleaner.
- (3) An ARB Executive Order certifying that the engine meets the selected emissions standard must be included with the application package.

The following tables are added to Appendix O:

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HHD, New Replacement Vehicles Replacement Engine Meets 0.20 g/bhp-hr NOx Standard in operation by December 31, 2011			
Old Engine Model Year	Minimum Annual Usage		Funding Amount
	Miles	Gallons	
≤1990	15,000	2600	\$18,000
	17,000	2900	\$20,000
	21,000	3600	\$25,000
	25,000	4200	\$30,000
	29,000	4900	\$35,000
	33,000	5600	\$40,000
	37,000	6200	\$45,000
1991 - 1993	15,000	2500	\$11,000
	21,000	3500	\$15,000
	27,000	4400	\$20,000
	34,000	5600	\$25,000
	41,000	6700	\$30,000
	48,000	7800	\$35,000
	54,000	8800	\$40,000
	61,000	9900	\$45,000
1994 - 2002	16,000	2600	\$10,000
	24,000	3800	\$15,000
	32,000	5100	\$20,000
	39,000	6200	\$25,000
	47,000	7400	\$30,000
	55,000	8700	\$35,000
	63,000	9900	\$40,000
	71,000	11200	\$45,000

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HHD, Used Replacement Vehicles Replacement Engine Meets 0.20 g/bhp-hr NOx Standard in operation by December 31, 2011			
Old Engine Model Year	Minimum Annual Usage		Funding Amount
	Miles	Gallons	
≤1990	15,000	2600	\$18,000
	17,000	2900	\$20,000
	21,000	3600	\$25,000
	25,000	4200	\$30,000
	29,000	4900	\$35,000
1991 - 1993	15,000	2500	\$11,000
	21,000	3500	\$15,000
	27,000	4400	\$20,000
	34,000	5600	\$25,000
	41,000	6700	\$30,000
1994 - 2002	48,000	7800	\$35,000
	16,000	2600	\$10,000
	24,000	3800	\$15,000
	32,000	5100	\$20,000
	39,000	6200	\$25,000
	47,000	7400	\$30,000
	55,000	8700	\$35,000

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MHD, New Replacement Vehicles Replacement Engine Meets 0.20 g/bhp-hr NOx Standard in operation by December 31, 2011			
Old Engine Model Year	Minimum Annual Usage		Funding Amount
	Miles	Gallons	
≤1990	16,000	1700	\$10,000
	24,000	2500	\$15,000
	32,000	3300	\$20,000
	40,000	4200	\$25,000
	48,000	5000	\$30,000
	56,000	5800	\$35,000
1991 - 1993	23,000	2300	\$10,000
	34,000	3400	\$15,000
	45,000	4400	\$20,000
	56,000	5500	\$25,000
	67,000	6600	\$30,000
1994 - 2002	78,000	7600	\$35,000
	33,000	3300	\$10,000
	49,000	4800	\$15,000
	65,000	6400	\$20,000
	82,000	8000	\$25,000
	98,000	9600	\$30,000

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MHD, Used Replacement Vehicles Replacement Engine Meets 0.20 g/bhp-hr NOx Standard in operation by December 31, 2011				
Old Engine Model Year	New Engine Model Year	Minimum Annual Usage		Funding Amount
		Miles	Gallons	
≤1990	2010	16,000	1700	\$10,000
	2010	24,000	2500	\$15,000
	2010	32,000	3300	\$20,000
	2010	40,000	4200	\$25,000
	2010	48,000	5000	\$30,000
1991 - 1993	2010	23,000	2300	\$10,000
	2010	34,000	3400	\$15,000
	2010	45,000	4400	\$20,000
	2010	56,000	5500	\$25,000
	2010	67,000	6600	\$30,000
1994 - 2002	2010	33,000	3300	\$10,000
	2010	49,000	4800	\$15,000
	2010	65,000	6400	\$20,000
	2010	82,000	8000	\$25,000
	2010	98,000	9600	\$30,000

**Section 2 - Revisions to the 2008 Carl Moyer Program Guidelines,
 Chapter III, On-Road Heavy-Duty Vehicles:**

On-Road Heavy-Duty Vehicles Revision 1:

Amend Section I(IV)(h)(1)(a):

Retrofits for 2004-2006 vehicles in small fleets (three or fewer trucks) that are installed and in operation by December 31, ~~2010~~ 2011;

**Section 3 - Revisions to the 2008 Carl Moyer Program Guidelines,
 Chapter IV, On-Road Fleet Modernization:**

Fleet Modernization Revision 1: Raise the maximum allowed mileage for used on-road trucks

Amend Section 4(d)(3):

A used replacement truck must have less than 200,000 miles Mileage: A used HHD replacement truck must have less than 500,000 miles and a used MHD

replacement truck must have less than 250,000 miles, with odometer verification to occur at the post inspection.

Fleet Modernization Revision 2: Reduce the required California registration period for baseline trucks

Replace Section 4(c)(3):

~~The old vehicle must have been registered in California for the previous two years.~~

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.

Fleet Modernization Revision 3: Extend eligibility to trucks that previously operated as drayage trucks.

Amend Section 4(a)(8):

On-road diesel-fueled heavy-duty drayage trucks are subject to the ARB Drayage Truck Regulation as described in Chapter III. No Carl Moyer Program funding opportunities are available for projects at the Ports of Long Beach or Los Angeles. For all other ports and intermodal rail yards, funding is available for replacement of trucks with an engine model year of 1993 or older with a truck meeting the 2007 emission standards through December 31, 2010. Cost effectiveness for these projects must be based only on NOx and ROG (not PM) and must use emission factors for a model year 1994 engine as the baseline. Other sources of funding that are available to replace heavy-duty drayage trucks include Proposition 1B and private funding from Port Authorities.

Former Drayage Trucks: The following requirements apply for vehicles that previously operated as a drayage truck:

- a. A vehicle that operated one or more times as a drayage truck in the previous two years, but no longer operates as a drayage truck, are eligible for funding.
- b. A vehicle that previously operated as a drayage truck must be contractually prohibited from drayage operations throughout the contract term.
- c. To help ensure that the replacement vehicle does not operate as a drayage truck during the contract term, the replacement vehicle will be added to the Drayage Truck Registry as non-compliant until the contract end date.

**Section 4 - Revisions to the 2008 Carl Moyer Program Guidelines,
Chapter VII, Off-Road Equipment Replacement:**

Off-Road Revision 1: Method to determine maximum off-road CI equipment replacement grants

Amend the first paragraph in Section II. Maximum Eligible Funding Amounts:

Projects are eligible for reimbursement up to a maximum of 80 percent of total equipment purchase costs ~~or the eligible cost of repower (as defined in Chapter 5 Section IV(b)(3) for CI equipment) with an engine meeting the current Model Year California emission standard, whichever is less.~~ Retrofits for CI equipment are eligible for up to 100 percent of total costs, including all filters and maintenance of the filters needed during the project life.

Amend Section IV(a):

- (1) ~~Projects are eligible for a maximum of 80 percent of total equipment purchase costs or the eligible cost of repower (as defined in Chapter V, section IV(b)(3)) with an engine meeting the current Model Year California emission standard, whichever is less up to the weighted cost-effectiveness limit. If a repower with an engine meeting the current Model Year California emission standard is not available, a maximum of 80 percent of the total equipment purchase costs is eligible for funding up to the weighted cost-effectiveness limit.~~

Off-Road Revision 2: Simplify usage documentation requirements

Replace Section IV(b)(3):

~~(3) The old equipment must be in operational condition to qualify for funding. The participant must be able to provide documentation for the previous year for at least one of the following:~~

~~(A) Maintenance/service records~~

~~(B) Revenue and usage records that identify operational, standby, and down hours for the equipment~~

~~(C) Routine inspections which document the operating condition of the old equipment (OSHA or workplace required)~~

~~(D) Other documentation approved by ARB.~~

~~In addition, the district must conduct a pre-inspection of the old equipment prior to funding to verify the operational status of the equipment.~~

(3) Annual Usage and Operational Requirement. The old equipment must be in operational condition to qualify for funding. To verify the operational status of the equipment the district must conduct a pre-inspection of the old equipment prior to funding.

(A) If the participant provides two years previous usage documentation, as described below, to the district as part of the application process, districts may exclude the usage requirement in the project contract with the participant (per Part III, Program Administration, section 29(f)). The following types of documents are acceptable to demonstrate usage:

1. Hour meter reading log collected at minimum of once per year from an installed and fully functioning hour meter or historical fuel usage documentation specific for the old equipment.

Documentation must include fuel logs, purchase receipts, or ledger entries.

Or

2. At least two items from the following list proving old equipment is being used by the fleet:

a. Revenue and usage records that identify operational, standby, and down hours for the equipment

b. Employee timesheets linked to specific equipment use

c. Preventative maintenance records tied to specific hours of equipment use

d. Repair work orders specific to the equipment

- e. Six months of tracking normal equipment usage with a functional, tamper proof hour meter with prior district approval
- f. Other documentation approved by ARB.

(B) If two years of usage documentation as required in (A) above is not available, the annual usage used to determine project cost effectiveness must be included in the project contract (per Part III, Program Administration, section 29(f)). In addition, the participant must provide documentation to demonstrate that the equipment was operational for the previous year. The following types of documents are acceptable to demonstrate that equipment is operational:

1. Maintenance/service records
2. Revenue and usage records that identify operational, standby, and down hours for the equipment
3. Routine inspections which document the operating condition of the old equipment (OSHA or workplace required)
4. Other documents approved by ARB

Delete Section IV(b)(4):

~~(4) Participants must submit documentation of annual usage of the old equipment for the previous two years. Usage from this documentation will be used to calculate the cost effectiveness of the project. The participant must be able to provide at least one of the following types of documentation:~~

~~(A) Hour meter reading log collected at minimum of once per year from an installed and fully functioning hour meter or historical fuel usage documentation specific for the old equipment. Documentation must include fuel logs, purchase receipts, or ledger entries. Or~~

~~(B) At least two items from the following list proving old equipment is being used by the fleet:~~

- ~~1. Revenue and usage records that identify operational, standby, and down hours for the equipment~~
- ~~2. Employee timesheets linked to specific equipment use~~
- ~~3. Preventative maintenance records tied to specific hours of equipment use~~
- ~~4. Repair work orders specific to the equipment~~
- ~~5. Six months of tracking normal equipment usage with a functional, tamper proof hour meter with prior district approval~~
- ~~6. Other documentation approved by ARB.~~

Off-Road Revision 3: Clarify criteria for Replacement Equipment

Amend Section IV. Project Criteria, (c) Replacement Equipment Requirements as follows:

All replacement equipment must meet the following conditions:

- (1) The new or used replacement equipment must have an engine meeting the most recent ~~Model Year~~ California emission standard or Tier. If a specific piece of equipment cannot be purchased and delivered with an engine meeting the most recent ~~Model Year~~ emission standard or Tier ~~at the time districts obligate funds~~ within six months from the time the district commits to the proposed project, then equipment with an engine meeting the previous ~~Model Year~~ emission standard or Tier may be purchased. For purposes of this section, district's commitment to a proposed project shall be consistent with that stated in their equipment replacement plan and/or their policies and procedures.
 - (A) At the applicant's request, confirmation of availability of equipment meeting the most recent emission standards or Tier may be limited to the same equipment manufacturer as the existing (old) equipment or engine.
 - (B) If the district and the applicant have not fully executed a contract within six months of project commitment, then the district must recheck for the availability of equipment with the most recent emission standard or Tier.
 - (C) Documentation that equipment with an engine meeting the most recent current Model Year emission standard or Tier is unavailable must be provided to the district. Acceptable documentation that equipment with an engine meeting the most recent emission standard is unavailable include:
 1. Verifiable information from the equipment manufacturer, engine manufacturer, distributor and/or dealer regarding the unavailability of equipment with an engine meeting the current emission standard or Tier.
 2. Confirmation (a written declaration by the district is acceptable) that engines from a specific manufacturer meeting the current emission standard or Tier are not certified (Executive Order is not available on ARB website.) Executive Orders for off-road engines may be found at <http://www.arb.ca.gov/msprog/offroad/cert/cert.php>.

Off-Road Revision 4: Eliminate advance approval of district equipment replacement plan

Delete the first sentence in Section I: Projects Eligible for Funding

~~Projects in this category may only be considered in Districts that have an ARB approved Equipment Replacement Plan.~~

Amend Section IV(e):

Districts must establish an off-road equipment replacement plan before they can fund off-road equipment replacement projects. This includes agreements with local dealerships and salvage yards, pre- and post-inspections, monitoring and enforcement considerations, reimbursement procedures, the development of contracts, etc. ~~The ARB must approve the district off-road equipment replacement plan prior to district implementation of an off road equipment replacement category.~~ Districts may work with dealers to streamline the program. Any potential partnerships between districts and dealers must be identified in the off-road equipment replacement plan. The plan must identify the district's process for oversight and review of dealer identified tasks. The district's off-road equipment replacement plan must address all of the above criteria as well as the following:

If you have questions regarding on-road changes, please contact Peter Christensen, Air Pollution Specialist, at (916) 322-1520 or pchriste@arb.ca.gov, and for questions regarding off-road changes, please contact Rhonda Runyon, Air Pollution Specialist, at (626) 350-6551 or rrunyon@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Peter Christensen
Air Pollution Specialist
Planning & Regulatory Development Section

Rhonda Runyon
Air Pollution Specialist
Carl Moyer Off-Road Section