

Feather River Air Quality Management District
OFF ROAD EQUIPMENT REPLACEMENT PROGRAM

The off-road equipment replacement program reduces emissions by replacing old, high polluting equipment with newer, cleaner equipment earlier than would have been expected through normal attrition. Carl Moyer Program funds may be used to offset part of the cost of the replacement vehicle and the entire cost of verified diesel emission control system (VDECS) diesel retrofits. The ARB established this program in 2008 because for some equipment, replacing the engine only, (i.e., repowering) is not possible and for other, the diminished value of the old equipment may not justify investing significant funds for engine replacement.

I. Projects Eligible for Funding

Equipment Replacement projects must meet the following general eligibility requirements:

- Eligible projects are those in which new equipment having the most recent Model Year California emission standard engine, 25 horsepower or larger, replaces an uncontrolled (Tier 0), fully functional piece of self propelled off-road equipment that is to be scrapped.

The emission reductions from the project must not be required by any local, state, and/or federal rule, regulation, or other legally binding requirement.

- Equipment purchased before a Grant Agreement for the project is fully executed is not eligible for funding.
- Applicants that do not provide credible records to document the previous two year's amount of historical operation in Yuba or Sutter Counties are not eligible for funding.
- All projects must achieve a cost-effectiveness as described in the District's Policy and Procedures Manual. Pollutants included in the cost-effectiveness calculation are NO_x (oxides of nitrogen), ROG (reactive organic gases) and diesel PM (particulate matter). PM is weighted by a factor of 20; (NO_x + ROG + 20*PM). The District staff will calculate cost effectiveness using the average of two recent years of documented equipment usage.

II. Maximum Eligible Funding Amounts

- New or used equipment purchase is eligible for up to 80 percent of total equipment purchase costs.
- VDECS are eligible for up to 100 percent of the total costs, including all filters and maintenance of the filters needed during the project life.

III. Equipment Requirements

a). Existing (Old) Equipment Requirements

- (1) The old equipment must have an uncontrolled engine. Equipment powered by Tier 1 or Tier 2 engines is not eligible for replacement.

(2) The applicant must have owned and operated the old equipment in California for the previous two years. The applicant must provide the following documentation:

1. Bill of sale for the old equipment and
2. Two years of documentation for at least one item in the following list. If a bill of sale can not be provided, two items from the following list may be submitted in substitution:
 - a. Tax depreciation logs
 - b. Property tax records
 - c. Equipment insurance records
 - d. Bank appraisals for equipment
 - e. Maintenance/service records
 - f. General ledgers
 - g. Fuel records specific to the old equipment (To be used as evidence of CA residency the fuel records must also identify the equipment owner)
 - h. Other documentation approved by ARB

(3) Applicants must submit documentation of annual usage and operational status 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 applicant must provide at least one of the following types of documentation:

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, and
2. At least one items from the following list:
 - 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
3. If hour meter reading or historical fuel usage is not available provide two items from the list in #2 above.

(4) The replacement of two (or more) pieces of old, like equipment with one piece of replacement equipment is eligible for funding. Each piece of old and replacement equipment must comply with all of the appropriate criteria. The replacement equipment must execute the same job as the old pieces of equipment. For baseline cost-effectiveness calculation, the annual emissions of the two pieces of old equipment are

summed. For the replacement equipment cost-effectiveness calculation, the usage of the two pieces of old equipment is summed for the replacement equipment usage.

b. Replacement Equipment Requirements

(i) The replacement equipment must have an engine meeting the most recent Model Year CA emission standard. If a specific piece of equipment can not be purchased with an engine meeting the most recent Model Year emission standard at the time the District obligates funds, then equipment with an engine meeting the previous Model Year emission standard may be purchased. Documentation from the equipment manufacturer that equipment with an engine meeting the current Model Year emission standard is unavailable must be provided to the District. Used equipment meeting the most recent Model Year CA emission standard qualifies as new equipment if sold by a dealer with the required warranties and documentation of how the price was depreciated to account for the used condition and the number of operation hours accumulated since new.

- (a) Engines participating in the averaging, banking, and trading program that are certified to family emission limits higher than the applicable emission standards are ineligible to participate in the Carl Moyer Program.
 - (b) Engines that are participating in the “Tier 4 Early Introduction Incentive for Engine Manufacturers” program, as detailed in Title 13, CCR, section 2423(b)(6), are ineligible for Carl Moyer Program funding.
 - (c) The certification emission standard and/or Tier designation for the engine must be determined from the ARB Executive Order issued for that engine which may be found at <http://www.arb.ca.gov/msprog/offroad/cert/cert.php>.
- ii) The replacement equipment must serve the same function and perform the same work equivalent as the old equipment (i.e. replacement of an agricultural tractor with another agricultural tractor). This requirement may be waived by District with approval from ARB for instances where general purpose farming equipment changes commodities.
- iii) Only the minimum attachments normally sold with the original equipment, as determined by the District, are eligible for funding on the replacement equipment. Incentive funding can only be used to pay for items essential to the operation of the equipment.
- iv) The horsepower rating for the replacement equipment engine must not be greater than 125 percent of the original manufacturer rated horsepower (baseline horsepower) for the lowest horsepower of the old equipment engine unless a higher horsepower rating is approved on a case by case basis by ARB. For old equipment in which the actual engine horsepower cannot be determined, horsepower can be calculated by multiplying the power take off by 120%.
- v) Purchasers of new CI equipment must purchase a minimum of a one-year or 1600 hours power and drive train warranty must be purchased for the replacement equipment. The warranty must cover parts and labor. Warranty documentation must be provided to the District. Warranty costs are not eligible for funding. The district may waive this requirement if they have provided ARB a satisfactory plan to ensure that funded equipment will be maintained and operated as if under warranty.

- vi) No funds will be issued for maintenance or repairs related to the operation of the equipment. The participant takes sole responsibility for ensuring that the equipment is in operational condition throughout the agreement period.
- vii) If the applicant obtains financing to assist in the purchase of replacement equipment, full documentation of financing must be provided to the District. No more than the applicant's share of the cost of the equipment may be financed. The equipment shall not be used as collateral for the loan.
- viii) Future annual hours of equipment operation must be based only on readings from an installed and fully operational hour meter. If during the project life the hour meter fails for any reason, the hour meter must be repaired or replaced as soon as possible at the owner's expense.
- ix) An ARB Verified Diesel Emission Control System (VDECS) is required on all replacement equipment if available.
 - (1) If the additional cost of the VDECS causes the cost-effectiveness to be above the cost effectiveness cap, then the VDECS is not required.
 - (2) If documentation is provided to the District or ARB that a VEDCS is not technically feasible, available, or safe, then the retrofit is not required.
 - (3) VDECS that control PM must use the highest level ARB-verified technology available at obligation of funds for the equipment being retrofitted.
 - (4) The VDECS must be installed prior to delivery of the replacement equipment to the Grantee and must stay in operation on the replacement equipment for the project life. The issuance of a two-party check made payable to both the VDECS supplier and the Grantee is authorized if both parties agree to such payment.
 - (5) If the applicant signs the VDECS waiver acknowledging that due to current or future regulations they may be required to install a retrofit on the funded equipment at their own cost, then the retrofit is not required.
- x) The cost of the VDECS, filters, and maintenance of the VDECS needed during the project life is eligible for incentive funding, provided its inclusion in the project cost still meets the weighted cost-effectiveness limit.
- xi) For the purpose of project selection based on cost-effectiveness, the District shall use a cost-effectiveness value that is calculated by excluding cost of the VDECS.

(c) Existing Equipment Destruction Requirements

The equipment replacement program requires the existing equipment to be destroyed. The chassis and engine must be destroyed to permanently remove old equipment from service. The participant shall permanently destroy and render useless or cause to be destroyed permanently or rendered useless each engine and

equipment chassis. Critical mating surfaces in the engine cylinder block and cooling or lubricant passages shall be breached, by burning, cutting, or breaking. The chassis shall be cut in such a manner as to make it permanently unusable and not repairable. The participant shall make each destroyed component available for District inspection in order for the District to certify such work has been properly done within 60 days of receiving new equipment.

The participant may select to surrender the old equipment to an authorized Salvage Yard. The participant must submit the Salvage Certification Form to the District within 30 days of receiving new equipment. The Salvage Yard must destroy the engine and chassis as described above, and submit documentation to the District within 60 days of the participant receiving new equipment, as described in the Salvage Yard Agreement.

IV. District Administrative Requirements

The District staff will implement the Carl Moyer Off-Road Equipment Replacement Program using the following administrative procedures:

- A. The District's request for proposals (RFP) will solicit applications for off road equipment replacement projects along with the other Moyer Program categories listed in the District's Policies and Procedures Manual. Each application will be evaluated and ranked in accordance with the District's Policies and Procedures Manual. Off road equipment replacement project applications will compete for funding with all Carl Moyer project applications.
- B. The District staff will work with equipment dealers and/or applicants to complete the standard "Off-Road Equipment Replacement Project Application" (available at www.fraqmd.org/Moyer.htm), and may develop additional forms if necessary to collect all information, records, and price quotes necessary to evaluate the proposal and to populate the data fields in the ARB's CARL database.
- C. The District staff will evaluate each proposal to verify the eligibility and cost-effectiveness in accordance with the CMP Guidelines. As part of the evaluation, staff will conduct a pre-inspection on the old equipment. The ORERP pre-inspection form will be used.
- D. A Grant Agreement will be executed for each off-road equipment replacement project that competes successfully in the RFP process and is approved by the District Air Pollution Control Officer. A sample Grant Agreement with a section specifically for this Off-Road Equipment Replacement Program is included as Appendix D in the District's Policy and Procedures Manual.
- E. Upon delivery of the new equipment to the dealer, the District staff will conduct a post-inspection. The ORERP post-inspection form will be used. The dealer shall not deliver the new equipment to the applicant until the post inspection is complete.

- F. After the District staff approves the post-inspection of the new equipment the dealer may deliver the new equipment to the participant. The old equipment must be destroyed and the destruction verified within 60 days after Participant receipt of new equipment.
- G. Payment will be processed once the District confirms the following: approved destruction of old equipment, approved pre-inspection, approved post-inspection, approved invoice, and confirmed submittal of W-9. All payments will be issued to the applicant. Two party checks may be issued to both the applicant and dealer if requested by the parties.
- H. Monitoring and enforcement of Grant Agreements is covered in Section XII of the District's Policies and Procedures Manual.

V. Dealer Requirements

Unless otherwise indicated, the Dealer must meet each requirement before the District will be obligated to release the incentive funds to the Program Participant. The Dealer agrees to do the following:

- (1) Provide basic information to participants about the equipment replacement program. The District will provide training to dealership staff.
- (2) Inform participants of rights and responsibilities as outlined in the air district and ARB guidelines.
- (3) Help the participants correctly complete the application. It is important to make sure that all information is filled out correctly and that the participant understands the program and the meaning of the Grant Agreement. Information necessary for preliminary evaluation of the project includes, but is not limited to the following:
 - a) Description and specifications of the old equipment including year, model, power rating, a list of included attachments and accessories, serial numbers of the equipment and engine, and credible records of the previous two years of ownership, operation and amount of usage in Yuba and Sutter Counties.
 - b) Description and specifications of the proposed new equipment including year, model, power rating, ARB engine Family Number and Executive Order number, a list of included attachments and accessories, price quote, warrantee information, and financing information-if financed.
 - c) If a verified diesel emission control system (VDECS) is feasible, specifications of the VDECS to be installed on the equipment including: make, model, a price quote that will be valid at the time the VDECS is installed, warrantee information, and identification of the installer. If a VDECS is not available, verifiable information from the retrofit manufacturer, retrofit distributor, and/or dealer regarding the unavailability of verified retrofits must be submitted with the application, unless the applicant signs the retrofit waiver.

d) Applicant should complete the Salvage Certification Form to indicate old equipment will be delivered to qualified salvage yard. If not using salvage yard, method and description of destruction should be indicated.

e) Documentation of replacement equipment warranty.

f) Proof of replacement equipment financing.

The District will provide all necessary forms.

(4) The Participant will schedule a time and place for the District to pre-inspect and to verify the identity, operation, and condition the old equipment. The Dealer will be invited to attend the pre-inspection, however it is not mandatory.

(5) After the Grant Agreement is executed, the Dealer will order the replacement equipment, have it delivered to the dealership and, if feasible, arrange for installation of the VDECS.

(6) Before delivering the replacement equipment to the Grantee, the Dealer will schedule a time and place for the District to inspect and verify the identity, operation, and condition the replacement equipment and VDECS, if installed. The Dealer may not deliver the replacement equipment to the participant until the District inspects the replacement equipment and verifies that it is eligible for funding.

(7) The Dealer shall submit copies of itemized invoices, warranty information, and financing information, prior to the District issuing payment for the grant.

(8) The Dealer will use only OEM certified parts for any repairs to any engine or equipment covered under the District Program.