

Carl Moyer Grant Program Public Workshop



The Workshop will begin at 2:00 PM

**Hosted by the Feather River Air Quality
Management District**

Thursday February 15, 2024

Agenda

- Welcome & Introductions
- Public Workshop to Be Recorded and Posted to Website
- What is the Carl Moyer Program
- What is the FARMER Program
- Program Overview
- Regulatory Compliance
- Off-Road Equipment Project Categories
- Destruction Requirements
- (New) Zero-Emission UTV Replacement Project Category
- Resources and Contact Information
- Question/Answers

Carl Moyer Memorial Air Quality Standards Attainment Program

Carl Moyer Memorial Air Quality Standards Attainment Program

- Since 1998 Carl Moyer Program has provided incentive grants for cleaner-than-required engines and equipment throughout California
- The program seeks to reduce emissions of oxides of nitrogen (NO_x), particulate matter (PM), and reactive organic gas (ROG) which are necessary for California to meet its clean air commitments under the State Implementation Plan
- Public and private entities can apply
- Eligible projects include replacement, repower, or retrofit of off-road equipment used in construction, agriculture, mining, and stationary irrigation pump engines
- CARB's 2017 Carl Moyer Guidelines
- District Policy and Procedures Manual
- Projects are subject to oversight and audit by FRAQMD, CARB, DOF



Cap and Trade
Dollars at Work

Funding Agricultural Replacement Measures for Emission Reductions Program

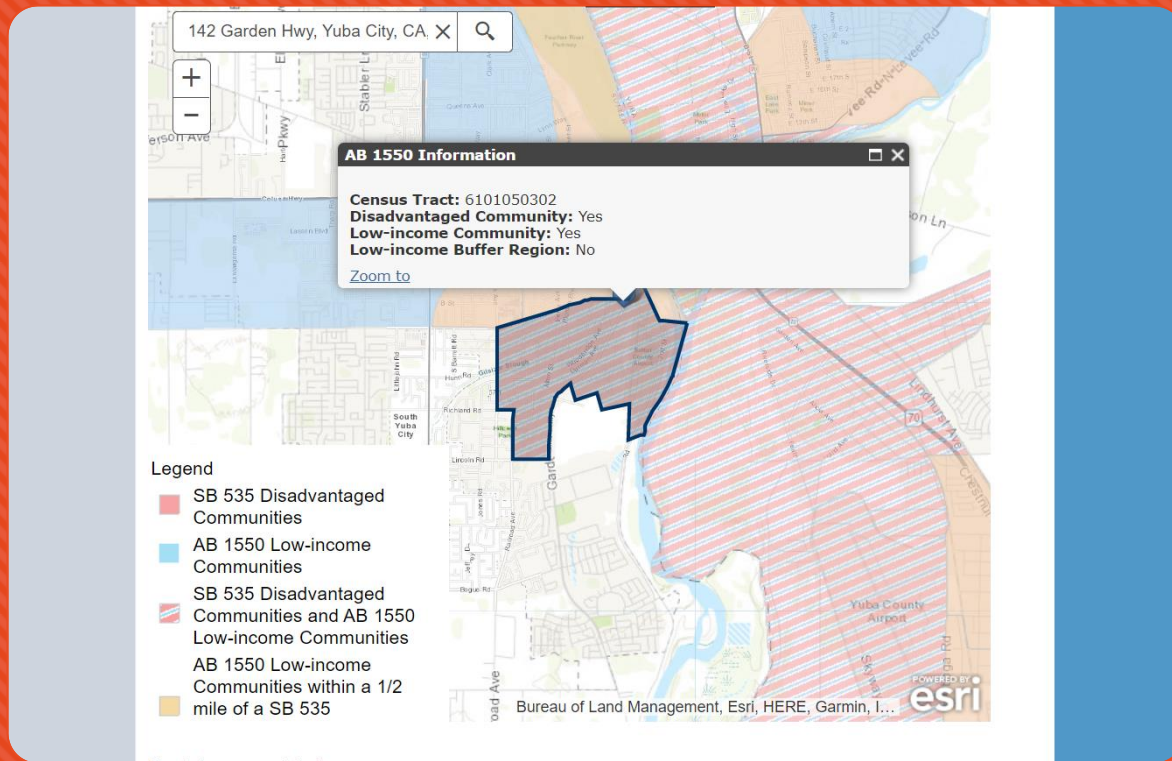
FARMER Program

- **Funding Agricultural Measures for Emission Reductions Program**
- **Supported by California Climate Investments, a statewide program that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment – particularly in disadvantaged communities**
- **Year 1, 2, 3, 4 and 5 FARMER Program funding already allocated**
- **Ag trucks were funded under the first two years of FARMER**
- **FRAQMD has accepted our final grant award amount and is currently waiting to for the grant solicitation to close to request the first half of grant funding.**

Program Overview

General Requirements

- Cannot pay for compliance with a regulation
 - Must be completed before compliance deadline
- Old engines/equipment must be operational
- Engine must be 25 horsepower or greater
 - If engine hp not known, can calculate based on: $\text{Engine HP} = \text{PTO} \times 120$ percent
- Must operate 75% within California and own for previous 2 years
 - Cost-Effectiveness will only include equipment usage in Yuba/Sutter counties
- Must be cost-effective
- Old engine/equipment must be destroyed
- Must be approved in program and have signed agreement before purchasing new engine/equipment



Map of Disadvantaged/Low-income Communities

<https://webmaps.arb.ca.gov/PriorityPopulations>

Funding

- Carl Moyer Year 26 award \$358,830
- FARMER Year 6 award amount \$751,975
- Award amounts are based on % of cost, not by horsepower
 - Example: Repower with Tier 4 engine up to 85%; Off-Road Equipment Replacement up to 65%
- Maximum funding is \$200,000 (NEW)
- Eligible for funding: engines/equipment, installation for eligible hardware, transport costs
- Ineligible for funding: taxes, extended warranty, maintenance
- New engines/equipment purchased must match application; shop around prior to submitting Application
- Equipment change requests will only be allowed if the original equipment is no longer manufactured, if the dealer closed, or some other factor out of the applicant's control

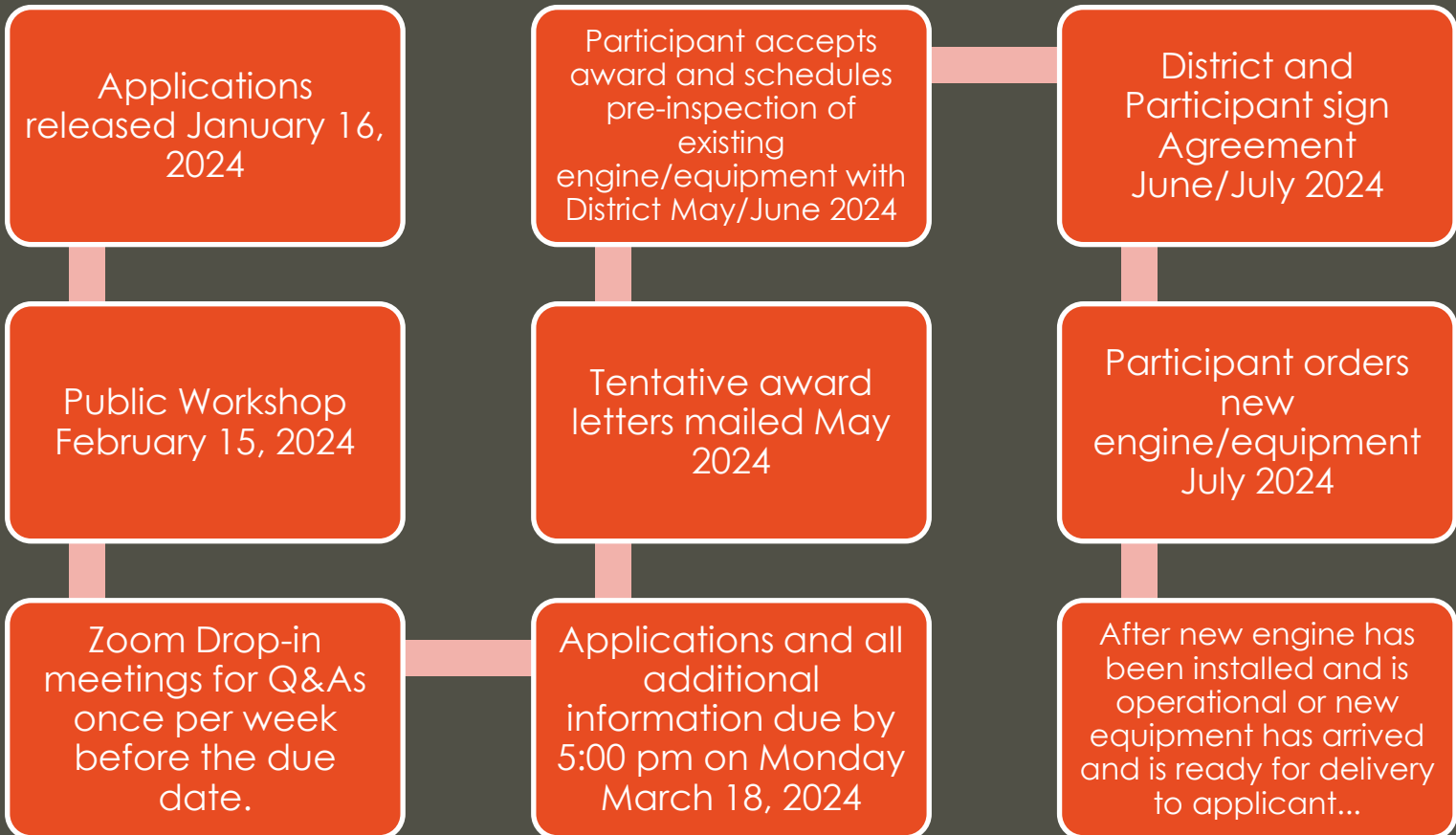
Project Selection

- Only one application per person/business/entity/farm
- Applications will be reviewed for completeness; completeness notification mailed or emailed
- All complete Applications received by 5:00 pm on Monday March 18, 2024, will be entered into random draw
 - Incomplete Applications will not be entered into draw
- If selected by random draw, project will be evaluated for cost-effectiveness and eligibility
- Tier 2 to Tier 4 replacement projects will be entered into random draw after Tier 0 to Tier 4 replacement projects, Tier 1 tier to tier 4 replacement projects, ZE UTV replacement projects, and repower projects are funded

Determining Cost-Effectiveness

- The most C/E project achieves the largest emission reductions for the least amount of funding
- Factors involved in C/E calculation:
 - Emissions of old engine
 - Emissions of new engine
 - Hours per year engine is operated
 - Number of years under contract (project life)
 - Cost of new engine/equipment
- Cost-Effectiveness (\$/ton) =
$$\frac{\text{grant amount (\$)} \times \text{CRF}}{\text{annual weighted surplus emission reductions}}$$
 - CRF: Capital recovery factor
 - Annual Weighted Surplus Emission Reductions (tons/Yr) = NO_x Reductions + ROG Reductions + (20 x PM reductions)
- Weighted surplus emission reductions include deterioration products and adjustment factors
- Cost-Effectiveness will be calculated by District; Detailed instructions are in Carl Moyer Guidelines <http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>

Tentative Timeline



Timeline Continued

- Schedule post-inspection (should be within 180 days of Agreement signing for replacement/repowers and one year for electric motors)
- Destroy old engine/equipment
- Submit W-9 tax form and invoices
- Payment will be issued to Participant
- 1099 issued for year payment was received
- First annual report mailed out year after project completion, and then every year throughout life of project (1 to 10 years)
- Own/operate engine/equipment per Agreement throughout life of project (1 to 10 years)

Regulatory Compliance & Eligibility Charts

Regulatory Compliance

- Ag mobile equipment:
 - No regulation/compliance deadline for ag off-road mobile
- Ag stationary irrigation engines:
 - Uncontrolled, Tier 1, Tier 2, or Tier 3 engines replaced with a Tier 4 engine or electric motor may be eligible
 - Diesel must be registered per FRAQMD Rule 4.16
- Non-Ag portable and off-road mobile:
 - Uncontrolled, Tier 1, Tier 2, or Tier 3 engines replaced with a Tier 4 engine or electric motor may be eligible
 - Off-road mobile - DOORS; portable - PERP or District permit

Off-Road Mobile Eligibility Chart

Equipment Type	Subject to ARB Fleet Rule?	Funding Opportunities ¹
Mobile agricultural equipment	No	Engine repowers, retrofits and replacements
Cargo handling equipment at ports/ intermodal rail yards	Cargo Handling Equipment Regulation ²	Limited opportunities.
All other equipment (e.g. construction, mining, rental, airport ground support and other industries)	Off-Road Regulation ³	Small fleets: Opportunities exist through Dec. 31, 2025, after which fleet must show 100% compliance with the regulation.

1. Limited opportunities means a fleet's compliance status with the ARB regulation must be determined. Contact air district Moyer Program staff or consult fleet rule Carl Moyer Implementation Charts at: <http://www.arb.ca.gov/msprog/moyer/guidelines/supplemental-docs.htm> in addition to the Guidelines.
2. Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards: <http://www.arb.ca.gov/ports/cargo/cargo.htm>
3. Regulation for In-Use Off-Road Diesel Vehicles <http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm>

Diesel Ag Irrigation Engines Eligibility Chart

Tier	HP	Registered As	Compliance Date	Project Type Eligible	Must be installed by
Tier 0, 1, 2	25-49	All	None	Diesel Engine or Electric Motor	N/A
Tier 1	50-750	Intermittent or Low-Use	2025	Tier 4 Diesel, SI Electric Motor	2024 2025
Tier 2	50-750	Intermittent or Low-Use	2025	Tier 4 Diesel, SI Electric Motor	2024 2025

Based on compliance deadlines in the Airborne Toxic Control Measure for Stationary Compression Ignition Engines, title 17, California Code of Regulations section 93115 and District Rule 4.16

Portable Non-Ag Diesel Engine Eligibility Chart

Engine Tier	HP	Subject to a Regulation?	Project Type Eligible	Notes
Portable Tier 0, 1, and 2	25-49	No	Repower, Retrofit or Replacement	Engines under 50 horsepower are not subject to the ATCMs and are eligible for Carl Moyer grants
Portable Tier 0	50-750	Yes, Portable ATCM	None	Tier 0 engines subject to Portable ATCM are not eligible for Moyer grants
Portable Tier 1	50-750	Yes, Portable ATCM	None	Tier 1 engines subject to Tier Phase-out Schedule must be retired by 1/1/2020, thus not eligible for Carl Moyer grants
Portable Tier 2	50-750	Yes, Portable ATCM	Tier 4 diesel or SI repowers and replacements	Small and Large Fleet funding opportunities possible

Based on compliance deadlines in the Portable Engine Airborne Toxic Control Measure, Title 17 CCR 93116 <http://www.arb.ca.gov/diesel/peatcm/peatcm.htm>



Off-Road Equipment Project Categories

Off-Road Projects - Overview

- Mobile, portable and stationary off-road engines and equipment
- Off-road = not registered with DMV
- Compression-ignition and large spark-ignition engines
- Construction, agricultural, industrial industries
- Examples:
 - Agricultural equipment (irrigation pumps, bin carriers, orchard tractors)
 - Off-road non-farm CI equipment (excavators, skid steer loaders, rough terrain forklifts, off-highway tractors, rubber tired dozers)
 - Large spark-ignited equipment (forklifts)

Off-Road Project Types

- Repower – the replacement of the existing engine with a newer emission-certified engine or electric motor
- Retrofit – the installation of an ARB verified emission control system on an existing engine
- Equipment Replacement – the purchase of new or used equipment with an engine certified to the current emission standard to replace older equipment that must be scrapped



Repower & Retrofit Projects

Repower and Retrofit Projects



- Off-Road Repower/Retrofit Application
- Repower awards up to 85% of the cost of the project
- Retrofit awards up to 100% of the cost of the project
- Project life between 1-10 years

Required to Apply

- Completed Application
- Proof of liability insurance for property on Application
- Itemized quote for new engine/motor
- Can use any certified dealer/installer
- Executive order for new engine
- 24 months of historical usage (optional)
 - If not provided, estimate usage on Application and the project will be required to meet a minimum usage
- Regulatory compliance (DOORS, PERP) if applicable
- Co-funding information (if applicable)
- Zero emission repowers (except stationary ag) must have 3 year or 5,000 hour warranty



Off-Road Equipment Replacement Projects

Replacement Projects

- One piece of off-road equipment can be replaced by one piece of new or used off-road equipment
- Old equipment must be Tier 0 (Generally older than 1996), Tier 1, or Tier 2
- Grant will pay up to 65% of the cost of the new equipment
- Project life between 3-10 years
- Replacement equipment must serve same function as old equipment (tractor for tractor, forklift for forklift)
- The cost of a cab or loader may be included in the grant amount if the original equipment has a cab or loader
 - If original equipment lacks a cab or loader applicant can cover entire cost of additional equipment



Horsepower Increase Option

- Existing ORERP program
 - New equipment's engine hp cannot be greater than 125% of the original engine's hp.
 - Unlimited reduction in hp allowed.
 - If no equivalent new equipment that is within 125% of the original equipment's horsepower, can apply for higher hp with statement from manufacturer.
- HP Increase Option (added in last year's program)
 - ORERP projects CAN apply for engine hp that is greater than 125% of the original equipment's horsepower EVEN IF there is an equivalent new equipment within 125% of the original equipment's horsepower.
 - Applicant must fill out and complete the NEW supplemental form for the higher horsepower equipment.
 - The grant award amount will be based on the new equipment with hp within 125% of the original engine hp.
 - Emissions reductions used to calculate cost effectiveness will be based on the higher horsepower equipment.

Required to Apply

- Completed application
- Evidence of liability coverage
- Hour meter photograph
- Usage data
- Proof of ownership
- Proof of operational status
- Replacement engine Executive Order (from dealer)
<http://www.arb.ca.gov/msprog/offroad/cert/cert.php>
- Replacement equipment price quote and spec sheet (from dealer)
- Warranty documents (from dealer)

Required to Apply Part 2

- Copy of liability insurance for business/farm
 - Does not need to list FRAQMD
 - Must match address on application
- Photograph of hour meter
 - Does not have to be working
 - Please include written statement.

Annual Hourly Usage Is Required

- Cost-effectiveness must be based on hours of operation
- Provide two years of annual usage on application and attach documentation showing how usage was estimated
- Documentation could include employee time sheets linked to equipment usage, equipment service records with copies of receipts of supplies purchased, operational records, repair work orders from third party that provide a date and hour meter reading
- The best records are dated, and hour meter readings can be verified through additional third-party documentation.
- If you do not have a working hour meter or no hour meter installed, a written statement of how the hours are calculated is helpful. Forecast equipment usage conservatively if you do not have timesheet records.

Proof of Existing Ownership

- Copy of the Bill of Sale for old equipment from dealership/auction/or notarized private party OR
- Provide documentation for previous two years that specifically lists the equipment such as:
 - Tax depreciation logs
 - Property tax records
 - Bank appraisals for equipment
 - Equipment insurance records
 - Maintenance/service records with copies of receipts for purchase of supplies
 - General ledgers

Operational Status

- Copies of previous year:
 - Revenue or usage records with operational, standby, and down hours for equipment
 - Employee time sheets linked to equipment usage
 - Preventive maintenance records tied to specific usage hours for equipment with copies of receipts for purchase of supplies
 - Repair work orders from third party specific to equipment

From Participating Dealer Obtain:

- Itemized quote
- Warranty information
- Engine executive order
- Must purchase new equipment at District trained/approved dealership
 - List provided on Application
 - Not on the list? Call FRAQMD to sign up

Required Warranty

- Equipment replacement must have a 1 year/1 600 hour warranty
- Used equipment must meet same warranty requirements
- Warranty must cover parts and labor
- Additional cost for warranty is not eligible for funding

Destruction Requirements

Destruction of Old Engines/Equipment

- Existing equipment must be delivered to an approved salvage yard within 30 days of receipt of new equipment
- Existing equipment can be destroyed after signing the contract and before receiving new equipment
- Salvage Certification Form will be mailed; bring with the equipment to the salvage yard
- List of participating salvage yards will be mailed

Invoice & Financing

Invoice & Financing Documentation

- Dealers provide itemized final invoice
- Participant may obtain financing for their portion of the equipment purchase only (>35% plus taxes)
- Documentation of financing must be provided to District

Zero-Emission UTV Replacement

(NEW) Zero-Emission UTV Replacement Program

- One piece of off-road equipment can be replaced by one piece of new zero emission equipment.
 - The existing vehicle can be an ATV or an UTV. Tractors with less than 25 horsepower are eligible for replacement as well.
- Zero-Emission: The vehicle must emit zero tailpipe emissions from its onboard source of power (such as all electric or hydrogen fuel cell vehicles) and may not go under any modification that would allow the propulsion by any other means.
- Provide the district with past maintenance records and/or service history on the UTV that is being replaced
- Old equipment can be diesel or gasoline fueled.
- Old equipment must go through the ORERP process and be scrapped.
- ZE UTV Project Category Grant will pay up to 65% of the cost of the new equipment.
 - Example: If new the equipment costs \$18,000 then maximum grant award is \$11,700.
 - In additions to the 65% funding cap, the maximum grant award amount is \$13,500.

Required Documentation

OFF-ROAD Zero-Emissions UTV REPLACEMENT APPLICATION

Complete each section. If the question does not apply (for example: asking for a fax number but you do not have a fax number) mark the answer as "n/a" for not applicable. This application is to be used for incentive funds for off-road equipment replacement. Applicant acknowledges that award is conditional upon approval of the District and must meet the minimum eligibility criteria.

PLEASE INCLUDE THE FOLLOWING ATTACHMENTS TO THIS APPLICATION:

- o Required: Proof that location of operation is covered by liability insurance
- o Required Proof of Ownership:
 - o Bill of Sale showing applicant as owner; or
 - o Private party bill of sale showing the applicant as owner; or
 - o Other documentation showing proof of operation for the previous 24 months such as maintenance/service records, general ledgers, or other documentation (subject to District approval).
- o Required: Itemized quote for new UTV
- o Required: Maintenance records and/or service history for the existing vehicle for the past 24 months
- o Required: Warranty documentation for new UTV from dealership you will be purchasing the new UTV from. The warranty must be 1-year minimum length, including applicable energy storage tanks or battery packs.
- o Optional: 24 months of complete historical usage

1. Applicant (Organization/Company/Individual Name):

2. Business Type:

3. Mailing Address:

City:

State:

Zip Code:

4. Contact Name:

ZE UTV Requirements

- The vehicle purchased must be a new vehicle.
- The Grant Applicant must self certify that the new UTV will be used exclusively for California Agriculture.
- The Grant Applicant must not purchase, make payments toward and/or take possession of the new UTV prior to receiving a fully executed grant contract with the District.
- New UTVs must have a towing capacity of 500 pounds or greater and a total weight of 700 pounds or greater.
- Vehicle drivetrain, including applicable energy storage tanks or battery packs, must be covered by a manufacturer warranty.
 - Must have a minimum 1-year warranty.
- The new UTV must have an operational hour meter installed.
 - If the 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.

Process ZE UTV Projects PT. 1

1. Turn in Application.
2. Receive notice that Application is complete.
3. Receive tentative award letter.
4. Return completed questionnaire to District staff via physical mail, email, fax, or drop off at the District office.
5. Call District to accept tentative award and schedule pre-inspection.
6. During pre-inspection the District will photograph the old vehicle, witness it start up and move forward and backward, and record the serial numbers. (OPTIONAL): Participants may bring the equipment to the District to be inspected and verify operational status.
7. After the District receives the grant money from the California Air Resources Board, the District mails you the contract agreement. Read and sign both copies and return both copies back to the District.

Process ZE UTV Projects PT. 2

8. After both signed contract agreements are returned, the District's Air Pollution Control Officer will sign both copies. After the contract agreement has been signed by all parties a copy will be mailed to you. The grant participant can now order the new UTV.
9. Once the new UTV is delivered, the participant must contact the District to schedule an inspection.
10. The District inspector will record new UTV serial number, make, model, and take photographs during the post inspection.
11. After verification that the UTV inspected matches the contract and is eligible for grant funding, District staff will notify the participant in writing that they have 30 days to surrender the old vehicle to a District approved scrapyard and return the salvage certification form.
12. After the District confirms that the old vehicle has been destroyed, and has received your W-9, we will request your check. The check should be available in about two weeks.
13. We prefer that you pick up your check at the District office.
14. The first annual report will be mailed in January of the following year. It is due by March 31st each year that the UTV is under contract.

Other Project Types

- Infrastructure in support of off-road equipment
 - Electrical infrastructure for Ag irrigation motor
- Fire apparatus
- On-Road Trucks
 - Ag Trucks-FARMER
 - Other Trucks-
 - ARB <http://www.arb.ca.gov/msprog/moyer/voucher/voucher.htm>
 - SMAQMD SECAT, Goods Movement (Prop 1B) <http://airquality.org/mobile/index.shtml>
 - Other State and Federal programs linked on FRAQMD website <https://www.fraqmd.org/links-to-grants-offered-by-other-agencies>
- Possible loans:
http://www.arb.ca.gov/msprog/truckstop/funding/loans_fa.htm

Resources and Contact Information

Resources

District Planning: Department Completing a new Application, updating previous year Application to resubmit, or general program information

District Engineering Department: Diesel Agricultural Engine Registration Program

District Website: Applications, Frequently Asked Questions, Policy and Procedures Manual, ARB Statewide Guidelines

Off-Road Equipment Dealers: Itemized quotes for engines and equipment for repower/retrofit/replacement projects; Executive Orders for engines; warranty information if needed

CARB:1-866-6-Diesel for information on diesel regulations

FRAQMD Program Contacts:

- Planning – Peter Angelonides (530) 634-7659 ext 209, Pangelonides@fraqmd.org.
- Engineering – William Escobedo (530) 634-7659 ext 212, wescobedo@fraqmd.org.
- FRAQMD website – www.fraqmd.org

Thank you for joining us today!

- Questions?
- Stop recording (it will be posted to website)
- Staff to remain online for additional questions

