

SAN JOAQUIN VALLEY  
AIR POLLUTION CONTROL DISTRICT

# HEAVY-DUTY ENGINE PROGRAM

## AGRICULTURAL PUMP ENGINE COMPONENT

### DIESEL ENGINE TO ELECTRIC MOTOR REPOWER OPTION

#### ELIGIBILITY CRITERIA AND APPLICATION GUIDELINES

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is currently accepting applications requesting monetary incentives to replace existing diesel agricultural irrigation pump engines (engines) with new electric motors, according to the terms and conditions described in these guidelines. For additional information, assistance, or to receive application materials, please contact:

San Joaquin Valley Air Pollution Control District  
Strategies and Incentives Department  
1990 East Gettysburg Avenue  
Fresno, CA 93726-0244

You may also contact us by phone, email, or visit our website:

(559) 230-5800  
[weberip@valleyair.org](mailto:weberip@valleyair.org)  
[www.valleyair.org](http://www.valleyair.org)

## PROGRAM REQUIREMENTS

Replacement of an existing diesel agricultural irrigation pump engine with a new electric motor.

❖ **General Information and Eligibility Criteria:**

- The SJVAPCD Agricultural Pump Engine Component is **not** a co-funding program. You are not eligible to participate in the SJVAPCD's program if you are currently under contract to receive funding from any other local, state, or federal agencies for the diesel engine you intend to submit an application.
- Projects will be funded based on a dollar per horsepower basis, based on the horsepower of new replacement electric motor, not to exceed 85% of eligible costs.
- There are two (2) options available for funding. SJVAPCD staff will help the applicant determine which option is preferred prior to contract.

**Option A: Diesel to Electric Repower**

**Option A** will pay up to 85% of the cost of the new electric motor when no line extension fees are charged by the electric service provider. The maximum eligible incentive amount is based on the horsepower of the new electric motor. Funding is capped at the following horsepower levels for each new motor, not to exceed 85 percent of eligible costs:

Horsepower Rating	Dollar/Horsepower
26-99	\$150
100-199	\$130
200-499	\$140
500-600	\$150

**Option B: Diesel to Electric Repower with Line Extension**

**Option B** will pay approximately 50% of the cost of the electric motor plus a portion of the line extension fees charged by the electric service provider (up to the cost-effectiveness limit). The maximum eligible incentive amount is based on the horsepower of the new electric motor (not to exceed 85 percent of eligible costs) plus the line extension cost, minus any rebates/allowances:

Horsepower Rating	Dollar/Horsepower
26-99	\$100
100-199	\$90
200-499	\$90
500-600	\$100

- The maximum eligible incentive amount is calculated up to the cost-effectiveness limit and may not necessarily reflect the maximum funding amount based on the aforementioned funding table.
- Eligible incentive amounts may be reduced after the claim for payment has been finalized, depending on all eligible items invoiced.
- Submission of a program application **does not** guarantee funding.

**❖ The existing engine must:**

- Be emission certified to a Tier 1 or Tier 2 or Tier 3 level (or Tier 0 from 26 to 50 horsepower).
- Must have an engine serial number stamped into the block or listed on an engine data tag affixed to the engine.
- Be rated greater than twenty-five (25) horsepower.
- Be a stationary or transportable off-road industrial engine.
- Be permitted or registered with the SJVAPCD if the engine is rated greater than fifty (50) horsepower.
- Have been located and operated within the SJVAPCD boundaries (see page 12) for a period of at least twelve (12) months prior to the application submission date.
- Be situated at its operating location (on the wellhead or booster trailer) and be in operating condition at the time of application submission **and** SJVAPCD inspection.
  - Operating condition is determined through an inspection process conducted by SJVAPCD staff prior to agreement execution.

**❖ The new electric motor must:**

- Be rated at greater than twenty-five (25) horsepower, which is equivalent to greater than nineteen (19) kilowatts.
  - If the horsepower rating of the new electric motor is 150% or greater than the existing engine, the participant must provide sufficient justification for the increase in horsepower to receive the maximum eligible incentive amount. If the horsepower increase can not be justified, the new engine may not be eligible for full funding at the dollar per horsepower funding level as specified on the table located on page 5 of the Application Packet. The participant's explanation for the increase in horsepower will be reviewed by staff on a case-by-case basis. Staff may contact participant for further clarification if required. If the explanation provided is not approved, the maximum eligible incentive amount may be capped at the horsepower level of the current engine and not the new engine.

**❖ The participant must:**

- **Not purchase or install the electric motor under funding consideration prior to agreement execution.**
- Operate the new electric motor 75% of the time within SJVAPCD boundaries (see page 12). Operational time is determined by the electric motor's annual hours of operation.
- Install and maintain a functioning hour meter to measure the hours of equipment operation through the full term of the agreement. If the equipment does not have a functioning hour meter at the time of the project, the meter must be installed, repaired, or replaced. If during the agreement term the hour meter fails for any reason, the hour meter must be repaired or replaced as soon as possible at the owner's cost.
  - The cost of an hour meter is eligible for incentive funding and should be included in the quoted price of the new electric motor if there is not an existing functioning hour meter at the time of the project.

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- Keep the new electric motor at the specified well/pump site through the full term of the agreement.
    - If the new electric motor is moved from the specified well/pump site during the agreement term, the SJVAPCD must approve the location change before the motor is relocated.
  - Remain the owner of the new electric motor through the full term of the agreement. Agreement terms range up to ten (10) years.
    - If the new electric motor or the property where the motor is located is sold during the agreement term, then the new owner must assume the agreement obligations with the SJVAPCD and comply with the terms and conditions outlined in the original agreement. The SJVAPCD must approve the electric motor ownership change **prior** to its sale.
  - Maintain replacement value insurance for the new electric motor through the full term of the agreement.
  - Submit annual reports to the SJVAPCD through the full term of the agreement.
  - Destroy or render useless the existing engine, consistent with the requirements of the SJVAPCD
- ❖ Associated Eligible Items:
- The SJVAPCD may provide additional incentives towards the cost of electric power line extension as listed in the utility company contract with the Participant.
  - Control panels with reduced-voltage starting capabilities are eligible for funding under limited circumstances. Documentation may be requested to be submitted as proof of any requirements or justification for the equipment.
    - Variable frequency devices are eligible for funding if the applicant provides justification for adjustable water needs as determined by SJVAPCD staff.
    - Reduced voltage starting (“soft start”) technology is eligible for funding if required by the electric service provider.
- ❖ Engines/equipment **ineligible** for funding:
- Uncontrolled (Tier 0) engines <25HP and >50HP.
  - Any engine with an unknown engine serial number.
  - Any engines owned by rental companies.
  - Any farm or construction vehicle, or any on-road vehicle powering an irrigation gear head or pump.

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## COMPLIANCE CRITERIA

Projects that may be eligible for funding provide emission reductions that are surplus to any regulatory requirements. However, due to varying compliance timelines, opportunities for funding may be limited.

❖ **SJVAPCD Rule 4702 (Internal Combustion Engines – Phase 2)**

The June 2005 amendments to Rule 4702 removed the exemption for engines used in agricultural operations. Based on rule requirements, engines greater than 50 horsepower may need to be replaced with certified engines or install pollution control equipment in order to meet outlined emission limits. The requirements of Rule 4702 impact the funding structure of the Emission Reduction Incentive Program, and could have an impact on your submitted project. To obtain a copy of the rule, visit the SJVAPCD website at [www.valleyair.org](http://www.valleyair.org) or call (559) 230-5800.

❖ **ARB's Stationary Diesel Engines Airborne Toxic Control Measure (ATCM)**

ARB has adopted an ATCM for stationary compression ignition (CI) engines greater than 50 horsepower. This control measure requires new CI engines for agricultural operations, including those used to repower agricultural equipment, to meet ARB and federal new off-road engine PM certification standards. Visit ARB's website at [www.arb.ca.gov](http://www.arb.ca.gov) to obtain a copy of the Stationary Diesel Engines ATCM.

❖ **ARB's Portable Diesel-Fueled Engines ATCM**

ARB has adopted an ATCM for portable diesel engines. This control measure requires all diesel-fueled portable engines 50 horsepower and greater to be certified to Tier 1, 2, or 3 federal and state off-road engine emission standards by 2010. The ATCM also requires fleets of portable engines 50 horsepower and greater to meet weighted particulate matter emission standards that become more stringent in 2013, 2017, and 2020. Visit ARB's website at [www.arb.ca.gov](http://www.arb.ca.gov) to obtain a copy of the Portable Diesel Engines ATCM.

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## APPLICANT RESOURCE WEB PAGE

To assist applicants participating in the SJVAPCD's Heavy-Duty Engine Emission Reduction Incentive Program, the SJVAPCD has developed an Applicant Resource Web Page. This page contains links to engine manufacturers, distributors, and local dealers familiar with the requirements of the program. The information and contacts within these links can assist you in obtaining all of the information necessary to fulfill the requirements of the program. Additionally, this page contains links to the California Air Resources Board website where you can obtain a list of eligible engines, vehicles, associated Executive Orders and other technical information.

When preparing an application, we ask that you utilize the information presented within the links on this page. By submitting complete application packets with accurate information, we can reduce the amount of time and resources necessary to process your application.

Please note that the manufacturers, distributors, and dealers represented on this page have not been "approved" by the SJVAPCD nor do they represent an exhaustive list of available resources. If you are an engine manufacturer, distributor, or dealer and you wish to be included on the Applicant Resource Web Page, please contact the SJVAPCD's Emission Reduction Incentive Program.

The Applicant Resource Web Page can be found at [www.valleyair.org](http://www.valleyair.org) under the "Grants and Incentives" tab.

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## APPLICATION GUIDELINES

- ❖ Fill out the application completely and as accurately as possible. Do not leave any required fields blank, as it lengthens the processing timeframe associated with the application and delays funding. All fields are required unless otherwise indicated.
- ❖ All required signatures must be in **blue ink**, as a way to identify them as original.
  - If a third party filled out any part of the application on your behalf, ensure that the Third Party Signature section is completely filled out and signed.
- ❖ A copy of the following items must be submitted in order for the application to be deemed **complete**:
  - Completed Application.
  - Completed Certifications section.
  - IRS Form W-9.
  - Copy of the completed corresponding Electric Service Provider Application or Letter of Intent.
  - Dated and itemized dealer quote and specification sheet for the new electric motor and eligible equipment.
  - If applicable, completed Third Party Information section.
  - For applicants who are municipalities, a copy of the Board Resolution which approves participation in the program.

Located in the **Application** packet (page 6) is a comprehensive detailed checklist of the above mentioned items. For guidance purposes, please refer to the checklist in the Application packet when submitting all required documents.

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## STEP-BY-STEP APPLICATION GUIDANCE

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This section outlines the information requirements for each field of the application. If you need additional assistance, please contact the Emission Reduction Incentive Program and a staff member will assist you.

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### SECTION 1 – APPLICANT INFORMATION

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#### ORGANIZATION INFORMATION

**1. Organization, Company, or Proprietor's Name**

The legal name of the organization that will enter into agreement with the SJVAPCD. The information entered into Section 1 of the application must be **identical** to the information on Form W-9, as this information will be used to generate all binding documents and be used to report incentive funding to the IRS.

**2. Business Type**

The classification of the organization that appears in the "Organization, Company, or Proprietor's Name" field of the application. Check the appropriate box.

**3. Tax ID**

The Taxpayer Identification Number (TIN) or Social Security Number (SSN) entered in the Form W-9. **The organization's name and tax ID will be used to report incentive funding to the IRS.** The SJVAPCD cannot give tax advice, as such, please contact a tax professional or the IRS to determine the tax consequences associated with receiving incentive funding.

**4. - 7. Address**

The physical address where the organization is located, including: number and street name, city, state, and zip code.

**8. - 11. Mailing Address**

The mailing address used by the organization. If the physical and mailing addresses are the same, write "Same." All correspondence generated by the SJVAPCD, including the agreement, checks, and annual reports, will be sent to the mailing address.

**12. Number of diesel engines to be repowered**

Provide the total number of diesel engines to be repowered as part of this project.

**13. Have you applied to any other grant programs for any engines in this project?**

Check whether additional grant funding was applied for any engines in this project other than grant funding through this program. If yes, please contact ERIP Staff at (559) 230-5800 before completing this application.

#### PRIMARY CONTACT INFORMATION

**14. First and Last Name**

The first and last name of the person who will serve as the primary contact to the SJVAPCD through the full term of the agreement. All questions related to your project will go to this individual.



15. **Title**  
The job title of the primary contact.
16. **Phone Number**  
The main phone number, including area code, for the primary contact.
17. **Fax Number**  
The fax number, including area code, for the primary contact.
18. **Alternate Contact Number**  
The alternate phone number, including area code, where the primary contact can be reached.
19. **Email**  
The email address of the primary contact.

**CONTRACT SIGNING AUTHORITY INFORMATION**

20. **First and Last Name**  
The first and last name of the person, designated by the organization that will enter into binding agreement with the SJVAPCD, to sign on the organization's behalf. Please print.
21. **Title**  
The job title of the person designated to sign on the organization's behalf.

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**SECTION 2 – ACTIVITY INFORMATION**

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1. - 3. **Engine Address**  
The physical location (street address, city, and zip code, or major cross streets if an address does not exist) where the engine is currently installed.
4. **Well Site/Pump #**  
Identify the engine by well site name or pump number if one has been assigned to it by your organization (i.e., Well #16, Southside Well, Pump #32N, etc.). If none has been assigned, write "N/A".
5. **Distance/Direction from Engine to Nearest Business**  
Specify the distance from the engine site to the nearest business. Designate the business' location with respect to the engine site.
6. **Distance/Direction from Engine to Nearest Residence or School**  
Specify the distance from the engine site to the nearest residence or school, whichever is closer. Designate the residence's or school's location with respect to the engine site.
7. **County of Operation**  
Check in which county or counties the engine is being operated.

- 8. Primary Function of Engine**

Check the primary function of the engine. If the engine is not used for crop irrigation, provide an explanation of its function.
- 9. Date Engine was Originally Installed/Operated at This Facility (this well/pump site)**

Fill in the month and year in which the current engine was originally installed/operated at the facility listed in Section 1 of the application.
- 10. Engine Type**

Check the type of the engine: stationary deep well, trailer mounted deep well (transportable), stationary booster, trailer mounted booster (transportable), or other. If "Other" is checked, please provide an explanation.
- 11. Estimated Annual Operation**

Provide the estimated annual operation of the engine in hours.
- 12. Percentage Use in SJVAPCD**

Provide the percentage of total annual hours of operation that occur within the SJVAPCD boundaries (see page 12).
- 13. Percentage Use in California**

Provide the percentage of total annual hours of operation that occur within California.
- 14. Is this engine operational?**

Check whether the engine is currently operational. Non-operational engines are ineligible for funding. The engine must be operational at the time of inspection.
- 15. Utility Company**

Check which utility company will be providing service to electrify the site of the new electric motor. If "Other" is checked, provide the name of the utility company.
- 16. When would this engine be available for operational inspection?**

Check the time(s) and day(s) the engine would be available for inspection by SJVAPCD staff. This information may be used for scheduling purposes; however, it does not guarantee your inspection on a specific day or time. SJVAPCD staff will contact you to set up an inspection appointment.

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### SECTION 3 – EQUIPMENT INFORMATION

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#### CURRENT ENGINE

- 1. - 2. Engine Make and Model**

Provide the make and model of the current engine. For example, Cummins (make) 6BTA5.9C (model).
- 3. Model Year**

The year the current engine model was manufactured.

**4. Intermittent/Gross Horsepower Rating**

The intermittent horsepower of the current engine.

**5. Serial Number**

The serial number listed on the current engine. **Engines with unknown serial numbers are ineligible for funding.** If the engine data tag is missing/illegible or an identifiable serial number is not stamped on the engine block, then the engine is ineligible to participate in the program.

**6. US EPA Engine Family Name**

The engine family name assigned by EPA (if available). This information would typically be listed on the engine date plate or can be made available through your engine dealer. You may also visit ARB's website at <http://www.arb.ca.gov/msprog/offroad/cert/cert.php> to obtain the information. If this information is not available, write "N/A".

**7. Engine Tier**

Check the tier emission level of the current engine; uncontrolled (Tier 0) **ineligible**, Tier 1, Tier 2, or Tier 3.

**NEW ELECTRIC MOTOR****8. - 9. Electric Motor Manufacturer and Model**

Provide the make and model of the electric motor. For example, US Motors (make) BF68 (model).

**10. Model Year**

The year the electric motor model was manufactured.

**11. Intermittent/Gross Horsepower Rating**

The intermittent horsepower of the new electric engine.

**12. If the horsepower rating of the new electric motor is 150% or greater than the current engine, please explain why the additional horsepower is needed**

The SJVAPCD requires justification if the horsepower of the new electric motor is 150% or greater than the current engine. If applicable, provide a detailed explanation for the need to purchase a new electric motor with increased horsepower.

**13. Motor Position**

Check the position of the new electric motor, horizontal or vertical.

**14. Motor Efficiency**

Check the efficiency rating of the new electric motor; standard or premium.

**15. Total Cost of New Electric Motor Including Installation**

The total cost of the new electric motor and any additional eligible equipment. The total cost includes: new electric motor, additional eligible equipment (including service pole, pump panel, meter service etc), installation labor, and sales tax.

**16. Tax Rate**

Sales tax rate used in the quote for the new electric motor.

**17. Total Line Extension Cost (if applicable)**

The total line extension fees charged by the electric service provider, minus any rebates or allowances.

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**SECTION 4 – DEALER/INSTALLER INFORMATION**

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**DEALER****1. Electric Motor Dealership Name**

The name of the business where you will be purchasing the new electric motor associated with this project.

**15. Address**

The physical address where the electric motor dealer is located, including: number and street name, city, state, and zip code.

**6. Contact Name**

The first and last name of the person the SJVAPCD can contact regarding the purchase of the new electric motor.

**7. Phone Number**

The phone number, including area code, of the contact person.

**8. Fax Number**

The fax number, including area code, of the contact person.

**9. Email**

The email address of the contact person.

**INSTALLER (complete only if different from electric motor dealer)****10. Electric Motor Installer Name**

The name of the business that will be installing the new electric motor associated with this project, if different than the electric motor dealer information.

**11. - 14. Address**

The physical address where the electric motor installer is located, including: number and street name, city, state and zip code.

**15. Contact Name**

The first and last name of the person the SJVAPCD can contact regarding the installation of the new electric motor.

**16.-18. Phone Number / Fax Number / Email**

The phone number, fax number and email address of the contact person.

MAP OF THE SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT BOUNDARIES

