

TO: Richard Corey  
Executive Officer  
California Air Resources Board

THROUGH: Steve Cliff, Ph.D.  
Deputy Executive Officer



FROM: Jack Kitowski, Chief  
Mobile Source Control Division



DATE: September 24, 2018

SUBJECT: APPROVAL OF ADDITIONAL PROJECT CATEGORIES AND  
MODIFICATIONS TO EXISTING PROJECT CATEGORIES IN THE  
FUNDING AGRICULTURAL REPLACEMENT MEASURES FOR  
EMISSION REDUCTIONS (FARMER) PROGRAM

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The purpose of this memo is to request your concurrence with staff's recommendations for additional project categories and modifications to existing categories in the Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program. The FARMER Program Guidelines were approved by the Board in March 2018. As part of the Guidelines, the Board granted the California Air Resources Board's (CARB) Executive Officer authority to approve additional project categories or make modifications to existing project categories as needed.

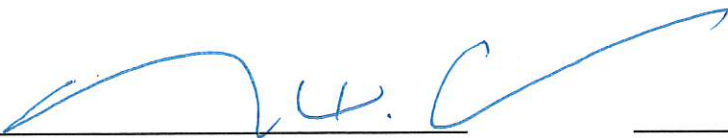
Staff received public feedback and requests to include additional project categories for agricultural trucks and equipment that are no longer available at similar horsepower ratings, as well as requests to modify the criteria for zero-emission agricultural utility terrain vehicles (UTV). Staff held public work groups in August 2018 to discuss staff's proposals for the additional and modified project categories, as summarized below and described further in the attached document.

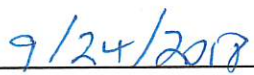
- **Additional Category for Heavy-Duty Agricultural Trucks:** Funding for agricultural trucks is currently available in the FARMER Program under the Carl Moyer Program-eligible project categories. However, agricultural trucks are typically low-use due to the seasonality of agriculture or are custom-built for specialty work making these trucks expensive, and therefore, not cost-effective under other incentive programs. To provide assistance for these trucks in the FARMER Program, staff is proposing to provide up to 65 percent of the cost of a new or used truck that meets the 2010 emission standard of 0.20 g/bhp-hr NO<sub>x</sub>.

Mr. Richard Corey  
September 24, 2018  
Page 2

- **Additional Category for Equipment Unavailable with Similar Horsepower Ratings:** Some off-road agricultural equipment are no longer produced at similar horsepower ratings as older models. For this project category, staff is proposing to keep the cost-effectiveness threshold consistent with the Carl Moyer Program, up to \$30,000 per ton of weighted emission reductions, and provide funding for up to 80 percent of the cost of the replacement equipment, regardless of horsepower rating, as long as the equipment serves the same function and performs the same work. Staff is also proposing to allow multiple pieces of equipment to be scrapped, if necessary, to make the project cost-effective.
- **Modified Zero-Emission Agricultural UTV Project Category:** Staff is proposing to modify the administrative requirements for zero-emission agricultural UTVs in order to streamline implementation. Under the proposed modified criteria for zero-emission agricultural UTVs, districts will still be expected to audit a set percentage of projects to ensure they are achieving the expected emission reductions and that all requirements are being met, but pre- and post-inspections by air district staff will no longer be required. Further, the required towing capacity of the replacement UTVs is reduced to 500 pounds.

Upon your approval of these project categories, staff will post the attached document on the FARMER Program website and districts will be able to begin funding these additional or modified project categories immediately. If you concur with these recommendations, please sign below and return to me.

  
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Signature of Richard W. Corey  
Executive Officer

  
\_\_\_\_\_  
Date

Attachment

cc: Erin Uchida  
Air Resources Engineer  
Mobile Source Control Division

Evan Powers  
Air Pollution Specialist  
Mobile Source Control Division

**Funding Agricultural Replacement Measures for Emission Reductions  
(FARMER) Program**  
**Additional and Modified Project Categories**

**1. Additional Category for Heavy-Duty Agricultural Trucks**

Heavy-duty trucks used in agricultural operations are currently eligible for funding in the FARMER Program. However, due to the seasonal nature of the agricultural industry, these trucks do not typically accrue many miles, which may limit incentive funding levels for these projects through traditional incentive funding mechanisms. Additionally, many specialty trucks used in agricultural operations are more expensive due to the specialized equipment they contain. This further reduces the incremental funding levels they may receive through other incentive programs.

California Air Resources Board (CARB) staff have worked with air districts, industry representatives, and other stakeholders to develop this category that provides additional incentives necessary to help owners and operators of agricultural trucks to turn over their older heavy-duty on-road and specialty agricultural trucks.

The following eligibility criteria and requirements apply to projects funded under this new project category. Further, the cost-effectiveness limit has been eliminated and districts may now fund up to 65 percent of the purchase price of an eligible replacement truck, including used trucks utilized in agricultural operations.

***Eligibility Criteria***

- Trucks must currently be in compliance with CARB's Truck and Bus Regulation under one of the following provisions:
  - Agricultural Vehicle Extension;
  - Low-Use Exemption;
  - Specialty Agricultural Vehicle Extension; or
  - Engine Model Year Schedule and the truck must operate as an "agricultural truck" as defined in the Truck and Bus Regulation.
- Current trucks must have a gross vehicle weight rating (GVWR) of 14,001 pounds or greater.

***Participant Requirements***

- Participants must maintain ownership of the replacement truck for three years.
  - If, during the life of the contract, the participants wish to sell the replacement truck, the administering air district must approve the truck ownership change prior to its sale. The new owner must be willing to assume program obligations with the air district and comply with the terms and conditions outlined in the FARMER Program Guidelines.<sup>1</sup>
- Upgrades to new trucks that add to the cost of the truck may be eligible for funding upon determination of the air district. Otherwise, FARMER funding

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<sup>1</sup> <https://ww2.arb.ca.gov/resources/documents/farmer-program-guidelines>

may only be used to fund the 'base model' that will serve the same function as the older truck.

- All replacement trucks must:
  - Meet 2010 emission standards of 0.20 g/bhp-hr NOx,
  - Be purchased from a dealership—no private party transactions are permitted, and
  - Have a GVWR of 14,001 pounds or greater.
    - Replacement used trucks must have less than the miles indicated below on the odometer:
      - Class 8 with a GVWR of 33,001 pounds or greater must have less than 650,000 miles
      - Class 7 with a GVWR of 26,001 – 33,000 pounds have less than 350,000 miles
      - Class 4-6 with GVWR of 14,001 – 26,000 pounds have less than 25,000 miles
- All replacement new trucks are subject to the warranty requirements in the 2017 Carl Moyer Program Guidelines.<sup>2</sup>
- Replacement used trucks are not subject to warranty requirements, but the participant must ensure that the truck remains in operation for the life of the contract.
- Glider kits do not qualify as replacement trucks under this project category.

Districts with board-approved Truck Trade-Up Programs may also utilize FARMER Program funding on trade-up transactions involving agricultural trucks after receiving CARB approval of the districts' truck trade-up program criteria.

Participants in this project category must meet all other applicable requirements for heavy-duty trucks in the FARMER Program Guidelines, 2017 Carl Moyer Program Guidelines and any future approved Guidelines, and current and future Program Advisories and Mail-outs.

## **2. Additional Category for Equipment Unavailable with Similar Horsepower Ratings**

This project category is available for FARMER Program-eligible equipment that is no longer available within 125 percent of the horsepower of the baseline equipment. Under traditional funding programs, maximum eligible funding amounts for equipment under this circumstance are based upon the cost of an engine or equipment whose horsepower is no higher than 125 percent of the existing engine horsepower. This severely limits the eligible funding available for harvesters and other large agricultural equipment no longer produced at similar horsepower ratings.

Under this project category, air districts may fund up to 80 percent of the purchase price of the replacement equipment, regardless of horsepower rating, as long as the project is cost-effective. The cost-effectiveness limit of weighted emission reductions is \$30,000 per ton. Further, participants may include multiple pieces of

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<sup>2</sup> <https://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>

equipment performing the same function and same work in order to increase cost effectiveness.

### ***Eligibility Criteria and Participant Requirements***

- Replacement equipment must serve the same function and perform the same work equivalent as the baseline equipment.
- Multiple pieces of equipment performing the same function and same work may be included as scrap to increase overall project cost-effectiveness.
- Participants must demonstrate with documentation to the administering air district that the equipment is no longer produced within 125 percent of the horsepower rating of the baseline equipment. This documentation must be kept on file by the air district.

Participants in this project category must meet all other applicable requirements for off-road equipment in the FARMER Program Guidelines, 2017 Carl Moyer Program Guidelines and any future approved Guidelines, and current and future Program Advisories and Mail-outs.

### **3. Modified Zero-Emission Agricultural Utility Terrain Vehicle (UTV) Project Category**

The Zero-Emission Agricultural UTV Project category is currently included as an eligible project category within the FARMER Program. During the development and implementation of the FARMER Program, air districts recommended a streamlined approach to this project category in order to reduce the amount of resources required to administer it. In addition to this modified process, air districts also have the option to administer this project category as written in the current FARMER Program Guidelines.

As with the original Zero-Emission Agricultural UTV Project category currently included in the FARMER Program Guidelines, the modified Zero-Emission Agricultural UTV Project allows air districts to provide incentives for up to 75 percent of the cost of a new zero-emission UTV to qualified individuals, businesses, public agencies and entities, and non-profit organizations involved in agricultural operations.

### ***Modified Zero-Emission Agricultural UTV Administrative Process***

Air districts may utilize the following process to administer this project category:

- The participant submits a completed application to their air district. The application is provided by the air district.
- Upon approval of the application package, the air district issues a voucher and contracts with the participant.
- The participant purchases the new eligible zero-emission UTV.
- The participant has the old UTV scrapped, destroyed, or otherwise rendered permanently inoperable by a district-approved dismantler. The participant must comply with all applicable scrap requirements within the FARMER Program Guidelines.

- The participant may then submit a claim to the air district for payment along with the following documentation:
  - Signed voucher,
  - Signed Certificate of Destruction from the dismantler, or other documentation confirming that the old UTV was rendered permanently inoperable,
  - Invoice for the new equipment purchase from the dealership,
  - Proof of payment for the new UTV, and
  - Photo of the new UTV.
- Upon submittal and approval of the complete payment claim package, the air district may then issue a payment check to the participant.

***Eligibility Criteria and Participant Requirements***

All vehicle eligibility criteria and participant requirements within the FARMER Program Guidelines remain unchanged with the exception of the towing capacity of the equipment. To be eligible for the Zero-Emission Agricultural UTV Project, replacement UTV models are required to have a towing capacity of 500 pounds or greater. This modification applies to the existing Zero-Emission Agricultural UTV Project category currently within the FARMER Program Guidelines.