Carl Moyer Memorial Air Quality Standards Attainment Program
Stationary Agricultural Engine Replacement and/or Retrofit Funding

General

As of **April 15th, 2009**, the Bay Area Air Quality Management District (District) will accept applications for the Carl Moyer Program on a first-come first-served basis**.** The purpose of the program is to provide funding to replace or retrofit heavy-duty diesel engines with lower-polluting engines and equipment.

Eligible Agricultural Projects

Eligible agricultural projects can receive up to the following CMP grant funding, covering a percentage of the total cost of the replacement engine or equipment, and installation:

1. Diesel to Diesel stationary agricultural engine replacement projects – 85% (Tier 3 and 4 only)
2. Installing ARB-Verified retrofit devices on Diesel stationary equipment – 100%
3. Certified Spark Ignition (SI) engine replacement- 85%
4. Diesel to Electric stationary engine / equipment replacement projects – 85%
5. Electric Motor New Purchase – 20%
6. Non- Engine Agricultural Use Projects - Case by Case basis

Who can apply?

Provided the project is not required by law, owners of mobile engines and stationary engines with more than 25 horsepower are eligible for grants. Portable engines are not eligible. All vehicles and equipment funded with a grant must operate within the Air District's boundaries. **Priority will be given to projects that reduce emissions in highly impacted communities. Highest priority will be given to the following six highly impacted communities:** 1) Concord, 2) Richmond/San Pablo, 3) Western Alameda County, 4) San Jose, 5) Redwood City/East Palo Alto, and 6) Eastern San Francisco. For a Priority Community Map of highly impacted communities in the Bay Area, see: http://www.baaqmd.gov/moyer.

The following counties are part of the District's jurisdiction: Alameda, Contra Costa, Marin, San Mateo, San Francisco, Santa Clara, and Napa counties. The southern portions of Solano and Sonoma counties are also part of the District.

What can I do now, before I start my application?

- Read the District Carl Moyer Program Overview Fact Sheet for rules that apply to all project types available from the District online at: http://www.baaqmd.gov/moyer.
- Understand any applicable state fleet rules that may apply to your fleet.
- Start collecting information needed for your application.
- Contact your engine or equipment dealer to discuss possibilities for your equipment.
- Review the California Air Resources Board (ARB) 2008 Carl Moyer Program Guidelines Chapter Ten "Agricultural Sources". The Guidelines are on the ARB webpage http://www.arb.ca.gov/msprog/moyer/moyer.htm.
- Contact the District with any additional questions.

If you have any questions regarding this program or the application process, please contact Stacy Shull by phone at (**415) 749-4955** or by e-mail at: sshull@baaqmd.gov

Carl Moyer Program AGRICULTURE
Quick-Reference Guide

For questions or more information, please contact Stacy Shull, Administrative Analyst for CMP agriculture, sshull@baaqmd.gov or 415-749-4955

Eligible Projects and Costs	
Eligible Agricultural Equipment	– In-Use Stationary diesel engines 25 hp and greater – Diesel Engines 50 hp and greater must be registered with the BAAQMD in order to be eligible for funding. – **Register engines here: http://www.baaqmd.gov/ag_diesel**
Eligible Agricultural Projects	– Repower: Replace In Use engine with o New Electric Motors o New diesel engine that meets applicable emission standards o New Spark-Ignited engine that meets applicable emission standards – Retrofit: Retrofit devices include selective catalytic reduction devices, diesel oxidation catalysts or diesel particulate filters – New Equipment Purchase – Agricultural Assistance
Eligible Agricultural Costs	– The capital cost of the new engine. – Tax and transport for eligible parts or costs. – Labor for installation of or modification to parts eligible for funding. ***Electric Motors and Equipment:*** – Capital cost of new motor – Peripheral equipment associated with electric motor projects (control panel, motor leads, service pole with guy wire, connecting electric line from the meter) – New Electric Equipment costs
Project Requirements	
Minimum project life and contract term	At least 1 year for engines subject to the Stationary Diesel Engine Air Toxic Control Measure (ATCM). If a longer project life is feasible, the minimum project life should be 3 years.
Surplus Emission Reductions	The project must be complete (engine installed and operational) at least 1 year prior to the associated ATCM compliance date or within three years of the ARB rule adoption date. See table 10-2 and 10-3 for compliance schedule
What if I can't replace my engine 1 year before the ATCM compliance date?	Still Apply! The District has an Agricultural Assistance program to help those that need longer project lives to achieve cost effective projects or can't meet the 1 year surplus requirement.
Carl Moyer program pays for a percentage of project costs	– Tier 3 and 4 Repower – 85 percent – Certified SI engine Repower – 85 percent – Electric motor repower – 85 percent – Electric motor new purchase – 20 percent – Retrofit device – 100 percent
Cost-effectiveness	Projects must meet a cost-effectiveness of $16,000 per weighted ton of NOx, ROG and PM10 reduced to be eligible
Area of activity and required hour meter	– Must be operated 75% in CA and roughly 75% in the District – All operation hours must be tracked by a functioning hour meter
New Engine Emission Requirements (ATCM)	
Agricultural In-Use Stationary Diesel Air Toxic Control Measure (ATCM)	The ATCM requires the replacement or retrofit of older in-use diesel engines with cleaner burning models over a period of 3 to 12 years. The compliance date is dependent upon the size of the Tier of the engine. – In-Use uncontrolled engines have the earliest compliance date – All new engines 50 hp and greater must certify to meet U.S. EPA Tier 3 or cleaner emission standards

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	– **Engines less than 50 hp do not need to meet emission standards**
Engine Registration Requirements	State regulations require that owners and operators of existing agricultural diesel engines rated at greater than **50 hp,** register their engines with the Air District by March 1, 2008. Register your engines here www.baaqmd.gov/ag_diesel.

Table 1

What Tier is my engine?

Engine Power (hp)	Manufacture Year	Tier
50 ≥ hp < 75	Pre 1998	Tier 0
	1998[2] - 2003	Tier 1
	2004 - 2007	Tier 2
75 ≥ hp < 100	Pre 1998	Tier 0
	1998[2] - 2003	Tier 1
	2004 - 2007	Tier 2
100 ≥ hp < 175	Pre 1997	Tier 0
	1997[2] - 2002	Tier 1
	2003 - 2006	Tier 2
175 ≥ hp < 300	Pre 1996	Tier 0
	1996[2] - 2002	Tier 1
	2003 - 2005	Tier 2
300 ≥ hp < 600	Pre 1996	Tier 0
	1996[2] - 2000	Tier 1
	2001 - 2005	Tier 2
600 ≥ hp ≤ 750	Pre 1996	Tier 0
	1996[2] - 2001	Tier 1
	2002 - 2005	Tier 2
hp > 750	Pre 2000	Tier 0
	2000[2] - 2005	Tier 1
	2006 - 2010	Tier 2

When do I need to replace my engine?

Table 10-2
Non-certified In-Use Stationary Diesel Agricultural Engine Emission Limits

Horsepower Range	Compliance Date	Diesel PM Not to Exceed (g/bhp-hr)	Off-Road CI certification Standard
> 50 to 99 hp	December 31, 2011	0.30	Tier 3 or Interim Tier 4
100 to 174 hp	December 31, 2010	0.22	Tier 3
175 to 750 hp	December 31, 2010	0.15	Tier 3
> 750 hp	December 31, 2014	0.075	Tier 4

Table 10-3
Tier 1 and Tier 2-certified In-Use Stationary Diesel Agricultural Engine Emission Limits

Horsepower Range	Compliance Date	Diesel PM Not to Exceed (g/bhp-hr)	Off-Road CI certification Standard
> 50 to 75 hp	December 31, 2015*	0.02	Tier 4
75 to 174 hp	December 31, 2015*	0.01	Tier 4
175 to 750 hp	December 31, 2014*	0.01	Tier 4
> 750 hp	December 31, 2014*	0.075	Tier 4

* Or 12 years after the date of initial installation, whichever is later