



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

**Carl Moyer Memorial Air Quality  
Standards Attainment Program**

*Stationary Agricultural  
Engine Projects Fact Sheet*



The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) is a state-funded program that offers grants to owners of heavy-duty vehicles and equipment to reduce air pollution emissions from heavy-duty engines. The Bay Area Air Quality Management District (Air District) is **NOW ACCEPTING** applications for the Carl Moyer Program.

**NEW Program changes!** Funding for school buses, transit buses, electric & alternative-fueled equipment, charging & fueling infrastructure – larger funding amounts!

**What types of stationary agricultural engine projects are eligible?**

The items below show the maximum percentages of total equipment replacement or installation costs that can be reimbursed by the Moyer grant for eligible agricultural projects:

- Diesel agricultural engine replacement (new equipment: electric, certified spark-ignition (SI) engine or Tier 4 Final diesel engines) – up to **85%**
- Install California Air Resources Board (CARB) verified retrofit devices on diesel-fueled stationary equipment – up to **100%**
- Infrastructure to support agricultural pump electrification – up to **50%** (**up to 75%** for publicly accessible projects with wind/solar systems)
- Non-engine agricultural-use projects – case-by-case basis

**Who can apply?**

Owners of stationary and portable engines 1997-1998 model year and NEWER with 25 horsepower or greater may be eligible to apply. Diesel engines 50 hp and greater must be registered with the Air District’s Agricultural Diesel Engine Registration Program to be eligible for funding. **Register engines here:** [www.baaqmd.gov/ag\\_diesel](http://www.baaqmd.gov/ag_diesel).

Applications will be evaluated on a first-come, first-served basis until all funds have been awarded, and applications must be complete to be considered for funding.

The following counties are part of the Air District’s jurisdiction: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara and southern portions of Solano and Sonoma. CMP-funded equipment must operate within the Air District’s jurisdictional boundaries. **Priority is given to projects that reduce emissions in the following impacted communities – AB 617 communities and communities for future AB 617 consideration.**

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|--|--|
| <ul style="list-style-type: none"> <li>• West Oakland</li> <li>• Richmond-San Pablo</li> <li>• East Oakland/ San Leandro</li> <li>• Eastern San Francisco</li> </ul> | <ul style="list-style-type: none"> <li>• Pittsburg-Bay Point area</li> <li>• San Jose</li> <li>• Tri-Valley area</li> <li>• Vallejo</li> </ul> |
|--|--|

More information about this funding priority is available at [www.baaqmd.gov/AB617grants](http://www.baaqmd.gov/AB617grants).

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

- Read the Air District Carl Moyer Program Overview Fact Sheet for additional requirements that apply to all project types: [www.baaqmd.gov/moyer](http://www.baaqmd.gov/moyer).
- Understand any applicable regulations may apply to your equipment.
- Contact your engine or equipment dealer to discuss possibilities for your equipment.
- Review the application user guide and start collecting required information and documentation.
- Review the CARB Carl Moyer Program Guidelines Chapter 5 - Off-road Equipment at <http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>
- If you have additional questions, contact the following:
  - **Off-Road Equipment Projects** - Adam Shapiro at (415) 749-8441 or [ashapiro@baaqmd.gov](mailto:ashapiro@baaqmd.gov)
  - **Stationary Engine Projects** – Daniel Anderson at (415) 749-8717 or [danderson@baaqmd.gov](mailto:danderson@baaqmd.gov).

**Carl Moyer Program - Quick-Reference Guide**

| Eligible Projects and Costs                   |   |
|---|---|
| <b>Eligible Agricultural Equipment</b>        | <ul style="list-style-type: none"> <li>– In-Use stationary and portable diesel engines, 1997-1998 model year and NEWER with power rating of 25 hp and greater</li> <li>– Diesel engines 50 hp and greater must be registered with the BAAQMD to be eligible for funding. <b>Register engines here:</b> <a href="http://www.baaqmd.gov/ag_diesel">www.baaqmd.gov/ag_diesel</a></li> <li>– Limited-use stationary compression ignition (diesel) engines with an existing Alternative Compliance Plan under Regulation 11 Rule 17</li> </ul>                                       |
| <b>Eligible Agricultural Projects</b>         | <ul style="list-style-type: none"> <li>– Repower: replace in-use engine with               <ul style="list-style-type: none"> <li>○ New electric motor</li> <li>○ New diesel engine that meets applicable emission standards</li> <li>○ New spark-ignited (SI) engine that meets applicable emission standards</li> </ul> </li> <li>– Retrofit: retrofit devices include selective catalytic reduction devices, diesel oxidation catalysts or diesel particulate filters</li> </ul>   |
| <b>Eligible Agricultural Project Costs</b>    | <ul style="list-style-type: none"> <li>– The capital cost of the new engine</li> <li>– Tax and transport for eligible parts or costs</li> <li>– Labor for installation of or modification to parts eligible for funding</li> </ul> <p><b>Electric motors and equipment:</b></p> <ul style="list-style-type: none"> <li>– Capital cost of new motor</li> <li>– Peripheral equipment associated with electric motor projects (control panel, motor leads, service pole with guy wire, connecting electric line from the meter)</li> <li>– New electric equipment costs</li> </ul> |
| Project Requirements                          |   |
| <b>Minimum Project Life and Contract Term</b> | At least 1 year for engines subject to the Stationary Diesel Engine Air Toxic Control Measure (ATCM). If a longer project life is feasible (ex: low-usage engines that qualify for alternative compliance plan), the minimum project life should be 3 years.  |
| <b>Surplus Emission Reductions</b>            | The project must be complete (engine installed and operational) at least 1 year before the associated ATCM compliance date or within three years of the CARB rule   |

|  | adoption date. See tables 10-2 and 10-3 (below) for compliance schedule.   |                                    |                                    |                                    |                                    |               |                   |      |                          |               |                   |      |        |               |                   |      |        |          |                   |       |        |                  |                 |                                    |                                    |               |                    |      |        |              |                    |      |        |               |                    |      |        |          |                    |       |        |
|--|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------|-------------------|------|--------------------------|---------------|-------------------|------|--------|---------------|-------------------|------|--------|----------|-------------------|-------|--------|------------------|-----------------|------------------------------------|------------------------------------|---------------|--------------------|------|--------|--------------|--------------------|------|--------|---------------|--------------------|------|--------|----------|--------------------|-------|--------|
| <b>Cost-effectiveness</b>  | Projects must meet a cost-effectiveness of <b>\$30,000</b> per weighted ton of NO <sub>x</sub> , ROG and PM <sub>10</sub> reduced to be eligible. Projects that involve electric motors are eligible to use the advanced technology cost-effectiveness limit of <b>\$100,000</b> .   |                                    |                                    |                                    |                                    |               |                   |      |                          |               |                   |      |        |               |                   |      |        |          |                   |       |        |                  |                 |                                    |                                    |               |                    |      |        |              |                    |      |        |               |                    |      |        |          |                    |       |        |
| <b>Area of activity and required hour meter</b>  | <ul style="list-style-type: none"> <li>- Must be operated within the BAAQMD jurisdictional boundaries</li> <li>- All operation hours must be tracked by a functioning hour meter</li> </ul>  |                                    |                                    |                                    |                                    |               |                   |      |                          |               |                   |      |        |               |                   |      |        |          |                   |       |        |                  |                 |                                    |                                    |               |                    |      |        |              |                    |      |        |               |                    |      |        |          |                    |       |        |
| <b>New Engine Emission Requirements (ATCM)</b>   |  |                                    |                                    |                                    |                                    |               |                   |      |                          |               |                   |      |        |               |                   |      |        |          |                   |       |        |                  |                 |                                    |                                    |               |                    |      |        |              |                    |      |        |               |                    |      |        |          |                    |       |        |
| <b>Agricultural In-Use Stationary Diesel Air Toxic Control Measure (ATCM)</b>  | <p>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 Tier of the engine.</p> <ul style="list-style-type: none"> <li>- In-Use uncontrolled engines (Tier 0) have the earliest compliance date</li> <li>- All new engines 50 hp and greater must certify to meet U.S. EPA Tier 4 or zero-emission standards</li> <li>- Engines less than 50 hp are not required to meet newer emission standards</li> </ul>   |                                    |                                    |                                    |                                    |               |                   |      |                          |               |                   |      |        |               |                   |      |        |          |                   |       |        |                  |                 |                                    |                                    |               |                    |      |        |              |                    |      |        |               |                    |      |        |          |                    |       |        |
| <p><b>When do I need to replace my engine?</b></p> <p><i>Please note that these compliance schedules apply to all engines that</i></p> <ul style="list-style-type: none"> <li>• <i><u>do not</u> qualify for a low usage alternative compliance plans or</i></li> <li>• <i><u>did not</u> apply for the extension by the deadline (December 31, 2011)</i></li> </ul> | <p style="text-align: center;"><b>Table 10-2</b><br/><b>Non-certified In-Use Stationary Diesel Agricultural Engine Emission Limits</b></p> <table border="1"> <thead> <tr> <th>Horsepower Range</th> <th>Compliance Date</th> <th>Diesel PM Not to Exceed (g/bhp-hr)</th> <th>Off-Road CI certification Standard</th> </tr> </thead> <tbody> <tr> <td>&gt; 50 to 99 hp</td> <td>December 31, 2011</td> <td>0.30</td> <td>Tier 3 or Interim Tier 4</td> </tr> <tr> <td>100 to 174 hp</td> <td>December 31, 2010</td> <td>0.22</td> <td>Tier 3</td> </tr> <tr> <td>175 to 750 hp</td> <td>December 31, 2010</td> <td>0.15</td> <td>Tier 3</td> </tr> <tr> <td>&gt; 750 hp</td> <td>December 31, 2014</td> <td>0.075</td> <td>Tier 4</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Table 10-3</b><br/><b>Tier 1 and Tier 2-certified In-Use Stationary Diesel Agricultural Engine Emission Limits</b></p> <table border="1"> <thead> <tr> <th>Horsepower Range</th> <th>Compliance Date</th> <th>Diesel PM Not to Exceed (g/bhp-hr)</th> <th>Off-Road CI certification Standard</th> </tr> </thead> <tbody> <tr> <td>&gt; 50 to 75 hp</td> <td>December 31, 2015*</td> <td>0.02</td> <td>Tier 4</td> </tr> <tr> <td>75 to 174 hp</td> <td>December 31, 2015*</td> <td>0.01</td> <td>Tier 4</td> </tr> <tr> <td>175 to 750 hp</td> <td>December 31, 2014*</td> <td>0.01</td> <td>Tier 4</td> </tr> <tr> <td>&gt; 750 hp</td> <td>December 31, 2014*</td> <td>0.075</td> <td>Tier 4</td> </tr> </tbody> </table> <p>* Or 12 years after the date of initial installation, whichever is later</p> | 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 | 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 |
| 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                             |                                    |                                    |               |                   |      |                          |               |                   |      |        |               |                   |      |        |          |                   |       |        |                  |                 |                                    |                                    |               |                    |      |        |              |                    |      |        |               |                    |      |        |          |                    |       |        |
| 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                             |                                    |                                    |               |                   |      |                          |               |                   |      |        |               |                   |      |        |          |                   |       |        |                  |                 |                                    |                                    |               |                    |      |        |              |                    |      |        |               |                    |      |        |          |                    |       |        |