



Carl Moyer Program Advisory: 05-002

Carl Moyer Program and Motor Vehicle Fee Funding for Agricultural Sources

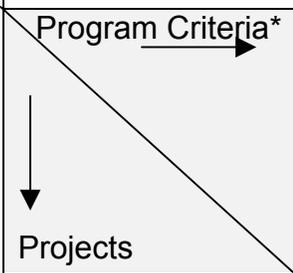
This page updated December 20, 2004

Since 1998, the Carl Moyer Memorial Air Quality Standards Attainment Program (“Carl Moyer Program”) has provided grants to encourage the owners of heavy-duty diesel engines to go beyond regulatory requirements by retrofitting, repowering, or replacing their engines with newer and cleaner ones. On January 1, 2005, new legislation (AB 923, Firebaugh) will take effect which broadens the definition of Carl Moyer Program-eligible projects to include additional agricultural sources and light-duty vehicles.

The purpose of this Advisory is to interpret AB 923 as it applies to reducing emissions from agricultural sources of air pollution. (For information on the light-duty vehicle programs authorized by AB 923, please consult Program Advisory 05-003.) Carl Moyer Program grants are awarded based on funding protocols developed in consultation with local air districts and interested stakeholders, and adopted by the Board in a public meeting. The definition of “agricultural sources” in AB 923 includes sources such as confined animal facilities and fugitive dust, for which there are currently no funding protocols. As shown in Table 1, projects for which funding protocols exist, such as projects involving tractors or agricultural irrigation pump engines, will continue to be eligible for funding. Projects for which no funding protocols exist, such as confined animal facilities, will be eligible for funding as soon as ARB staff has developed, and the Board has adopted, funding protocols. Development of these funding protocols is underway.

The legislation requires the ARB to establish or update grant criteria and guidelines for covered projects, as revised by the bill, by January 1, 2006. This Advisory will serve as an interim guideline; however, this Advisory will eventually be superseded by Board-adopted guidelines. After October 2005, interested persons should consult <http://www.arb.ca.gov/msprog/moyer/moyer.htm> or ARB staff to determine if final Board-adopted guidelines are available. This Advisory sets minimum project criteria. Local air pollution control district requirements may be more stringent.

Table 1: Agricultural Source Eligibility for Carl Moyer Program and \$2 Motor Vehicle Registration Fee Incentive Funds

	<u>Carl Moyer Program</u>	<u>Agricultural Assistance Program</u> (funded with \$2 MV Fees)
Program Criteria*  Projects	<ul style="list-style-type: none"> • Reductions must be surplus • \$13,600 cost-effectiveness limit 	<ul style="list-style-type: none"> • Previously unregulated sources • Within 3 years after rule adoption or before compliance date (whichever is later) • No surplus requirement • \$13,600 cost-effectiveness of total reductions limit
Tractors and other self-propelled equipment	Yes	Not eligible per section 39011.5
Agricultural irrigation pumps	Yes	Yes
Other internal combustion engines	Yes	Yes
Confined animal facilities	Evaluation under way	Evaluation under way
Agricultural fugitive dust	Evaluation under way	Evaluation under way

*Summary of eligibility criteria. Please consult the Carl Moyer Program Guidelines and the remainder of this Program Advisory for complete eligibility information. The Guidelines and Program Advisories set minimum criteria. Local air district requirements may be more stringent.

What is AB 923 and how does it affect agricultural sources?

AB 923 (Firebaugh) was signed by the Governor on September 23, 2004 and takes effect on January 1, 2005. AB 923 will permit the funding of incentive programs to reduce emissions of nitrogen oxides (NOx), particulate matter (PM) and reactive organic gases (ROG). The bill also authorizes funding for additional agricultural sources. Two funding sources – the Carl Moyer Program and an additional two dollar surcharge on motor vehicle registration fees are affected. For the purposes of AB 923, agricultural sources are defined in Health and Safety Code Section 39011.5. This section defines an agricultural source as a source of air pollution used in the production of crops, or the raising of fowl or animals, that meets any of the following criteria:

- Is a confined animal facility;
- Is an internal combustion engine used in the production of crops or the raising of fowl or animals, except an engine that is used to propel implements of husbandry;
- Is a Title V source; or
- Is a source that is otherwise subject to regulation by a district pursuant to federal law (for example, fugitive dust sources subject to federal control requirements).

For purposes of the motor vehicle registration fee, self-propelled agricultural equipment, such as tractors or harvesters, are specifically excluded from the definition of “agricultural sources” under this section of the Health and Safety Code. However, self-propelled equipment is eligible for funding under the “traditional” Carl Moyer Program because it is a mobile source.

What is the difference between agricultural projects funded by the Carl Moyer Program and agricultural projects directly funded by the motor vehicle registration fee program?

The Carl Moyer Program and the motor vehicle registration fee program are governed by related but different statutory requirements:

- For Carl Moyer Program projects, emission reductions must be real, surplus, quantifiable, and enforceable. “Surplus” means that the reductions must surpass those reductions required by existing regulatory requirements. Projects must also meet a cost-effectiveness threshold of \$13,600 per ton of emissions reduced.
- The \$2 motor vehicle fee can be used to fund agricultural projects in two ways. The \$2 motor vehicle fee can be used to fund agricultural projects meeting the Carl Moyer Program guidelines. In addition, the \$2 motor vehicle fee may be used to directly fund agricultural projects through a new program called the “Agricultural Assistance Program” (AAP) if specified conditions are met. AAP projects must apply to previously unregulated sources. These projects do not need to provide surplus emission reductions. (The \$2 motor vehicle registration fee may also be used to fund vehicle scrapping and new school bus purchases. Please see Program Advisory 05-004 for additional information.) Agricultural Assistance Program projects cannot be counted as Carl Moyer Program matching funds by local districts. Because the emission reductions from AAP projects are already credited toward the applicable rule in the State Implementation Plan (SIP), they cannot be counted for additional SIP credit (i.e. no “double-counting”).

Carl Moyer Program

What types of agricultural projects are eligible for funding under the Carl Moyer Program?

At this time, there are Carl Moyer Program funding protocols for projects that reduce emissions from the following types of agricultural sources:

- **Tractors and other self-propelled equipment.** Please refer to the September 30, 2003 version of the Carl Moyer Program Guidelines for emission factors and methodologies for determining project eligibility.
- **Agricultural irrigation pump engines.** As discussed in Program Advisory 04-13, projects that reduce emissions from both stationary and portable agricultural irrigation pump engines are eligible for funding. In addition, Program Advisory 05-001 modifies the requirements for project life, allowing all agricultural irrigation pump engines (including

portable engines) to qualify for funding beyond the December 31, 2004 date specified in Program Advisory 04-13.

For which additional agricultural sources is ARB planning to develop Carl Moyer Program funding protocols?

As discussed above, AB 923 broadens the definition of Carl Moyer Program-eligible projects to include additional agricultural sources. There are currently no funding protocols for projects that reduce emissions from agricultural sources that are not engines. ARB staff is evaluating the eligibility of projects to reduce emissions from the following types of agricultural sources:

- Confined animal facilities, and
- Fugitive dust subject to district regulation per federal law.

ARB staff will continue to consult with local districts and interested stakeholders to determine whether we should also evaluate additional categories of agricultural sources for eligibility.

Motor Vehicle Registration Fees/Agricultural Assistance Program

What are motor vehicle registration fees?

Existing law authorizes air districts to assess motor vehicle fees to fund implementation of the California Clean Air Act. AB 923 modifies the law to allow district boards to adopt an additional surcharge of up to \$2 to implement any or all of four specified programs: the Carl Moyer Program; Low-Emission School Bus Program; a car scrap program; or the new purchase, retrofit, repower, or add-on equipment for previously unregulated agricultural sources. This Advisory provides interim guidelines for funding projects pertaining to agricultural sources. For interim guidelines to apply motor vehicle registration fees to implement the Carl Moyer Program, school bus program, or scrap program, please refer to the Motor Vehicle Fee Program Advisory (05-004).

What types of agricultural projects can be funded with the new motor vehicle fee?

Emission reductions from agricultural projects that meet the Carl Moyer Program guidelines may be funded with the \$2 surcharge on motor vehicles.

OR

The \$2 surcharge on motor vehicles may be used under a new program called the "Agricultural Assistance Program" (AAP) to directly fund the "new purchase, retrofit repower, or add-on of equipment for previously unregulated agricultural sources of air pollution, as defined in Section 39011.5." This funding (but not the Carl Moyer Program funding) will be available "for a minimum of three years from the date of adoption of an applicable rule or standard, or until the compliance date of that rule or standard, whichever is later, if the state

board has determined that the rule or standard complies with Sections 40913, 40914, and 41503.1” of the Health and Safety Code.

Based on the statutory provisions of AB 923, AAP projects must meet all of the following requirements:

- Projects must involve the new purchase, retrofit, repower or add-on of equipment,
- Projects must reduce emissions from previously unregulated sources; that is sources that are unregulated as of January 1, 2005, the effective date of the legislation, but are subject to regulation at the time of the grant,
- Projects must be funded within 3 years of rule adoption or before the compliance date of the rule, whichever is later, and
- The ARB must determine that the applicable rule complies with Sections 40913, 40914, and 41503 of the Health and Safety Code pertaining to attainment plan measures.

How will the state board determine that the rule or standard complies with Sections 40913, 40914, and 41503.1?

Sections 40913, 40914, and 41503.1 of the Health and Safety Code relate to California Clean Air Act attainment plans and the rate of emission reductions required in those plans. District plans must be designed to achieve and maintain the state ambient air quality standards by the earliest practicable date through the use of all feasible measures. ARB routinely reviews district rules for compliance with these requirements and will treat agriculture-related rules the same way.

What types of agricultural projects are eligible for funding under the Agricultural Assistance Program (AAP)?

Agricultural irrigation pump engines subject to district rules that limit NOx, ROG or PM emissions from agricultural irrigation pump engines can be funded if those rules take effect after January 1, 2005. The project must also meet the AAP criteria listed above, and should meet the cost-effectiveness of total reduction (CETR) limit of \$13,600 per ton as described below.

Are projects that reduce emissions from self-propelled equipment, such as tractors, eligible for funding as agricultural projects under the Agricultural Assistance Program?

No. As defined in Health and Safety Code Section 39011.5, “agricultural sources” exclude self-propelled equipment such as tractors. However, projects that reduce emissions from tractors and other self-propelled equipment are eligible for funding under the Carl Moyer Program which does not contain the exclusion in section 39011.5(a)(2). Please refer to the most recent version of the Carl Moyer Program guidelines for emission factors and methodologies for determining project eligibility.

How should districts evaluate the cost-effectiveness of Agricultural Assistance Program (AAP) projects?

Because AAP projects are not required to achieve surplus emission reductions, the cost-effectiveness calculations used in the Carl Moyer Program (which are based solely on surplus reductions) are not appropriate for evaluating these types of projects.

However, in order to provide a means for districts to evaluate AAP projects, ARB staff have developed a new metric for the AAP, the “cost-effectiveness of total reductions” (CETR), where CETR is the annualized cost divided by the emission reductions as if no regulatory requirement existed:

$$\frac{\text{Annualized Cost (\$/year)}}{\text{Emission Reductions if no Regulatory Requirement Existed (tons/yr)}}$$

The emission reductions should be calculated using Carl Moyer Program methodologies and protocols, but assuming no regulatory requirement exists. For example, for agricultural irrigation pump engines, the CETR calculation would generally assume a project life of 7 years, even if a local rule for agricultural irrigation pump engines takes effect in three years.

In order to ensure that the technologies and costs of projects funded by the AAP are generally comparable to those funded by the Carl Moyer Program, **local districts should not directly fund agricultural projects that exceed a CETR of \$13,600 per ton of total emissions reduced.** Districts may set more restrictive CETR limits when implementing local programs.

It should be noted that the CETR cannot be compared to the cost-effectiveness of Carl Moyer Program-eligible projects because it includes the total emission reductions associated with a project instead of just the surplus emission reductions.