

Date of Hearing: April 22, 2019

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair

AB 1589 (Salas) – As Amended March 21, 2019

SUBJECT: Carl Moyer Memorial Air Quality Standards Attainment Program: heavy-duty off-road equipment

SUMMARY: Specifies that the replacement of farm equipment powered by an uncontrolled gasoline engine with farm equipment powered by a diesel engine certified to the cleanest available emission level is eligible for funding under the Carl Moyer Memorial Air Quality Standards Attainment (Carl Moyer) Program. Specifically, **this bill:**

- 1) Specifies that the replacement of a farm in-use heavy-duty off-road equipment powered by an uncontrolled gasoline engine with a farm in-use heavy-duty off-road equipment powered by a diesel engine certified to the cleanest available emission level is eligible for funding under the Carl Moyer Program.
- 2) Requires eligible projects to meet the cost-effectiveness values for oxides of nitrogen (NOx) established in existing law.

EXISTING LAW:

- 1) Establishes the Air Resources Board (ARB) as the air pollution control agency in California and requires ARB, among other things, to control emissions from a wide array of mobile sources and coordinate, encourage, and review the efforts of all levels of government as they affect air quality.
- 2) Establishes the Carl Moyer Program, to be administered by ARB, to fund the incremental cost of eligible projects that reduce emissions of air pollutants from vehicular sources in the state and for funding a fueling infrastructure demonstration program and technology development efforts.
- 3) Establishes local air districts to, among other things, control emissions from stationary sources.
- 4) Authorizes a local air district that has been designated in nonattainment by the state to levy a fee of up to \$2 on motor vehicles registered within the air district. Provides that a district may only levy this fee if the district board adopts a resolution providing for both the fee and a corresponding program for the reduction of air pollution from motor vehicles.
- 5) Authorizes a local air district that has been designated in nonattainment by the state to increase the fee to a maximum of \$6 on motor vehicles under specified conditions including adopting a resolution that the funds will be used for the reduction of air pollution from motor vehicles.

- 6) Requires those local air districts, upon approval by the local district board, to use the revenue from that fee to implement specified programs that the district determines remediate air pollution harms created by motor vehicles on which the surcharge is imposed.

FISCAL EFFECT: Unknown

COMMENTS: The Carl Moyer Program is a voluntary grant program that reduces air pollution from vehicles and equipment by providing incentive funds to private companies and public agencies to purchase cleaner -than-required engines, equipment, and emission reduction technologies. The program has been implemented since 1998 through a partnership between ARB and California's 35 local air pollution control and air quality management districts. When the Carl Moyer Program was initially established AB 1571 (Villaraigosa) Chapter 923, Statutes of 1999, it was funded by General Fund appropriations. Subsequent legislation expanding the program to additional pollutants and engines, AB 923 (Firebaugh), Chapter 707, Statutes of 2004 established permanent funding through a 75-cent tire fee, and by authorizing air districts to levy a surcharge on vehicle registrations in their jurisdictions. The program also receives a portion of the smog abatement fee (\$6) included in the annual registration of newer vehicles. ARB disburses these funds to air districts, who implement the programs in their local jurisdictions.

Local air districts administer these grants and select which projects to fund. ARB works collaboratively with the districts and other stakeholders to set guidelines and ensure the program reduces pollution and provides cleaner air for Californians. According to ARB, the Carl Moyer Program provides about \$60 million for projects each year statewide. The program pays up to 85% of the cost to repower engines and up to 100% to purchase an ARB-verified retrofit device. Maximum grant amounts vary for purchase of new vehicles and equipment.

The Carl Moyer Program requires a project to meet a cost-effectiveness test in order to be eligible for funding. The air district reviewing the application calculates the project's cost-effectiveness by dividing the annualized cost of the potential project (dollars per year), by the annual weighted surplus emission reductions the project will achieve (tons per year). For purposes of farm equipment, the project has minimum of 10 years regardless of the actual project life, making farm equipment more likely to receive funding. A project must obtain early or additional emission reductions beyond those required by existing federal or state laws or regulations. The program funds projects that reduce covered emissions from covered sources. Covered emissions include NO_x, particulate matter (PM), and reactive organic gases from any covered source. Covered Sources/eligible projects include cleaner on-road trucks, school and transit buses, off-road equipment, marine vessels, locomotives, agricultural equipment, light duty vehicle scrap, and lawn mowers.

Under the Carl Moyer Program, ARB funds the replacement of an uncontrolled gasoline engine for in-use off-road farm equipment with a controlled gasoline engine for in-use off-road farm equipment. An uncontrolled engine is an older engine that was produced prior to emission standards being adopted and generally does not have certain engine treatment controls. For these reasons, uncontrolled gasoline engines emit a lot more emissions (NO_x and PM) than their newer controlled counterpart does. For similar reasons, an uncontrolled diesel engine can be replaced with a controlled diesel engine (a Tier 4 diesel engine -cleanest available emission level).

However, farm equipment powered by an uncontrolled gasoline engine cannot be replaced with farm equipment powered by a Tier 4 final diesel engine. Switching from an uncontrolled gasoline engine to a Tier 4 diesel engine results in lower levels of NO_x and higher levels of

diesel PM. Diesel PM is a toxic air contaminant and carcinogen, and while switching from an uncontrolled gasoline engine to a diesel engine may reduce general PM emissions, it increases emissions of diesel PM. This is concerning because diesel PM is estimated to be responsible for 70 % of known cancer risk related to air toxics in California. The replacement authorized under this bill will result in lower NOx and PM emissions compared to existing practice, however, will result in higher diesel PM.

The San Joaquin Valley Air Pollution District is interested in changing the Carl Moyer Guidelines to allow for the replacement of uncontrolled gasoline tractors with controlled Tier 4 diesel tractors and produced a report on the matter. Based on the results of the study, the district found reductions in cancer risk, overall exhaust toxicity and PM, and concluded that “when looking at the overall data presented one can only conclude that a Tier 4 diesel engine provides significant overall reduction in exposure to the public compared to that of an uncontrolled gasoline engine.”

According to the author, “Currently, the Carl Moyer Program does not cover the replacement of uncontrolled gasoline engines with controlled and cleaner diesel engines. This is a major issue in the agriculture sector where thousands of uncontrolled gasoline tractors still operate. These vehicles emit far greater emissions than uncontrolled diesel engines, which are currently covered under the exchange program.... The San Joaquin Valley Air Pollution Control District estimates that replacing an uncontrolled gasoline engine with diesel engines will achieve a 97 percent reduction in NOx emissions and will reduce cancer risk by 68 percent. This change would help reduce poor air quality in California, particularly in non-attainment areas.”

Writing in support, the San Joaquin Valley Air Pollution Control District states, “The changes proposed by this bill will allow the District to fund the replacement uncontrolled gasoline powered equipment that are currently ineligible for funding under the Carl Moyer program. These projects provide reductions of localized criteria pollutants and air toxics emissions and should be eligible for funding through the Carl Moyer program.”

In opposition, Sierra Club California writes, “While this type of replacement would reduce NOx, it would significantly increase diesel PM emissions. Diesel PM has a significant impact on California’s public health. Approximately 70 % of cancer risk is related to the state air toxics attributable to diesel PM. The emissions can also result in premature death, exacerbated chronic heart and lung disease, asthma, and decrease lung function in children.”

Related Legislation: SB 216 (Galgiani) of the current legislative session would, among other things, specify that a heavy-duty truck exchange is an eligible project for funding under the Carl Moyer Program.

Previous Legislation: AB 1317 (Gray), Chapter 634, Statutes of 2017, made well pumps eligible for funding under the Carl Moyer Memorial Air Quality Standards Attainment (Carl Moyer) Program.

AB 1274 (O’Donnell), Chapter 633, Statutes of 2017, expanded the current smog check exemption from cars up to six years old, to cars up to eight years old, and assessed an additional fee on exempted cars, and directed revenue to the Carl Moyer Program.

SB 513 (Beall), Chapter 610, Statutes of 2015 made a number of changes to update the Carl Moyer Program.

REGISTERED SUPPORT / OPPOSITION:

Support

African American Farmers of California
American Pistachio Growers
California Cotton Ginners and Growers Association, Inc.
California Fresh Fruit Association
California Rice Commission
Nisei Farmers League
San Joaquin Valley Air Pollution Control District
Western Agricultural Processors Association

Opposition

Sierra Club California

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