

BOARD MEETING DATE: September 5, 2025

AGENDA NO. 6

PROPOSAL: Authorize Carl Moyer and VW Programs to Fund Truck Projects With Program Eligible Low NOx Engines

SYNOPSIS: The Board approved Program Announcements (PAs) for the Carl Moyer Air Quality Standards Attainment Program (Carl Moyer Program) in 2022 and 2025, and Volkswagen Environmental Mitigation Trust Program (VW Program) in 2019 and 2021. These PAs solicited truck projects with 0.02 g/bhp-hr NOx-certified engines. Beginning with 2023 and newer model years, manufacturers no longer certify engines to the 0.02 g/bhp-hr NOx standard; instead, certifying to the 0.05 g/bhp-hr NOx standard. Therefore, Board authorization is needed to fund 0.05 g/bhp-hr NOx-certified engines for eligible truck projects under the Carl Moyer and VW Programs. This action is to authorize the Executive Officer to fund eligible truck projects with engines certified to the 0.05 g/bhp-hr NOx standard under the Carl Moyer and VW Programs.

COMMITTEE: Technology, August 15, 2025; Recommended for Approval

RECOMMENDED ACTIONS:

Authorize the Executive Officer to fund eligible truck replacement projects with engines certified to the 0.05 g/bhp-hr NOx standard under the following Program

Announcements (PAs):

- Carl Moyer Air Quality Standards Attainment Program (Carl Moyer Program) #PA2022-01, #PA2023-04, and #PA2025-03; and
- Volkswagen Environmental Mitigation Trust Program (VW Program) – Combustion Freight and Marine Projects Category #PA2020-02 and #PA2021-07 for contracts executed before March 2024.

Wayne Nastri
Executive Officer

Background

The Carl Moyer and VW Programs both provide funding for 0.02 g/bhp-hr truck projects. The eligibility requirements for these programs were approved by the Board and limit funding to 0.02 g/bhp-hr engines for all trucks under the Carl Moyer Program and for trucks under the combustion category of the VW Program. Beginning with 2023 and newer model years, manufacturers no longer certify engines to the 0.02 g/bhp-hr NOx standard: instead, certifying to the 0.05 g/bhp-hr NOx standard.

Carl Moyer Program

The Carl Moyer Program Guidelines allow funding for engines certified to the 0.05 g/bhp-hr NOx standard and the 0.02 g/bhp-hr NOx standard. However, the guidelines set lower funding limits for engines certified to 0.05 g/bhp-hr NOx standard. Under the South Coast AQMD administered Carl Moyer Program, only engines meeting the 0.02 g/bhp-hr NOx standard or cleaner are eligible for funding to maximize emissions reductions and health benefits in the air basin.

In April 2022, December 2022, and March 2025, the Board approved the release of Carl Moyer Program #PA2022-01, PA2023-04, and #PA2025-03, where only engines that met the 0.02 g/bhp-hr NOx standards or cleaner were eligible for funding for on-road projects. Beginning with 2023 and newer model years, Cummins stopped certifying engines to the 0.02 g/bhp-hr NOx standard, and many awarded fleets are unable to move forward with their projects.

The design of the Cummins 2023 model year or newer natural gas engines was identical to that of the 2022 version, which was certified to 0.02 g/bhp-hr NOx standard, but due to more stringent laboratory and real-world test procedures, Cummins made a business decision to certify the newer engines to 0.05 g/bhp-hr NOx standard to allow a compliance margin. The Cummins natural gas engines are still the cleanest natural gas engines commercially available today.

VW Program

In November 2018, March 2020, and March 2024, the Board recognized revenue for up to \$150 million to implement two of five project funding categories for the VW Program, including the Combustion Freight and Marine Project (Combustion Category) and Zero-Emission Class 8 Freight and Port Drayage Trucks (Zero-Emission Class 8 Trucks Category) categories.

The San Joaquin Valley Air Pollution Control District (APCD) and Bay Area Air District administer the other three VW Program funding categories as follows:

- San Joaquin Valley APCD – Zero-Emission Transit, School, and Shuttle Buses

- Bay Area Air District – Zero-Emission Freight and Marine Projects, and Light Duty Zero-Emission Vehicle Infrastructure

In December 2019 and June 2021, the Board approved releasing PA #PA2020-02 and #PA2021-07, under the Combustion Category, which solicited for the replacement or repower of Class 7 or Class 8 freight trucks, including drayage trucks, dump trucks, waste haulers, and concrete mixers, whose engines are certified to the 0.02 g/bhp-hr NOx standard. On September 18, 2024, CARB issued a one-time exception, approving payment to eligible Class 7 and Class 8 freight trucks under the VW Program - Combustion Category for contracts executed before March 2024, with replacement engines certified to the 0.05 g/bhp-hr NOx standard. Recently, Cummins stopped selling engines certified to the 0.02 g/bhp-hr NOx standard. Therefore, VW Program - Combustion Category award recipients were unable to acquire replacement trucks with engines that met the 0.02 g/bhp-hr NOx standard.

Proposal

Staff recommend authorizing the Carl Moyer Program #PA2022-01, #PA2023-04, and #PA2025-03 to fund engines certified to the 0.05 g/bhp-hr standard for all eligible truck projects. Also, staff propose authorizing the VW Program – Combustion Category #PA2020-02 and #PA2021-07 to fund eligible truck projects with engines certified to the 0.05 g/bhp-hr standard for contracts executed before March 2024.

Outreach

Carl Moyer Program applicants will be notified of the funding eligibility of the 0.05 g/bhp-hr NOx standard via the Carl Moyer Program website and email notification. VW Program applicants will be notified via e-mail.

Benefits to South Coast AQMD

The 2022 AQMP calls for adopting zero-emission and low-NOx technologies, where feasible, and providing incentive funding to reduce mobile source emissions to meet the 2015 8-hour ozone standards by 2037. South Coast AQMD supports numerous activities to advance new technologies and meet regional air quality goals. Successful implementation of the Carl Moyer and VW Programs is a direct result of these technology advancement activities.

Resource Impacts

No resource impacts are anticipated for the Carl Moyer or VW Programs.