

ON-ROAD HEAVY-DUTY VEHICLES

South Coast Air Quality Management District
2020 Carl Moyer Program



Project Categories

Heavy-Duty Trucks and Buses

- >14,000 lbs. GVWR
- Statewide Truck and Bus Regulation

Drayage Trucks

- Registered in Drayage Truck Registry
- >26,000 lbs. GVWR

Transit Vehicles

- Urban buses -greater than 35 feet in length and 33,000 lbs. GVWR
- Transit Fleet Vehicles -less than 35 feet in length and 33,000 lbs. GVWR



Project Categories (Continued)

Solid Waste Collection Vehicles (SWCV)

- Compliant with final SWCV Regulation (2006 and older engines)
- Compliance with Truck and Bus Regulation (2007 and newer engines)

Emergency Vehicles

- Fire trucks, prisoner transport buses, pumpers, ladder trucks and water tenders
- Defined in CA Vehicle Code Sections 27156.2 & 165
- Replacement option only



Project Options

- ▶ Replacement: The replacement of an older, high polluting vehicle with a newer, cleaner one
- ▶ Repower: Replacing an older, high polluting engine with a newer, cleaner one (note: prototype may be required if repower has not been previously demonstrated)
- ▶ Conversion: Replacing or modifying the original engine/vehicle to a hybrid or zero emission technology



Eligibility Requirements - Existing Vehicle



- EMY 2007 to 2010 (some exceptions)
- Compliance deadline no earlier than 1/1/2023
- Vehicle must be operational
- 75% of usage in South Coast Air Basin
- Clean Vehicle Title (No Lien)
- DMV Registration & Proof of Insurance (previous 24 months)
 - Seasonal registration may be eligible (3-6 months continuous registration per 12 month period for the prior 24 months)
- Usage documentation prior 24 months
- Executive Order for Existing Engine
- Photo verifying GVWR and engine tag
- Compliance with applicable Regulation



Eligibility Requirements- Replacement Vehicle



- EMY 2013 or newer
- Fleet size 1-10: Replacement vehicle with engine certified at or below 0.10 g/bhp-hr NOx
- Fleet size > 10: Must select optional low NOx (0.02 g/bhp-hr) or zero emission
- Engine's intended service class must match replacement vehicle's weight class (e.g., a MHD engine must be used in a vehicle with GVWR 19,501-33,000 lbs.)
- Mileage Caps for Used Replacement Truck
 - HHD 500,000 miles, MHD 250,000 miles, LHD 150,000 miles
- Warranty - Minimum of 1 year or 100K miles including parts & labor
- California registration or California IRP



Eligibility Requirements Repower



- Engines must be certified by CARB
- 0.10 g/bhp-hr NOx or cleaner
- Compliance Check Requirement (Based on VIN)
- Written confirmation from manufacturer
- Prototype testing may be required
 - No CMP funds can be used for prototype vehicle



Documentation of Compliance Status

Fleet subject to the Statewide Truck and Bus Regulation (TRUCRS)

- A Copy of the TRUCRS Fleet list with compliance option for each
- A Copy of the Compliance Certificate printed from TRUCRS

Vehicle subject to the Drayage Truck Regulation

- DTR Compliance Search Page Printout showing VIN and compliance status

Vehicle subject to other applicable CARB Regulation

- SOUTH COAST AQMD will verify the compliance status with CARB
- Complete Fleet Compliance is Needed



Project Life

▶ Truck Replacement	7 years
▶ Transit Bus Replacement	12 years
▶ Repower	7 years
▶ Electric Conversion	5 years
▶ Emergency Vehicle Replacement	14 years
▶ Other On-Road Projects	3 years

Regulatory requirements may reduce the project life shown above
A longer project life may be considered on a case-by-case basis



Maximum Funding Amounts by Project Type

Vehicle Type	Zero Emission Replacement or Conversion	Low NOx Replacement			Low NOx Repower
		(0.02 g/bhp-hr)	(0.05 g/bhp-hr)	(0.10 g/bhp-hr)	
Class 8	\$200,000	\$100,000	\$80,000	\$70,000	
Class 7	\$150,000	\$80,000	\$60,000	\$50,000	
Class 6	\$150,000	\$80,000	\$60,000	\$50,000	\$40,000
Class 5	\$80,000	\$70,000	\$50,000	\$40,000	
Class 4	\$80,000	\$70,000	\$50,000	\$40,000	
Transit Bus	\$80,000	\$25,000	\$25,000	\$25,000	\$20,000
Emergency		Up to 80% of cost			N/A

Note: No more than 80% of the eligible cost for fleets with ≤ 10 vehicles; no more than 50% of the eligible cost for larger fleets.

Funding Amount Examples

Equipment Type	Baseline Engine Model Year	New Replacement Technology	Potential Funding	Annual Usage (miles)	Funding Amount
Transit Bus*	2008	Zero Emission	\$80,000 or 80% of eligible project cost	29,000	\$25,000
HHD Truck	2007	Low NOx (0.02g/bhp-hr NOx)	\$100,000 or 80% of eligible project cost	60,000	\$100,000
HHD Truck	2008	Low NOx (0.02g/bhp-hr NOx)	\$100,000 or 80% of eligible project cost	15,000	\$25,500
HHD Truck	2007	Zero Emission	\$200,000 or 80% of eligible project cost	70,000	\$125,000

* This project's baseline vehicle is CNG fueled



Case-By-Case Projects

- ▶ On-road heavy-duty vehicles with GVWR of 8,501 - 14,000 lbs.
- ▶ Retrofit projects
 - Must reduce NOx emissions by at least 15%, and at or below the 0.02 g/bhp-hr optional low NOx standard
- ▶ Transport Refrigeration Units (TRUs) - zero emission replacement projects only
- ▶ Auxiliary Power Units (APUs)
- ▶ Projects using Power Take-Off (PTO) hours of operation



Required Inspections

South Coast AQMD will not pay invoices until all four inspections have been performed and approved

Pre Inspection

- After project approval, before or after contract execution
- Verifies operational status, EMY, GVWR, ESM, same as application

Post Inspection

- Before replacement engine/vehicle is delivered to fleet
- Verifies the technology, engine duty cycle, GVWR

Pre-Dismantle Inspection

- Verifies truck is operational, intact and not stripped
- Existing truck must be delivered to dismantler within 60 days after new truck delivery

Destruction Inspection

- Engine and frame rail destruction
- Destroyed < 60 days after dismantler receipt
- Dismantler provides photos within 10 business days



Additional Resources

Resource	Site Address
HVIP	https://www.californiahvip.org/
Truck & Bus Regulation	https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation
The Truck Stop 1-866-6DIESEL	https://ww3.arb.ca.gov/msprog/truckstop/truckstop.htm
Carl Moyer Grant Calculator	https://ww3.arb.ca.gov/msprog/moyer/grant_calculator/grant_calculator6iframe.htm



APPLICATION DEADLINE

TUESDAY AUGUST 4, 2020 AT 1PM

<https://carlmoyeronline.aqmd.gov/>

FOR PAPER APPLICATIONS:

www.aqmd.gov/moyer





Questions/Comments

Staff Name	E-mail	Phone
Tom Lee	tlee@aqmd.gov	(909) 396-2270
Yuh Jiun Tan	ytan@aqmd.gov	(909) 396-2463
Krystle Martinez	kmartinez@aqmd.gov	(909) 396-3021
Fan Xu	fxu@aqmd.gov	(909) 396-2347
Andrew Yoon	ayoon@aqmd.gov	(909) 396-3043
David Chen	dchen@aqmd.gov	(909) 396-3083
Justin Joe	jjoe@aqmd.gov	(909) 396-2054

