

Pursuant to the authority vested in California Air Resources Board by Health and Safety Code Divisions 25.5 and 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

**IT IS ORDERED AND RESOLVED:** The following on-road motor vehicles with a manufacturer's GVWR over 10,000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

**VEHICLE FAMILY INFORMATION:**

Model Year: 2023

Vehicle Family Name: PVPT2VOCVJ00

Vehicle Type: Vocational

Vehicle Service Class: Heavy HDV

Vehicle Subcategory: Heavy HDV / Diesel / Multi-Purpose

Gross Vehicle Weight Rating (GVWR) of Vehicles (pounds): GVWR > 33,000

**CO<sub>2</sub> FAMILY EMISSION LIMITS:**

CO<sub>2</sub> Standard (g/ton-mile): 261

Highest Projected Family Emission Limit (g/ton-mile): 349

Lowest Projected Family Emission Limit (g/ton-mile): 0

**EMISSION CONTROL SYSTEMS:**

Low rolling resistance tires all (LRRR), Low rolling resistance tires (drive) (LRRD), Low rolling resistance tires (steer) (LRRS), Tire pressure monitoring system (TPMS), Other Advanced Technology Components (ADVO), Weight reduction (WR), Engine shutoff - 5 min or less idling (IRT5)

**BE IT FURTHER RESOLVED:** The manufacturer has demonstrated certification compliance with the Greenhouse Gas Emission Standards as specified in Title 17 CCR 95663 and the incorporated "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles" (HDV Test Procedures) adopted October 21, 2014 as last amended September 9, 2021.

**BE IT FURTHER RESOLVED:** For the listed air conditioning platform(s) in the attachment, the manufacturer has demonstrated certification compliance with the AC Leakage Standard specified in 17 CCR 95663(a)(1)(B)7 and Section 1037.115 of the incorporated "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles" (HDV Test Procedures) adopted October 21, 2014, as last amended September 9, 2021.

**BE IT FURTHER RESOLVED:** For the listed vehicle models, the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1978 (complete vehicles) (vehicle refueling emissions standards), and 13 CCR 2035 et seq. (emission control warranty).

**BE IT FURTHER RESOLVED:** The engine families that are approved for installation within the vehicle family are listed in the attachment.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

Executed on this 16th day of November 2022.



Robin U. Lang, Chief  
Emissions Certification and Compliance Division

**Vehicle Make and Models:****Vehicle Make**

Mack

Volvo

Mack

**Models**

LRe (Heavy-Duty All Electric Vehicle)

VHD (AF, AB), VAH (AF, AB), VN (R, L),

Granite (AF, AB), LR, Terrapro MR, Pinnacle PI (AF), Anthem AN (AB)

**Engine Families in Vehicle Family:**

PVPTH10.8CA1

PCEXH0540LDC

PVPTH12.8CA1

**A/C Platform Summary:****A/C Platform ID**

MRU: 11L

MRU: 13L

**Refrigerant Type**

R134a

R134a

**Refrigerant  
Capacity (g)**

1450

1450

**STD (HFC (g/year))**

21.8

21.8

**Leakage Rate (HFC  
(g/year))**

13.8

13.8