

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: 2024

Vehicle Family Name: RVPT2VOCVK00

Vehicle Type: Vocational Tractor

Vehicle Service Class: Heavy HDV

Vehicle Subcategory: Heavy HDV / Diesel / Regional

Gross Vehicle Weight Rating (GVWR) of Vehicles (pounds): GVWR > 26,000

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

CO<sub>2</sub> Standard (g/ton-mile): 194

Highest Projected Family Emission Limit (g/ton-mile): 251

Lowest Projected Family Emission Limit (g/ton-mile): 146

**EMISSION CONTROL SYSTEMS:**

Low rolling resistance tires all (LRRRA), Low rolling resistance tires (drive) (LRRD), Low rolling resistance tires (steer) (LRRS), Tire pressure monitoring system (TPMS), Weight reduction (WR), Engine shutoff - 5 min or less idling (IRT5), Aerodynamic roof fairing (ARF), Aerodynamic side skirt and/or fuel tank fairing (ATS), Weight, Vehicle speed limiter (VSL), Gap reducing fairing (TGR)

**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 22nd day of November 2023.



Robin U. Lang, Chief  
Emissions Certification and Compliance Division

**Vehicle Make and Models:**

**Vehicle Make**

Volvo

Mack

**Models**

VHD (AF, AB), VAH (AF, AB), VNR, VNL, VNL (NEW VNL)  
 Granite (AF, AB), Terrapro MR, LR, Pinnacle PI (AF),  
 Anthem AN (AB)

**Engine Families in Vehicle Family:**

RVPTH10.8CA1

RVPTH12.8CA1

RCEXH0540LDC

RVPTH12.8CA2

RVPTH12.8CA4

**A/C Platform Summary:**

**A/C Platform ID**

**Refrigerant Type**

**Refrigerant Capacity (g)**

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

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

VHD: L1H1 Day Cab 11L

R134a

1510

22.7

10.1

VHD: L1H1 Day Cab 13L

R134a

1510

22.7

10.1

VHD: L3 11L

R134a

1710

25.7

11.4

VHD: L3 13L

R134a

1710

25.7

11.4

VNL: L1H1 Day Cab 11L

R134a

1510

22.7

10.1

VNL: L1H1 Day Cab 13L

R134a

1510

22.7

10.1

VNL: L3H1 11L

R134a

1710

25.7

11.4

VNL: L3H1 13L

R134a

1710

25.7

11.4

VNL: L4H2 11L

R134a

1810

27.2

11.4

VNL: L4H2 13L

R134a

1810

27.2

11.4

VNL: L4H4 11L

R134a

1810

27.2

11.4

VNL: L4H4 13L

R134a

1810

27.2

11.4

VNL: L5H4 11L

R134a

1810

27.2

11.4

VNL: L5H4 13L

R134a

1810

27.2

11.4

VNR: L1H1 Day Cab 11L

R134a

1510

22.7

10.1

VNR: L1H1 Day Cab 13L

R134a

1510

22.7

10.1

VNR: L3H1 11L

R134a

1710

25.7

11.4

VNR: L3H1 13L

R134a

1710

25.7

11.4

VNR: L4H2 11L

R134a

1710

25.7

11.3

VNR: L4H2 13L

R134a

1710

25.7

11.3

VNR: L4H4 11L

R134a

1810

27.2

11.3

VNR: L4H4 13L

R134a

1810

27.2

11.3

GU: Day Cab 11L

R134a

1590

23.9

11.1

GU: Day Cab 13L

R134a

1590

23.9

11.1

GU: Day Cab Cummins 9L

R134a

1590

23.9

10.6

ANTHEM AN CXU: Day Cab 11L

R134a

1590

23.9

11.2

ANTHEM AN CXU: Day Cab 13L

R134a

1590

23.9

11.2

ANTHEM AN CXU: 48" Sleeper 11L

R134a

1820

27.3

12.5

ANTHEM AN CXU: 48" Sleeper 13L

R134a

1820

27.3

12.5

ANTHEM AN CXU: 70" Sleeper 11L	R134a	1820	27.3	12.5
ANTHEM AN CXU: 70" Sleeper 13L	R134a	1820	27.3	12.5
PINNACLE CHU: Day Cab 13L	R134a	1590	23.9	11.2
PINNACLE CHU: 48" Sleeper 13L	R134a	1820	27.3	12.6
PINNACLE CHU: 70" Sleeper 13L	R134a	1820	27.3	12.6
Mack: LRU 11L	R134a	1575	23.6	13.2
LRU: Cummins 9L	R134a	1575	23.6	14
LRU: ELECTRIC ROOF UNIT	R134a	1100	16.5	6.6
MRU: 11L	R134a	1450	21.8	13.8
MRU: 13L	R134a	1450	21.8	13.8
MRU: Cummins 9L	R134a	1450	21.8	14.7
P6700: Daycab: No Parking Cooler	R134a	1590	23.9	10.2
P6700: Daycab: Parking Cooler	R134a	1590	23.9	14.6
P6700: Medium/Long Sleeper: No Parking Cooler	R134a	1860	27.9	11.9
P6700: Medium/Long Sleeper: Parking Cooler	R134a	1860	27.9	16.2
P6700: Short Sleeper: Parking Cooler/Bunk HVAC	R134a	1810	27.2	16.2
P6700: Short Sleeper: Bunk HVAC	R134a	1810	27.2	11.9
P6700: Short Sleeper: No Parking Cooler	R134a	1590	23.9	10.2
P6700: Short Sleeper: Parking Cooler	R134a	1590	23.9	14.6
<b>VNR: L1H1 Day Cab 9L Cummins</b>	<b>R134a</b>	<b>1510</b>	<b>22.7</b>	<b>10.1</b>