

#### PROTERRA OPERATING COMPANY, INC.

EXECUTIVE ORDER A-433-0008 New On-Road Heavy-Duty Enhanced Electric and Fuel-Cell Motor Vehicles

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: PPRT2VOCVBEB Vehicle Type: Vocational / Other Bus

Assigned Vehicle Service Class: Heavy HDV

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

CO<sub>2</sub> Standard (g/ton-mile): 300

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

### TIRE COEFFICIENT OF ROLLING RESISTANCE:

Tire Coefficient of Rolling Resistance Standard (kg/metric ton): \* Highest Tire CRR Value (kg/metric ton): 6.5

## **EMISSION CONTROL SYSTEMS:**

Advanced Technology Components Other (ADVO)

**BE IT FURTHER RESOLVED:** The listed vehicle family is certified to the Optional Phase 2 Custom Chassis CO<sub>2</sub> Emissions Standards as specified in 17 CCR 95663(a)(1)4 and Section 1037.105(h) 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:** 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:** The listed vehicle family is certified to the Enhanced Electric and Fuel-Cell Vehicle Certification Procedures in section 1 in the California provisions of subpart 1037.615 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 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 powertrain 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 <u>22nd</u> day of March 2023.

Robin U. Lang, Chief Emissions Certification and Compliance Division

Attachment 1 of 1:

Vehicle Family:PPRT2VOCVBEB Date: 03/14/2023 EO: A-433-0008

**Vehicle Make and Models:** 

<u>Vehicle Make</u> <u>Models</u> <u>Equipped with fuel-fire heater</u>

Proterra ZX5 No

Powertrain Families in Vehicle Family:

Powertrain Family namePowertrain TypeE.O. NumberPPRT4ELCPZEPBattery ElectricA-433-0007

A/C Platform Summary:

A/C Platform ID Refrigerant Type Refrigerant STD (HFC Leakage Rate (HFC Capacity (g) (g/year)) (g/year)) Eberspaecher AC136 G3 AE R134a 6500 97.5 39.5 Valeo Revo E Global R134a 5400 81.0 3.5