5Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 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 engines and emission control systems produced by the manufacturer as described below are certified for use in on-road motor vehicles with a manufacturer's Gross Vehicle Weight Rating (GVWR) over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

Model Year	Engine Family	Combustion Cycle	Fuel Operation	Fuel Type(s)	Intended Vehicle Service Class	Intended GHG Vehicle Type
2024	RVPTH12.8CA3	Diesel	Dedicated	Diesel	Heavy Heavy-Duty	Vocational and Tractor

Emission Control Systems (ECS)	Special Features
[1,2,3,4]: Turbocharger (TC), Charge Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Direct Injection (DDI), Electronic Control Module (ECM), Diesel Oxidation Catalyst, (DOC), Periodic Trap Oxidizer (PTOX), Selective Catalytic Reduction - Urea (SCR-U), Ammonia Oxidation Catalyst (AMOX)	None

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) as demonstrated on the Federal Test Procedure (FTP) and Supplemental Emission Test (SET) test cycles, and on the Low-Load Cycle (LLC) test cycle and 2) Conformity Factors (CF) as demonstrated using the Three-Bin Moving Average Window (3B-MAW) method, as applicable, for exhaust criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), and exhaust greenhouse gas (GHG) pollutants carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O) as set forth in 13 CCR 1956.8 and the applicable California test procedures for heavy-duty diesel cycle engines, and 3) family emission limits (FEL) and family certification levels (FCL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per brake horsepower-hour (g/bhp-hr), except as noted, or designated as not applicable (*).

Applicable Standard		Criteria				GHG			
		NMHC	NOx	CO	PM	CO2 VOCV	CO2 TRAC	CH4	N2O
Heavy-Duty Diesel Cycle Clean Idle 10g Alternate Phase 2 CO2 Standard Heavy Heavy-Duty Vocational and Tractor	**STD: FTP / SET**	0.14	0.050	15.5	0.005	510	442	0.10	0.10
	STD: LLC	0.14	0.200	15.5	0.005	*	*	*	*
	FEL: FTP / SET	*	0.100	*	0.005	530	476	0.10	0.10
	FEL: LLC	*	0.300	*	0.010	*	*	*	*
	3B-MAW	2.0	2.0	2.0	2.0	*	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL or FCL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

BE IT FURTHER RESOLVED: For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1971.1 (on-board diagnostic full or partial compliance), and 13 CCR 2035 et seq. (emission control warranty).

BE IT FURTHER RESOLVED: That the listed engine family is certified on an interim basis pending CARB's submission of the proposed amendments to the California Heavy-Duty Engine and Vehicle Omnibus regulation to the Office of Administrative Law (OAL), and OAL's approval of such amendments. Upon OAL approval of such amendments this Executive Order becomes final.

BE IT FURTHER RESOLVED: For engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [10 g/hr NOx] and section 11.A.6.3 of the applicable California test procedures, except those in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), the engine manufacturer shall provide an approved "Certified Clean Idle" label to be affixed to the vehicle into which the engine is installed.

BE IT FURTHER RESOLVED: The listed engine models are certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of heavy-duty on-board diagnostic (HD OBD) systems with identified deficiencies) and Health and Safety Code Section 43154.

BE IT FURTHER RESOLVED: The listed engine family is conditionally certified pending the submission of additional test data to verify compliance with Heavy-Duty On-Board Diagnostic (HD OBD) requirements. The manufacturer has until August 24, 2024 to provide an updated application along with test data for HD OBD per communications provided to Volvo. Failure to resolve concerns by the specified date shall be cause for the Executive Officer to revoke the conditional Executive Order ab initio, in which case all engines covered under this conditional certification would be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to a civil penalty pursuant to Health and Safety Code 43154.

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

Executed on this 27th day of June 2024.

Robin U. Lang

Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RVPTH12.8CA3 EO Number: A-242-0245 Date Applicable: 06/25/2024

					Peak Power			Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	L	hp	rpm	mm3/stroke	lb-ft	rpm	mm3/stroke	-	-	-
D13N-455CA	ETOR-2235_VGT-3	1	I6	12.8	455	1700	258	1650	1200	287	1	Both	
MP8-455CA	ETOR-2235_VGT-3	1	I6	12.8	455	1700	258	1650	1200	287	1	Both	
D13N-455CA	ETOR-2235_VGT-3	2	I6	12.8	455	1700	258	1650	1200	287	2	Both	
MP8-455CA	ETOR-2235_VGT-3	2	I6	12.8	455	1700	258	1650	1200	287	2	Both	
D13N-455CA	ETOR-2235_VGT-3	3	I6	12.8	455	1700	258	1650	1200	287	3	Both	
MP8-455CA	ETOR-2235_VGT-3	3	I6	12.8	455	1700	258	1650	1200	287	3	Both	
D13N-455CA	ETOR-2235_VGT-3	4	I6	12.8	455	1700	258	1650	1200	287	4	Both	
MP8-455CA	ETOR-2235_VGT-3	4	I6	12.8	455	1700	258	1650	1200	287	4	Both	