

Pursuant 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	RVPTH10.8CA1	Diesel	Dedicated	Diesel	Heavy Heavy-Duty	Vocational and Tractor

Emission Control Systems (ECS)	Special Features
[1]: 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, as applicable, and 2) Not-To-Exceed limits (NTE) as demonstrated using the Not-To-Exceed test cycle, 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) for vocational (VOCV) and tractor (TRAC) vehicles, 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 (*).

		Crit	eria		GHG				
Applicable Standard	NMHC	NOx	СО	PM	CO2 VOCV	CO2 TRAC	CH4	N2O	
Heavy-Duty Diesel Cycle	STD	0.14	0.050	15.5	0.005	510	442	0.10	0.10
Optional Standard – below 525 bhp	LLC	*	*	*	*	*	*	*	*
Clean Idle 30g Alternate Phase 2 CO2 Standard	FEL	*	0.20	*	0.01	534	470	0.10	0.10
Heavy Heavy-Duty Vocational and Tractor	NTE	0.21	0.30	19.4	0.02	*	*	*	*

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 to the optional standard for engines below 525 brake horsepower as specified in 13 CCR 1956.8(a)(2)(C)3 and section 11.B.5.3.5 of the applicable California test procedures.

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) [30 g/hr NOx] and section 35.B.4 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.



Volvo Group Trucks Technology, Powertrain Engineering, a Division of Mack Trucks, Inc. (Volvo)

EXECUTIVE ORDER: A-242-0241 New On-Road Heavy-Duty Engines Page 2 of 2

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.

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

Executed on this 8th day of December 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RVPTH10.8CA1 EO Number: A-242-0241 Date Applicable: 11/16/2023

					Peak Power			Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	Liters	horsepower	rpm	mm3/stroke	lb-ft	rpm	mm3/stroke	-	-	-
D11N-325	V		16	10.8	325	1800	180	1250	1200	220	1	Both	
MP7-355A	С		16	10.8	355	1800	195	1250	1200	221	1	Vocational	
MP7-395C	С		16	10.8	395	1800	215	1590	1200	287	1	Vocational	
MP7-365C	F		16	10.8	365	1800	198	1500	1200	267	1	Both	
MP7-425M	С		16	10.8	425	1800	235	1590	1200	286	1	Both	
D11N-385	VST		16	10.8	385	1800	194	1500	1200	267	1	Both	
D11N-365	V		16	10.8	365	1800	205	1390	1200	246	1	Both	
MP7-355A	F		16	10.8	355	1800	195	1250	1200	221	1	Both	
D11N-385	V		16	10.8	385	1800	194	1500	1200	267	1	Both	
MP7-425M	F		16	10.8	425	1800	235	1590	1200	286	1	Both	
D11N-425	V		16	10.8	425	1800	235	1590	1200	286	1	Both	
MP7-345C	F		16	10.8	345	1800	188	1390	1200	246	1	Both	
D11N-425	XE		16	10.8	425	1800	235	1590	1200	286	1	Both	
MP7-375M	С		16	10.8	375	1800	205	1390	1200	246	1	Both	
MP7-425SE	F		16	10.8	425	1800	235	1590	1200	286	1	Both	
D11N-355	V		16	10.8	355	1800	195	1250	1200	221	1	Both	
MP7-325M	F		16	10.8	325	1800	180	1250	1200	220	1	Both	
MP7-375M	F		16	10.8	375	1800	205	1390	1200	246	1	Both	
MP7-395C	F		16	10.8	395	1800	215	1590	1200	287	1	Both	
MP7-325M	С		16	10.8	325	1800	180	1250	1200	220	1	Vocational	