Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 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 off-road equipment. 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)	Engine Operation
2024	RHZXL02.0V51	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Electronic Direct Injection (DDI), Charge Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Control Module (ECM), Turbocharger (TC), Diesel Oxidation Catalyst (DOC), Periodic Trap Oxidizer (PTOX)	None

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kWh-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

Applicable Standard		Criteria			Smoke Opacity		
		NMHC+NOx	CO	PM	ACL	LUG	PEAK
Tier 4 Final 37 ≤ kW < 56	STD	4.7	5.0	0.03	*	*	*
	FEL	*	*	*	*	*	*
	NTE	5.9	6.2	0.04	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL 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: That the manufacturer has elected to combine engines from the 19 ≤ kW < 56 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 37 ≤ kW < 56 power category in accordance with Section 1039.230(e) of 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 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

BE IT FURTHER RESOLVED: The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

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

Executed on this 20th day of October 2023.

Robin U. Lang

Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RHZXL02.0V51 EO Number: U-R-034-0351 Date Applicable: 10/11/2023

					Peak Power			Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
3H50TICD	3H50TICD-vs-28-IFNsi		I3	1.46	43.7	2800	52	203	2000	63	1	N/A	
3H50TICD	3H50TICD-vs-28-IFN		I3	1.46	43.7	2800	52	188	2100	59	1	N/A	
3H50TICD	3H50TICD-vs-28-ICFN		I3	1.46	36.4	2800	43.5	188	1800	57.5	1	N/A	
3H50TICD	3H50TICD-vs-27-IFN		I3	1.46	42	2700	51	188	2000	58	1	N/A	
3H50TICD	3H50TICD-vs-26-IFN		I3	1.46	40.3	2600	49.5	188	1900	58	1	N/A	
3H50TICD	3H50TICD-vs-25-IFN		I3	1.46	38.6	2500	48.5	188	1800	58	1	N/A	
3H50TICD	3H50TICD-vs-24-IFN		I3	1.46	36.4	2400	47	188	1700	58	1	N/A	
3H50TICD	3H50TICD-vs-23-IFN		I3	1.46	35.3	2300	47	188	1600	58	1	N/A	
3H50TICD	3H50TICD-vs-22-IFN		I3	1.46	33.7	2200	46.5	182	1600	58	1	N/A	
4H50TICD	4H50TICD-vs-22-IFN		I4	1.95	44.8	2200	44.5	238	1500	55	1	N/A	
4H50TICD	4H50TICD-vs-23-IFN		I4	1.95	46.9	2300	45.5	242	1600	55	1	N/A	
4H50TICD	4H50TICD-vs-24-IFN		I4	1.95	48.8	2400	46	242.3	1700	55	1	N/A	
4H50TICD	4H50TICD-vs-25-IFN		I4	1.95	50.8	2500	46.5	242.6	1800	55	1	N/A	
4H50TICD	4H50TICD-vs-26-IFN		I4	1.95	52.7	2600	47.5	242.9	1900	55	1	N/A	
4H50TICD	4H50TICD-vs-27-IFN		I4	1.95	54.8	2700	48	243.2	2000	55	1	N/A	
4H50TICD	4H50TICD-vs-28-IFN		I4	1.95	55.4	2800	48	243.5	2100	55	1	N/A	