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	RDZXL02.9120	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Direct Diesel Injection (DDI), Turbocharger (TC), Charge Air Cooler (CAC), Electronic Control Module (ECM), Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC), Continuous Trap Oxidizer (CTOX), 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) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (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 75 ≤ kW < 130	STD	0.19	0.40	5.0	0.02	*	*	*
	FEL	*	*	*	*	*	*	*
	NTE	0.28	0.60	6.2	0.03	*	*	*

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 56 ≤ kW < 130 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 75 ≤ kW < 130 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 24th day of August 2023.

Kim Yacoubian for
Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RDZXL02.9120 EO Number: U-R-013-0718 Date Applicable: 07/24/2023

					Peak Power			Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	Liters	horsepower	rpm	lb/hr	lb-ft	rpm	lb/hr	-	-	-
TCD2.9L4	C5VT75E		I4	2.925	100.6	2200	39.1	295	1600	33.7	1	N/A	
TCD2.9L4	C5VI70EU		I4	2.925	93.9	2200	36.6	302.4	1600	33.9	1	N/A	
TCD2.9L4	C5VT58EU		I4	2.925	77.7	2200	30.5	278.7	1600	31.2	1	N/A	
TCD2.9L4	C5VT63EU		I4	2.925	84.4	2200	33.2	295	1600	33.7	1	N/A	
TCD2.9L4	C5VT65E		I4	2.925	87.2	2200	34.2	265.5	1600	28.7	1	N/A	
TCD2.9L4	C5VT70E		I4	2.925	93.9	2200	36.6	295	1600	33.7	1	N/A	
TCD2.9L4	C5VT77EU		I4	2.925	103.2	2200	39.7	309.7	1600	33.9	1	N/A	
TCD2.9L4	C5VT70EU		I4	2.925	93.9	2200	36.6	295	1600	33.7	1	N/A	
TCD2.9L4	C5VT70EUA		I4	2.925	93.9	2200	36.6	302.4	1600	33.9	1	N/A	
TCD2.9L4	C5VT75EU		I4	2.925	100.6	2200	39.1	295	1600	33.7	1	N/A	
TCD2.9L4	C5VI77EU		I4	2.925	103.2	2200	39.7	309.7	1600	33.9	1	N/A	
TCD2.9L4	C5VI77EV		I4	2.925	103.2	2200	39.7	309.7	1600	33.9	1	N/A	
TCD2.9L4	C5VT65EU		I4	2.925	87.2	2200	34.2	265.5	1600	28.7	1	N/A	
TCD2.9L4	C5VI70EV		I4	2.925	93.9	2200	36.6	302.4	1600	33.9	1	N/A	
TCD2.9L4	C5VI75EU		I4	2.925	100.6	2200	39.1	309.7	1600	33.9	1	N/A	
TCD2.9L4	C5VI75EV		I4	2.925	100.6	2200	39.1	309.7	1600	33.9	1	N/A	