Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below 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	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2023	PHZXL1.95V50	1.463, 1.951	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Diesel Oxidation Catalyst, Exhaust Gas Recirculation, Electronic Control Module, Turbocharger, Charge Air Cooler	Crane, Loader, Tractor, Dozer, Pump, Compressor, Generator Set

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
19 ≤ kW < 56	Tier 4 Final	**STD**	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT	--	--	4.1	0.3	0.03	--	--	--

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

BE IT FURTHER RESOLVED: That for the listed engine models which include engines from different power categories in the same engine family, the manufacturer is complying with the more stringent set of standards from the 37 ≤ kW < 56 power category in conformance with the incorporated Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-D" adopted October 20, 2005 and last amended October 25, 2012.

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

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed on this 27th day of October 2022.

Robin U. Lang

Robin U. Lang, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models **EO #:** U-R-034-0338 **Family:** PHZXL1.95V50 **Attachment Last Revised:** 9/16/2022

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
4H50TIC	2800-var-55,4			1.95	Liters	55.4	kilowatt	2800	47.7	mm3/stroke	243	N-m	2100	54.4	mm3/stroke	N/A	N/A	N/A	N/A
4H50TIC	2700-var-54,8			1.95	Liters	54.8	kilowatt	2700	47.4	mm3/stroke	243	N-m	2000	54.3	mm3/stroke	N/A	N/A	N/A	N/A
4H50TIC	2600-var-52,7			1.95	Liters	52.7	kilowatt	2600	46	mm3/stroke	243	N-m	1900	53.8	mm3/stroke	N/A	N/A	N/A	N/A
4H50TIC	2500-var-50,8			1.95	Liters	50.8	kilowatt	2500	45.2	mm3/stroke	243	N-m	1800	53.4	mm3/stroke	N/A	N/A	N/A	N/A
4H50TIC	2400-var-48,8			1.95	Liters	48.8	kilowatt	2400	44.7	mm3/stroke	242	N-m	1700	53.4	mm3/stroke	N/A	N/A	N/A	N/A
4H50TIC	2300-var-46,9			1.95	Liters	46.9	kilowatt	2300	44.5	mm3/stroke	242	N-m	1600	53.1	mm3/stroke	N/A	N/A	N/A	N/A
3H50TIC	2800-var-43,7-HT			1.46	Liters	43.7	kilowatt	2800	50.8	mm3/stroke	203	N-m	2000	61.4	mm3/stroke	N/A	N/A	N/A	N/A
3H50TIC	2800-var-43,7			1.46	Liters	43.7	kilowatt	2800	50.8	mm3/stroke	188	N-m	2100	57.1	mm3/stroke	N/A	N/A	N/A	N/A
3H50TIC	2700-var-42,0			1.46	Liters	42	kilowatt	2700	48.5	mm3/stroke	188	N-m	2000	56.3	mm3/stroke	N/A	N/A	N/A	N/A
3H50TIC	2600-var-40,3			1.46	Liters	40.3	kilowatt	2600	47.5	mm3/stroke	188	N-m	1900	56	mm3/stroke	N/A	N/A	N/A	N/A
3H50TIC	2500-var-38,6			1.46	Liters	38.6	kilowatt	2500	46.8	mm3/stroke	188	N-m	1800	55.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50TIC	2800-var-36,4-C81			1.46	Liters	36.4	kilowatt	2800	41.8	mm3/stroke	188	N-m	1800	55.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50TIC	2500-var-36,4-C81			1.46	Liters	36.4	kilowatt	2500	44.3	mm3/stroke	188	N-m	1800	55.9	mm3/stroke	N/A	N/A	N/A	N/A