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	PDCLL02.4HTV	2.435	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Control Module, Electronic Direct Injection, Periodic Trap Oxidizer, Exhaust Gas Recirculation, Oxidation Catalyst, Turbocharger	Loader, Tractor, Generator Set, Forklift

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	--	--	3.9	0.1	0.002	--	--	--

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 29th day of December 2022.

Robin U. Lang, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models **EO #:** U-R-044-0184 **Family:** PDCLL02.4HTV **Attachment Last Revised:** 10/17/2022

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
4HT4	5520-2654	N/A	L4	2.435	Liters	54.5	kilowatt	2600	48.3	mm3/stroke	240.5	N-m	1700	54.9	mm3/stroke	N/A	N/A	N/A	N/A
4HT4	5021-2654	N/A	L4	2.435	Liters	49.5	kilowatt	2600	43.7	mm3/stroke	220	N-m	1700	49.8	mm3/stroke	N/A	N/A	N/A	N/A
4HT4	4527-2654	N/A	L4	2.435	Liters	45	kilowatt	2600	40.3	mm3/stroke	210	N-m	1700	47.4	mm3/stroke	N/A	N/A	N/A	N/A
4HT4	5020-2454	N/A	L4	2.435	Liters	49.5	kilowatt	2400	45.4	mm3/stroke	237	N-m	1700	54	mm3/stroke	N/A	N/A	N/A	N/A
4HT4	4723-2454	N/A	L4	2.435	Liters	47	kilowatt	2400	42	mm3/stroke	230	N-m	1700	51.1	mm3/stroke	N/A	N/A	N/A	N/A
4HT4	4000-1894	N/A	L4	2.435	Liters	40	kilowatt	1800	47.9	mm3/stroke	216	N-m	1800	47.9	mm3/stroke	N/A	N/A	N/A	N/A
4HT4	3300-1594	N/A	L4	2.435	Liters	33	kilowatt	1500	47.7	mm3/stroke	215	N-m	1500	47.7	mm3/stroke	N/A	N/A	N/A	N/A