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)					
2021	MVPXL05.1CJA	5.1	Diesel	8,000					
SPECIAL	. FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
T	Electronic Diesel Inj onic Control Module, Ch Turbocharger, Smoke P elective Catalytic Reduc Exhaust Gas Recircu Ammonia Oxidation (harge Air Cooler, uff Limiter, stion – Urea, ulation,	Crane, Loader, Pump, Compressor, Generator Set						

The engine models and codes are attached.

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The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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	EMISSION				EXHAUST (g/kw-l		OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		NMHC NOx		NMHC+NOx	со	РМ	ACCEL	LUG	PEAK	
75 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A	
		FEL	N/A	N/A	N/A	N/A	0.03	N/A	N/A	N/A	
		CERT	0.01	0.34		0.1	0.02				

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

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 $130 \le kW \le 560$ 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 $\frac{25th}{2}$ day of November 2020.

Allen Lyons, Chief Emissions Certification and Compliance Division

Attachment 1 of 1: Engine Models EO #: U-R-014-0182			Family	MVPXL05.1CJA	Attachment Revised: 11/16/2020														
					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power -		Peak Torque -	Peak Torque -	Peak Torque -	Peak Torque -				
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Fuel Units	Peak Torque	Units	Speed (rpm)	Fuel	Fuel Units	OBD	GHG	Special	Notes
TAD570VE	1	N/A	14	5.1	Liters	141	horsepower	2300	79	lb/hr	710	N-m	1200	64	lb/hr	N/A	N/A	N/A	N/A
TAD571VE	П	N/A	14	5.1	Liters	173	horsepower	2301	95	lb/hr	810	N-m	1200	73	lb/hr	N/A	N/A	N/A	N/A
TAD572VE	Ш	N/A	14	5.1	Liters	214	horsepower	2302	114	lb/hr	910	N-m	1450	92	lb/hr	N/A	N/A	N/A	N/A