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)				
2022	NSZXL07.8QXA	7.790	Diesel	8000				
SPECIAL	FEATURES & EMISSION C	ONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION					
Air Coole Recircula	ic Control Module, Turk r, Electronic Direct Inje ation, Diesel Oxidation st Reduction-Urea, Am Catalyst	ction, Exhaust Gas Catalyst, Selective	Excavator, Crane, Load	ers				

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	EMISSION				EXHAUST (g/kw-ł		OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		NMHC NOx		NMHC+NOx	со	РМ	ACCEL	LUG	PEAK	
130 ≤ kW< 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A	
		CERT	0.02	0.38		0.2	0.02				

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).

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 23rd day of December 2021.

Allen Kyons, Chief Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-006-0507

Family: NSZXL07.8QXA Attachr

Attachment Last Revised: 9/9/2021

Model	Code		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
AQ- 6HK1X	6HK1XD QAB-01	N/A	16	7.790	Liters	281.6	horsepower	1900	153.4	mm3/stroke	797	lb-ft	1500	153.9	mm3/stroke	N/A	N/A	N/A	N/A
AQ- 6HK1X	6HK1XD QAB-02	N/A	16	7.790	Liters	264.2	horsepower	1900	144.2	mm3/stroke	774	lb-ft	1500	149.8	mm3/stroke	N/A	N/A	N/A	N/A
AQ- 6HK1X	6HK1XD QAB-03	N/A	16	7.79	Liters	215.9	horsepower	1800	126.1	mm3/stroke	693	lb-ft	1500	135.9	mm3/stroke	N/A	N/A	N/A	N/A
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