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	PFPXL03.6EHK	3.6	Diesel	8,000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Charged Air Cooler, Exhaust Gas Recirculation, Electronic Control Module, Turbocharger, Diesel Oxidation Catalyst, Periodic Trap Oxidizer, Selective Catalytic Reduction – Urea, Ammonia Oxidation Catalyst	Loader, Tractor, Dozer, Pump, Generator Set, Other Industrial Equipment

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
56 ≤ kW < 130	Tier 4 Final	**STD**	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.01	0.30	--	0.02	0.004	--	--	--

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 56 ≤ kW < 130 power categories 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 24th day of June 2022.

Krishna Sahai for

Allen Lyons, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models **EO #:** U-R-015-0543 **Family:** PFPXL03.6EHK **Attachment Last Revised:** 6/9/2022

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
F5LGL413V*V	F5LGL413V*V	N/A	I4	3.6	Liters	118	horsepower	2300	93	mm3/stroke	382	lb-ft	1300	119	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL413N*V	F5LGL413N*V	N/A	I4	3.6	Liters	114	horsepower	2300	90	mm3/stroke	344	lb-ft	1500	106	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL413M*V	F5LGL413M*V	N/A	I4	3.6	Liters	111	horsepower	2200	90	mm3/stroke	340	lb-ft	1400	104	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL413Z*V	F5LGL413Z*V	N/A	I4	3.6	Liters	103	horsepower	2300	83	mm3/stroke	297	lb-ft	1600	92	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL4131*V	F5LGL4131*V	N/A	I4	3.6	Liters	103	horsepower	2300	83	mm3/stroke	297	lb-ft	1600	92	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL4132*V	F5LGL4132*V	N/A	I4	3.6	Liters	101	horsepower	2200	81	mm3/stroke	317	lb-ft	1400	98	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL4133*V	F5LGL4133*V	N/A	I4	3.6	Liters	101	horsepower	2200	81	mm3/stroke	295	lb-ft	1500	91	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL4134*V	F5LGL4134*V	N/A	I4	3.6	Liters	97	horsepower	2300	77	mm3/stroke	300	lb-ft	1600	92	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5MGL4135*V	F5MGL4135*V	N/A	I4	3.6	Liters	95	horsepower	2300	76	mm3/stroke	270	lb-ft	1500	84	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL4136*V	F5LGL4136*V	N/A	I4	3.6	Liters	95	horsepower	2300	76	mm3/stroke	297	lb-ft	1500	92	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL4137*V	F5LGL4137*V	N/A	I4	3.6	Liters	94	horsepower	2200	76	mm3/stroke	291	lb-ft	1400	90	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL4138*V	F5LGL4138*V	N/A	I4	3.6	Liters	90	horsepower	2300	72	mm3/stroke	270	lb-ft	1500	84	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL4139*V	F5LGL4139*V	N/A	I4	3.6	Liters	86	horsepower	2300	69	mm3/stroke	273	lb-ft	1500	84	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL414A*V	F5LGL414A*V	N/A	I4	3.6	Liters	85	horsepower	2200	65	mm3/stroke	261	lb-ft	1400	81	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL414B*V	F5LGL414B*V	N/A	I4	3.6	Liters	82	horsepower	2300	66	mm3/stroke	247	lb-ft	1500	76	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX
F5LGL414C*V	F5LGL414C*V	N/A	I4	3.6	Liters	102	horsepower	2300	82	mm3/stroke	325	lb-ft	1600	98	mm3/stroke	N/A	N/A	N/A	DDI CAC EGR ECM TC DOC DPF SCR AMOX