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	PCPXL18.1HTF	18.1	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Diesel Oxidation Catalyst, Engine Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst	Loader, Tractor, Excavator, Off-road Truck, Paver, Commercial Equipment

The engine models and codes are attached.

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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	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
		FEL	--	--	--	--	0.01	--	--	--
		CERT	0.04	0.11	--	0.01	0.01	--	--	--

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).

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 12th day of September 2022

Robin U. Lang

Robin U. Lang, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models **EO #:** U-R-001-0666 **Family:** PCPXL18.1HTF **Attachment Last Revised:** 9/6/2022

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
C18	Cert Test 1	NA	I6	18.13	Liters	552	horsepower	1900	214.8	lb/hr	2248	lb-ft	1300	188.4	lb/hr	N/A	N/A	N/A	N/A
C18	1	NA	I6	18.13	Liters	552	horsepower	1900	214.8	lb/hr	2248	lb-ft	1300	188.4	lb/hr	N/A	N/A	N/A	N/A
C18	2	NA	I6	18.13	Liters	552	horsepower	1900	214.8	lb/hr	2248	lb-ft	1300	188.4	lb/hr	N/A	N/A	N/A	N/A
C18	2A	NA	I6	18.13	Liters	552	horsepower	1900	214.8	lb/hr	2248	lb-ft	1300	188.4	lb/hr	N/A	N/A	N/A	N/A
C18	3	NA	I6	18.13	Liters	527	horsepower	1700	183.6	lb/hr	2201	lb-ft	1200	166.7	lb/hr	N/A	N/A	N/A	N/A
C18	3A	NA	I6	18.13	Liters	527	horsepower	1700	183.6	lb/hr	2201	lb-ft	1200	166.7	lb/hr	N/A	N/A	N/A	N/A
C18	4	NA	I6	18.13	Liters	574	horsepower	2000	206	lb/hr	1983	lb-ft	1300	165.7	lb/hr	N/A	N/A	N/A	N/A
C18	4A	NA	I6	18.13	Liters	574	horsepower	2000	206	lb/hr	1983	lb-ft	1300	165.7	lb/hr	N/A	N/A	N/A	N/A
C18	5	NA	I6	18.13	Liters	598	horsepower	2000	216	lb/hr	2069	lb-ft	1300	173.1	lb/hr	N/A	N/A	N/A	N/A
C18	5A	NA	I6	18.13	Liters	598	horsepower	2000	216	lb/hr	2069	lb-ft	1300	173.1	lb/hr	N/A	N/A	N/A	N/A
C18	6	NA	I6	18.13	Liters	629	horsepower	2000	230.5	lb/hr	2173	lb-ft	1300	182.8	lb/hr	N/A	N/A	N/A	N/A
C18	6A	NA	I6	18.13	Liters	629	horsepower	2000	230.5	lb/hr	2173	lb-ft	1300	182.8	lb/hr	N/A	N/A	N/A	N/A
C18	7	NA	I6	18.13	Liters	570	horsepower	1900	211.2	lb/hr	2200	lb-ft	1200	166.4	lb/hr	N/A	N/A	N/A	N/A
C18	8	NA	I6	18.13	Liters	460	horsepower	1800	163.9	lb/hr	1823	lb-ft	1250	146.1	lb/hr	N/A	N/A	N/A	N/A
C18	9	NA	I6	18.13	Liters	543	horsepower	1900	201.2	lb/hr	1817	lb-ft	1400	162.2	lb/hr	N/A	N/A	N/A	N/A
C18	10	NA	I6	18.13	Liters	481	horsepower	1900	175.4	lb/hr	1910	lb-ft	1200	145.3	lb/hr	N/A	N/A	N/A	N/A
C18	11	NA	I6	18.13	Liters	629	horsepower	1900	225.1	lb/hr	2172	lb-ft	1300	182.7	lb/hr	N/A	N/A	N/A	N/A
C18	11A	NA	I6	18.13	Liters	629	horsepower	1900	225.1	lb/hr	2172	lb-ft	1300	182.7	lb/hr	N/A	N/A	N/A	N/A
C18	12	NA	I6	18.13	Liters	554	horsepower	1900	206.3	lb/hr	2020	lb-ft	1300	166.5	lb/hr	N/A	N/A	N/A	N/A
2806F	13	NA	I6	18.13	Liters	574	horsepower	2000	206	lb/hr	1983	lb-ft	1300	165.7	lb/hr	N/A	N/A	N/A	N/A
2806J	13A	NA	I6	18.13	Liters	574	horsepower	2000	206	lb/hr	1983	lb-ft	1300	165.7	lb/hr	N/A	N/A	N/A	N/A
2806F	14	NA	I6	18.13	Liters	598	horsepower	2000	216	lb/hr	2069	lb-ft	1300	173.1	lb/hr	N/A	N/A	N/A	N/A
2806J	14A	NA	I6	18.13	Liters	598	horsepower	2000	216	lb/hr	2069	lb-ft	1300	173.1	lb/hr	N/A	N/A	N/A	N/A
2806F	15	NA	I6	18.13	Liters	629	horsepower	2000	230.5	lb/hr	2173	lb-ft	1300	182.8	lb/hr	N/A	N/A	N/A	N/A
2806J	15A	NA	I6	18.13	Liters	629	horsepower	2000	230.5	lb/hr	2173	lb-ft	1300	182.8	lb/hr	N/A	N/A	N/A	N/A
C18	16	NA	I6	18.13	Liters	481	horsepower	1900	175.4	lb/hr	1910	lb-ft	1200	145.3	lb/hr	N/A	N/A	N/A	N/A
C18	17	NA	I6	18.13	Liters	527	horsepower	1700	183.6	lb/hr	2201	lb-ft	1200	166.7	lb/hr	N/A	N/A	N/A	N/A
C18	17A	NA	I6	18.13	Liters	527	horsepower	1700	183.6	lb/hr	2201	lb-ft	1200	166.7	lb/hr	N/A	N/A	N/A	N/A
C18	18	NA	I6	18.13	Liters	543	horsepower	1900	201.2	lb/hr	1817	lb-ft	1400	162.2	lb/hr	N/A	N/A	N/A	N/A
C18	19	NA	I6	18.13	Liters	629	horsepower	2000	230.5	lb/hr	2173	lb-ft	1300	182.8	lb/hr	N/A	N/A	N/A	N/A
C18	19A	NA	I6	18.13	Liters	629	horsepower	2000	230.5	lb/hr	2173	lb-ft	1300	182.8	lb/hr	N/A	N/A	N/A	N/A
C18	20	NA	I6	18.13	Liters	468	horsepower	1750	163	lb/hr	2010	lb-ft	1300	163.4	lb/hr	N/A	N/A	N/A	N/A
C18	20A	NA	I6	18.13	Liters	468	horsepower	1750	163	lb/hr	2010	lb-ft	1300	163.4	lb/hr	N/A	N/A	N/A	N/A
C18	21	NA	I6	18.13	Liters	570	horsepower	1900	211.2	lb/hr	2200	lb-ft	1200	166.4	lb/hr	N/A	N/A	N/A	N/A
C18	22	NA	I6	18.13	Liters	629	horsepower	2000	230.5	lb/hr	2173	lb-ft	1300	182.8	lb/hr	N/A	N/A	N/A	N/A