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	NDZXL03.6055	3.621	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Exhaust Gas Recirculation, Electronic Control Module, Diesel Oxidation Catalyst, Continuous Trap Oxidizer, Selective Catalytic Reduction-Urea	Loader, Tractor, Dozer, Pump, Compressor, Material Handler, Small Cranes

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	0.002	0.36	--	0.1	0.003	--	--	--

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.

BE IT FURTHER RESOLVED: That the listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer must submit the necessary data by March 31, 2022 to confirm or correct the certification emissions levels on this conditional certification. Failure to submit the necessary data or resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification and introduced into commerce in the State of California shall be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to civil penalties pursuant to Health and Safety Code Section 43154.

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 9th day of January 2022.

Allen Lyons, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models **EO #:** U-R-013-0676 **Family:** NDZXL03.6055 **Attachment Last Revised:** 12/30/2021

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
TCD3.6L4	CFVI100D		I4	3.621	Liters	134.1	horsepower	2000	50.2	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI100C		I4	3.621	Liters	134.1	horsepower	2200	52	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI100U		I4	3.621	Liters	134.1	horsepower	2300	52.8	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI95BU		I4	3.621	Liters	127.3	horsepower	2000	47.5	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI95AU		I4	3.621	Liters	127.3	horsepower	2200	49.3	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI95U		I4	3.621	Liters	127.3	horsepower	2300	47.8	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI70U		I4	3.621	Liters	93.8	horsepower	2200	35.7	lb/hr	390	lb-ft	1600	31.1	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI74BU		I4	3.621	Liters	99.7	horsepower	2000	36.3	lb/hr	410	lb-ft	1600	32.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI74AU		I4	3.621	Liters	99.7	horsepower	2200	37.6	lb/hr	410	lb-ft	1600	32.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI74U		I4	3.621	Liters	99.7	horsepower	2300	39.2	lb/hr	410	lb-ft	1600	32.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI80BU		I4	3.621	Liters	107.2	horsepower	2000	40	lb/hr	430	lb-ft	1600	34.9	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI80AU		I4	3.621	Liters	107.2	horsepower	2200	41.8	lb/hr	430	lb-ft	1600	34.9	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI80U		I4	3.621	Liters	107.2	horsepower	2300	43.2	lb/hr	430	lb-ft	1600	34.9	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI85BU		I4	3.621	Liters	113.9	horsepower	2000	42.4	lb/hr	460	lb-ft	1600	37.3	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI85AU		I4	3.621	Liters	113.9	horsepower	2200	44.2	lb/hr	460	lb-ft	1600	37.3	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI85U		I4	3.621	Liters	113.9	horsepower	2300	45.5	lb/hr	460	lb-ft	1600	37.3	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI90BU		I4	3.621	Liters	120.6	horsepower	2000	44.9	lb/hr	480	lb-ft	1600	39	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI90AU		I4	3.621	Liters	120.6	horsepower	2200	46.5	lb/hr	480	lb-ft	1600	39	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	CFVI90U		I4	3.621	Liters	120.6	horsepower	2300	47.8	lb/hr	480	lb-ft	1600	39	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI70U		I4	3.621	Liters	93.8	horsepower	2200	35.7	lb/hr	390	lb-ft	1600	31.1	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI74BU		I4	3.621	Liters	99.7	horsepower	2000	36.3	lb/hr	410	lb-ft	1600	32.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI74AU		I4	3.621	Liters	99.7	horsepower	2200	37.6	lb/hr	410	lb-ft	1600	32.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI74U		I4	3.621	Liters	99.7	horsepower	2300	39.2	lb/hr	410	lb-ft	1600	32.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI80BU		I4	3.621	Liters	107.2	horsepower	2000	40	lb/hr	430	lb-ft	1600	34.9	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI80AU		I4	3.621	Liters	107.2	horsepower	2200	41.8	lb/hr	430	lb-ft	1600	34.9	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI80U		I4	3.621	Liters	107.2	horsepower	2300	43.2	lb/hr	430	lb-ft	1600	34.9	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI85BU		I4	3.621	Liters	113.9	horsepower	2000	42.4	lb/hr	460	lb-ft	1600	37.3	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI85AU		I4	3.621	Liters	134.1	horsepower	2000	40.2	lb/hr	460	lb-ft	1600	37.3	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI85U		I4	3.621	Liters	134.1	horsepower	2200	43.6	lb/hr	460	lb-ft	1600	37.3	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI90BU		I4	3.621	Liters	134.1	horsepower	2300	51.7	lb/hr	480	lb-ft	1600	39	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI90AU		I4	3.621	Liters	127.3	horsepower	2000	42.3	lb/hr	480	lb-ft	1600	39	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI90U		I4	3.621	Liters	127.3	horsepower	2200	45.7	lb/hr	480	lb-ft	1600	39	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI95BU		I4	3.621	Liters	127.3	horsepower	2300	54.6	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI95AU		I4	3.621	Liters	93.8	horsepower	2200	49.3	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI95U		I4	3.621	Liters	99.7	horsepower	2000	41.5	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI100BU		I4	3.621	Liters	99.7	horsepower	2200	55.2	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI100AU		I4	3.621	Liters	99.7	horsepower	2300	54.4	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A
TCD3.6L4	C5VI100U		I4	3.621	Liters	107.2	horsepower	2000	45.9	lb/hr	500	lb-ft	1600	40.7	lb/hr	N/A	N/A	N/A	N/A