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 LIF (hours)		
2020	LMNBL12.4OR4	12.4	Diesel	8,000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION		
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Loaders, Tractors, Harvesters, Agricultural Equipment, Construction Equipment, Pumps			

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	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
CLASS			NMHC	NOx	NMHC+NOx	СО	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
		CERT	0.06	0.37		0.3	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 at El Monte, California on this 2200

day of November 2019.

Allen Lyons, Chief

Emissions Certification and Compliance Division

10/17/2019

Engine Model Summary Template

Attachment: 1/1

Engine Family	1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate mm/stroke@peak HP (for diesel only)	5. Fuel Rate (lbs/hr)@peak HP (for diesel only)	6. Torque @ RPM (SAE Gross)	7. Fuel Rate mm/stroke @ peak torque	8. Fuel Rate (lbs/hr) @ peak torque	9. Emission Control Device Per SAE J1930
KMNBL12.4OR4	D2676-R02	LE137	404 KW @	292	175.7	2520 Nm @	342	150.1	ECM, DI, TC, CAC
			1850 RPM			1350 RPM			EGR, SCR-U, AMOX
KMNBL12.4OR4	D2676-R02	LE521	383 KW @	266	169.1	2420 Nm @	325	142.9	ECM, DI, TC, CAC
	Ŷ		1950 RPM			1350 RPM			EGR, SCR-U, AMOX
KMNBL12.4OR4	D2676-R02	LE522	353 KW @	246	155.9	2305 Nm @	307	130.1	ECM, DI, TC, CAC
			1950 RPM			1300 RPM			EGR, SCR-U, AMOX
KMNBL12,4OR4	D2676-R02	LE523	323 kW @	225	142.9	2108 Nm @	283	115.3	ECM, DI, TC, CAC
			1950 RPM			1250 RPM			EGR, SCR-U, AMOX
KMNBL12.4OR4	D2676-R02	LE524	294 kW @	208	131.8	1916 Nm @	258	104.9	ECM, DI, TC, CAC
			1950 RPM			1250 RPM			EGR, SCR-U, AMOX
KMNBL12.4OR4	D2676-R02	LE147	373 kW @	251	159.3	2520 Nm @	306	129.6	ECM, DI, TC, CAC
			1950 RPM			1300 RPM			EGR, SCR-U, AMOX