Pursuant to the authority vested in the 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-02-003;

**IT IS ORDERED AND RESOLVED:** That the following compression-ignition engine and emission control system 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.

ENGINE FAMILY	(liters)	FUEL TYPE	USEFUL LIFE (hours)
MVXL02.3CCC	2.3	Diesel	5000
URES & EMISSION (		TYPICAL EQUIPMENT	APPLICATION
Indirect Diesel Inje	ction	Tractor and Industria	l Equipment
r	URES & EMISSION (	MVXL02.3CCC 2.3	MVXL02.3CCC 2.3 Diesel URES & EMISSION CONTROL SYSTEMS TYPICAL EQUIPMENT

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), 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			E	EXHAUST (g/kw-ł	רד)		O	PACITY (*	6)
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
19 <u>&lt;</u> KW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50
		CERT			4.2	2.1	0.34	5	3	10

**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 \_\_\_\_\_22<sup>429</sup> day of December 2006.

Raphael Samoait

Annette Hebert, Chief Mobile Source Operations Division

## **Engine Model Summary Template**

U-R-035-0210

Engine Family	Engine Family 1.Engine Code 2.Engine Model	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 diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torqu	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930
7MVXL02.3CCC	K4N 28.3kW-01	K4N	38.0HP@2000	34.5	15.2	101.3ftlb@1400	35	10.8	Q
7MVXL02.3CCC	K4N 30.5kW-01	K4N	40.9@2200	33.5	16.2	103.4@1800	33.5	13.2	<u>IO</u>
7MVXL02.3CCC	K4N 31.4kW-01	K4N	42.1HP@2300	33.5	16.9	103.4ftlb@1800	33.5	13.2	D
7MVXL02.3CCC	K4N 32.6kW-01	K4N	43.7HP@2400	33.7	17.8	104.9ftlb@1800	35.5	14.0	IQI
7MVXL02.3CCC K4N 33.1kW-01	K4N 33.1kW-01	K4N	44.4@2500	33	18.1	99.8@1800	33.5	13.2	IQI
7MVXL02.3CCC K4N 33.1kW-02	K4N 33.1kW-02	K4N	44.4@2500	33	18.1	99.8@1800	33.5	13.2	Ō
7MVXL02.3CCC	K4N 34.6kW-02	K4N	46.4HP@2600	33	18.8	99.8ftlb@1800	33.5	13.2	IQI
7MVXL02.3CCC	K4N-Y231NSA	K4N	43.7@2400	33.7	17.8	104.9@1800	35.5	14.0	IO I
7MVXL02.3CCC	K4N-Y231NSB	K4N	43.7@2400	33.7	17.8	104.9@1800	35.5	14.0	<b>D</b>
7MVXL02.3CCC	K4N-Y232SCMA	K4N	44.4@2500	33	18.1	99.8@1800	33.5	13.2	<b>D</b>
7MVXL02.3CCC	K4N-Y2B	K4N	46.4@2600	34.4	19.6	106.3@1600	36.0	12.6	IOI

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