CATERPILLAR, INC.

EXECUTIVE ORDER U-R-001-0226 New Off-Road Compression-Ignition Engines

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.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2003	3CPXL06.6MRW	6.6	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
Direct Die	sel Injection, Turbocharg and Smoke Puff Li	er, Charge Air Cooler miter	Loader, Tractor and Indu	istrial 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 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			ı	EXHAUST (g/kw-l	ır)		OF	PACITY (%	6)
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 <u><</u> KW<225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
*		FEL	N/A	N/A	9.4	N/A	0.40	NA	N/A	N/A
		CERT			8.3	2.2	0.34	16	4	25

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 at El Monte, California on this ______ day of August 2003.

Allen Lyons, Chief

Mobile Source Operations Division

ATTACHMENT 1 OF 1

Engine Model Summary Form

Manufacturer: CATERPILLAR INC.

Engine category: Nonroad Over 50 Hp

EPA Engine Family: 3CPXL06.6MRW

Mfr Family Name: N/A

Process Code: New Submission

4-R-001-0226

211811111	1.Engine Code 2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Kate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Kate: mm/stroke@peak torque	8.Fuel Rate: (ibs/hr)@peak torque	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930
Note: Peak HP and Peak torque 1 -Cert 3116 2 3116	ik torque 16 16	fuel rates are 210 @ 2400 174 @ 2200 187 @ 2200	nominal values. 95 83	Due to product-77.0 61.4	ion engine avgs. 623 @ 1450 524 @ 1500 568 @ 1600	these fuel rates 124 108 113	may change. 60.5 54.2 60.6	EM, DI, TC, SPL, CAC EM, DI, TC, SPL, CAC EM, DI, TC, SPL, CAC