## CATERPILLAR, INC.

EXECUTIVE ORDER U-R-001-0298 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)			
2006	6CPXL58.6E2T	51.8 and 58.6	Diesel				
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Direct Dies Smok	sel Injection, Turbocharg e Puff Limiter and Engin	er, Charge Air Cooler, e Control Module	Pump, Compressor, Generator and Industrial 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
KW > 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT			5.3	1.6	0.14	19	4	31

**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 day of December 2005.

Allen Lyons, Chief

Mobile Source Operations Division

## ATT ACHINENT 1 OF 1

Engine Model Summary Form

Caterpillar, Inc. Manufacturer:

Nonroad CI Engine category:

6CPXL58.6E2T EPA Engine Family:

U-R-001-0298

Mfr Family Name:

**New Submission** Process Code:

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930 EM,DI,TC,ECM 650 615 590 567 564 542 334 393 **₹** ₹ mm/stroke@peak torque 7.Fuel Rate: 653 626 602 599 575 551 649 ٤ ₹ ž 6.Torque @ RPM (SEA Gross) 10025@1400 9424@1400 9024@1400 8622@1400 8567@1400 8187@1400 7973@900 9410@900 ž ۲ ₹ ¥ (lbs/hr) @ peak HP (for diesels only) 5.Fuel Rate: 828 881 787 751 784 419 495 495 751 734 674 624 mm/stroke @ peak HP (for diesel only) 4.Fuel Rate: 689 647 615 613 519 613 613 587 587 909 557 3.BHP@RPM (SAE Gross) 2500@1900 2350@1900 2250@1900 2150@1900 2250@1900 1476@1200 2150@1900 1250@1200 1476@1200 2206@1800 2008@1800 1825@1800 2.Engine Model 3512C 1.Engine Code 10 12 Ę 2 က 4 2 9 7 က 6