CATERPILLAR, INC.

EXECUTIVE ORDER U-R-001-0301 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	6CPXL34.5E2W	34.5	Diesel	8000		
-	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION			
Direct Die	sel Injection, Turbocharg and Engine Control	er, Charge Air Cooler module	Loader, Dozer and Indus	trial 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 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
		FEL	N/A	N/A	10.4	N/A	0.20	N/A	N/A	N/A
		CERT			8.3	0.6	0.13	13	2	23

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 December 2005.

MAllen Lyons, Chief

Raphael Sursonity

Mobile Source Operations Division

Engine Model Summary Form

Caterpillar Inc Manufacturer:

Engine category: Nonroad CI
EPA Engine Family: 6CPXL34.5E2W

Mfr Family Name:

New Submission Process Code:

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8.Fuel Rate: 9.Emission Control lbs/hr)@peak torque Device Per SAE J1930	305 CAC EM,DI,TC,ECM	J EM,DI,TC,ECM	EM,DI,TC,ECM	EM,DI,TC,ECM	' EM,DI,TC,ECM
8.Fuel Rate: (lbs/hr)@peak torque	305 CA	275	306	275	
7.Fuel Rate: mm/stroke@peak torque	524	471	525	472	405
6.Torque @ RPM (SEA Gross)	3618 @ 1300	3325 @ 1300	3599 @ 1300	3311 @ 1300	2688 @ 1300
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	333	310	362	324	335
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)		394	462	413	426
3.BHP@RPM (SAE Gross)	936 @ 1750	880 @ 1750	1000 @ 1750	920 @ 1750	931 @ 1750
2.Engine Model	3508B	3508B	3508B	3508B	3508B
.Engine Code		2	က	4	2