EXECUTIVE ORDER U-R-002-0253 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)			
2004	4CEXL0275AAF	4.5	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Direct Diesel Injection			Crane, Loader, Tractor, Dozer, Pump and Compressor				

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	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
CLASS			HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	N/A	N/A	N/A
		CERT			7.2	2.4	0.30	4	6	6

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 September 2004.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form ANACHEOTES 1st 1

U-R-002-0253

Cummins Inc. Manufacturer:

Engine category: Nonroad Cl EPA Engine Family: 4CEXL0275AAF

Mfr Family Name: B851

New Submission Process Code:

8.Fuel Rate: 9.Emission Control lbs/hr)@peak torque Device Per SAE J1930	216@1300 69 50.2 DDI,EM ♣
7.Fuel Rate: mrr/stroke@peak torque (lbs	69
6.Torque @ RPM (SEA Gross)	216@1300
5.Fuel Rate: (tbs/hr) @ peak HP (for diesels only)	32.1
4.Fuet Rate: mm/stroke @ peak HP (for diesel only)	92200
3.BHP@RPM (SAE Gross)	80@2200
1.Engine Code 2.Engine Model	8454,FR91173 B4.5 80@2200 65
1.Engine Code	8454,FR91173