Cummins Inc.

EXECUTIVE ORDER U-R-002-0175 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	3CEXL050.AAA	38 and 50	Diesel	8000			
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	TYPICAL EQUIPMENT APPLICATION			
Direct Dies	sel Injection, Turbocharg	er, Charge Air Cooler	Haul Truck and E	excavator			

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		EXHAUST (g/kw-hr)				OPACITY (%)				
POWER CLASS	STANDARD		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
KW > 560	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15_	50
		CERT	0.4	8.1		2.0	0.23	14	6	24

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 November 2002.

Aller Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form ATIACHMENT BIOCI

Manufacturer: Cummins Inc.

Engine category: Nonroad Cl

EPA Engine Family: 3CEXL050.AAA

Mfr Family Name: A283

Process Code: New Submission

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U-R-002-0175

1.Engine Code	2.Engine Model	a.BHP@RPM (SAE Gross)	4.Fuol Palo: nuntstroto @ poate HP (for diesol only)	5.Fuel flale: (lbe/ln) (@ pealcHP (for diesels only)	6. Torquo @ HPM (SEA Gross)	7.Fuel Italo: nun/stroke@peak lorque	0. Fuel Rate: 9. Emission Control (lbs/hr)@peak torque Device Per SAE J1930	9.Emission Control Device Per SAE J1930
2913:FR 6350	KTA50-C	2000@1900	coc	654	\$800@1500	668	538 //	AZ TC GAC ★
2914:FR 6357	KTA50-C	2000@1900	080	788	6800@1600	399		TC, CAC
2914;FR B418	KTA50-C	1800@1900	355	007	5224(@1500	350	484	TG,CAC
2936:FR 6367	KTA38-C	1260@1800	369	907	3767@1400	360	3/10	TC, CAC
2936:FR 6365	KTA20-C	1450@1900	202	502	4127@1400	391	989	TO,OAO
2936:FR 6373	KTA30-C	1360@1900	370	474	4127@1400	391	309 -	TC,CAC
2037:FR 8368	KTA38-C	1260@1800	350	430	3767(බූ1400	360	340	TC, CAC
2907:FR 6366	KTA38-C	1450@1900	392	502	4127@1400	. 391	369	TC,CAC
2997:FR 6374	Ki'Aaa-C	1350@1900	370	474	4127@1400	108		Dr Tojono