Cummins Inc.

EXECUTIVE ORDER U-R-002-0225 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	4CEXL1.71A31	1.714	Diesel	5000						
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION							
	Indirect Diesel Inje	ection	Crane, Loader, Tractor, Dozer, Pump, Compressor and Ot 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 19 ≤ kW < 37	EMISSION STANDARD			EXHAUST (g/kw-ł	OPACITY (%)					
	CATEGORY		HC	NOx	NMHC+NOx	co	РМ	ACCEL	LUG	PEAK
	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50
		CERT			6.0	1.7	0.27	6	6	8

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 February 2004.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form ATTACHMECT TO 1 00 1

U-R-002-0225

CUMMINS INC. Manufacturer:

Nonroad C! Engine category:

EPA Engine Family. 4CEXL1.71A31

Mfr Family Name: A1700

New Submission Process Code:

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9 Emission Control Device Per SAE J1930	IDI, EM				 The second secon					principality is 10 to 10				Control on the control of the contro	reproducement of the second o		To be the first the section of the s		The state of the s
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7.Fuel Rate: mm/stroke@peak torque	39.0			•		The second secon	maker one constraints and the constraints of the co								de loine d'annouverble con mos de los concents et politics				Water the commence of the comm
6.Torque @ RPM (SEA Gross)	85.5@1600	es emplés es el pages.				and the second s		-				The second secon			ment i inn di cama di cama di cama di cama di dana di d				The second secon
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	16.1				and a second sec		Here was a second secon	-				TO MAKE THE PERSON OF THE PERS		•		-			COLUMN TO THE WAS A PROPERTY OF THE PARTY OF
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3.BHP@RPM (SAE Gross)	37@2800																		
2.Engine Model	A1700	The state of the s									• •								****** · · · · · · · · · · · · · · · ·
1.Engine Code	FR35004		e e e e e e e e e e e e e e e e e e e						:				=						