CUMMINS ENGINE COMPANY, INC.

EXECUTIVE ORDER U-R-002-0115 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-45-9;

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)			
2001	1CEXL028.AAA	28	Diesel	8000			
SPECIAL F	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION			
Direct Diese	el Injection, Turbochargo	er, Charge Air Cooler	Generato	•			
ENGINE MODELS (rated power in kilowatts, kw)	VTA28-G8 (611.5 kw) VTA28-G8 (627.9 kw) VTA28-G8 (671.1 kw) VTA28-G8 (691.3 kw)						

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		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS	CATEGORY		HC	NOx	NMHC+NO _X	co	PM	ACCEL	LUG	PEAK
KW > 560	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	N/A	N/A	N/A
		CERT	1.2	7.4		4.6	0.51		IN/A	IN/A
				7.4		4.6	0.51	ļ 		

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 2001.

R. B. Summerfield, Chief.

Mobile Source Operations Division

Engine Model St mary Form ATTACHMENT

Manufacturer:

Cummins Inc

Engine category:

Nonroad CI

EPA Engine Family: 1CEXL028.AAA

Mfr Family Name: A153

Process Code:

New Submission

U-R-002-0115

1.Engine Code 8080:FR5206	2.Engine Model VTA28-G8	3.BHP@RPM (SAE Gross) 842@1500	(Kw) (for diesel only)	(for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate; mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
		927@1800	627.9 303	306.5				CACEMITO DOT
8080;FR5205	VTA28-G8	B20@1500	691.3 276 611.5 294	334.8				I EM,TC I
		900@1800	64].1 270	297.1 328,1				EM,TC V
EPA Gert #	· CEX-NR	9-01-33					<u> 19. 19. 19. 1</u>	•