CUMMINS INC.

EXECUTIVE ORDER U-R-002-0506 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)					
2009	9CEXL2.08A43	2.082	Diesel	5000					
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION						
	Indirect Diesel Inje	ction	Crane, Loader, Tractor, Dozer, Pump, Compressor, Generator and Other 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	EMISSION			I	EXHAUST (g/kw-ł		OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
8 <u><</u> kW < 19	Tier 4 Final	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
19 ≤ kW < 37	Tier 4 Interim	STD	N/A	N/A	7.5	5.5	0.30	20	15	50
		CERT			5.7	1.7	0.23	10	10	13

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 January 2009.

Annette Hebert, Chief

Mobile Source Operations Division

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Manufacturer: CUMMINS Inc.

Engine category: Nonroad CI

EPA Engine Family: 9CEXL2.08A43

Mfr Family Name: A2000

Process Code: New Submission

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AE J1930	Σ	Σ	Σ	Σ	Σ	Σ									
evice Per SAE J193	IDI,EM	IDI,EM	IDI,EM	IDI,EM	IDI,EM	IDI,EM									
rque Dev															
(lbs/hr)@peak torque Device Per SAE J1930	13.7	13.7	N/A	ΝΑ	N/A	N/A							 The second secon		
(lbs/hr)										•					
torque	38.0	38.0	NA	N/A	N/A	N/A				and an article and article and article and article and article and article art					
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(SEA Gross)	99.6@1600	99.6@1600	N/A	Ž	N/A	NA				in the second contract of the second contract					
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(for diesel only)	34.0	34.0	35.7	35.8	29.5	28.9					in the second se				
(for diesel only)				` '											
	300	300	800	500	800	500					-				
(SAE Gross)	45@2800	45@2800	34.9@1800	28.8@1500	28.3@1800	24.4@1500						- 4 .			
labo													 		
2.Engine Model	A2000	A2000	4A2.0-G1	4A2.0-Ğ1	4A2.0-G1	4A2.0-G1	-								
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1.Engine Code	FR35003	5019	FR35013	FR35013	FR35023	FR35023		-				100 dec 100 dec 100 de			
1.Engi	FR	FR3	FR	FR	FR3	FR									