CUMMINS INC.

EXECUTIVE ORDER U-R-002-0400

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)			
2007	7CEXL1.71A31	1.714	Diesel	5000			
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION				
Indirect Diesel Injection			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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
			HC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
8 < kW < 19	Tier 2	STD	N/A	N/A	7.5	6.6	0.80	20	15	50
19 ≤ kW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50
		CERT			6.1	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

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Form

11-12-002-0400

Manufacturer: CUMMINS Inc.

Engine category: Nonroad CI

EPA Engine Family: 7CEXL1.71A31

Mfr Family Name: A1700

Process Code: New Submission

	4				
9.Emission Control Device Per SAE J1930	IDI,EM	IDI,EM	D, EM	DIEM	
8.Fuel Rate: (lbs/hr)@peak torque	10.5	9.5	Y/A	9.1	
7.Fuel Rate: mm/stroke@peak torque	39.0	35.5	NA	34.3	
6.Torque @ RPM (SEA Gross)	85,5@1600	80.5@1600	NA	76.1@1600	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	1.91	13.3	9.8	13.1	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	34.0.	32.0	33.1	28.0	
3.BHP@RPM (SAE Gross)	37@2800	32.2@2500	25.3@1800	31@2800	
L.Engine Code 2.Engine Model	A1700	A1700	3A1.7-G1	A1700	
1.Engine Code	FR35004	FR35017	FR35014	FR35025	