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)	
2005	5CEXL0409AAA	6.7	Diesel	8000	
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION		
Direct Diesel Injection, Turbocharger, Charge Air Cooler			Tractor		

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	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
CLASS			НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
75 <u>≤</u> kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
130 <u>≤</u> kW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
		CERT			5.9	0.5	0.17	5	2	14

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 October 2004.

Kons. Chief Allen

Mobile Source Operations Division

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Engine Model Summary Form

U-R-002-0280

5CEXL0409AAA Cummins Inc. Nonroad Cl Mir Family Name: A833 EPA Engine Famly. Engine category: Manufacturer:

New Submission

Process Code:

	control E J1930	SAC +	CAC	C	CAC	 !
	9.Emission Control Device Per SAE J1930	DDI,TC,CAC	DDI,TC,CAC	DDI,TC,CAC	DDI.TC.CAC	
	8.Fuel Rate: (Ibs/hr)@peak torque	53.3	48.2	40.6	35.4	
7.Fuel Rate:	mm/stroke@peak torque	113	102	1, 86	75	
	6.Torque @ RPM (SEA Gross)	575@1400	521@1400	423@1400	378@1400	
5.Fuel Rate:	(lbs/hr) @ peak HP (for diesels only)	74.2	66.0	56.4	49.0	
4.Fuel Rate:	mm/stroke @ peak HP (for diesel only)	100	89	76	66	
	3.BHP@RPM (SAE Gross)	184@2200	166@2200	142@2200	121@2200	
	Engine Code 2.Engine Model	8362,FR9993 B6.7	B6.7	B6.7	B6.7	
	1.Engine Code	8362,FH9993	8362, FH9994	8362;FR9995	8362;FR9996	