## **CUMMINS INC.**

EXECUTIVE ORDER U-R-002-0464 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	9CEXL03.3ACA	3.3	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Dies	sel Injection, Turbocharge Engine Control Mo	er, Charge Air Cooler, odule	Dump Truck			

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		EXHAUST (g/kw-hr)					OF	OPACITY (%)	
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM .	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
		CERT			3.8	1.4	0.21	6	2	. 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

Annette Hebert, Chief

Mobile Source Operations Division

day of December 2008.

## ATAUMENT (% ) ! Engine Model Summary Template

4940-200-8-n

		O O PROPINCIA CONTRACTOR DE LA CALLACTURA DE LA CALLACTUR
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930	EM,TC,CAC,DFI,ECM	
8.Fuel Rate: (lbs/hr)@peak torq	35	
7.Fuel Rate: mm/stroke@peak torque	101	
6.Torque @ RPM (SEA Gross)	304@1600	addicine to province and the separate an
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	43	
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (Ibs/hr) @ peak HP 6.Torque @ RPM (for diesel only) (for diesels only) (SEA Gross)	82	
	110@2400	e de la companya de l
3.BHP@RPM Engine Family 1.Engine Code 2.Engine Model (SAE Gross)	QSB3.3	
1.Engine Code	FR30230	diddigen gyang appagapapan gi pagamanan dikaba didak se dibe, at 1975, s.a.
Engine Family 1.Engine	9CEXL03.3ACA	Windowskie Angelege de generale de de de la de la Colonia