

 <b>AIR RESOURCES BOARD</b>	<b>CUMMINS INC.</b>	<b>EXECUTIVE ORDER U-R-002-0493</b> 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	9CEXL030.AAD	30.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler			Generator	

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):

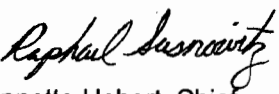
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
kW > 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	N/A	N/A	N/A
		CERT	--	--	5.9	0.7	0.12	--	--	--

**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 23<sup>rd</sup> day of December 2008.

  
 for Annette Hebert, Chief  
 Mobile Source Operations Division

**ATTACHMENT B (of 1)**  
**Engine Model Summary Template**

U-R-002-0493

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (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
9CEXL030.AAD	1175:FR5247	QST30-G	1490@1800	426	517.1	N/A	N/A	N/A	N/A
9CEXL030.AAD	1704:FR5250	QST30-G	1490@1800	426	517.1	N/A	N/A	N/A	N/A
9CEXL030.AAD	2713:FR5263	QST30-G	1362@1800	373	453.3	N/A	N/A	N/A	N/A
9CEXL030.AAD	2714:FR5264	QST30-G	1362@1800	373	453.3	N/A	N/A	N/A	N/A
9CEXL030.AAD	2717:FR5269	QST30-G	1400@1500	505	511.1	N/A	N/A	N/A	N/A
9CEXL030.AAD	2716:FR5265	QST30-G	1300@1500	465	470.5	N/A	N/A	N/A	N/A
9CEXL030.AAD	2717:FR5266	QST30-G	1300@1500	465	470.5	N/A	N/A	N/A	N/A
9CEXL030.AAD	2718:FR5267	QST30-G	1231@1500	435	440	N/A	N/A	N/A	N/A
9CEXL030.AAD	2719:FR5268	QST30-G	1231@1500	435	440	N/A	N/A	N/A	N/A
9CEXL030.AAD	1808:FR5253	QST30-G	1239@1800	366	443.9	N/A	N/A	N/A	N/A
9CEXL030.AAD	1818:FR5254	QST30-G	1239@1800	366	443.9	N/A	N/A	N/A	N/A
9CEXL030.AAD	3197:FR5270	QST30-G	1490@1800	436	517.1	N/A	N/A	N/A	N/A
9CEXL030.AAD	3198:FR5271	QST30-G	1490@1800	436	517.1	N/A	N/A	N/A	N/A