

California Environmental Protection Agency <b>Air Resources Board</b>	<b>CUMMINS INC.</b>	<b>EXECUTIVE ORDER U-R-002-0591</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 engines and emission control systems 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)
2013	DCEXL06.7AAH	6.7	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst			Crane, Loader, Tractor, Dozer, Pump, Compressor, and Generator Set	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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):

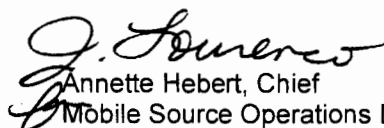
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Interim Tier 4 /ALT NOx	STD	0.19	3.4	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.05	3.2	--	0.04	0.02	--	--	--

**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 28<sup>th</sup> day of August 2012.

  
 Annette Hebert, Chief  
 Mobile Source Operations Division

## Engine Model Summary Template

U-R-002-0591

Attachment ps 1/1

7/20/2012

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
DCEXL06.7AAH	3098:FR92547	QSB6.7	173@2500	79	67	590@1500	115	58	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92548	QSB6.7	160@2500	79	66	540@1500	105	53	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92558	QSB6.7	173@2200	82	61	590@1500	114	58	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92556	QSB6.7	165@2200	81	60	540@1500	102	52	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92560	QSB6.7	155@2200	78	58	496@1500	94	47	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92575	QSB6.7	173@2100	83	59	590@1500	114	58	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92720	QSB6.7	168@2100	85	60	540@1500	107	54	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92577	QSB6.7	158@2100	81	57	590@1500	114	58	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92572	QSB6.7	146@2100	76	54	540@1500	107	54	DDI,ECM,TC,CAC, EGR, OC
DCEXL06.7AAH	3098:FR92568	QSB6.7	170@2000	89	60	485@1500	94	48	DDI,ECM,TC,CAC, EGR, OC