California Environmental Protection Agency AIR RESOURCES BOARD	KUBOTA Corporation	EXECUTIVE ORDER U-R-025-0470 New Off-Road Compression-Ignition Engines	
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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)			
2011	BKBXL.719KCC	0.479, 0.719	Diesel	3000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
	Indirect Diesel Inje	ction	Generator Set, Welder, Air Conditioner for Trucks				

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):

	EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
0 ≤ kW < 19	Tier 4	OPTIONAL STD	N/A	N/A	7.5	6.6	0.40	N/A	N/A	N/A
		CERT			6.8	2.4	0.20			

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C" adopted October 20, 2005.

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 December 2010.

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Annette Hebert, Chief Mobile Source Operations Division

Form	
ummary	
Model S	
Engine	

E0# U-R-025-0470

KUBOTA Corporation New Submission EPA Engine Family: BKBXL.719KCC Nonroad CI Mfr Family Name: N/A Engine category: Process Code: Manufacturer:

Attachment

Complete: 11/29/2010 Date: (2/2) =) page (of 1

ntrol J1930	tQT									>
9 Emission Control Device Per SAE J1930	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM
8.Fuel Rate: (lbs/hr)@peak torque	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7.Fuel Rate: mm/stroke@peak torque	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6.Torque @ RPM (SEA Gross)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	9.2	8.6	7.1	6.2	5.7	4.2	4.9	5.9	6.1	4.2
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	15.2	14.3	14.1	15.4	14.2	14.4	14.6	14.7	15.2	14.3
3.BHP@RPM (SAE Gross)	20.5@3600	19.2@3600	16.6@3000	13.4@3600	12.3@3600	9.7@2600	11.1@3000	12.9@3600	13.3@3600	9.7@2600
2.Engine Model	0722-D2-ET	D722-D2-ET	D722-D2-ET	Z482-D2-ET	Z482-D2-E F	- 2482-D2-ET	Ξ 482-D2-ET	Z482-D2-ET	∠482-D2-ET	Z482-D2-ET
1.Engine Code	.D722-D2-ET01	D722-D2-ET02	D722-D2-ET03	Z482-D2-ET01	2482-D2-ET02	Z482-D2-ET03	Z482-D2-ET04	Z482-D2-ET05	Z482-D2-ET06	Z482-D2-ET07