California Environmental Protection Agency AIR RESOURCES BOARD

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.

YEAR ENGINE FAMILY (lite   2008 8KBXL01.1BCB 1.1		DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)			
		1.123	Diesel	.3000			
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION				
	Indirect Diesel Inje	ction	Tractor, Compressor, Generator Set, Other OEM Products				

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):

Γ	RATED	EMISSION		EXHAUST (g/kW-hr) OPACITY (%)							•)
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK	
	8 <u>≤</u> kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
			CERT			6.6	1.3	0.21	4	3	8

**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 April 2007.

Annette Hebert, Chief Mobile Source Operations Division

**Engine Model Summary Form** 

Attachment

Manufacturer: KUBOTA Corporation Engine category: Nonroad Cl

RUNITORIA CI 8KBXL01.1BCB

EPA Engine Famiy. 8KBXL0 Mfr Family Name: N/A Process Code: Running Change

U-R-025-0329

Control AE J1930		-									
9.Emission Device Per S	Ë	Ē	N N N N	EM	Ш	EM	EM	EM	Ш	EN	μ
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	7.3	9.4	9.4	8.1	7.7	7.8	7.2	6.8	6.8	6.2	68
7.Fuel Rate: mm/stroke@peak torque	25.5	25.4	25.4	25.4	24.2	24.4	25.4		25.2	24.6	25.4
6.Torque @ RPM (SEA Gross)	52.9@1700	52.7@2200	52.7@2200	53.4@1900	50.5@1900	50.9@1900	52.6@1700	52.7@1600	52.5@1600	50.7@1500	52 7@1600
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	9.5	11.6	11.2	10.8	6.6	9.8	9.2	8.9	8.9	8.1	2
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	21.7	21.7	22.3	22.9	21.9	21.6	21.9	22.2	22.1	21.4	219
3.BHP@RPM (SAE Gross)	21.9@2600	24.8@3200	24.8@3000	24.3@2800	22.5@2700	22.3@2700	21.3@2500	20.9@2400	20.8@2400	19.0@2250	19.0@2200
1.Engine Code 2.Engine Model	D1105-ET	D1105-ET	D1105-ET	D1105-ET	D1105-ET	D1105-ET	D1105-ET	D1105-ET	D1105-ET	D1105-ET	D1105-ET
1.Engine Code	D1105-ET01	D1105-ET02	D1105-ET03	D1105-ET04	D1105-ET05	D1105-ET06	D1105-ET07	D1105-ET08	D1105-ET09	D1105-ET10	D1105-ET11