California Environmental Protection Agency AIR RESOURCES BOARD	KUBOTA CORPORATION	EXECUTIVE ORDER U-R-025-0223 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)
2006	6KBXL.719KCB	0.479, 0.656, 0.719	Diesel	3000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Indirect Diesel Injection	Riding Mower, Other Industrial Equipment

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 < 8	Tier 2	STD	N/A	N/A	7.5	8.0	0.80	20	15	50
8 ≤ kW < 19	Tier 2	STD	N/A	N/A	7.5	6.6	0.80	20	15	50
		CERT	--	--	6.0	2.9	0.35	4	4	7

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 30th day of December 2005.

Raphael Susnowitz

for Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: **KUBOTA Corporation**

Engine category: **Nonroad CI**

EPA Engine Family: **6KBXL.719KCB**

Mfr Family Name: **N/A**

Process Code: **New Submission**

Attachment
U-R-025-0223

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
D662-ES01	D662-ES	18.5@3600	13.4	8.1	30.8@2600	14.9	6.5	~~N/A~~ FDE
D662-ES02	D662-ES	17.0@3350	13.4	7.5	29.4@2600	14.0	6.1	~~N/A~~
D662-ES03	D662-ES	16.4@3200	13.0	7.0	30.3@2400	14.5	5.8	~~N/A~~
D662-ES04	D662-ES	15.3@3200	12.3	6.6	29.6@2300	14.0	5.4	~~N/A~~
D662-ES05	D662-ES	15.0@3000	12.8	6.4	30.1@2300	14.8	5.7	~~N/A~~
D722-ES01	D722-ES	20.0@3600	15.0	9.1	33.8@2600	16.3	7.1	~~N/A~~
D722-ES02	D722-ES	15.6@3000	13.0	6.5	29.9@2000	14.4	4.8	~~N/A~~
D722-ES03	D722-ES	18.8@3400	14.5	8.3	32.2@2600	15.3	6.7	~~N/A~~
D722-ES04	D722-ES	17.7@3200	14.3	7.7	31.3@2600	14.9	6.5	~~N/A~~
D722-ES05	D722-ES	17.7@3200	14.3	7.7	29.6@2400	13.9	5.6	~~N/A~~
D722-ES06	D722-ES	16.9@3200	13.8	7.4	33.3@2200	15.9	5.9	~~N/A~~
D722-ES07	D722-ES	16.6@3200	13.7	7.4	33.1@2200	15.8	5.8	~~N/A~~
D722-ES08	D722-ES	16.6@3000	14.1	7.1	29.7@2600	14.2	6.2	~~N/A~~
D722-ES09	D722-ES	16.6@3000	14.1	7.1	33.9@2200	16.1	5.9	~~N/A~~
D722-ES10	D722-ES	15.4@2950	13.3	6.6	31.9@2200	15.0	5.5	~~N/A~~
D722-ES11	D722-ES	15.2@2900	13.3	6.5	33.8@2200	15.9	5.9	~~N/A~~
D722-ES12	D722-ES	15.4@2800	13.9	6.5	32.1@2200	15.1	5.6	~~N/A~~
D722-ES13	D722-ES	10.3@2050	12.5	4.3	29.6@1600	14.2	3.8	~~N/A~~
D722-ES14	D722-ES	15.2@2700	14.0	6.3	29.4@2400	14.0	5.6	~~N/A~~
D722-ES15	D722-ES	14.5@2600	13.8	6.0	30.2@2200	14.2	5.2	~~N/A~~
D722-ES16	D722-ES	11.9@2200	13.4	4.9	27.2@1900	13.6	4.3	~~N/A~~
D722-ES17	D722-ES	13.9@2500	14.2	6.0	32.1@2000	15.8	5.3	~~N/A~~
D722-ES18	D722-ES	10.2@2000	12.5	4.2	29.6@1600	14.2	3.8	~~N/A~~
D722-ES19	D722-ES	20.0@3600	15.0	9.1	31.8@2800	15.6	7.3	~~N/A~~
D722-ES20	D722-ES	12.9@2400	13.7	5.5	28.8@2100	14.0	4.9	~~N/A~~
Z482-ES01	Z482-ES	11.7@3200	14.4	5.2	22.7@2400	16.6	4.5	~~N/A~~