California Environmental Protection Agency AIR RESOURCES BOARD	ISUZU MOTORS LIMITED	EXECUTIVE ORDER U-R-006-0205 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)
2005	5SZXL04.3GTA	4.3	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger	Loader, Compressor, 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
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
		CERT	--	--	6.3	1.6	0.29	6	2	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 16TH day of December 2004.

Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: **Isuzu Motors Limited**

Engine category: **Nonroad CI**

EPA Engine Family: **5SZXL04.3GTA**

Mfr Family Name: **NA**

Process Code: **New Submission**

ATTACHMENT

U-R-006-0205

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
4BG1TABGA-01	BB-4BG1T	99.0@2300	72.9@2300	37.3@2300	257.5@1600	77.6@1600	27.6@1600	EM,TC,DFI
4BG1TABGA-02	BB-4BG1T	65.0@2300	49.3@2300	25.2@2300	161.6@1600	49.1@1600	17.5@1600	EM,TC,DFI
4BG1TABGA-04	BB-4BG1T	54.8@1800	50.9@1800	20.4@1800	161.6@1600	49.1@1600	17.5@1600	EM,TC,DFI
4BG1TABGA-05	BB-4BG1T	88.0@2150	66.1@2150	31.6@2150	219.1@1600	68.7@1600	24.4@1600	EM,TC,DFI
4BG1TABGA-07	BB-4BG1T	88.2@2100	71.2@2100	33.3@2100	244.4@1600	75.5@1600	26.9@1600	EM,TC,DFI
4BG1TABGA-09	BB-4BG1T	87.1@2050	70.8@2050	32.3@2050	239.7@1600	73.0@1600	26.0@1600	EM,TC,DFI
4BG1TABGA-10	BB-4BG1T	81.1@2050	64.8@2050	29.5@2050	230.0@1600	68.7@1600	24.4@1600	EM,TC,DFI
4BG1TABGA-11	BB-4BG1T	98.6@2200	73.5@2200	36.0@2200	257.5@1600	77.6@1600	27.6@1600	EM,TC,DFI
4BG1TABGA-12	BB-4BG1T	80.1@2200	63.9@2200	31.5@2200	210.5@1600	64.1@1600	22.8@1600	EM,TC,DFI
4BG1TABGA-13	BB-4BG1T	97.0@2200	73.0@2200	35.7@2200	252.4@1600	76.1@1600	27.1@1600	EM,TC,DFI
4BG1TABGB-01	BB-4BG1T	97.9@2100	74.2@2100	34.7@2100	254.5@1400	77.0@1400	24.0@1400	EM,TC,DFI
4BG1TABGC-01	BB-4BG1T	97.0@2500	71.2@2500	39.6@2500	249.9@1600	75.5@1600	26.9@1600	EM,TC,DFI
4BG1TABGC-02	BB-4BG1T	99.0@2300	72.9@2300	37.3@2300	257.5@1600	77.6@1600	27.6@1600	EM,TC,DFI
4BG1TABGC-03	BB-4BG1T	98.6@2200	73.5@2200	36.0@2200	257.5@1600	77.6@1600	27.6@1600	EM,TC,DFI
4BG1TABGC-04	BB-4BG1T	97.9@2100	74.2@2100	34.7@2100	257.5@1600	77.6@1600	27.6@1600	EM,TC,DFI
4BG1TABGD-01	BB-4BG1T	97.9@2100	74.2@2100	34.7@2100	254.5@1400	77.0@1400	24.0@1400	EM,TC,DFI