California Environmental Protection Agency AIR RESOURCES BOARD	ISUZU MOTORS LIMITED	EXECUTIVE ORDER U-R-006-0160 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)
2003	3SZXL06.5EXA	6.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Charge Air Cooler	Loader, Compressor, Excavator

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons 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
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
130 ≤ kW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
		CERT	--	--	5.7	1.2	0.19	7	2	19

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 10TH day of January 2003.

Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

ATTACHMENT F0 U-R-006-0160

Manufacturer: **Isuzu Motors Limited**

Engine category: **Nonroad CI**

EPA Engine Family: **3SZXL06.5EXA**

Mfr Family Name: **NA**

Process Code: **Running Change** 2-7-03

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
6BG1XABEA-03	CC-6BG1T	188.0@2150	94.0@2150	67.4@2150	498.7@1800	98.0@1800	58.8@1800	EM,TC,CAC,DFI
6BG1XABEB-01	CC-6BG1T	188.4@2200	92.3@2200	67.7@2200	498.7@1800	98.0@1800	58.8@1800	EM,TC,CAC,DFI
6BG1XABEC-03	CC-6BG1T	171.0@2100	88.0@2100	61.6@2100	461.9@1800	91.5@1800	54.9@1800	EM,TC,CAC,DFI
6BG1XABED-02	CC-6BG1T	185.1@2100	95.4@2100	66.8@2100	498.7@1800	98.0@1800	58.8@1800	EM,TC,CAC,DFI
6BG1XABED-03	CC-6BG1T	188.0@2150	94.0@2150	67.4@2150	498.7@1800	98.0@1800	58.8@1800	EM,TC,CAC,DFI
6BG1XABEE-01	CC-6BG1T	188.4@2200	92.3@2200	67.7@2200	498.7@1800	98.0@1800	58.8@1800	EM,TC,CAC,DFI
6BG1XABEF-01	CC-6BG1T	149.9@2200	72.5@2200	53.2@2200	359.7@1800	68.3@1800	41.0@1800	EM,TC,CAC,DFI
6BG1XABED-01	CC-6BG1T	188.4@2200	92.3@2200	67.7@2200	498.7@1800	98.0@1800	58.8@1800	EM,TC,CAC,DFI
6BG1XABEF-02	CC-6BG1T	171.0@2100	88.0@2100	61.6@2100	461.9@1800	91.5@1800	54.9@1800	EM,TC,CAC,DFI

R/C