California Environmental Protection Agency AIR RESOURCES BOARD	ISUZU MOTORS LIMITED	EXECUTIVE ORDER U-R-006-0159 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			FUEL TYPE	USEFUL LIFE (hours)	
2003	3SZXL06.5FXA	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 EMISSION POWER STANDARD			EXHAUST (g/kw-hr)				OPACITY (%)			
CLASS	CATEGORY		нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
75≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT			6.1	1.7	0.21	14	2	36

**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

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day of January 2003.

Allen Wons, Chief Mobile Source Operations Division

## **Engine Model Summary Form**

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6BG1XABFA-05	1.Engine Code	Process Code:	Mfr Family Name: NA	EPA Engine Family: 3SZXL06.5FXA	Engine category:	Manufacturer:
AA-6BG1T	2.Éngine Model	New Submission	NA	3SZXL06.5FXA	Nonroad Cl	isuzu Motors Limited
149.3@2100 (i11 -4 +w)	3.8HP@RPM (SAE Gross)					iited
79.1@2100	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)			17 1 1		
55.4@2100	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)			TIINCHIVENT		
414,3@1600	6.Torque @ RPM (SEA Gross)				ł	
83.3@1600	7.Fuel Rate: mm/stroke@peak torque		7			
44.4@1600	8.Fuel Rate: (lbs/hr)@peak torque			FO U-R-OKC aloca		
EM,TC,CAC,DD (	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930		LC13.0			

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