California Environmental Protection Agency

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	5SZXL01.1DNA	1.1	Diesel	5000		
SPECIAL	FEATURES & EMISSION					
Indirect Diesel Injection			Loader, Pump, Compressor, Generator Set, 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	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)				OPACITY (%)			
CLASS			нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
19 <u><</u> kW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50
		CERT			6.0	1.6	0.35	8	9	18

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

ZATH day of November 2004.

Allen Lygens, Chief Mobile Source Operations Division

Engine Wodel Summary Form

ATTACHMENT

Isuzu Motors Limited

Manufacturer:

- ----

New Submission

Process Code:

Mfr Family Name: NA

Nonroad Cl 5SZXL01.1DNA

Engine category: EPA Engine Family.

U-R-006-0192

1

9.Emission Control levice Per SAE J1930	EM,IDI	EM,IDI	EM, IDI	
8. Fuel Rate: 9. Emission Control (Ibs/hr)@peak torque Device Per SAE J1930	8.3@2000	8.0@2000	8.6@2000	
7.Fuel Rate: mm/stroke@peak torque	24.8@2000	23.9@2000	25.9@2000	· · · · · · · · · · · · · · · · · · ·
6.Torque @ RPM (SEA Gross)	48.5@2000	47.6@2000	52.4@2000	
5.Fuel Rate: (lbs/hr) @ peak HP (for disels only)	13.5@3450	13.5@3550	13.7@3450	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	23.5@3450	22.7@3550	23.8@3450	
3.BHP@RPM (SAE Gross)	26.7@3450	26.7@3550	28.4@3450	
2.Engine Model	3LB1	3LB1	3LB1	
1.Engine Code 2.Engine Model	3LB1NABDA-01	3LB1NABDA-02	3LB1NABDA-03	

٠.

5 7