California Environmental Protection Agency AIR RESOURCES BOARD	MITSUBISHI HEAVY INDUSTRIES, LTD.	EXECUTIVE ORDER U-R-035-0253 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 engine and emission control system 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)
2008	8MVXL37.1BBA	37.1	Diesel	8000
	FEATURES & EMISSION		TYPICAL EQUIPMENT A	PPLICATION
Direct Dies	el Injection, Turbocharg Engine Control Mo	er, Charge Air Cooler, odule	Generator	

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	EMISSION			E	XHAUST (g/kw-ł	nr)		OF	PACITY (%	.)
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
KW > 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	N/A	N/A	N/A
		CERT			5.6	0.7	0.13		-	

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 ____

day of March 2008.

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Annette Hebert, Chief Mobile Source Operations Division

Engine Model Summary Template

ATTACHMENT 1 OF 1

U-R-035-0253

				4.Fuel Rate:	5.Fuel Rate:		7.Fuel Rate:		
Summer of the	1.Engine Code	3.BHP@RPM 3.BHP@RPM 3.BHP@RPM (SAE Gross)		mm/stroke @ peak HP (Ibs/ht) @ peak HP 6.Torque @ RPM (for diesel only) (for diesels only) (SEA Gross)	 (lbs/hr) @ peak HP (for diesels only) 	6.Torque @ RPM (SEA Gross)	mm/stroke@peak torque	8.Fuel Rate: (Ibs/hr)@peak torque	8.Fuel Rate: 9.Emission Control (Ibs/hr)@peak torqueDevice Per SAE J1930
PWXL37.1BBA	CWVXL37.1BBA S12H-Y2PTAW-1 S12H-PTAW	7.1BBA S12H-Y2PTAW-1 S12H-PTAW 1528@1800	1528@1800	455	549	NA	NA	NA	DITC, CHC, ECM
	S12H-Y2PTAW-2	S12H-Y2PTAW-2 S12H-PTAW	1528@1800	439	527	NA	NA	NA	DITC, CAC ECM
****XL37.186A	S12H-Y2PTAW-A	S12H-Y2PTAW-A S12H-PTAW 1528@1800	1528@1800	448	534	NA	NA	NA	DITCCACECM