MAHINDRA & MAHINDRA LTD.

EXECUTIVE ORDER U-R-043-0071 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 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)		
2010	AMMLL02.5N62	2.497	Diesel	8000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION			
Mechanic Cool	al Direct Injection, Turber, Engine Control Modu Recirculation	le, Exhaust Gas	Loader, Tractor			

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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 <u><</u> KW < 56	Tier 4 Interim	STD	N/A	N/A	4.7	5.0	0.30	20	15	50
		CERT			4.2	1.6	0.12	4	4	26

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

Annette Hebert, Chief

Mobile Source Operations Division

day of March 2010.

ATTACHMENT 1 OF 1

Engine Model Summary Form

Manufacturer:

MAHINDRA & MAHINDRA LTD.,

Engine category:

Nonroad Cl

EPA Engine Family:

AMMLL02.5N62

Mfr Family Name:

MAHINDRA & MAHINDRA

Process Code:

New Submission

u-R-043-0071. 3)1/2010

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@pcsk torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
NA	NE362 2wd	61.93@2200	65.23@2200	23.76@2200	238.7N.m@1400	71.54@1400	17.57@1400	DUT, TONA CAC, ECM, EGR
NA	NE362 4wd	61.93@2200	65.23@2200	23.76@2200	238.7N.m@1400	71.54@1400	17.57@1400	n NA n