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 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)
2003	3HZXL3.43A37	2.6, 3.4	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection	Compressor, Generator Set

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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ KW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	8.4	--	--	--	9	12	10

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 _____2ND_____ day of December 2002.

Allen Lyons, Chief
Mobile Source Operations Division

Model Year: 2003
Manufacturer: Motorenfabrik Hatz GmbH & Co. KG
Engine Family: 3HZXL3.43A37

Issued:
Revised: 10/24/2002
E.O. Number: U1-R-034-0024

Small Off-Road Engine Model Summary Form

Units for Table: hp

Worst Case?	47. Model Designation	48. Sales Code	49. Displ (cc)	50. Bore/Stroke	51. Ignition Timing	52. Max Power	53. Rated Speed (RPM)	54. Rated Torque	55. Torque Speed (RPM)	56. Emiss Control Sys
	4M41	Calif. Only	3432	102 / 105	10+1° static	53.1	3000	125	3000	EM
	4M41	Calif. Only	3432	102 / 105	10+1° static	47.8	3000	112	3000	EM
	4M41Z	Calif. Only	3432	102 / 105	10+1° static	51.6	3000	123	3000	EM
	4M41Z	Calif. Only	3432	102 / 105	10+1° static	46.3	3000	110	3000	EM
	4L41C	Calif. Only	3432	102 / 105	10+1° static	48.8	3000	115	3000	EM
	4L41C	Calif. Only	3432	102 / 105	10+1° static	44.0	3000	104	3000	EM
	4M41	Calif. Only	3432	102 / 105	10+1° static	52.0	2300	160	2300	EM
	4M41	Calif. Only	3432	102 / 105	10+1° static	46.8	2300	144	2300	EM
	4M41Z	Calif. Only	3432	102 / 105	10+1° static	51.0	2300	158	2300	EM
	4M41Z	Calif. Only	3432	102 / 105	10+1° static	45.8	2300	142	2300	EM
	4L41C	Calif. Only	3432	102 / 105	10+1° static	47.0	2300	144	2300	EM
	4L41C	Calif. Only	3432	102 / 105	10+1° static	42.3	2300	130	2300	EM
	4M41	Calif. Only	3432	102 / 105	10+1° static	37.0	1800	149	1800	EM
	3M41	Calif. Only	2574	102 / 105	10+1° static	39.8	3000	94	3000	EM
	3M41Z	Calif. Only	2574	102 / 105	10+1° static	39.1	3000	92	3000	EM
	3M41	Calif. Only	2574	102 / 105	10+1° static	38.9	2300	112	2300	EM
	3M41Z	Calif. Only	2574	102 / 105	10+1° static	38.2	2300	110	2300	EM
X	4L41C	Calif. Only	3432	102 / 105	10+1° static	37.0	1800	144	1800	EM