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) 8000	
2003	3MVXL06.4DDD	6.4	Diesel		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger, Charge Air Cooler			Excavator		

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		EXHAUST (g/kw-hr)				OPACITY (%)			
CLASS	CATEGORY		HC	NOx	NMHC+NOx	co	РМ	ACCEL	LUG	PEAK
75≤ KW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT			6.0	0.7	0.25	8	3	15

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 February 2003.

Allen Lyons, Chief

Mobile Source Operations Division

ATTACHMENT 10F1

Engine Model Sumary Form

Manufacturer: Mitsubishi Heavy Industries,Ltd

Engine category: Nonroad Cl

EPA Engine Family: 3MVXL06.4DDD

Mfr Family Name: S6K-TAA

Process Code: New Submission

U-R-035-0051

S6K-Y2DT74SBG	S6K-Y2DT74S8K S6K-TAA 147@1800	S6K-Y2DT74SAK	1.Engine Code 2.Engine Model (SAE Gross)
S6K-TAA	S6K-TAA	S6K-TAA	2.Engine Model
147@1800	147@1800	147@1800	3.BHP@RPM (SAE Gross)
S6K-Y2DT74SBG S6K-TAA 147@1800 90.4 90.4 15 64.6 452filb@1400 92 51.7 51.7 51.7 52 51.	90.4	S6K-Y2DT74SAK S6K-TAA 147@1800 90.4 90.4 152filb@1400 92	4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak H (for diesel only) (for diesels only)
64.6	64.6	64.6	5.Eucl Rate: (lbs/hr) @ peak HP (for diesels only)
.45211b@1400	452filb@1400	452ftlb@1400	6.Torque @ RPM (SEA Gross)
92	92	92	7.Fuel Rate: mm/stroke@peak lorque
b@1400 92 51.1 D.DJ.TAA)@1400 92 51.1 N.DITAA	51.1	8.Fuel Rate: 9.Emission Cantrol (lbs/hr) @peak torque Device Per SAE J1930
D.DI TAA	D DI TAA	D DI TAA	9.Enilssion Control Device Per SAE J 1930