MERCURY MARINE

EXECUTIVE ORDER U-W-001-0043 New Spark-Ignition Marine Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 43101, 43102 and 43104; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following new spark-ignition marine engine and emission control systems (ECS) produced by the manufacturer are certified as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	FUEL TYPE DISPLACEMENT (cc)		LEVEL OF CLEANLINESS				
2003	3M9XM08.1BAS	Gasoline	8100	Ultra Low Emission ("Three Stars")				
EQUIPMENT APPLICATION Inboard & Sterndrive		ECS & SPE	ENGINE TYPE					
			Fuel Injection	4-Stroke				
ENGINE MODELS (rated power in kilowatts, kW)		See Attachment						

BE IT ORDERED AND RESOLVED: That the listed engines are certified to a hydrocarbon plus oxides of nitrogen (HC+NOx) family emission limit (FEL) in accordance with a plan submitted by the manufacturer to, and approved by, the Executive Officer for compliance with the exhaust emission standard on a corporate average basis pursuant to Title 13, California Code of Regulations, (13 CCR) Section 2442(b). The FEL shall be the applicable emission standard for this engine family for determining compliance of any engine within this engine family pursuant to 13 CCR Sections 2444.1 (in-use compliance). The FEL and certification emission level in grams per kilowatt-hour (g/kW-hr) for this engine family are as follows. Engines in this engine family shall have closed crankcases in conformance with Part I, Section 18.(h) of the "California Exhaust Emission Standards and Test Procedures for 2001 Model-Year and Later Spark-Ignition Marine Engines."

HC+NOx	FAMILY EMISSION LIMIT (g/kW-hr)	CERTIFICATION LEVEL (g/kW-hr)		
	16.0	13.8		

Compliance with the emission standard on a corporate average basis shall be determined pursuant to 13 CCR Section 2442(b) based on the sales-weighted average of all engines produced for sale in California that are included in the approved corporate average compliance plan for the model-year.

BE IT FURTHER RESOLVED: That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Sections 2443.1, 2443.2 and 2443.3 (emission control, consumer, and environmental labels), and Sections 2445.1 and 2445.2 (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 November 2002.

Alle Lyons, Chief

Mobile Source Operations Division

Model Year: __2003 _____ Page: _____ Issued: _____ Issued: _____ Engine Family: __3M9XM08.1BAS _____ Revised: _____ SI MARINE ENGINE SUPPLEMENTAL INFORMATION. E.O.#: ______ U____ OOI __COU__ ?

S11. MODEL SUMMARY (Use asterisk to identify worst-case engine model used for certification testing)

S12 Model Designation	S13 Engine Code	S14 Sales Codes (Check all appropriate codes)			S15 Eng. Disp. (cc)	S16 Rated Power (kW)	S17 Rated Speed (RPM)	S18 Peak Torque (N-m)	S19 Peak Torque Speed
		Calif. Only	49 _. State	50-State				(11-111)	(RPM)
*44S42228N1				X	8100	279.6	4800	680.7	330 0
44S42238N1				X	8100	279.6	4800	680.7	3300
44S42258N1				X	8100	279.6	4800	680.7	3300
44T42228N1				X	8100	279.6	4800	680.7	3300
3308100511				X	8100	279.6	4600	680.7	3300
3308100421				X	8100	279.6	4600	680.7	3300
3308100021				X	8100	279.6	4600	680.7	3300
330810011E				X	8100	279.6	4600	680.7	3300
3308100051				X	8100	279.6	4600	680.7	330 0
3308100321				X	8100	279.6	4600	680.7	3300
3308100091				X	8100	279.6	4600	680.7	3300
3308100311				X	8100	279.6	4600	680.7	3300
3308100131				X	8100	279.6	4600	680.7	3300
3308100301				X	8100	279.6	4600	680.7	3300
3308100361				X	8100	279.6	4600	680.7	3300