California Environmental Protection Agency AIR RESOURCES BOARD	MERCURY MARINE	EXECUTIVE ORDER U-W-001-0086 New Spark-Ignition Marine Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 43018, 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
2005	5M9XM02.52C0	Gasoline	2507	Very Low Emission ("Two Stars")

EQUIPMENT APPLICATION	ECS & SPECIAL FEATURES	ENGINE TYPE
Outboard	Direct Fuel Injection	2-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) Sections 2442(a)(1) and (a)(2). 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) and 2446 (audit testing). 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."

	FAMILY EMISSION LIMIT (g/kW-hr)	CERTIFICATION LEVEL (g/kW-hr)
HC+NOx	30.00	25.96

Compliance with the emission standard on a corporate average basis shall be determined pursuant to 13 CCR Sections 2442(a)(2)(D) and 2442(a)(2)(F) based on the sales-weighted average power 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.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter pursuant to 13 CCR Section 2442(a)(2)(B).

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 28TH day of January 2004.

Allen Lyons, Chief
Mobile Source Operations Division

ATTACHMENT

Model Year: ____2005_____
Manufacturer Name: ___Mercury Marine_____
Engine Family: _____5M9XM02.52C0_____
SI MARINE ENGINE SUPPLEMENTAL INFORMATION.

Page: _____
Issued: 1/28/04
Revised: 11/9/04
E.O.#: U-W-001-0086

S10. MODEL SUMMARY (Use asterisk to identify worst-case engine model used for certification testing)

S11 Model Designation	S12 Engine Code	S13 Sales Codes (Check all appropriate codes)			S14 Eng. Disp. (cc)	S15 Rated Power (kW)	S16 Rated Speed (RPM)	S17 Peak Torque (N-m)	S18 Peak Torque
		Calif. Only	49 State	50-State					
1150D84DC				X	2507	110.36	5500	522	3000
1150D84DY				X	2507	110.36	5500	522	3000
1150D73DD				X	2507	110.36	5500	522	3000
1150D73DT				X	2507	110.36	5500	522	3000
1150D73DY				X	2507	110.36	5500	522	3000
1150D83DC				X	2507	110.36	5500	522	3000
1150D83DD				X	2507	110.36	5500	522	3000
1150D83DY				X	2507	110.36	5500	522	3000
1175D83DC				X	2507	128.76	5500	510	3250
1175D83DD				X	2507	128.76	5500	510	3250
1175D73DD				X	2507	128.76	5500	510	3250
* 1920471DH				X	2507	147.15	6500	553.25	3250
1920475DH				X	2507	147.15	6500	553.25	4000
1920400DH				X	2507	147.15	6500	553.25	4000
1920401DH				X	2507	147.15	6500	553.25	4000
1920402DH				X	2507	147.15	6500	553.25	4000
1920470DH				X	2507	147.15	6500	553.25	4000
1922470DH				X	2507	168	6700	560	4000
1922471DH				X	2507	168	6700	560	4000
1922475DH				X	2507	168	6700	560	4000
1922476DH				**X**	**2507**	**168**	**6800**	**602**	**5000**