| California Environmental Protection Agency AIR RESOURCES BOARD | MERCURY MARINE | EXECUTIVE ORDER U-W-001-0229 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 |
|---|---|---|---|---|
| 2009 | 9M9XM01.6ECT | Gasoline | 1600 | Super Ultra Low Emission ("Four Stars") |

| EQUIPMENT APPLICATION | ECS & SPECIAL FEATURES | ENGINE TYPE |
|---|---|---|
| Sterndrive | Multiport Fuel Injection, Oxygen Sensor, Three-way Catalytic Converter, On-Board Diagnostics-Marine System, Low Permeation Fuel Hose | 4-Stroke |

| | |
|---|---|
| **ENGINE MODELS (rated power in kilowatts, kW)** | 1.6 MPI cat Micro-drive (74.6 kW) |

**BE IT ORDERED AND RESOLVED:** That the listed engines are certified to a hydrocarbon plus oxides of nitrogen (HC+NOx) family emission limit (FEL) and carbon monoxide (CO) direct standard in accordance with a plan submitted by the manufacturer to, and approved by, the Executive Officer for compliance with the exhaust emission standards on a corporate average basis pursuant to Title 13, California Code of Regulations, (13 CCR) Section 2442(b). The HC+NOx FEL and the CO standard shall be the applicable emission standards 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 standards and certification emission levels in grams per kilowatt-hour (g/kW-hr) for this engine family are as follows. Engines in this engine family shall discharge no crankcase emissions into the ambient atmosphere in conformance with 13 CCR Section 2442(b).

| *=not applicable | HC+NOx (g/kW-hr) | CO (g/kW-hr) |
|---|---|---|
| **STANDARD** | 5.0 | 75.0 |
| **FAMILY EMISSION LEVEL** | 4.3 | * |
| **CERTIFICATION LEVEL** | 4.2 | 64.0 |

Compliance with the emission standards 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), Section 2444.2 (on-board engine malfunction detection system), 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 18 day of December 2008.

Annette Hebert, Chief
Mobile Source Operations Division