California Environmental Protection Agency AIR RESOURCES BOARD	VOLVO PENTA OF THE AMERICAS, INC.	EXECUTIVE ORDER U-W-012-0045 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	9VPAM05.7GXC	Gasoline	5000, 5700	Super Ultra Low Emission ("Four Stars")

EQUIPMENT APPLICATION	ECS & SPECIAL FEATURES	ENGINE TYPE
Sterndrive	Dual Three Way Catalytic Converter Heated Oxygen Sensor Multiport Fuel Injection On-Board Diagnostics	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) 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	5.0	*
CERTIFICATION LEVEL	3.3	53.8

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 9 day of January 2009.

Annette Hebert, Chief
Mobile Source Operations Division

ATTACHMENT 1 of 2

Model Year: 2009
Manufacturer Name: VOLVO PENTA
Engine Family: 9VPAM05.7GXC
SI MARINE ENGINE SUPPLEMENTAL INFORMATION

Page: 3
Issued: 8/28/08
Revised:
E.O.#: U-W-012-0045

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

S12. Engine Model	S13. Engine Code	S14. Sales Codes (Check ALL appropriate)			S15. Eng. Displ. (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
		Calif. Only	49-State	50-State					
5.0 GiC-J	3869429	X			5000	175	4400	382	3600
5.0 GiCE-J	3869455	X			5000	175	4400	382	3600
5.0 GiC-JF	3869430	X			5000	175	4400	382	3600
5.0 GiCE-JF	3869441	X			5000	175	4400	382	3600
5.0 GiCE-M	21182208	X			5000	175	4400	382	3600
5.0 GiCE-MF	21182209	X			5000	175	4400	382	3600
5.0 GXiC-J	3869351	X			5000	201	4800	424	3600
5.0 GXiCE-J	3869456	X			5000	201	4800	424	3600
5.0 GXiC-JF	3869352	X			5000	201	4800	424	3600
5.0 GXiCE-JF	3869442	X			5000	201	4800	424	3600
5.0 GXiCE-M	21182210	X			5000	201	4800	424	3600
5.0 GXiCE-MF	21182212	X			5000	201	4800	424	3600
5.7 GiC-300-J	3869459	X			5700	224	4800	511	3400
5.7 GiCE-300-J	3869460	X			5700	224	4800	511	3400
5.7 GiC-300-JF	3869461	X			5700	224	4800	511	3400
5.7 GiCE-300-JF	3869462	X			5700	224	4800	511	3400
5.7 GiCE-300-M	21182213	X			5700	224	4800	511	3400
5.7 GiCE-300-MF	21182215	X			5700	224	4800	511	3400
5.7 GXiC-J	3869353	X			5700	239	5000	505	3600
5.7 GXiCE-J	3869457	X			5700	239	5000	505	3600
5.7 GXiC-JF	3869354	X			5700	239	5000	505	3600
5.7 GXiCE-JF	3869443	X			5700	239	5000	505	3600
5.7 GXiCE-M	21189867	X			5700	239	5000	505	3600

ATTACHMENT 2 OF 2

Model Year: 2009
Manufacturer Name: VOLVO PENTA
Engine Family: 9VPAM05.7GXC
SI MARINE ENGINE SUPPLEMENTAL INFORMATION

Page: 3
Issued: 8/28/08
Revised:
E.O.#: V-W-012-2045

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

S12. Engine Model	S13. Engine Code	S14. Sales Codes (Check ALL appropriate)			S15. Eng. Displ. (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
		Calif. Only	49-State	50-State					
5.7 GXiCE-MF	**21301406**	**X**			**5700**	**239**	**5000**	**505**	**3600**