CALIFORNIA AIR RESOURCES BOARD	Kawasaki Heavy Industries, Ltd.	**EXECUTIVE ORDER U-W-007-0069** New Spark-Ignition Marine Engines

Pursuant to the authority vested in California 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-19-095;

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
2022	NKAXM1.503CA	Gasoline	1498	Ultra Low Emission ("Three Stars")
EQUIPMENT APPLICATION		**ECS & SPECIAL FEATURES**		**ENGINE TYPE**
PWC		Sequential Multiport 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) and a 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(a). 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) and 2446 (audit testing). 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 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."

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)
STANDARD	*	300.0
FAMILY EMISSION LEVEL	16.40	*
CERTIFICATION LEVEL	12.51	159.5

Compliance with the emission standards on a corporate average basis shall be determined pursuant to 13 CCR Section 2442(a) 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 Sections 2442(a)(2)(B) and 2446.

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 on this 2nd day of April 2021.

Allen Lyons, Chief
Emissions Certification and Compliance Division

SIME Exhaust Model Summary Template (rev. 2020)

For CARB Use Only

Executive Order: U-W-007-0069
Attachment 1 of 1

Date: January 21, 2021
Engine Family: NKAXM1.503CA

Model Summary

		S14. Sales Codes (Check all appropriate)							
S12. Engine Model	**S13. Engine Code**	**CA Only**	**49-State**	**50-State**	**S15. Engine Displacement (cc)**	**S16. Rated Power (kW)**	**S17. Rated Speed (RPM)**	**S18. Peak Torque (N-m)**	**S19. Peak Torque Speed (RPM)**
JT1500KN	JTT50AE	6	49	55	1498	118	7500	152	7250
JS1500AN	JTT50AE	50	450	500	1498	118	7500	152	7250
JT1500RN	JTT50AE	46	414	460	1498	118	7500	152	6000
JT1500SN	JTT50AE	47	423	470	1498	118	7500	152	6000
JT1500TN	JTT50AE	47	423	470	1498	118	7500	152	6000