Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; 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 large spark-ignition engines and emission control systems produced by the manufacturer are certified for use in off-road equipment as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE
2022	NKBXB01.5PFA	1.5	Gasoline, LPG, CNG, Gasoline-LPG Dual Fuel, LPG-CNG Dual Fuel, Gasoline-LPG-CNG Multi-Fuel
DURABILITY HOURS	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT USAGE
5000	Three-Way Catalytic Converter, Heated Oxygen Sensor (2), Multiport Fuel Injection (Gasoline), Gaseous Fuel Mixer (LPG, CNG)		Aerial Lift, Generator, Sweeper, Tractor/Tug
ENGINE MODELS (rated power in kilowatt, kW)		See Attachment	

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx) and carbon monoxide (CO) exhaust certification emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2433(b)(1)) and certification emission levels for this engine family in grams per kilowatt-hour (g/kW-hr). Engines within this engine family shall have closed crankcases in conformance with 13 CCR Section 2433(b)(3).

	HC+NOx (g/kW-hr)	CO (g/kW-hr)
EXHAUST STANDARD	0.8	20.6
CERTIFICATION LEVEL	0.2	6.5

The following is the evaporative hydrocarbon emission standard (13 CCR Section 2433(b)(4)) and certification emission level for this engine family in grams per gallon of fuel tank capacity (g/gallon).

Evaporative Certification Method	HC Certification Level (g/gallon)	HC Certification Standard (g/gallon)
Design Based	N/A	0.2

**BE IT FURTHER RESOLVED:** That for the listed engines for the aforementioned model-year, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2433(c) (certification and test procedures), 13 CCR Section 2434 (emission control labels), and 13 CCR Sections 2435 and 2436 (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 on this  $\frac{977}{2}$  day of December 2021.

Allen Lyons, Chief Emissions Certification and Compliance Division

LSIE Exhaust Model Summary Template (rev. Aug 2021)

Date:

Engine Family: NKBXB01.5PFA

## Model Summary

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

S15. Sales Codes (Check all appropriate) CA Only S13. S14. 50-State S16. S17. S18. S19. S20. 49-State Engine Displacement Engine Model Engine Code Rated Power (kW) Rated Speed (RPM) Peak Torque (FT-LB) Peak Torque Speed (RPM) (Liters) WG1605-G-ET WG1605-G-ET01 1.537 40.48 3600 83.64 2700 Х WG1605-G-ET WG1605-G-ET51 1.537 40.48 3600 83.64 2700 Х WG1605-GL-ET WG1605-GL-ET01 1.537 40.48 3600 83.64 2700 Х WG1605-GLN-ET\* 1.537 3600 83.64 2700 WG1605-GLN-ET01 Х 40.48 WG1605-L-ET WG1605-L-ET01 Х 1.537 38.05 3600 81.14 2550 1.537 3600 WG1605-LN-ET WG1605-LN-ET01 Х 38.05 81.14 2550 WG1605-N-ET WG1605-N-ET01 Х 1.537 35.30 3600 74.28 2600

For CARB Use Only Executive Order: U-L-016-0150 Attachment \_\_1\_\_of\_\_1\_\_