Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. 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	USEFUL LIFE (hours)		
2019	KSIDL04.9G6C	4.9	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Cooler, E Diesel Oxid	c Direct Injection, Turbo Engine Control Module, S dation Catalyst, Ammon ve Catalyst Reduction-U Recirculation	Smoke Puff Limiter, ia Oxidation Catalyst, rea, Exhaust Gas	Tractor			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS			NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
$130 \le kW \le 560$	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.03	0.18		0.1	0.02			

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (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

\_\_\_\_ day of July 2018.

Annette Hebert, Chief Emissions Compliance, Automotive Regulations and Science Division

## ATTACHMENT 1071 U-R-050-0073 DATE: 07/02/2018

## Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque		9.Emission Control Device Per SAE J1930
KSIDL04.9G6C	*	49AWF.969	198@2100	143	66.7	654@1500	186	62.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, DOC,AMOX
KSIDL04.9G6C		49AWF.1072	197@2100	121	56.5	615@1600	149	53.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, DOC,AMOX
KSIDL04.9G6C		49AWF.1073	181@2100	132	61.6	638@1500	178	59.3	ECM,DDI,TC,CAC,SPL,SCRC,EGR, DOC,AMOX

\* TESTED ENGINE