Pursuant to the authority vested in the 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)
2015	FPKXL04.4MT1	4.4	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Engine Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst	Crane, Loader, Tractor, Dozer, Pump, Compressor, Generator Set

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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.01	0.30	--	0.02	0.01	--	--	--

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C" adopted October 20, 2005 and last amended October 25, 2012.

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).

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

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.

This Executive Order hereby supersedes Executive Order U-R-022-0198 dated September 29, 2014.

Executed at El Monte, California on this 10 day of February 2015.

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

Page 1/4

Engine Model Summary Template

U-R-022-0198-1
6-16-2015

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	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
FPKXL04.4MT1	Cert Test 1	4074/2200	148@2200	114	55	413@1400	125.7	39	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	1	4074/2200	148@2200	114	55	413@1400	125.7	39	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	2	4138/2200	142@2200	110	53	413@1400	125.2	38	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	3	4136/2200	137@2200	106	51	413@1400	125.6	39	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	4	4134/2200	131@2200	103	50	391@1400	119	37	DDI TAA ECM DOC EGR SCR AMOX EPR

Page 2/4

Engine Model Summary Template

V-R-022-0198-1
6-16-2015

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	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
FPKXL04.4MT1	5	4132/2200	124@2200	**94**	45	391@1400	**121.9**	37	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	6	4092/2200	122@2200	**93**	45	369@1400	**114.6**	35	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	7	4328/2000	122@2000	100	44	369@1400	**114.6**	35	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	8	4130/2200	115@2200	89	43	369@1400	**114.6**	35	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	9	4126/2200	110@2200	88	42	332@1400	**102.3**	31	DDI TAA ECM DOC EGR SCR AMOX EPR

Page 3/4

U-R-022-0198-1
6-16-2015

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	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
FPKXL04.4MT1	10	4128/2200	100@2200	**81**	39	332@1400	**102.3**	31	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	11	4248/2000	100@2000	86	38	332@1400	**102.3**	31	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	12	4072/2200	94@2200	**78**	38	332@1400	**102.3**	31	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	13	3996/2200	88@2200	75	36	332@1400	**102.3**	31	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	14 AK444 (Emergency)	4132/2200	124@2200	**94**	45	391@1400	**121.9**	37	DDI TAA ECM DOC EGR SCR AMOX EPR

Page 4/4

Engine Model Summary Template

U-R-022-0198-1
6-16-2015

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	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
FPKXL04.4MT1	15 AK444 (Emergency)	4126/2200	110@2200	88	42	332@1400	**102.3**	31	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	16 AK444 (Emergency)	4128/2200	100@2200	**81**	39	332@1400	**102.3**	31	DDI TAA ECM DOC EGR SCR AMOX EPR
FPKXL04.4MT1	17 AK444 (Emergency)	3996/2200	88@2200	75	36	332@1400	**102.3**	31	DDI TAA ECM DOC EGR SCR AMOX EPR

TAA = TC + CAC