California Environmental Protection Agency **Air Resources Board**	DEUTZ AG	**EXECUTIVE ORDER U-R-013-0516** New Off-Road Compression-Ignition Engines

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)
2016	GDZXL07.8047	7.755	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Continuous Trap Oxidizer, Selective Catalytic Reduction-Urea	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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.02	0.31	--	0.01	0.004	--	--	--

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 26 day of February 2016.

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

Deutz AG

Nonroad CI

Engine Model Summary Template

Attachment page 1 of 1

EO # U-R-013-0516

Date: 1/28/2016

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
GDZXL07.8047	CFWT291U	TTCD7.8L6	390.2@2100	199.1	139.3	1154@1500	221.3	110.6	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT269U	TTCD7.8L6	360.7@2100	183.4	128.3	1117@1500	213.9	106.9	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT247U	TTCD7.8L6	331.2@2100	169.1	118.3	1018@1500	192.9	96.4	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT224U	TTCD7.8L6	300.3@2100	155.1	108.5	943@1500	177.9	88.9	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT202U	TTCD7.8L6	270.8@2100	142.2	99.5	856@1500	160.1	80.0	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT232U	TTCD7.8L6	311.1@2100	160.5	112.3	1012@1500	194.5	97.2	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT217U	TTCD7.8L6	291.6@2100	152.5	106.7	951.4@1500	182.5	91.2	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT203U	TTCD7.8L6	272.8@2100	143.5	100.4	888.7@1500	170.0	84.9	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT189U	TTCD7.8L6	254.1@2100	135.0	94.4	826@1500	156.5	78.2	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U
GDZXL07.8047	CFWT255U	TTCD7.8L6	341.9@2100	175.5	122.8	1104.8@1500	213.5	106.7	DDI,TC,CAC,ECM,EGR,CTOX,SCR-U