**DEUTZ AG** 

EXECUTIVE ORDER U-R-013-0490 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)		
2015	FDZXL06.1059	6.057	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Continuous Trap Oxidizer, Selective Catalytic Reduction-Urea			Offroad Crane, Loader, Pump, Compressor, Other Industrial Equipment			

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	EMISSION		EXHAUST (g/kW-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
75 ≤ kW ≤ 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.02	0.18		1.5	0.01			

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 June 2014.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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ED#U-R-013-0490	Date: 5/28/2014	9.Emission Control Device Per SAE J1930	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR
THE CO	Dat	8.Fuel Rate: (lbs/hr)@peak torque	52.4	52.4	52.4	52.1	44.2
asl	76	7.Fuel Rate: mm/stroke@pe ak torque	108.5	108.5	108.5	108.0	91.5
y Template		ss/hr) @ peak HP 7. Fuel Rate: (for diesels 6. Torque @ RPM mm/stroke@pe only) (SEA Gross) ak torque	553.2@1450	553.2@1450	553.2@1450	549.5@1450	464.7@1450
Engine Model Summary Template	5. Fuel Rate:	(lbs/hr) @ peak HP (for diesels only)	64.8	61.9	63.4	56.6	50.9
	Attachment page 1 of 5. Fuel Rate:	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	88.5	93.0	200.7	94.5	76.5
		3.BHP@RPM (SAE Gross)	172.9@2200	172.9@2000	172.9@2100	160.9@1800	140.8@2000
		Engine Family 1.Engine Code 2.Engine Model	TCD6.1L6	TCD6.1L6	TCD6.1L6	TCD6.1L6	TCD6.1L6
49	Nonroad CI	1. Engine Code	CFV1129	CFVI129A	CFVI129B	CFVI120	CFVI105
Deuts AG	Nonre	Engine Family	FDZXL06.1059	FDZXL06.1059	FDZXL06.1059	FDZXL06.1059	FDZXL06.1059