California Environmental Protection Agency Air Resources Board	DEUTZ AG	EXECUTIVE ORDER U-R-013-0501-1 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	FDZXL15.9058	15.874	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Diesel Oxidation Catalyst, Selective Catalytic Reduction-Urea (2)	Crane, Dozer, Loader, Pump and 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 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	0.34	--	0.02	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.

This Executive Order hereby supersedes Executive Order U-R-013-0501 dated March 23, 2015.

Executed at El Monte, California on this 5 day of August 2015.

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

Deutz AG

Nonroad CI

Engine Model Summary Template

Attachment page 1 of 2

EO# U-R-013-0501-1

Date: 7/31/2015

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
FDZXL15.9058	CFYI520U	TCD16.0V8	697.3@2100	293	256.6	2890@1400	315	186.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI520V	TCD16.0V8	697.3@2000	298	246.2	2890@1400	312	186.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI520W	TCD16.0V8	697.3@1900	305	241.5	2890@1400	312	186.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI505U	TCD16.0V8	677.2@1800	308	235.1	2890@1400	312	186.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI480U	TCD16.0V8	643.7@2100	260	233.3	2800@1400	300	182.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI480V	TCD16.0V8	643.7@2000	270	226.6	2800@1400	300	182.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI480W	TCD16.0V8	643.7@1900	279	223.7	2800@1400	300	182.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI480X	TCD16.0V8	643.7@1800	289	222.3	2800@1400	300	182.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI440U	TCD16.0V8	590.0@2100	236	214.7	2650@1400	285	172.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI440V	TCD16.0V8	590.0@2000	246	209.7	2650@1400	285	172.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI440W	TCD16.0V8	590.0@1900	256	204.3	2650@1400	285	172.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI440X	TCD16.0V8	590.0@1800	266	201.5	2650@1400	285	172.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI400U	TCD16.0V8	536.4@2100	214	195.9	2650@1400	285	172.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI400V	TCD16.0V8	536.4@2000	224	191.1	2650@1400	285	172.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI400W	TCD16.0V8	536.4@1900	234	187.4	2650@1400	285	172.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI400X	TCD16.0V8	536.4@1800	238	179.9	2650@1400	272	172.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI350U	TCD16.0V8	469.4@2100	190	169.8	2150@1400	226	140.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI350V	TCD16.0V8	469.4@2000	195	168.8	2150@1400	226	140.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI350W	TCD16.0V8	469.4@1900	199	162.1	2150@1400	226	140.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI350X	TCD16.0V8	469.4@1800	210	157.5	2150@1400	226	140.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI370U	TCD16.0V8	496.2@2100	203	179.1	1900@1400	201	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI390U	TCD12.0V6	523.0@2100	280	196.6	2130@1400	296	141.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI390V	TCD12.0V6	523.0@2000	290	189.9	2130@1400	296	141.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI390W	TCD12.0V6	523.0@1900	300	189.9	2130@1400	296	141.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI370U	TCD12.0V6	496.2@1800	290	176.9	2130@1400	296	141.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI360U	TCD12.0V6	482.8@2100	258	178.4	2080@1400	286	137.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI360V	TCD12.0V6	482.8@2000	260	173.3	2080@1400	286	137.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI360W	TCD12.0V6	482.8@1900	276	170.9	2080@1400	286	137.6	DDI,TC,CAC,ECM,SCR,DOC, SCR

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Nonroad CI

Engine Model Summary Template

Attachment page 2 of 2

EO# U-R-013-0501-1

Date: 7/31/2015

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
FDZXL15.9058	CFYI350U	TCD12.0V6	469.4@1800	274	163.1	2080@1400	286	137.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI330U	TCD12.0V6	442.5@2100	231	164.4	2000@1400	276	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI330V	TCD12.0V6	442.5@2000	238	159.9	2000@1400	276	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI330W	TCD12.0V6	442.5@1900	248	155.2	2000@1400	276	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI330X	TCD12.0V6	442.5@1800	258	152.9	2000@1400	276	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI300U	TCD12.0V6	402.3@2100	205	150.4	2000@1400	276	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI300V	TCD12.0V6	402.3@2000	212	146.6	2000@1400	276	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI300W	TCD12.0V6	402.3@1900	221	142.4	2000@1400	276	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI300X	TCD12.0V6	402.3@1800	231	137.9	2000@1400	276	130.6	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI273U	TCD12.0V6	366.1@2100	179	139.9	1800@1400	246	118.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI273V	TCD12.0V6	366.1@2000	196	136.6	1800@1400	246	118.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI273W	TCD12.0V6	366.1@1900	210	132.9	1800@1400	246	118.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI273X	TCD12.0V6	366.1@1800	200	128.9	1800@1400	246	118.9	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI240U	TCD12.0V6	321.8@2100	169	136.4	1500@1400	206	100.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI240V	TCD12.0V6	321.8@2000	176	119.9	1500@1400	206	100.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI240W	TCD12.0V6	321.8@1900	186	117.1	1500@1400	206	100.3	DDI,TC,CAC,ECM,SCR,DOC, SCR
FDZXL15.9058	CFYI240X	TCD12.0V6	321.8@1800	185	113.9	1500@1400	206	100.3	DDI,TC,CAC,ECM,SCR,DOC, SCR