## **DEUTZ AG**

EXECUTIVE ORDER U-R-013-0085 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-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control system 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)
2003	3DZXL35.0001	17.5, 26.3, 35.0	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
Dire	oct Diesel Injection, Smo Turbocharger, Charge	ke Puff Limiter, Air Cooler	Industrial Equi	pment

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), 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) OPACIT					PACITY (%	TY (%)			
POWER CLASS	CATEGORY	STANDARD CATEGORY			НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
kW > 560	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50		
		CERT	0.6	8.6		1.0	0.22	9	8	13		

**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

Aller Lyons, Chief

Mobile Source Operations Division

day of December 2002.

Attachment 1 of

Manufacturer: DEUTZ AG
Engine Category: Nonroad Cl
EPA Family Name: 3DZXL35.0001
Mfr. Family Name: TBD616V8
Process Code: New Submission

## **ENGINE MODEL SUMMARY FORM**

drx-013-0085

1. Engine 2. Engine Model 3. BHP@ RPM code	TBD 616 V8 590	884	TBD 616 V16 1179	TBD 616 V12 322	TBD 616 V12 322	TBD 616 V12 325	TBD 616 V12 333	TBD 616 V16 347		TBD 616 V16 350	DA 996 A2 TBD 616 V16 350 1800 DA 1095 A1 TBD 616 V16 350 1800
4. Fuel Rate @  M Rated Power (mm3/stroke)	00 235		00 235								
5. Fuel Rate (lbs./hr) Rated Power	206.5	309.4	412.7	112.6	112.6	113.6	116.4	121.6	122.5	122.5	122.5
6. Peak Torque RPM(NM)	-	3051 1	-								
iue @	500	1500	1500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7. Peak Torque (mm³/stroke)	280.0	280.0	280.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8. Fuel Hate (lbs./hr) @ Peak Torque	150.0	224.9	299.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9. Emission Control Device (SAE J1930)	EM DOF, SOY TC	EM CAC		EM	EM	EM	EM	EM.	m	EM	EM

<sup>\*\*</sup> This rating is listed as the certification test rating for this >560 kW family, but is not being certified due to its lower power output that places it in the 225-450 kW power category.