California Environmental Protection Agency AIR RESOURCES BOARD	DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY	EXECUTIVE ORDER U-R-004-0181 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 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)
2004	4JDXL04.5042	4.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Smoke Puff Limiter, Electronic Control Module	Crane, Loader, Tractor, Dozer, Pump, Generator Set, Compressor, Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
		FEL	-	-	-	-	0.36	-	-	-
		CERT	-	-	5.7	1.1	0.32	7	3	18

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

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 23RD day of December 2003.

Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

Attachment 1 of 1
U-R-004-0181

Manufacturer: Deere Power Systems Group of Deere &
Engine category: Nonroad CI
EPA Engine Family: 4JDXL04.5042
Mfr Family Name: 350TD
ess Code: New Submission

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
4045TF275A	4045T	99.24@2500	75.00@2500	34.00@2500	296.98@1500	99.8@1500	41.89@1500	EM EC
4045TRT70	4045T	80.47@2350	54.20@2350	32.63@2350	250.59@1400	85@1400	25.80@1400	EM EC
4045TRT71	4045T	90.52@2350	69.60@2350	35.28@2350	277.00@1400	93.5@1400	28.22@1400	EM EC
4045TRT72A	4045T	99.24@2200	79.00@2200	37.70@2200	288.06@1500	95@1500	31.09@1500	EM EC
4045TRT73	4045T	90.52@2200	71.00@2200	35.28@2200	276.55@1400	89@1400	28.00@1400	EM EC
4045TRT74	4045T	99.24@2350	71.50@2350	37.79@2350	290.57@1500	91.5@1500	30.89@1500	EM EC
4045TL272	4045T	92.54@2300	71.30@2300	35.50@2300	281.72@1500	91.0@1500	29.77@1500	EM EC
4045TL271	4045T	84.49@2300	64.90@2300	32.41@2300	257.38@1500	83.8@1500	27.34@1500	EM EC
4045TL270	4045T	77.78@2300	59.50@2300	29.55@2300	238.94@1500	77.6@1500	25.14@1500	EM EC
4045TT092	4045T	84.49@2200	65.60@2200	32.46@2200	261.80@1400	85.3@1400	26.86@1400	EM EC