California Environmental Protection Agency AIR RESOURCES BOARD	JOHN DEERE POWER SYSTEMS OF DEERE	EXECUTIVE ORDER U-R-004-0307 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)
2007	7JDXL12.5035	12.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Smoke Puff Limiter, Electronic Control Module	Tractor, Pump, Compressor, Generator Set, Other Industrial Equipment

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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW < 225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
225 ≤ kW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		FEL	-	-	6.4	-	-	-	-	-
		CERT	-	-	6.2	0.7	0.15	12	2	24

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 20 day of December 2006.

Annette Hebert, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: **John Deere Power Systems of Deere and**

Engine category: **Nonroad CI**

EPA Engine Family: **7JDXL12.5035**

Mfr Family Name: **650HD**

Process Code: **New Submission**

Attachment
EO# U-R-004-0307

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
6125HRW18	6125H	525.69@2100	258.00@2100	182.54@2100	1846.61@1575	360@1575	191.58@1575	EM EC SPL
6125HZ015	6125H	402.31@2100	190.00@2100	133.16@2100	1348.83@1500	265@1500	134.04@1500	EM EC SPL
6125HH006B	6125H	466.68@2200	216.00@2200	160.06@2200	1444.70@1600	292@1600	157.63@1600	EM EC SPL
6125HH006C	6125H	431.81@2200	201.00@2200	149.26@2200	1444.70@1600	292@1600	157.63@1600	EM EC SPL
6125HF070A	6125H	504.23@2100	247.00@2100	174.17@2100	1843.66@1575	369@1575	195.99@1575	EM EC SPL
6125HDW01B	6125H	295.03@2000	150.00@2000	100.98@2000	1132.01@1500	219.6@1500	111.12@1500	EM EC SPL
6125HDW01A	6125H	288.32@2000	148.00@2000	99.87@2000	1021.39@1500	202@1500	102.30@1500	EM EC SPL
6125HDW02A	6125H	288.32@2000	148.00@2000	99.21@2000	1021.39@1500	202@1500	102.30@1500	EM EC SPL
6125HDW02B	6125H	295.03@2000	150.00@2000	99.21@2000	1132.01@1500	219.6@1500	111.12@1500	EM EC SPL