California Environmental Protection Agency AIR RESOURCES BOARD	DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY	EXECUTIVE ORDER U-R-004-0254 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)
2006	6JDXL06.8084	4.5, 6.8	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Smoke Puff Limiter	Tractor

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
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		FEL	-	-	6.3	-	0.28	-	-	-
		CERT	-	-	6.0	1.6	0.26	20	8	47

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 21st day of December 2005.

Raphael Susnowitz
for Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

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

Engine category: **Nonroad CI**

EPA Engine Family: **6JDXL06.8084**

Family Name: **350HQ**

Process Code: **New Submission**

Attachment
U-R-004-0254

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
4045HL270	4045H	103.26@2300	75.90@2300	39.25@2300	316.08@1500	103.7@1500	34.97@1500	EM EC SPL TC, ODI, CA
4045HL271	4045H	112.65@2300	81.40@2300	42.11@2300	347.35@1500	114.5@1500	38.59@1500	EM EC SPL TC
4045HL273	4045H	115.33@2300	85.20@2300	42.77@2300	350.15@1500	116@1500	39.14@1500	EM EC SPL TC
4045HL272	4045H	104.60@2300	77.20@2300	39.91@2300	315.93@1500	104.1@1500	35.06@1500	EM EC SPL TC
6068HRW59B	6068H	119.36@2300	57.20@2300	44.82@2300	362.84@1500	73.4@1500	37.15@1500	EM EC SPL TC
6068HRW59A	6068H	129.41@2300	62.20@2300	48.26@2300	393.07@1500	79.5@1500	40.24@1500	EM EC SPL TC
6068HRW70A	6068H	129.41@2300	63.90@2300	49.56@2300	401.92@1500	84@1500	42.53@1500	EM EC SPL TC
6068HRW70B	6068H	119.36@2300	59.40@2300	46.06@2300	372.42@1500	77.6@1500	39.29@1500	EM EC SPL TC