California Environmental Protection Agency AIR RESOURCES BOARD	DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY	EXECUTIVE ORDER U-R-004-0174 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	4JDXL06.8048	4.5, 6.8	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Smoke Puff Limiter, Engine Modification, Electronic Control Module, Turbocharger, Charge Air Cooler	Pump, Compressor, Generator Set, 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
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT	-	-	6.0	1.4	0.16	10	2	22

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

Manufacturer: Deere Power Systems Group of Deere and

Engine category: Nonroad CI

EPA Engine Family: 4JDXL06.8048

Mfr Family Name: 350HG

Process Code: New Submission

Attachment 1-8 1
U-R-004-0174

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
6068HL475A	6068H	173.00@2100	83.70@2100	59.26@2100	629.61@1400	120.35@1400	56.82@1400	EM EC
4045HL475A	4045H	112.65@2300	79.90@2300	41.34@2300	346.61@1500	104.9@1500	35.39@1500	EM EC
6068HRW61A	6068H	119.36@2300	57.80@2300	44.85@2300	365.79@1500	72.3@1500	36.58@1500	EM EC
6068HRW61B	6068H	129.41@2300	61.80@2300	47.95@2300	397.50@1500	78.4@1500	39.62@1500	EM EC
6068HRW62A	6068H	139.47@2100	68.60@2100	48.62@2100	469.03@1400	91.2@1400	43.04@1400	EM EC
6068HRW62B	6068H	154.89@2100	75.80@2100	53.73@2100	520.65@1400	99.6@1400	47.01@1400	EM EC
4045HL476	4045H	103.26@2300	71.50@2300	38.52@2300	318.59@1500	94.4@1500	31.82@1500	EM EC