 AIR RESOURCES BOARD	John Deere Power Systems	EXECUTIVE ORDER U-R-004-0370
		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)
2009	9JDXL13.5103	13.5	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Smoke Puff Limiter, Exhaust Gas Recirculation			Loaders, 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 < 560	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	--	--	3.4	0.6	0.10	11	1	20

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 12th day of December 2008.


 Annette Hebert, Chief
 Mobile Source Operations Division

Engine Model Summary Form

U-R-004-0370

Manufacturer: John Deere Power Systems
 Engine category: Nonroad CI
 EPA Engine Family: 9JDXL13.5103
 Mfr Family Name: 650HAA
 Process Code: New Submission

Attachment P. 1 of 1

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
6135HF485A	6135H	630.29@2100	311.00@2100	218.30@2100	2025.08@1575	393@1575	206.31@1575	EM EGR EC
6135HF485B	6135H	600.78@2100	296.30@2100	209.73@2100	1880.54@1575	354.5@1575	188.19@1575	EM EGR EC
6135HF485N	6135H	399.63@2100	199.50@2100	141.21@2100	1352.51@1400	285.6@1400	134.77@1400	EM EGR EC
6135HF485O	6135H	399.63@1900	214.20@1900	137.17@1900	1521.39@1400	310.6@1400	146.61@1400	EM EGR EC
6135HF485P	6135H	350.01@2100	177.30@2100	564.60@2100	1181.42@1400	217.6@1400	120.90@1400	EM EGR EC
6135HF485Q	6135H	350.01@2100	177.30@2100	125.49@2100	1181.42@1400	256.1@1400	120.90@1400	EM EGR EC
6135HF485R	6135H	350.01@1900	188.50@1900	120.75@1900	1352.51@1400	282.3@1400	133.21@1400	EM EGR EC
6135HF485U	6135H	462.66@1800	257.30@1800	156.09@1800	N/A	N/A	N/A	EM EGR EC
6135HRW02	6135H	496.18@2100	243.30@2100	172.29@2100	1713.13@1575	339.3@1575	180.16@1575	EM EGR EC
6135HRW01	6135H	590.05@2100	290.40@2100	205.65@2100	1880.54@1575	368.6@1575	195.73@1575	EM EGR EC
6135HN001	6135H	500.21@2100	251.80@2100	178.20@2100	1688.80@1400	332.1@1400	156.71@1400	EM EGR EC
6135HH001A	6135H	527.03@2200	256.30@2200	190.22@2200	1530.98@1600	317.1@1600	171.08@1600	EM EGR EC
6135HH001B	6135H	486.80@2200	236.20@2200	175.23@2200	1530.98@1600	318.7@1600	171.92@1600	EM EGR EC
6135HZ007A	6135H	576.64@2100	283.70@2100	201.06@2100	1880.54@1575	355.4@1575	188.81@1575	EM EGR EC
6135HZ007B	6135H	552.51@2100	275.90@2100	195.33@2100	1792.04@1400	356.6@1400	168.28@1400	EM EGR EC
6135HDW01A	6135H	358.06@2000	192.10@2000	129.59@2000	1352.51@1500	289.2@1500	146.26@1500	EM EGR EC
6135HDW01B	6135H	295.03@2000	163.00@2000	109.97@2000	1224.19@1500	259.8@1500	131.40@1500	EM EGR EC
6135HFC48A	6135H	600.78@2100	296.30@2100	209.73@2100	1880.54@1575	354.5@1575	188.19@1575	EM EGR EC
6135HFC48B	6135H	616.88@1760	359.00@1760	213.19@1760	N/A	N/A	N/A	EM EGR EC
6135HFC48C	6135H	600.78@2100	303.40@2100	214.97@2100	N/A	N/A	N/A	EM EGR EC
6135HF485C	6135H	549.82@2100	274.60@2100	184.41@2100	1792.04@1400	356.6@1400	168.28@1400	EM EGR EC
6135HF485D	6135H	549.82@2100	274.60@2100	194.41@2100	1792.04@1400	356.6@1400	168.28@1400	EM EGR EC
6135HF485E	6135H	525.69@2100	265.70@2100	188.08@2100	1792.04@1400	357.6@1400	168.79@1400	EM EGR EC
6135HF485F	6135H	500.21@2100	251.80@2100	178.20@2100	1688.80@1400	332.1@1400	156.71@1400	EM EGR EC
6135HF485G	6135H	500.21@2100	251.80@2100	178.20@2100	1688.80@1400	332.1@1400	156.71@1400	EM EGR EC
6135HF485H	6135H	500.21@1900	272.70@1900	174.63@1900	1792.04@1400	359.9@1400	169.87@1400	EM EGR EC
6135HF485T	6135H	537.75@1800	308.90@1800	187.44@1800	N/A	N/A	N/A	EM EGR EC
6135HF485S	6135H	616.88@1800	347.80@1800	210.98@1800	N/A	N/A	N/A	EM EGR EC
6135HF485I	6135H	450.59@2100	226.40@2100	160.26@2100	1521.39@1400	350.6@1400	165.50@1400	EM EGR EC
6135HF485J	6135H	450.59@2100	226.40@2100	160.26@2100	1521.39@1400	350.6@1400	165.50@1400	EM EGR EC
6135HF485K	6135H	450.59@1900	243.40@1900	155.87@1900	1688.80@1400	334.9@1400	158.05@1400	EM EGR EC
6135HF485L	6135H	425.11@2100	210.40@2100	148.92@2100	1521.39@1400	302.5@1400	142.75@1400	EM EGR EC
6135HF485M	6135H	399.63@2100	199.50@2100	141.21@2100	1352.51@1400	285.6@1400	134.77@1400	EM EGR EC

SPL, PDI
TC, CAL

