JOHN DEERE POWER SYSTEMS

EXECUTIVE ORDER U-R-004-0421 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			FUEL TYPE	USEFUL LIFE (hours)		
2011	BJDXL03.0208	2.4, 3.0	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Dies Smok	sel Injection, Turbocharge se Puff Limiter, Electronic	er, Charge Air Cooler, Control Module	Loaders, Tractor, Pump, Compressor, Generator Set, Other 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	EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Interim	STD	N/A	N/A	4.7	5.0	0.30	20	15	50
		CERT			3.9	1.0	0.22	14	3	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

_ day of December 2010.

Annette Hebert, Chief

Mobile Source Operations Division

Attachment: Page 10f1 **Engine Model Summary Form**

EO#: U-R-004-0421

Manufacturer:

John Deere Power Systems

Engine category:

Nonroad Cl

EPA Engine Family: BJDXL03.0208

Mfr Family Name: 250HBB

Process Code:

Running Change

R/C Date: 10/10/2011

.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
4024HF295A	4024H	65.72@2800	44.70@2800	28.18@2800	167.41@2000	54.9@2000	24.70@2000	EM EC SPL
4024HF295D	4024H	60.35@2400	46.20@2400	24.92@2400	167.41@1800	55.6@1800	22.49@1800	EM EC SPL
4024HF295C	4024H	65.72@2400	49.90@2400	26.92@2400	188.80@1800	61.2@1800	24.81@1800	EM EC SPL
4024HF295B	4024H	61.02@2800	43.20@2800	27.21@2800	157.82@2000	52.8@2000	23.75@2000	EM EC SPL
4024HLV11A	4024H	60.35@2400	46.20@2400	24.92@2400	167.41@1800	55.6@1800	22.49@1800	EM EC SPL
4024HLV11B	4024H	65.72@2400	49.90@2400	26.92@2400	188.80@1800	61@1800	24.81@1800	EM EC SPL
5030HF295B	5030H	73.90@2200	48.80@2200	30.21@2200	253.69@1650	66.4@1650	30.87@1650	EM EC SPL
4024HF297	4024H	65.72@2800	45.50@2800	28.66@2800	167.41@2000	55@2000	24.70@2000	EM EC SPL
4024HT011A	4024H	61.69@2600	44.00@2600	25.73@2600	161.51@1950	54.6@1950	23.97@1950	EM EC SPL
4024HT011B	4024H	65.72@2600	46.90@2600	27.45@2600	169.62@1950	56.5@1950	24.76@1950	EM EC SPL
5030HT014	5030H	73.76@2800	39.20@2800	30.87@2800	188.80@2050	48.5@2050	27.94@2050	EM EC SPL
5030HF286A	5030H	79.13@2800	39.90@2800	31.31@2800	189.53@2000	50.7@2000	28.44@2000	EM EC SPL