

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)
2011	BJDXL04.5144	2.4, 3.0, 4.5	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Smoke Puff Limiter, Electronic Control Module			Loaders, Tractor, Dozer, 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
		CERT	--	--	4.0	0.9	0.30	19	4	35

**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.**

This Executive Order hereby supersedes Executive Order U-R-004-0458 dated December 16, 2011.

Executed at El Monte, California on this 27 day of April 2012.

  
 Annette Hebert, Chief  
 Mobile Source Operations Division

**Engine Model Summary Form**

Manufacturer: John Deere Power Systems  
 Engine category: Nonroad CI  
 EPA Engine Family: BJDXL04.5144  
 Mfr Family Name: 902FLX  
 Process Code: New Submission

EO#: U-R-004-0458-1

Date: 4/9/2012

Attachment: page 1 of 1

1. Engine code	2. Engine Model	3. kW@RPM (SAE Gross)	4. Fuel Rate: mm/stroke@peak kW (for diesel only)	5. Fuel Rate: (kg/hr)@peak kW (for diesels only)	6. Torque (Nm) @RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (kW/hr)@peak torque	9. Emission Control Device Per SAE J1930
5030HF285F	5030H	57.0@2400	45.1@2400	13.8@2400	276@1800	51.9@1800	11.91@1800	EC SPL EM
4045TF285B	4045T	74.0@2400	77.1@2400	18.87@2400	355@1600	86.8@1600	14.17@1600	EC SPL EM
4024HF285B	4024H	60.0@1800	61.8@1800	11.35@1800				EC SPL EM
4045HF280A	4045H	74.0@2200	76.8@2200	17.23@2200	400@1600	91.8@1600	14.98@1600	EC SPL EM
4045HF280B	4045H	74.0@2400	72.5@2400	17.75@2400	365@1600	83.9@1600	13.69@1600	EC SPL EM
4024HF285C	4024H	60.0@2800	52.8@2800	15.08@2800	283@2000	65.9@2000	13.44@2000	EC SPL EM
5030HF285D	5030H	68.0@2400	52.3@2400	16.0@2400	341@1800	63.6@1800	14.6@1800	EC SPL EM
4045TF280A	4045T	63.0@2400	65.7@2400	16.08@2400	302@1700	71.7@1700	12.43@1700	EC SPL EM
4045HF280C	4045H	74.0@2200	75.4@2200	16.92@2200	380@1600	87.4@1600	14.26@1600	EC SPL EM
4045TF280B	4045T	60.0@2400	63.7@2400	15.59@2400	285@1700	70.2@1700	12.17@1700	EC SPL EM
4045TF285D	4045T	63.0@2200	80.6@2200	18.09@2200	355@1600	85.1@1600	13.89@1600	EC SPL EM
4045TF280E	4045T	56.0@1800	72.1@1800	13.24@1800				EC SPL EM
4045TF280C	4045T	56.0@2400	60.5@2400	14.81@2400	276@1700	67.2@1700	11.65@1700	EC SPL EM
5030HF285A	5030H	74.0@2800	50.7@2800	18.1@2800	341@2000	63.4@2000	16.17@2000	EC SPL EM
5030HF285G	5030H	72.0@1800	69.8@1800	16.02@1800		69.8@1800	16.02@1800	EC SPL EM
5030HF285E	5030H	62.0@2400	47.8@2400	14.83@2400	306@1800	56.8@1800	13.04@1800	EC SPL EM
5030HF285B	5030H	62.0@2800	45.2@2800	16.14@2800	284@2000	54.7@2000	13.95@2000	EC SPL EM
4045TF285E	4045T	74.0@1800	92.7@1800	17.02@1800				EC SPL EM
4045TF285C	4045T	63.0@2400	64.9@2400	15.89@2400	314@1600	76.1@1600	12.42@1600	EC SPL EM
4045TF280D	4045T	63.0@1800	79.9@1800	14.67@1800				EC SPL EM
4045HF280D	4045H	74.0@1800	90@1800	16.52@1800				EC SPL EM

ADI, IC, CAC