

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)
2007	7JDXL04.5111	4.5	Diesel	8000
<b>SPECIAL FEATURES &amp; EMISSION CONTROL SYSTEMS</b>			<b>TYPICAL EQUIPMENT APPLICATION</b>	
Direct Diesel Injection, Turbocharger, Charge Air Cooler			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):

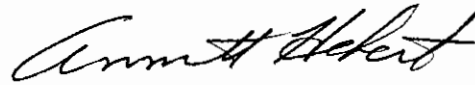
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
		CERT	-	-	4.0	0.9	0.30	19	4	35

**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.**

Executed at El Monte, California on this 5 day of July 2007.

  
 Annette Hebert, Chief  
 Mobile Source Operations Division

## Engine Model Summary Form

Manufacturer: **John Deere Power Systems**  
 Engine category: **Nonroad CI**  
 EPA Engine Family: **7JDXL04.S111**  
 Mfr Family Name: **350HAE**  
 SSS Code: **New Submission**

*Attachment*  
*EO# U-R-004-0310*

1 Engine Code	2 Engine Model	3 BHP@RPM (SAE Gross)	4 Fuel Rate: mm <sup>3</sup> /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 <sup>3</sup> /stroke@peak torque	8 Fuel Rate: (lbs/hr)@ peak torque	9 Emission Control Device Per SAE J1930
4045HF280A	4045H	99.24 @ 2200	76.80 @ 2200	38.01 @ 2200	294.99 @ 1600	91.8 @ 1600	33.07 @ 1600	EM DFI CAC, TC
4045HF280B	4045H	99.24 @ 2400	72.50 @ 2400	39.16 @ 2400	269.18 @ 1600	83.9 @ 1600	30.21 @ 1600	EM DFI CAC
4045HF280C	4045H	99.24 @ 2200	75.40 @ 2200	37.20 @ 2200	280.24 @ 1600	87.4 @ 1600	31.44 @ 1600	EM DFI CAC
4045HF280D	4045H	99.24 @ 1800	90.00 @ 1800	36.51 @ 1800		NA	NA	EM DFI CAC