California Environmental Protection Agency	ROUSH INDUSTRIES INC.	EXECUTIVE ORDER A-344-0047-5 New On-Road Heavy-Duty Engines
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Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-14-012;

**IT IS ORDERED AND RESOLVED:** The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL	ENGINE FAN	NE FAMILY ENGINE SIZES (L)		FUEL TYPE	STANDARDS & TEST		ECS & SPECIAL FEATURES	DIAGNOSTIC 5
			51265 (6)		PROCEDURE	CLASS	TWC, SFI, 2AFS, HO2S	EMD+
2014	ERIIE06.8E	SW5	6.8	LPG	Otto	HDO	1000, 011, 241 0, 11020	
	ENGINE'S IDLE			ADDI	TIONAL IDLE EN	IISSIONS CO	NTROL <sup>4</sup>	
	N/A				N	/A		
ENGINE (I	_)			ENGINE MODE	LS/CODES (rat	ted power, in	hp)	
6.8	EEF6 Step V F-650	18BR5 /an / El / EEF6	2, EEF61HBR EEF418YR511, EF418RR505, E 18AR505, EEF6	512, EEF618FR512, EEF EEF418NR511, EEF418 EF418RR510, EEF418R 51HAR505, EEF61UAR5	61HFR512; F- PR511, EEF4 R511, EEF418 D5, EEF618AR	450/550 Ch 1LYR511, E 3RR530; Mo 510, EEF6	F61HBR510, EEF618BR511, EEF assis Cab / EEF418YR505, EEF4 EEF41LNR511, EEF41LPR511; otor Home / EEF418QR505, EEF4 1HAR510, EEF61UAR510 (362 for	18NR505, 18QR511; all codes)
L=liter; hp= 1 CNG/LM 2 L/M/H H	⊧horsepower; kw=k IG=compressed/liqu DD=light/medium/h	ilowatt; h Jefied natu eavy heav	r=hour; iral gas; LPG=liquef iy-duty dieset; UB=u	ied petroleum gas; E85=85% eth irban bus; HDO=heavy duty Otto;	anol fuel; MF=mult	ii fuel a.k.a. BF	R 86.abc=Title 40, Code of Federal Regulation	

ESS=engine shutdown system (per 13 CCR 1956.8(a)(6)(A)(1); 30g=30 g/hr NOx (per 13 CCR 1956.8(a)(6)(C); APS =internal combustion auxiliary power system; ALT=alternative method (per 13 CCR 1956.8(a)(6)(D); Exempt=exempted per 13 CCR 1956.8(a)(6)(B) or for CNG/LNG fuel systems; N/A=not applicable (e.g., Otto engines and vehicles); EMD=engine manufacturer diagnostic system; OBD(F) / (P) / (\$)=full / partial / partial with fine / on-board diagnostic; (2012-08-20)

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the SET and NTE limits under the applicable California exhaust emission standards and test procedures for heavyduty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family. "Diesel" CO, SET and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For flexible- and dual-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.).

in g/bhp-hr	NMHC		NOx		NMHC+NOx		со		PM		нсно	
	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
STD	0.14	*	0.20	*	*	*	14.4	*	0.01	*	0.01	*
CERT	0.07	*	0.08	*	*	*	2.2	*	0.000	k	0.000	*
NTE		*				*		*		r	*	

<sup>4</sup> g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET= supplemental emissions testing; NTE=Not-to-Exceed emission limit; STD=standard or emission test cap; FEL=tamily emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;)

**BE IT FURTHER RESOLVED:** For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 2035 et seq. (emission control warranty) and 13 CCR 1971.1 (on-board diagnostic).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

This Executive Order hereby supersedes Executive Order A-344-0047-4 dated June 3, 2014.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division