EXECUTIVE ORDER A-360-0035 New On-Road Heavy-Duty Engines Page 1 of 1 Pages

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 YEAR	ENGINE FAMILY FBPTE06.8FW5		ENGINE SIZES (L)	FUEL TYPE 1	STANDARDS & TEST	SERVICE 2	ECS & SPECIAL FEATURES 3	DIAGNOSTIC 6				
2015			6.8	LPG	PROCEDURE Otto	HDO	ECM, TWC, 2HO2S(2), SFI	EMD				
PRIMARY ENGINE'S IDLE EMISSIONS CONTROL			ADDITIONAL IDLE EMISSIONS CONTROL 5									
N/A			N/A									
ENGINE (	ENGINE (L) ENGINE MODELS / CODES (rated power, in hp)											
6.8		LPG / Ford 6.8 (340)										
* =not applicable; GVWR=gross vehicle weight rating, 13 CCR xyz=Title 13, California Code of Regulations, Section xyz; 40 CFR 86.abc=Title 40, Code of Federal Regulations, Section 86.abc; L=itier; hp=horsepower; kw=kilowatt; hr=hour;  CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a. BF=bi fuel; DF=dual fuel; FF=flexible fuel;  L/M/H HDD=light/medium/heavy heavy-duty diesel; UB=urban bus; HDO=heavy duty Otto;  ECS=emission control system; TWC/IOC=three-way/oxid/zing catalyst; NAC=NOx adsorption catalyst; SCR-U / SCR-N=selective catalytic reduction – urea / – ammonia; WU (prefix) =warm-												
up catalyst; TBI=throttle super charg control mod	; DPF=diesel particu e body fuel injection; ger; CAC=charge aii dule; EM=engine mo	late filter; SFI/MFI=: cooler; E dification;	PTOX=periodic trap sequential/multi port GR / EGR-C=exhau 2 (prefix)=parallel;	oxidizer, HO2S/O2S=heated/oxy fuel injection; DGI=direct gasolin st gas recirculation / cooled EGR; (2) (suffix)=in series;	/gen sensor; HAFS le injection; GCAR PAIR/AIR=pulsed	S/AFS=heated/a B=gaseous car l/secondary air	air-fuel-ratio sensor (a.k.a., universal or linear buretor, IDI/DDI=indirect/direct diesel injectio injection; SPL=smoke puff limiter; ECM/PCN al combustion auxiliary power system; ALT=	oxygen sensor); n; TC/SC=turbo/ f=engine/powertrain				
(per 13 CCI	R 1956.8(a)(6)(D); E	xempt=e	kempted per 13 CCF		fuel systems; N/A	=not applicable	(e.g., Otto engines and vehicles);					

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the EURO and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family. "Diesel" CO, EURO 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	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD	0.14	*	0.20	*	*	*	14.4	*	0.01	*	0.01	*
FEL	*	*	*	*	*	*	*	*	*	*	*	*
CERT	0.09	*	0.14	*	*	*	3.0	*	0.000	*	0.002	*
NTE	*		*		*		*		*		*	

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle, including RMCSET=ram mode cycle supplemental emissions testing; NTE=Not-to-Exceed; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde; (Rev.: 2007-02-26)

**BE IT FURTHER RESOLVED:** Certification to the FEL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

**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 1971 (engine manufacturer diagnostic), and 13 CCR 2035 et seq. (emission control warranty).

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.

Executed at El Monte, California on this \_\_\_\_\_\_ day of August 2014

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division