California Environmental Protection Agency				
AIR RESOURCES BOARD	BAF TECHNOLOGIES	EXECUTIVE ORDER A-364-0010		

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-02-003:

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	ENGINE SIZES (L)	FUEL TYPE	& TEST PROCEDURE	INTENDED SERVICE CLASS ²	ECS & SPECIAL FEATURES 3
2008	8BAFH06.89CN	6.8	CNG	Otto	HDO	ECM, EGR, TWC, 2HO2S, SFI
NGINE (L)	<u>' </u> _		ENGINE	ODELS / CODES (r	ated power, in hp)	1011, 2017, 1170, 20023, SFI
6.8				V-10 / BAF0868C		
*				*		
*			· · · · · · · · · · · · · · · · · · ·	*		Year
=not applies			R xyz=Title 13, California Co	•		

CFR 86.abc=Title 40, Code of Federal Regulations, Section 86.abc; 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;

CNB/LNG=compressenguened natural gas; LPG=hquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a. BF=bl fuel; DF=dual fuel; FF=flexible fuel;
L/MH HDD=light/medium/heavy heavy-duty diesel; UB=urban bus; HDD=heavy duty Otto;
ECS=emission control system: TWC/OC=hree-way/outgizing catalyst; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; HO2S/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); TBI=throttle body fuel injection: SFUMFI=sequential/multi pot fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor; BUPD=lindirect/direct diese injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAIR/AIR=pulsed/secondary air injection; SPL=smoke putf limiter; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallet; (2) (suffix)=in sense;

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.1 (urban bus) or 13 CCR 1956.8 (other than urban bus); 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, in g/bhp-hr, 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 1956.1 or 13 CCR 1956.8 are in parentheses.)

<u> </u>	NMHC		NOx		NMH	NMHC+NOx		co		РМ		нсно	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO			
STD	0.14	*	0.20	•	•		14.4			EURO	FTP	EURO	
FEL	•	*	•	+ <u>-</u>	+ -	<u> </u>	14.4	<u> </u>	0.01	*	0.01	•	
ERT	0.12	*	0.09	+				•	*	· ·	•	*	
ITE			0.08			L*	12.0	•	0.005	•	0.000		

FEL=famity 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: 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) 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 July 2007.

Annette Hebert, Chief

 7 Mobile Source Operations Division