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<u>~``</u>	California Environmental Protection Agency
-	STAID RESOLINCES BOARD

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.

•				STANDARDS	INTENDED				
MODEL		ENGINE	FUEL TYPE	& TEST	SERVICE	ECS & SPECIAL FEATURES			
YEAR	ENGINE FAMILY	SIZES (L)		PROCEDURE	CLASS				
└────╉		8,1		Diesel	HHDD	TBI, TC, CAC, ECM, OC, HO2S			
2007	7JDXH08.1065	0.1		ODELS / CODES (rated power, it	ed power, in hp)			
ENGINE (ENGINE	ODEEDT OODDE ((275) / 8081HFN04J (275)			
8.1		6081	H: / 6081HFN04K (280), / 60	181HFN04L (280),	1000 1004	I (275), / 6081HFN04J (275)			
0.1				•					
*				*					
*				*					
*		_			10 CE	86 abc=Title 40, Code of Federal Regulations, Section 86.abc;			
	icoble: GVWR=pross vehi	de weight rating; 13	CCR xyz=Title 13, California Cod	e of Regulations, Sec	Cion Xyz; 40 CPT	86.abc =Title 40, Code of Federal Regulations, Section 86.abc;			
L=liter: b p	=horsepower; kw=kilowatt		5 - d training 055; F85 =85%	ethanoi fuel: MF=mul	ti fuel a.k.a. BF=	bi fuel; DF=dual fuel; FF=flexible fuel;			
CNG/LI	NG=compressed/liquefied	natural gas: LPG=II0	B=urban bus: HDO=heavy duty O	otto;		there STOX -periodic trap oxidizer: HO2S/O2S=heated/oxygen			

CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanot tuel; MF=multi ruel a.k.a. BF=Di ruel; DF=buai ruel; FF=hexible ruel;
L/WH HDD=light/medium/heavy heavy-duly diesel; UB=urban bus; HDD=heavy duly Otto;
ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; PTOX=periodic trap oxidizer; 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; SFI/MFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor; HD/DDI=indirect/direct diesel injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAIR/AIR=pulsed/secondary air injection; SPL=smoke pulf limiter; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallel; (2) (suffix)=in series

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 of period. The corresponding certification levels, in g/bhp-hr, for this engine family. "Diesel" CO, EURO and NTE certification of period. The corresponding certification levels, in g/bhp-hr, for this engine family. 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.)

engineo, a							<i>,</i>	<u>```</u>	P	M	н	сно
	NMHC		NOx		NMHC+NOx		<u> </u>			EURO	FTP	EURO
			FTP	EURO	FTP	EURO	FTP	EURO	FTP	EORO		
	FTP	EURO					15.5	15.5	0.01	0.01	· · ·	
STD	0.14	0.14	•	· ·		L		+	1	*	•	*
	+	+	1.16	1.16	1.3	1.3						· ·
FEL			0.82	1.00	0.91	1.11	0.21	0.17	0.003	0.001		
CERT	0.09	0.09 0.114		1.00			19.4		0.02			*
NTE	0	0.21		1.74		2.0				and the sector of the sector o		
INIE	1 <u> </u>						u E tan Steady State Cycle:		NTE=Not-to-Exceed; STD=standard or emission test cap,			

9/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle; 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;

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: The listed engine models have been certified to the split engine family standards under 13 CCR 1956.8(b) [diesel engines] or 13 CCR 1956.8(d) [Otto engines] and the incorporated 40CFR 86.007-15(m)(9).

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.

_ day of April 2007. Executed at El Monte, California on this ____

Caphael Susneries

Annette Hebert, Chief Mobile Source Operations Division