EXECUTIVE ORDER A-021-0317-2 New On-Road Heavy-Duty Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC) Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-45-9; and

Pursuant to the December 15, 1998 Settlement Agreement between the Air Resources Board and the manufacturer, and any modifications thereof to the Settlement Agreement;

IT IS ORDERED AND RESOLVED: That 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 gross vehicle weight rating (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 SIZE (liter)	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas)	STANDARDS & TEST PROCEDURE	INTENDED SERVICE CLASS (L/M/H HDD≕light/medium/heavy heavy-du [HD] diesel; UB≕urban bus; HDO≕HD Otto					
2002	2CEXH0505CBK	8.3	CNG / LNG	Diesel	UB					
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		ENGINE MODELS / CODES (rated power in horsepower, hp)								
OC, HO2S, TC, CAC, PCM, TBI		CG-280 / CPL8012 (280 hp), CG-275 / CPL8009 (275 hp), CG-250 / CPL8006 (250 hp), CG-250 / CPL8003 (250 hp),								
SFI=seauent	ree-way/oxidizing catalyst tialMFI DDI/IDI≃direct /ind AIR≃pulsed AIR SPL=smol	firect diseal ini	varm-up cat. O2S=oxygen sensor HO2S=heated ection TC/SC=turbo/super charger CAC=charq ECM/PCM=engine /powertrain control module	O2S TBI=throttle bo ge air cooler EGR= EM=engine modifica	ody fuel injection MFI=multi port fuel injection exhaust gas recirculation AIR=secondary air tition 2 (prefix)=parallel (2) (suffix)=in series					

The following are the exhaust emission standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) in grams per brake horsepower-hour (g/bhp-hr) for this engine family for hydrocarbon (HC) or non-methane HC (NMHC), oxides of nitrogen (NOx), or NMHC+NOx, carbon monoxide (CO) [except that "diesel" CO certification compliance may have been demonstrated pursuant to Code of Federal Regulations, Title 40, Part 86, Subpart A, Section 86.091-23(c)(2)(i) in lieu of testing], particulate matter (PM), and formaldehyde (HCHO) under the "Federal Test Procedure" (FTP) (Title 13, California Code of Regulations, (13 CCR) Section 1956.1 (urban bus) or 1956.8 (other than urban bus)), and under the "Euro III Test Procedure" (EURO) in the Settlement Agreement, including a EURO's "Not-to-Exceed" NOx standard: (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 Section 1956.1 or 1956.8 are in parentheses.)

*= not HC NMHC NOY NMHC+NOY											EURO'S NOT-TO-EXCEED NOx STD 2.3						
HC		NMHC		NOx		NMHC+NOx		СО		PM		нсно					
FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO		EURO				
_ •	•	1.2	1.2	*	*	*	*	15.5	15.5	*	*	*	*				
*	*	*	•	4.0	4.0	*		*	*	0.05	0.05	*	-				
*	*	*	•	1.8	1.8	+	*	•					-				
*	*	0.2	0.01	1.5	1.4	*	*	2.0	13			*					
	FTP		FTP EURO FTP	FTP EURO FTP EURO  1.2 1.2  1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4	FTP EURO FTP EURO FTP	FTP         EURO         FTP         EURO         FTP         EURO           *         *         1.2         1.2         *         *           *         *         *         *         4.0         4.0           *         *         *         *         1.8         1.8	FTP         EURO         FTP         EURO         FTP         EURO         FTP           *         *         1.2         1.2         *         *         *         *           *         *         *         *         4.0         4.0         *           *         *         *         *         1.8         1.8         *	FTP         EURO         FTP         EURO         FTP         EURO         FTP         EURO           *         *         1.2         1.2         *         *         *         *           *         *         *         *         4.0         4.0         *         *           *         *         *         *         1.8         1.8         *         *	HC	HC         NMHC         NOx         NMHC+NOx         CO           FTP         EURO         FTP         EURO         FTP         EURO         FTP         EURO         FTP         EURO           *         *         1.2         1.2         *         *         *         15.5         15.5           *         *         *         *         4.0         4.0         *         *         *         *         *           *         *         *         *         1.8         1.8         *         *         *         *         *         *	HC	HC         NMHC         NOx         NMHC+NOx         CO         PM           FTP         EURO         FTP         EURO<	HC         NMHC         NOx         NMHC+NOx         CO         PM         HC           FTP         EURO         FTP </td				

**BE IT FURTHER RESOLVED:** That 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:** That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR Sections 1965 (emission control labels), and 2035 et seq. (emission control warranty).

**BE IT FURTHER RESOLVED**: That the listed engine models are conditionally certified subject to the following conditions: (1) The Settlement Agreement is in effect; and, (2) The manufacturer is in compliance with all applicable certification requirements of the Settlement Agreement and any modifications thereof.

Engines certified under this Executive Order shall conform to all applicable California emission regulations and all requirements under the Settlement Agreement and any modifications thereof.

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

This Executive Order is not valid for engines produced on or after October 1, 2002.

Executed at El Monte, California on this \_\_\_\_\_\_ day of March 2002.

Allen Lyons, Chief

New Vehicle / Engine Programs Branch