a Envi Califor el Pro ection Agency AIR RESOURCES BOARD

CATERPILLAR INC.

Pursuant to the authority vested in the Air Resources Board (ARB) 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 (EO) G-02-003; and

Pursuant to the December 15, 1998 Settlement Agreement (SA) between ARB 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 GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL ENGINE FAMILY		ENGINE SIZE (liter)	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas)	INTENDED SERVICE CLASS (L/M/H HDD=light/medium/heavy heavy-dut) [HD] diesel; UB=urban bus; HDO=HD Otto)				
2004	4CPXH0537H3K	8.8	Diesel (ultra low sulfur diesel)	PROCEDURE Diesel	UB			
EMISSION	IAL FEATURES & CONTROL SYSTEMS	······	ENGINE MODELS / CODES	(rated power in h	orsepower, hp)			
DDI, TC, CAC, ECM, SPL, DPF		C9: 1 (330 hp)						
injection m	ri-muni por nuel injection	⊃ri≖sequenti	way/oxidizing catalyst WU (prefix) ≕warm-up cat. alMFI DDI/IDI≔direčt /indirect diesel injection Ti		or HO2S=heated O2S TBI=throttle body fuel arger CAC≈charge air cooler EGR≡exhaust			

AIR=secondary air Injection PAIR=pulsed AIR SPL=smoke pulf limiter ECM/PCM=angine /powertrain control module EM=engine modificat i (2) (suffix)=in series HC=hydrocarbon NMHC=non-methane HC NOx=oxides of nitrogen CO=carbon monoxide PM=particulate matter hyde g/bhp-hr=grams per brake horsepower-hour 2 (prefix)=parallel

The following are the exhaust emission standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT), in g/bhp-hr, for this engine family 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 EURO's "Not-to-Exceed" standard(s). "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. (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 1956.8 are in parentheses.)

and the second se		EURUS	S NOT-TO	-EXCEED	STD	NMHC: 0.	6250	NOx: *	N	MHC+NC	V. 2 125	DM	0.0405
HC		NMHC		NOx								PM: 0.0125 HCHO	
FTP	EURO	FTP	EURO	FTP	EURO					-			
*	*	0.5	0.5	*	*	0.0						-11	EURO
*	*	*	*	*	*	*	*	10.0	13.5	0.01	0.01		*
*	*	*	*	*	*	*							
*	*	0.1	0.03	*	*	2.4	24	0.6	0.1	0.004	0.04	*	*
		1	HC NM FTP EURO FTP * * 0.5 * * * * * *	HC NMHC FTP EURO FTP EURO * * 0.5 0.5 * * * * * * * *	HC NMHC N FTP EURO FTP EURO FTP * * 0.5 0.5 * * * * * * * * * * *	HC NMHC NOx FTP EURO FTP EURO FTP EURO * * 0.5 0.5 * * * * * * * * * * * * * *	HC NMHC NOx NMHH FTP EURO FTP EURO FTP EURO FTP * * 0.5 0.5 * * 2.5 * * * * * * * *	HC NMHC NOx NMHC+NQx FTP EURO FTP EURO FTP EURO * * 0.5 0.5 * * 2.5 2.5 * * * * * * * * * * * * * * * * * * * * * * * *	HC NMHC NOx NMHC+NOx FTP EURO FTP EURO FTP EURO FTP * * 0.5 0.5 * * 2.5 2.5 15.5 *	HC NMHC NOx NMHC+NOx CO FTP EURO FTP	HC NMHC NOx NMHC+NQx CO FTP FTP EURO FTP EURO FTP EURO FTP EURO FTP * * 0.5 0.5 * * 2.5 2.5 15.5 15.5 0.01 *	HC NMHC NOx NMHC+NOx CO PM FTP EURO FTP FTP </td <td>HC NMHC NOx NMHC+NOx CO PM HC FTP EURO FTP</td>	HC NMHC NOx NMHC+NOx CO PM HC FTP EURO FTP

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 certified to the emission standards listed above for sales only to transit fleets that have been exempted by the Executive Officer, pursuant to 13 CCR Sections 1956.2(d)(7), from the requirements of 13 CCR Sections 1956.2(c)(5) and 1956.2(d)(4), respectively. Sales of the listed engine models to any transit fleet that is not exempted by the Executive Officer according to 13 CCR Sections 1956.2(c)(8) and 1956.2(c)(8) and 1956.2(c)(8) and 1956.2(d)(7), are not covered by this Executive Officer.

BE IT FURTHER RESOLVED: That the manufacturer shall submit quarterly reports of sales of all engines in this family to transit fleets in California. The reports shall be submitted to the Executive Officer within 45 days after the end of each calendar quarter and shall include engines sold during the reporting quarter. At a minimum, the reports shall provide the following information: name of the transit fleet, engine serial numbers, and any other information deemed necessary by the Executive Officer.

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 applicable requirements under the Settlement Agreement and any modifications thereof.

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

Executed at El Monte, California on this day of February 2004.

Allen Lyons, Chief Mobile Source Operations Division