California Environmental Protection Agency AIR RESOURCES BOARD	CUMMINS INC.	EXECUTIVE ORDER A-021-0357 New Engines for Diesel or Incomplete Medium-Duty Vehicles

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-02-003; 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 diesel or incomplete medium-duty vehicles with a manufacturer's gross vehicle weight rating (GVWR) from 8,501 to 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	EMISSION STANDARD CATEGORY	ON-BOARD DIAGNOSTIC COMPLIANCE
2004	4CEXA0359BAE	5.9	Diesel	Diesel	ULEV	Full

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	ENGINE MODELS / CODES (rated power in horsepower, hp)
DDI, OC, TC, CAC, PCM	ISB 325: 8347 (325 hp), 8351 (325 hp)

TWC/OC=three-way/oxidizing catalyst WU (prefix) =warm-up cat. O2S=oxygen sensor HO2S=heated O2S TBI=throttle body fuel injection MFI=multi port fuel injection SFI=sequentialMFI DDI/IDI=direct /indirect diesel injection TC/SC=turbo/super charger CAC=charge air cooler EGR=exhaust gas recirculation AIR=secondary air injection PAIR=pulsed AIR SPL=smoke puff limiter ECM/PCM=engine /powertrain control module EM=engine modification 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 1956.8), and under the "Euro III Test Procedure" (EURO) in the Settlement Agreement, including a EURO's "Not-to-Exceed" NMHC+NOx standard: (For flexible- and dual-fueled engines, the CERT values in brackets [ ] are those when tested on conventional test fuel.)

	EURO'S NOT-TO-EXCEED STD		NMHC: 0.6250		NOx: *		NMHC+NOx: 3.125				PM: 0.1250			
* = not applicable	HC		NMHC		NOx		NMHC+NOx		CO		PM		HCHO	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
(DIRECT) STD	*	*	0.5	0.5	*	*	2.5	2.5	14.4	14.4	0.10	0.10	0.050	0.050
AVERAGE STD	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FEL	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CERT	*	*	0.1	0.05	*	*	2.4	2.3	1.4	0.6	0.09	0.08	0.032	0.026

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 the listed engine models have been certified to the optional emission standards and test procedures in 13 CCR Section 1956.8(h) applicable to diesel or incomplete medium-duty vehicles with a GVWR from 8,501 to 14,000 pounds and, therefore, shall be subject to 13 CCR Section 2139(c) (in-use testing of engines certified for use in diesel or incomplete medium-duty vehicles with a 8,501-14,000 pound GVWR).

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), 1968.2 (on-board diagnostic, full or partial compliance), and 2035 et seq. (emission control warranty).

BE IT FURTHER RESOLVED: That the listed engine models are 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.

Executed at El Monte, California on this 13TH day of November 2003.

Allen Lyons, Chief
Mobile Source Operations Division