California Environmental Protection Agency AIR RESOURCES BOARD	NISSAN DIESEL MOTOR CO., LTD.	EXECUTIVE ORDER A-276-0028 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;

IT IS ORDERED AND RESOLVED: That the following 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	STANDARDS & TEST PROCEDURE	INTENDED SERVICE CLASS
2002	2NDXH04.6FAB	4.6	Diesel	Diesel	Light Heavy-Duty

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	ENGINE MODELS / CODES (rated power in horsepower, hp)
OC, DDI, TC, CAC, PCM	FD46TA-U1 / FD46TA-U1 MT (175 hp) FD46TA-U1 / FD46TA-U1 AT (175 hp) FD46TA-U2 / FD46TA-U2 MT (145 hp) FD46TA-U2 / FD46TA-U2 AT (145 hp)
ABBREVIATIONS: OC=oxidizing catalyst TWC=three-way catalyst O2S=oxygen sensor HO2S=heated O2S DDI=direct diesel injection IDI=indirect diesel injection TC/SC=turbo/super charger CAC=charge air cooler SPL=smoke puff limiter PCM=powertrain control module ECM=engine control module EM=engine modification 2 (prefix)=parallel 2(suffix)=in series	

The following are the exhaust emission standards, or family emission limit(s) (FEL) as applicable, and certification levels for this engine family for hydrocarbons (HC) or non-methane hydrocarbons (NMHC), oxides of nitrogen (NOx), or NMHC+NOx, carbon monoxide (CO), particulate matter (PM), and formaldehyde (HCHO) in grams per brake horsepower-hour (g/bhp-hr) (Title 13, California Code of Regulations, (13 CCR) Section 1956.1 (urban bus) or 1956.8 (other than urban bus)): (The emission standards and certification levels for default operations permitted under 13 CCR Section 1956.1 or 1956.8 are in parentheses.)

* = not applicable [g/bhp-hr]	HC	NMHC	NOx	NMHC+NOx	CO	PM	HCHO
(DIRECT) STANDARD	1.3	*	4.0	*	15.5	0.10	*
CORPORATE AVERAGE STANDARD	*	*	*	*	*	*	*
FAMILY EMISSION LIMIT (FEL)	*	*	*	*	*	*	*
CERTIFICATION LEVEL	1.0	*	3.8	*	4.3	0.09	*

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 labeling), and 2035 et seq. (emission control system warranty).

Engines certified under this Executive Order shall 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 21st day of November 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division