State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-98
Relating to Certification of New Heavy-Duty Engines and Vehicles

DETROIT DIESEL CORPORATION

Pursuant to the authority vested in the Air Resources Board at Sections 43100, 43101, and 43102 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9; and

Pursuant to the December 15, 1998 Settlement Agreement between the Air Resources Board and Detroit Diesel Corporation and any modifications to the Settlement Agreement;

IT IS ORDERED AND RESOLVED: That the following engines and emission control systems produced by the manufacturer are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Model Year: 2001

Fuel Type: Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG)

Engine Family	Displacement Liters	Displacement Cubic Inches	Exhaust Emission Control Systems and Special Features
1DDXH12.7FGG	12.7	780	Turbocharger Charge Air Cooler Engine Control Module Gaseous Fuel Mixer Throttle Body Gaseous Fuel Injection Oxygen Sensor

Engine models and codes are listed on the attachments.

BE IT ORDERED AND RESOLVED: That the following are the certification exhaust emission standards (Title 13, California Code of Regulations, Section 1956.8) and certification emission levels for this engine family in grams per brake horsepower-hour (g/bhp-hr) under the Federal Test Procedure ("FTP"):

	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulate Matter
Standards	1.2	15.5	2.5	0.05
Certification	0.8	2.0	2.0	0.02

BE IT FURTHER RESOLVED: That the listed engine models are certified to the optional lower-emission NOx standard pursuant to Title 13, California Code of Regulations, Section 1956.8(a)(1).

BE IT FURTHER RESOLVED: That the listed engine models are certified for use in urban buses.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2035 *et seq.*).

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

1. The Settlement Agreement is in effect.
2. The manufacturer is in compliance with all applicable certification requirements of the Settlement Agreement.

Engines certified under this Executive Order must conform to all applicable California emission regulations and to all applicable terms and conditions of the Settlement Agreement.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 16th day of January 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: **Detroit Diesel Corpertation**

Engine category: **On-highway HDDE**

EPA Engine Family: **1DDXH12.7FGG**

Mfr Family Name: **SERIES 60G-2.5 NOX**

Process Code: **New Submission**

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
973	CNG	330@2100		116.6	1400@1200		103.0	MIX, ECM, TC, CAC, TBI
974	LNG	330@2100		116.6	1400@1200		103.0	O_2S
976	CNG	400@2100		128.1	1450@1200		98.5	
978	LNG	400@2100		128.1	1450@1200		98.5	
1370	CNG - Man. Tran	400@2100		128.1	1450@1200		98.5	
1371	LNG - Man. Tran	400@2100		128.1	1450@1200		98.5	

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