State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-73-1

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 1999 model-year Detroit Diesel Corporation diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle-weight-rating (GVWR) over 14,000 pounds:

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
XDDXH08.5FJF (Series 50G)	8.5	519	Turbocharger Charge Air Cooler Electronic Control Module

The engine models and codes are listed on attachments.

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

	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulate Matter
"FTP"	1.2	15.5	4.0	0.05

BE IT FURTHER RESOLVED: That the following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulate Matter
"FTP"	0.6	2.4	2.2	0.01

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 listed engine models are certified for use in urban buses.

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. Detroit Diesel Corporation is in compliance with all applicable certification requirements of the Settlement Agreement.
3. By October 8, 1999, the Settlement Agreement is modified in accordance with the letter dated December 31, 1998 from Bruce Fergusson of the United States Environmental Protection Agency to Jonathan Martel representing Detroit Diesel Corporation. Engines produced on or before October 8, 1999 are covered by this Executive Order if Detroit Diesel Corporation is in compliance with all other terms and conditions of this Executive Order, regardless of whether the condition stated in the previous sentence is ultimately met.

Engines produced on or after October 9, 1999, are not covered by this Executive Order unless the Settlement Agreement is modified as specified in Condition 3.

Executive Order A-290-73 dated January 21, 1999 is hereby superseded by Executive Order A-290-73-1.

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 27th day of August 1999.

R. B. Summerfield, Chief
Mobile Source Operations Division

12/4/98

LARGE ENGINE MODEL SUMMARY

Manufacturer: Detroit Diesel Corporation

Process Code: New Submission

EPA Engine Family: XDDXH08.5EJF

Manufacturer Family Name: Series 50G

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
920	Series 50G ↓	275@2100		94.0	890@1200		66.5	ECM, TC, CAC

EO: A-290-731