State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-240
Relating to Certification of New Heavy-Duty Engines and Vehicles

CUMMINS ENGINE COMPANY, INC.

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 Cummins Engine Company, Inc. and any modifications to the Settlement Agreement;

IT IS ORDERED AND RESOLVED: That the following 1999 model-year Cummins Engine Company, Inc. diesel-derived 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 or Liquefied Natural Gas (CNG or LNG)

Engine Family	Displacement Liters	Displacement Cubic Inches	Exhaust Emission Control Systems and Special Features
XCEXH0505CAJ (553F)	8.3	505	Turbocharger Charge Air Cooler Engine Control Module Oxidation Catalytic Converter Heated Oxygen Sensor

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	2.5	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"	0.2	0.6	1.7	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 to the optional lower-emission NOx standards 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 the aforementioned engine family has been conditionally certified subject to the following conditions:

1. The Settlement Agreement is in effect.
2. The Settlement Agreement has not become null and void under Settlement Agreement Paragraph 165.
3. Cummins Engine Company is in compliance with all applicable certification requirements of the Settlement Agreement.
4. By April 22, 1999, the Settlement Agreement is modified in accordance with the letter dated January 5, 1999 from Bruce Fergusson of the United States Environmental Protection Agency to John Rubino of Cummins Engine Company. Engines produced on or before April 22, 1999 are covered by this Executive Order if Cummins Engine Company 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 April 22, 1999 are not covered by this Executive Order unless the Settlement Agreement is modified as specified in Condition 4.

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 26th day of January 1999.

R. B. Summerfield, Chief
Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

10/22/98

Manufacturer: **Cummins Engine Company** Process Code: **New Submission**

EPA Engine Family: **XCEXH0505CAJ** Manufacturer Family Name: **553F**

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
CPL 2290	C8.3-275G							
FR 90304		275 @ 2400	na	na	750 @ 1400	na	na	TC CAC ECM OC HO2S
CPL 2466	C8.3-250G							
FR 90270		250 @ 2400	na	na	750 @ 1400	na	na	TC CAC ECM OC HO2S
FR 90271		250 @ 2400	na	na	660 @ 1400	na	na	TC CAC ECM OC HO2S

EO A-21-240