State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-287 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 2000 model-year Cummins Engine Company, Inc. 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)

Displacement		Exhaust Emission Control
Engine Family	Liters Cubic Inches	Systems and Special Features
YCEXH0505CBG	8,3 505	Turbocharger
(553B)		Charge Air Cooler
(0002)		Powertrain Control Module
		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	4.0	0.10

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

"FTP"	Non-Methane <u>Hydrocarbons</u> 1.1	Carbon Monoxide 7.1	Nitrogen Oxides 2.2	Particulate Matter 0.07
"FTP"	1.1	7.1	<i>2.2</i>	0.07

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.

 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 302 day of December 1999.

R. B. Summerfield, Chief

Mobile Source Operations Division

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Engine Model Semmary Form

Cummins Engine Company Manufacturer:

On-highway HDDE Engine category:

YCEXH0505CBG EPA Engine Family.

553B Mfr Family Name: **New Submission** Process Code:

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	NA TC, CKHD 25, PCM	TC, CACHD2S, PCM	NA TC, CAC, HO2S, PCM
8.Fuel Rate: (lbs/hr)@peak tor	NA	A A	NA
7.Fuel Rate: mm/stroke@peak torque	\$	AN AN	
6.Torque @ RPM (SEA Gross)	750 @ 1400	750 @ 1400	NA 660 @ 1400
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	NA	NA	K
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only)	NA	NA	NA
3.BHP@RPM (SAE Gross)	275 @ 2400	250 @ 2400	250 @ 2400
1.Engine Code 2.Engine Model	C8.3-275G	C8.3-250G	C8.3-250G
1.Engine Code	2289;FR90303	2464;FR90091	2464;FR90175