State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-310 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 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)

	Displacement		Exhaust Emission Control	
Engine Family	<u>Liters</u>	Cubic Inches	Systems and Special Features	
1CEXH0359BBJ	5.9	359	Turbocharger	
			Charge Air Cooler	
			Powertrain Control Module	
			Throttle Body Gaseous Fuel Injection	
			Heated 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 <u>Ox</u> ides	Particulate Matter
Standards	1.2	15.5	4.0	0.10
Certification	0.1	7.2	2.6	0.08

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 _____ day of February 2001.

R. B. Summerfield, Chief

Mobile Source Operations Division

Engine Model Pommary Form

On-highway HDDE	
Engine category:	

Cummins Engine Company

Manufacturer:

EPA Engine Family. 1CEXH0359BBJ Mfr Family Name: 493C

Process Code: New Submission

8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930	NA TE AL HZOSPCM, GOGELL	(1 H2O\$PCM, 06 [NA V V H2OSPCM, OC.
	A	NA	N
7.Fuel Rate: mm/stroke@peak torque	NA	N	N
6.Torque @ RPM (SEA Gross)	500@1600	420@1600	375@1600
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	NA	NA	N
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	M	NA	N
3.BHP@RPM (SAE Gross)	230@2800	195@2800	150@2500
I.Engine Code 2.Engine Model	5 B5.9-230G	B5.9-195G	B5.9-150G
1.Engine Code	2974;FR90295	2972;FR90007	2969;FR90201