State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-282 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: Diesel

Engine Family YCEXH0359BAI (413O)	5.9 359	Exhaust Emission Control Systems and Special Features Turbocharger Charge Air Cooler Powertrain Control Module Oxidation Catalytic Converter
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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):

"FTP"	Total Hydrocarbons 1.3	Carbon Monoxide 15.5	Nitrogen Oxides 4.0	Particulate Matter 0.10
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BE IT FURTHER RESOLVED: That pursuant to the Settlement Agreement and any modifications thereof, the aforementioned engine family is also subject to the following emission standards, in grams per brake horsepower-hour, under the EURO III tests in the Settlement Agreement, and a "Not-to-Exceed" nitrogen oxides emission standard of 5.0 grams per brake horsepower-hour:

"EURO III"	Total <u>Hydrocarbons</u> 1.3	<u>Carbon Monoxide</u> 15.5	Nitrogen Oxides 4.0	Particulate Matter 0.10
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BE IT FURTHER RESOLVED: That the following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

"FTP" "EURO III"	Total Hydrocarbons 0.1 0.0	Carbon Monoxide 0.6 0.1	Nitrogen Oxides 3.4 3.7	Particulate Matter 0.07 0.08
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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:

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

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Mobile Source Operations Division

Engine Model Sprimary Form

Manufacturer: Cummins Engine Company, inc.

Engine category: On-highway HDDE

EPA Engine Family: YCEXH0359BAI

Mfr Family Name: 4030

Process Code: New Submission

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	PCM, TC, CAC,	PCM, PE, CAC,	PCM, PE, CAC,	PCM, PG, CAC,	30
8.Fuel Rate: (lbs/hr)@peak torque	55.2	48.3	48.2	44.8	
7.Fuel Rate: mm/stroke@peak torque	102	102	102	83	agent of the second of the sec
6.Torque @ RPM (SEA Gross)	520@1600	520@1400 520@1400	520@1400 520@1400	420@1400	
5. Fuel Rate: HP (lbs/hr) @ peak HP		76.0		0 20	0.00
ω.	(ror diesel only)	94	06	0	2
3.BHP@R PM	(SAE Gross)	215@2500	210@2500	193@2500	175@2500
	2.Engine Model	ISB 225	ISB 210	ISB 190	ISB 185
	1.Engine Code 2	2595;FR90550	2595;FR90551	2596;FR90552	2597;FR90553