State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-294 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: Diesel

	Disp	lacement	Exhaust Emission Control
Engine Family	Liters	Cubic Inches	Systems and Special Features
1CEXH0359BAV	5.9	359	Turbocharger
			Charge Air Cooler
			Powertrain Control Module
			Direct Diesel Injection

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"):

	Total	Carbon	Nitrogen	Particulate
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	Matter
Standards	1.3	15.5	4.0	0.10
Certification	0.1	1.0	3.7	0.10

CUMMINS ENGINE COMPANY, INC.

BE IT FURTHER RESOLVED: That pursuant to the Settlement Agreement and any modifications thereof, the aforementioned engine family is also subject to emission standards under the EURO III tests in the Settlement Agreement, including a "Not-to-Exceed" nitrogen oxides emission standard of 5.0 g/bhp-hr. The following are the emission standards and certification levels, in g/bhp-hr, under the EURO III tests:

	Total	Carbon	Nitrogen	Particulate
	<u>Hydrocarbons</u>	<u>Monoxide</u>	Oxides	Matter
Standards	1.3	15.5	4.0	0.10
Certification	0.03	0.4	3.5	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.
- 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 $22 \frac{nd}{d}$ day of December 2000.

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R. B. Summerfield, Chief Mobile Source Operations Division Engine Model Sprang Form

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Manufacturer: Cummins Engine Company, Inc.

Engine category: On-highway HDDE

EPA Engine Family: 1CEXH0359BAV

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Mfr Family Name: 403V Process Code: New Submission

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8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	DD, PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	
Emission ce Per S	SM, TC	Х, TC	JM, TC	ЗМ, ТС	SM, TC	SM, TC	ЗМ, TC	ЗМ, TC	:M, TC	
9.E Devi	کر po	/ P	P P	¥	P	Ă			a B B	
Rate: ak torqu	69 🗘		4	+	.0	~	6	~		
8.Fuel Rate: 'hr)@peak to	9	69	64	64	56	52	56	52	47	
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7.Fuel Rate: mm/stroke@peak torque	128	128	119	119	104	110	104	10	87	
7.Fuel Rate: nm/stroke@pe torque	1	1	Ļ	-	1	F	٢	1	Ű	
6.Torque @ RPM (SEA Gross)	660@1600	660@1600	605@1600	605@1600	520@1600	520@1400	520@1600	520@1400	420@1600	
3. Torque (SEA	660	0099	605(605(520	520(520@	520	420@	
5.Fuel Rate: bs/hr) @ peak HI (for diesels only)	96	87	87	81	81	78	74	73	68	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)										
4.Fuel Rate: //stroke @ peak (for diesel only)	124	107	107	100	100	96	91	87	81	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)										
	0	0	0	Q	0	o	0	0	0	
3.BHP@RPM (SAE Gross)	263@2300	237@2400	237@2400	219@2400	219@2400	217@2400	195@2400	193@2500	175@2500	
3.BI (S∕	263	237	237	219	219	217	195	193	175	
odel										
2.Engine Model	ISB 260	ISB 245	ISB 240	ISB 225	SB 225	ISB 210	ISB 205	SB 190	ISB 185	
2.En	4	~	Y	2	5	2	2	2	2	
Code	1657	658	659	1660	1661	1662	663	1664	1665	Second Hill Revealed
1.Engine Code	2683;FR90657	2684;FR90658	2684;FR90659	2685;FR90660	2685;FR90661	2685;FR90662	2686;FR90663	2686;FR90664	2687;FR90665	
<u>т</u>	2685	2684	2684	2685	2685	2685	2686	2686	2687	

ATTACHMENTS

A-21-294

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