## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-21-301 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	<u>Liters</u>	<b>Cubic Inches</b>	Systems and Special Features			
1CEXH0912XAE	14.9	912	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 <u>Hydrocarbons</u>	Carbon Monoxide	Nitrogen Oxides	Particulate Matter
Standards	1.3	15.5	4.0	0.10
Certification	0.2	0.7	3.8	0.08

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 7.0 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>	<u>Oxides</u>	<u>Matter</u>		
Standards	1.3	15.5	6.0	0.10		
Certification	0.1	0.3	5.8	0.04		

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 nd day of December 2000.

R. B. Summerfield, Chief

Mobile Source Operations Division

## Engine Model Summary Form

Manufacturer: Cummins Engine Company, Inc.

Engine category: On-highway HDDE EPA Engine Family: 1CEXH0912XAE

Mfr Family Name: 103E

Process Code: New Submission

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	FCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC	PCM, TC, CAC				
8.Fuel Rate: (lbs/hr)@peak torque	155 D	155	155	141	141	141	141	155	155	141	141	147
7.Fuel Rate: mm/stroke@peak torque	383	383	383	349	349	349	349	383	383	349	349	349
6.Torque @ RPM (SEA Gross)	2050@1200	2050@1200	2050@1200	1850@1200	1850@1200	1850@1200	1850@1200	2050@1200	2050@1200	1850@1200	1850@1200	1850@1200
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	220	220	220	204	204	215	204	220	220	204	215	204
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	.363	363	363	337	337	355	337	363	363	337	355	337
3.BHP@RPM (SAE Gross)	625@1800	625@1800	625@1800	590@1800	590@1800	610@1800	590@1800	625@1800	625@1800	590@1800	610@1800	590@1800
2.Engine Model	Signature 600	Signature 600	Signature 600	Signature 565	Signature 565	009 XSI	ISX 565	Signature 600	Signature 600	Signature 565	009 XSI	ISX 565
1.Engine Code	2834;FR10149	2834;FR10314	2834;FR10296	2834;FR10151	2834;FR10315	2834;FR10311	2834;FR10297	2835;FR10149	2835;FR10296	2835;FR10151	2835;FR10311	2835;FR10297

ATTACHMENT