## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-21-205

Relating to Certification of New Heavy-Duty Motor Vehicle Engines
CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1998 model 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 or Liquid Natural Gas (CNG or LNG)

Fuel Type: Comp	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Exhaust Emission Control		
Engine Family	<u>Liters</u>	(Cubic Inches)	Systems and Special Features	
WCEXH0505CAG (553B)	8.3	(505)	Charge Air Cooler Turbocharger Powertrain Control Module Heated Oxygen Sensor	

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake-horsepower-hour:

Non-Methane Hydrocarbons	Carbon M <u>onoxide</u>	Nitrogen <u>Oxides</u>	<u>Particulates</u>
HAGLOCALDONA	<del></del>	4.0	0.10
1.2	15.5	7,0	

The following are the certification exhaust emission values for this engine family in grams per brake-horsepower-hour:

Non-Methane	Carbon <u>Monoxide</u>	Nitrogen Oxides	<u>Particulates</u>
Hydrocarbons	7.1	2.2	0.07
1.1	,		1 - 4ho

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, Section 2035 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this

of February 1998.

R. B. Summerfield, Chief

Mobile Source Operations Division

## LARGE ENGINE MOL L SUMMARY

Manufacturer: Cummins Engine Company

EPA Engine Family: WCEXH0505CAG

Manufacturer Family Name:

Process Code: New Submission.

553B

8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930 TC, CAC H2OS, PCM 1, ', E E g 7.Fuel Rate: mm/stroke@peak torque ā 힏 Бa 6.Torque @ RPM (SEA Gross) 660 @ 1400 750@1400 750@ 1400 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 고 교 па 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) na na na 3.BHP@RPM (SAE Gross) 250 @ 2400 250 @ 2400 275@ 2400 2.Engine Model C8.3-275G 1.Engine Code FR 90175 CPL 2464 FR 90303 FR 90091 CPL 2289