## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-13-119-2

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

## CATERPILLAR, 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 1998 model-year Caterpillar, Inc. diesel-cycle 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	Engine <u>Liters</u>	Displacement (Cubic Inches)	Exhaust Emission Control Systems and Special Features
WCPXH0442HSK	7.1	(442)	Turbocharger Charge Air Cooler Engine Control Module

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:

Total	Carbon	Nitrogen	<u>Particulates</u>
Hydrocarbons	<u>Monoxide</u>	<u>Oxides</u>	
1.3	15.5	4.0	0.10

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

Total	Carbon	Nitrogen	<u>Particulates</u>
Hydrocarbons	<u>Monoxide</u>	<u>Oxides</u>	
0.9	1.4	3.9	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, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

- 1. Any engine which employs a defeat device shall not be covered by this Executive Order.
- 2. Within 150 days following the issuance of Executive Order A-13-119, the manufacturer must show cause, to the satisfaction of the Executive Officer or his designee, that the strategy for fuel injection timing, including timing during the fuel economy mode, is not a defeat device.

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.

R. B. Summerfield, Chief

\_\_ day of March 1998.

Mobile Source Operations Division

EO: A-13-119-2

Manufacturer: CATERPILLARING.

EPA Engine Family: WCPXH0442HSK

mm/stroke @ peak HP (for diesel only) 4.Fuel Rate:

Manufacturer Family Name: 5.Fuel Rate: (lbs/hr) @ peak HP (for dlesels only)

6.Torque @ RPM (SEA Gross)

Process Code: New Submission

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mm/stroke@peak 7.Fuel Rate: lorque

6.Fuel Rate: 9.Emission Control (Ibs/hr)@peak torque Device Per SAE J1930

EM, DICAC, ECM, EM, DICAC, ECM, EM, DICAC, ECM EM, DICAG, ECM EM, DICAG, ECM EM, DICAG, ECM EM, DICAG, ECM EM, DICAC, ECM. EM, DICPC, ECM may change 71.8 59.2 59.6 76.8 77.6 71.8 these fuel rates 158 160 148 160 148 148 122 123 ion engine avgs. 800 @ 1440 800 @ 1440 860 @ 1440 660 @ 1440 660 @ 1440 605 @ 1440 860 @ 1440 860 @ 1440 800 @ 1440 Due to product-123.1 79.9 104.7 104.7 95.1 86.1 95.1 86.1 nominal values. 129 126 116 108 152 141 141 3.BHP@RPM (SAE Gross) 300 @ 2200 275 @ 2200 250 @ 2200 250 @ 2200 fuel rates are 210 @ 2200 275 @ 2200 330 @ 2400 300 @ 2200 230 @ 2200 and Peak Torque 2.Engine Model 3126 3126 3126 3126 3126 3126 3126 3126 3126 Note: Peak HP 1 - Cert. Engine 1.Engine Code n S ဖ Ø 6

48.0

520 @ 1440

210 @ 2200

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