

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-27-85

Relating to Certification of New Heavy-Duty Engines and Vehicles

MACK TRUCKS, 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;

IT IS ORDERED AND RESOLVED: That the following engine and emission control system 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: Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG)

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems and Special Features</u>
	<u>Liters</u>	<u>Cubic Inches</u>	
1MKXH11.9G55 (Family 55)	11.9	728	Turbocharger Charge Air Cooler Electronic Control Module Oxygen Sensor Throttle Body Fuel Injection

Engine models and codes are listed on attachments.

BE IT ORDERED AND RESOLVED: That the following are the certification exhaust emission standards or family emission limits (FELs), as applicable, (Title 13, California Code of Regulations, Section 1956.8) and certification exhaust emission values for this engine family in grams per brake horsepower-hour under the Federal Test Procedure ("FTP"):

	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
Standard	1.2	15.5	4.0	0.10
FEL	N/A	N/A	2.5	0.05
Certification	0.3	1.3	2.3	0.03

BE IT FURTHER RESOLVED: That the above-described certification is subject to the following terms, limitations and conditions:

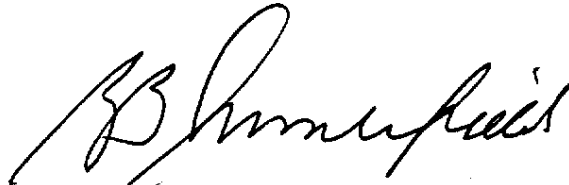
The above family emission limit(s) (FELs) is an emission level declared by the manufacturer to serve for the averaging, banking and trading program in lieu of an emission standard for certification. It represents the emission standard applicable to this engine family that must be applied when determining compliance of any model within this engine family pursuant to 13 CCR Section 1956.8(b).

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.).

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 8<sup>th</sup> day of January 2001.



R. B. Summerfield, Chief  
Mobile Source Operations Division

ATTACHMENT

Engine Model Summary Form

Manufacturer: Mack Trucks, Inc.

Engine category: On-highway HDDE

EPA Engine Family: 1MKXH11.9G55

Mr. Family Name: FAMILY 55

Process Code: New Submission

A-27-85

1. Engine Code	2. Engine Model	3. BHP @ RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke @ peak torque	8. Fuel Rate: (lbs/hr) @ peak torque	9. Emission Control Per SAE J1930
N/A	E7G-350	350 @ 1800	N/A	121	1260 @ 1250	N/A	100	T <sub>BF</sub> , EM, EC, TAA, O <sub>2</sub> S
N/A	E7G-325	325 @ 1950	N/A	113	1180 @ 1250	N/A	95	"