State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-1071

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

GENERAL MOTORS CORPORATION

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: 2002

Fuel Type: Diesel

| Engine Family | • | lacement <u>Cubic Inches</u> | Exhaust Emission Control Systems and Special Features |
|---------------|-----|---------------------------------|--|
| 2GMXH06.5521 | 6.5 | 395 | Turbocharger Powertrain Control Module Oxidation Catalytic Converter Indirect Fuel Injection |

Engine models and codes are listed on 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 exhaust emission values for this engine family in grams per brake horsepower-hour under the Federal Test Procedure ("FTP"):

| | Total <u>Hydrocarbons</u> | Carbon <u>Monoxide</u> | Nitrogen Oxides | Particulate <u>Matter</u> |
|---------------|------------------------------|---------------------------|--------------------|------------------------------|
| Standard | 1.3 | 15.5 | 4.0 | 0.10 |
| Certification | 0.1 | 1,2 | 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.).

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 22nd day of February 2001.

R. B. Summerfield, Chief

Mobile Source Operations Division

Engine Model Sur⊖ary Form

Manufacturer: General Motors Corporation

Engine category: On-highway HDDE EPA Engine Family. 2GMXH06.5521

Mfr Family Name: N/A

Process Code: New Submission

| , | 1 | | | | | | | | 10,00 | 41.5 | | . 39.4° - 18.4° | | | |
|---|---------------|---------------|---------------|---------------|-----------|--|--|--|-------|------|----------|--------------------|--------------|----|-----|
| 8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930 | OC,TC,PCM,IFI | OC,TC,PCM,IFI | OC,TC,PCM,IFI | OC,TC,PCM,IFI | | | | | | Eo | #. (A | A-Haci | 6-10 imen | ワ/ | |
| 8.Fuel Rate: (lbs/hr)@peak torque | 50.5 | 58.0 | 54.3 | 58.0 | | | | | | | | | | | |
| 7.Fuel Rate: mm/stroke@peak torque | 6:99 | 76.9 | 72.9 | 76.9 | | | | | | | | | | | |
| 6.Torque @ RPM (SEA Gross) | 385@1800* | 430@1800* | 420@1800* | 430@1800* | * SAE NET | | | Supplemental to the control of the c | | | | | | | |
| 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) | 95.8 | 95.1 | 95.1 | 95.9 | | And the second s | | SERVER TO THE SERVER SE | | | | | | | |
| 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) | 63.6 | 63.1 | 63.1 | 63.6 | | | | er () (1994), er | | | | | | | |
| 3.BHP@RPM (SAE Gross) | 190@3400* | 195@3400* | 195@3400* | 195@3400* | * SAE NET | | | A CALLANDA DE LA TATA DEL TATA DE LA TATA DE | | | | | | | |
| 2.Engine Model | 1.65 | 797 | | L65 | | | | | | | | | | | *** |
| Engine Code | 2 | | 4 | 5 | | | | | | | 22 | | | | |