State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-878

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

GENERAL MOTORS CORPORATION

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 1999 model-year General Motors Corporation Otto-cycle engines are certified for use in heavy-duty vehicles with a manufacturer's gross vehicle weight rating (GVWR) greater than 14,000 pounds:

Fuel Type: Gasoline

Engine Family	Engine D Liters (C	isplacement ubic Inches)	Exhaust Emission Control Systems and Special Features
XGMXH05.7582	5.7	(350)	Dual Three-Way Catalytic Converters Sequential Multiport Fuel Injection Exhaust Gas Recirculation Dual Heated Oxygen Sensors (2)
XGMXH07.4501	7.4	(454)	Dual Three-Way Catalytic Converters Sequential Multiport Fuel Injection Exhaust Gas Recirculation Dual Heated Oxygen Sensors (2)

Engine models and codes are listed on attachments.

The certification exhaust emission standards for these engine families in grams per brake horsepower-hour are:

Non-Methane Hydrocarbons	<u>Carbon Monoxide</u>	Nitrogen Oxides
1.9	37.1	4.0

The certification exhaust emission values for these engine families in grams per brake horsepower-hour are:

Engine Family XGMXH05.7582 XGMXH07.4501	Non-Methane <u>Hydrocarbon</u> 0.2 0.4	Carbon <u>Monoxide</u> 3.8 11.2	Nitrogen Oxides 1.7 3.0

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 listed engine models comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

Vehicles 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 April 1998.

R. B. Summerfield, Chief

Mobile Source Operations Division

1999 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY OTTO-STANDARD ENGINES

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: XGMXH05.7582							
DISPLACEMENT: 5.7L				50 CUBIC INCHES			
ALL ENG CODE	S IN ENG FAMILY:	CA <u>X</u> 49S <u>X</u> 50S		ALVES/CYLINDER:	•		
		FLEX-FUEL DUAL-F		_ GASOLINE <u>X</u> C	NG		
LNG LPG M85 M100 OTHER (SPECIFY)							
MAXIMUM RATE	ED POWER: 255 H	P @ 4600 RPM	E	NGINE CONFIGURA	ATION: V8		
EXHAUST ECS ((E.G., OC, TWC, MF	FI, IFI, TC, CAC):		, SFI, EGR, 2HO2S(
			(USE ABBREVIA	TIONS PER SAE J1	930 SEP91)		
ENGINE MODEL (ENG CODE) 31 (12)	RATED HP @ RPM 250 @ 4000	IGNITION SYSTEM OR ECM/PCM P/N 16258835/ 16263425PD-OPER 16216044,	PART OF LOWER INTAKE MANIFOLD ASM	EGR VALVE	CATALYTIC CONVERTER P/N 25160620: 2 USED		
L31 (52)	235 @ 4000	16249491-ENG 16249385/ 16258745PC-OPER 16216037-ENG, 16258835/ 16263425PD-OPER 16249457, 16267284-ENG	17097280				

SUED: 02-24-98

REV. NO.: