State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-619
Relating to Certification of New Motor Vehicles

GENERAL MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1994 model-year General Motors Corporation exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Gasoline

Engine Family: R1G2.3VHG2EA Displacement: 2.3 Liters (139 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Three Way Catalytic Converter
Oxygen Sensor
Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The TLEV certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane Organic Gas	Carbon Monoxide	Nitrogen Oxides	Formaldehyde
50,000	0.125	3.4	0.4	0.015
100,000	0.156	4.2	0.6	0.018

BE IT FURTHER RESOLVED: That on January 14, 1993, the Air Resources Board approved the adoption of a reactivity adjustment factor (RAF) of 0.98 for 1993 through 1997 model-year TLEVs operated on gasoline meeting the specifications of section 9.a.1.(ii) of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles." A 0.98 RAF shall be conditionally applied to the listed engine family for all purposes related to the engine family, based on the assumption that the adoption of the 0.98 RAF will become effective by December 31, 1993. If the adoption of the 0.98 RAF does not become effective by December 31, 1993, the RAF of the listed vehicle models shall be deemed to be 1.000 for all purposes relating to this engine family.

Reactivity Adjustment Factor for NMOG Mass Emission: 0.98

The certification exhaust emission values set forth for non-methane organic gas (NMOG) reflect application of a 0.98 RAF for 1994 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

Miles	Non-Methane Organic Gas	Carbon Monoxide	Nitrogen Oxides	Formaldehyde
50,000	0.072	1.1	0.1	0.002
100,000	0.072	1.1	0.1	0.002

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average NMOG exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That under the submitted compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That on January 14, 1993, the Air Resources Board approved the repeal of the currently-effective requirement that each manufacturer certify a minimum of 80 percent of its projected sales of 1994 model-year California-certified passenger cars and light-duty trucks to the phase-in standards for non-methane hydrocarbons (NMHC), or the more stringent standards in section 1960.1(g)(2) of Title 13, California Code of Regulations. If the repeal of such requirement does not become effective by December 31, 1993, the manufacturer shall submit a plan for compliance with the requirement; passenger cars and light-duty trucks not meeting such phase-in or more stringent standards shall be certified only to the extent allowed under the requirement.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2290).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves 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 TLEV hydrocarbon exhaust emission standard to which the listed vehicles are certified is at least twice as stringent as otherwise applicable to gasoline vehicles of the same year and class, and the listed vehicles therefore meet the definition of "low-emission motor vehicle" set forth in Health and Safety Code Sections 39037.05 and 43800.

BE IT FURTHER RESOLVED: That the listed vehicle models shall be clearly labeled as "low-emission motor vehicles" as defined in Health and Safety Code Sections 39037.05 and 43800, and such labeling shall meet the requirements of Health and Safety Code Section 43802(a) at the time of sale.

BE IT FURTHER RESOLVED: That the listed vehicle models are certified as TLEVs at the request of General Motors Corporation based on the assumption that the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles"

will be amended to allow the certification of 1994 model TLEVs on a phase 2 certification gasoline having specifications substantially similar to the specifications of the gasoline used to certify the listed vehicle models. The Air Resources Board approved such amendments at a hearing conducted August 14, 1992. The certification of the listed vehicle models as TLEVs is CONDITIONAL on such amendments becoming effective by August 1, 1993. If such amendments do not become effective by August 1, 1993, the listed vehicle models shall bedeemed certified to the phase-in standards for passenger cars as set forth in section 1960.1 (f)(1) of Title 13, California Code of Regulations (For 50,000 miles: 0.25 g/mi non-methane hydrocarbons or NMHC, 3.4 g/mi carbon monoxide or CO, and 0.4 g/mi oxides of nitrogen. For 100,000 miles: 0.31 g/mi NMHC and 4.2 g/mi CO.)

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 attachment.

Executed at El Monte, California this 10th day of June, 1993.

Norman Kaiser for

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

A-6-619

(FOR CARB USE ONLY)

16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY R1G2.3VHG2EA

EVAPORATIVE FAMILY R1G1046AYM0K

CARLINES TO BE COVERED:

CARLINE NAME	CARLINE CODE
ACHIEVA	29010
GRAND AM	33025

ISSUED: 06-03-93
(ML-RP340)

REVISED:

A-6-619

OLDSMOBILE MODEL IDENTIFICATION

MODEL	NAME	CAR LINE	CODE
3AG69	CUTLASS CIERA S SEDAN	CUTLASS CIERA	29015
3AM69	CUTLASS CIERA SL SEDAN		29015
3AJ35	CUTLASS CRUISER S STATION WAGON	CUTLASS CRUISER	29020
3AM35	CUTLASS CRUISER SL STATION WAGON		29020
3CW69	NINETY EIGHT REGENCY ELITE SEDAN	NINETY EIGHT	29035
3CX69	NINETY EIGHT REGENCY SEDAN		29035
3HN69	EIGHTY EIGHT ROYALE SEDAN	EIGHTY EIGHT	29025
3HY69	EIGHTY EIGHT ROYALE LS SEDAN		29025
3NF37	ACHIEVA SC COUPE	ACHIEVA	29010
3NF69	ACHIEVA SL SEDAN		29010
3NL37	ACHIEVA COUPE		29010
3NL69	ACHIEVA SEDAN		29010
3WH47	CUTLASS SUPREME S COUPE	CUTLASS SUPREME	29055
3WH69	CUTLASS SUPREME S SEDAN		29055
3WT67	CUTLASS SUPREME CONVERTIBLE		29055

A-6-619

PONTIAC MODEL IDENTIFICATION

MODEL	NAME	CAR LINE	CODE
2FS87	FIREBIRD COUPE	FIREBIRD/FORMULA	33020
2FV87	FIREBIRD FORMULA		33020
2FS67	FIREBIRD CONVERTIBLE		33020
2FV67	FIREBIRD FORMULA CONVERTIBLE		33020
2HX69	BONNEVILLE SE SEDAN	BONNEVILLE	33045
2HY69	BONNEVILLE SSEI SEDAN		33045
2HZ69	BONNEVILLE SSE SEDAN		33045
2JB37	SUNBIRD LE COUPE	SUNBIRD	33060
2JB69	SUNBIRD LE SEDAN		33060
2JL37	SUNBIRD SE COUPE		33060
2JB67	SUNBIRD LE CONVERTIBLE		33060
2NE37	GRAND AM SE COUPE	GRAND AM	33025
2NE69	GRAND AM SE SEDAN		33025
2NW37	GRAND AM GT COUPE		33025
2NW69	GRAND AM GT SEDAN		33025
2WJ19	GRAND PRIX SE SEDAN	GRAND PRIX	33055
2WJ37	GRAND PRIX SE COUPE		33055
2WM19	GRAND PRIX SEDAN		33055
2WM37	GRAND PRIX COUPE		33055

(FOR CARB USE ONLY)

E.O. #A-6-619

1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: R1G2.3VHG2EA

PASSENGER CARS X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES___

FUEL TYPE: PHASE 2 STANDARDS TYPE: TLEV VEHICLE TYPE: NA

ENGINE CONFIG: I4 LITER (CID): 2.3 (139) EVAP FAMILY: R1G1046AYMOK

ENGINE: FRONT X MID___ REAR___ DRIVE: FWD X RWD___ 4WD-FT___ 4WD-PT___

EMISSION CONTROL SYSTEM & SPECIAL FEATURES: TWC, O2S, MFI, KS

DPA: SECTION 08.13.02.00

ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECM/PCM) PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
30,30A, 30B	2NE37	A4	3250	16182933	NA	25143634
	3NL37					
	3NF37*					
	2NW37					
	2NE69*					
	3NL69					
	3NF69		3375			
	2NW69					

* GM elects to test these models at the next higher ETW.

ISSUED: 06-03-93 (ML-RP340) REVISED: ML-RR035, RR051, RR058

17-R1G2.3VHG2EA-2 (1994)

17-23VHG