### **GENERAL MOTORS CORPORATION**

**EXECUTIVE ORDER A-006-1163** 

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 & 39516 and Executive Order G-02-003;

### IT IS ORDERED AND RESOLVED:

That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

MODEL YEAR TEST GROUP		VEHICLE TYPE	EXHAUST EMISSION STANDARD CATEGORY	USEFU (mi		IN- COMP (*=N/A or A/E=ex	MEDIATE USE LIANCE full In-use; h. / evap. late in-use)	FUEL TYPE
2004	4GMXT02.2123	LDT: 0-3750 Pounds LVW	USEPA Bin 8	EXH / ORVR	EVAP	EXH	EVAP	GASOLINE
			Counted as ARB ULEV	100K	150K	*	E	(Tier 2 Unleaded)
No.	ECS & S	SPECIAL FEATURES	EVAPORATIVE	FAMILY (EV	AF)		DISPLACE	
1	TWC, H	4GMXR0	117811					
*	garage and a	•	*					
* .			*					

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

#### **BE IT FURTHER RESOLVED:**

That the exhaust and the evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's "NMOG Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

#### **BE IT FURTHER RESOLVED:**

That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.1 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

#### **BE IT FURTHER RESOLVED:**

The listed vehicle models are federally certified, and are certified under the provisions of 13 CCR Section 1961(a)(14) and the incorporated test procedures.

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this 23RD day of April 2003.

Allen Lyons, Chief

Mobile Source Operations Division



New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

# **ATTACHMENT**

# **EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS**

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

NMOG FLEET NMOG @ RAF=*  AVERAGE [g/mi] CH4 RAF = * NMOG				1141110001	1110110-1011	CH4=methane; NMOG=non-CH4 organic gas; NMHC=non-CH4 hydrocarbon; CO=carbon monoxide; NOx=oxides of nitrogen HCHO=formaldehyde; PM=particulate matter; RAF=reactivity adjustment factor; 2/3 D [g/test]=2/3 day diumal+									
CERT	STD	NMOG	NMHC	I NMHC	hot-soak; RL [g/mi]=running loss; ORVR [g/gallon dispensed]=on-board refueling vapor recovery; g=gram; mg=milligram mi=mile; K=1000 miles; F=degrees Fahrenheit; SFTP=supplemental federal test procedure										
0.052	0.053	CERT [g/mi]	CERT [g/mi]	[g/mi]	CO	g/mi]	NOx	[g/mi]	НСНО	[mg/mi]	PM	g/mi]	Hwy NO	x [g/mi]	
Contract of Section	0.5014		13		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
	@ 50K	0.042	*	0.100	2.2	3.4	0.09	0.14	*	15.	*	*	0.02	0.19	
	@ UL	0.051	*	0.125	2.4	4.2	0.15	0.20	•	18.	•	•	0.05	0.18	
Marin arrama mada	@ 50°F & 4K		*	*	*	•	*	*	•	•	•	*	•	*	

CO [g/mi] @ 20°F & 50K				Ox [g/mi] posite)		g/mi] posite)		:+NOx [US06]		g/mi] i06]		C+NOx [SC03]	CO	[g/mi] 2031
	U P & 3UK		CERT	SİD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	7.6	SFTP @ 4000 miles	*	*	*	*	0.04	0.14	1.4	8.0	0.03	0.20	1.8	2.7
STD	10.0	SFTP @ 100000 miles	0.22	0.71	•	, s •	*	*	2.2	11.1	*	*	3.1	3.7

Evaporative Family		al + Hot Soak est) @ UL	2-Days Diurn (grams/te		Runnin (grams/m		On-Board Re Recovery (gran	fueling Vapor ns/gallon) @ UL
	CERT	STD	CERT	STD	CERT	STD	CERT	STD
4GMXR0117811	0.53	0.65	0.70	0.85	0.00	0.05	0.04	0.20
*	*	*	•	*	*	•	•	*
*	•	*	*	•	•	*	*	<b>-</b>
•	•	+	*	*	*	*	<del> </del>	+

\* = not applicable; UL=useful life; PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; ECS= Emission Control System; STD= Standard; CERT= Certification; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; TLEV=transitional LEV; ULEV=ultra LEV; SULEV=super ULEV; TWC=3-way catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; OC=oxidizing catalyst; O2S=oxygen sensor; HO2S=heated O2S; AFS/HAFS=air- fuel ratio sensor / heated AFS; EGR=exhaust gas recirculation; AIR=secondary air injection; PAIR=pulsed AIR; MFI= multiport fuel injection; SFI=sequential MFI; TBI=throttle body injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD (F)/(P)=full/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG= compressed/liquefled natural gas; LPG=liquefled petroleum gas; E85=\*85%\* Ethanol Fuel

## 2004 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	IN- COMP (*=N/A or A/E=exi	IEDIATE USE LIANCE full in-use; n. / evap. ate in-use)	PHASE-IN STD.	OBD II
					EXH	EVAP		ı
SATURN	VUE AWD	4GMXR0117811	1	2.2		E	SFTP	Full
SATURN	VUE FWD	4GMXR0117811	1	2.2	*	Ε	SFTP	Full