

#### **GENERAL MOTORS CORPORATION**

EXECUTIVE ORDER A-006-1221 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 (mii		IN- COMP (*=N/A or A/E=ex	MEDIATE USE LIANCE full in-use; h. / evap. late in-use)	FUEL TYPE	
2005	5GMXT04.3184	MDV: 3751-5750 Pounds ALVW	Low Emission Vehicle (LEV)	EXH / ORVR	EVAP	EXH	EVAP	Gasoline (Tier 2	
			, ,	120K	150K	•	E	Unleaded)	
No.		SPECIAL FEATURES	EVAPORATIVE FAMILY (EVAF) DISPLACEMENT (L)						
1	. 2TWC,	HO2S(2), SFI, OBD(F)	5GMXR	5GMXR0176820					
*		*	5GMXR	0223840					
*		*	4	*			4.3		
*		*	•	,					

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], 1968.2 [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).

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 \_\_\_\_\_ day of March 2004.

ુAllen Lyons, Chief 🧳

Mobile Source Operations Division



## **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 or NMHC NMOG=non-CH4 organic gas; NMHC=non-CH4 hydrocarbon; CO=carbon monoxide; NMOG or NMHC NMOG or NMHC NMOG=non-CH4 organic gas; NMHC=non-CH4 hydrocarbon; CO=carbon monoxide; NMOG or NMHC NMOG=non-CH4 organic gas; NMHC=non-CH4 hydrocarbon; CO=carbon monoxide; NMOG or NMHC NMOG=non-CH4 organic gas; NMHC=non-CH4 hydrocarbon; CO=carbon monoxide; NMOG=non-CH4 hydrocarbon; CO=carbon monoxide; NMOG=non-CH4 hydrocarbon; CO=carbon monoxide; NMOG or NMHC=non-CH4 hydrocarbon mo									
CERT	STD	NMOG	NMHC	INMHC	[not-soak; K	L  g/mi =runi	ning loss: OR	VR fo/gallor	ı dispensed)=	on-board ref	fueling vapor n al test procedu	ecovery: a=a	ram; <b>mg</b> =millio	ıram
*	+	CERT	CERT	[g/mi]	CO [	g/mi]	NOx	[g/mi]		[mg/mi]	PM [		Hwy NO	x [a/mi]
	<u>. </u>	[g/mi]	[g/mi]	1.5	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
5.25	@ 50K	0.085	*	0.160	2.2	4.4	0.2	0.4	*	18.	*	*	0.1	0.8
	@ UL	0.098		0.230	2.7	6.4	0.3	0.6	•	27.	*	*	0.2	1.2
11 1 1 1 C	50°F & 4K	•	*	•	*	*	*	*	•	*		****	*	*

CO [g/mi]			NMHC+N (com	Ox [g/mi] posite)		g/mi] posite)		+NOx [US06]	] CO [US	g/mi] 06]		C+NOx [SC03]	CO [	g/mi] :031
@ 20	0°F & 50K	The Park	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	3.9	SFTP @ 4000 miles	*	•	*	*	0.04	0.40	2.5	10.5	0.02	0.31	1.1	3.5
STD	12.5	SFTP @ * miles	*	*	*	*	*	*	•	*			*	•

Evaporative Family	3-Days Diurn (grams/te		2-Days Diurn (grams/te	al + Hot Soak est) @ UL	Runnir (grams/m	ng Loss nile) @ UL	On-Board Refueling Vapo Recovery (grams/gallon) @		
	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
5GMXR0176820	0.61	0.90	0.67	1.15	0.00	0.05	0.14	0.20	
5GMXR0223840	0.41	0.90	0.54	1.15	0.00	0.05	0.09	0.20	
*	*	*	*	*	*	*	*	*	
*	*	*	*	*	*	•	*	+	

<sup>\* =</sup> 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; DGI=direct gasoline fuel 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/liquefied natural gas; LPG=liquefied petroleum gas; E85="85%" Ethanol Fuel;

### 2005 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	IN- COMP (*=N/A or A/E=exi	MEDIATE USE LIANCE full in-use; h. / evap. ate in-use)	PHASE-IN STD.	OBD II
					EXH	EVAP		·
CHEVROLET	C1500 SILVERADO 2WD	5GMXR0176820	1	4.3		E	SFTP	Full
CHEVROLET	K1500 SILVERADO 4WD	5GMXR0176820	1	4.3	*	E	SFTP	Full
CHEVROLET	G15/25 VAN 2WD CONV	5GMXR0223840	1	4.3	•	E	SFTP	Full
CHEVROLET	G1500/2500 EXPRESS 2WD	5GMXR0223840	1	4.3	•	E	SFTP	Full
CHEVROLET	G1500/2500 VAN 2WD	5GMXR0223840	1	4.3	*	E	SFTP	Full
CHEVROLET	C1500 SILVERADO 2WD	5GMXR0223840	1	4.3	*	ε	SFTP	Full
CHEVROLET	K1500 SILVERADO 4WD	5GMXR0223840	1	4.3	*	E	SFTP	Full
GMC	C1500 SIERRA 2WD	5GMXR0176820	1	4.3	+	E	SFTP	Full
GMC	K1500 SIERRA 4WD	5GMXR0176820	1	4.3	*	Ε	SFTP	Full
GMC	G15/25 SAVANA 2WD CARGO CONV	5GMXR0223840	1	4.3	* .	E	SFTP	Full
GMC	G1500/2500 SAVANA 2WD CARGO	5GMXR0223840	1	4.3	*	E	SFTP	Full
GMC	G1500/2500 SAVANA PASSEN 2WD	5GMXR0223840	1	4.3	*	E	SFTP	Full
GMC	C1500 SIERRA 2WD	5GMXR0223840	1	4.3	*	E	SFTP	Full
GMC	K1500 SIERRA 4WD	5GMXR0223840	1	4.3	*	E	SFTP	Full