

#### **GENERAL MOTORS CORPORATION**

**EXECUTIVE ORDER A-006-1238** 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			
2005 5GM	5GMXT08.1201	MDV: 5751-8500 Pounds ALVW	Low Emission Vehicle (LEV)	EXH / ORVR	EVAP	EXH	EVAP	Gasoline (Tier 2			
			(,	120K	150K	* E		Unleaded)			
No.	ECS &	SPECIAL FEATURES	EVAPORATIVE	FAMILY (EV		DISPLACEMENT (L)					
1	2WU-TWC,2T	WC, 2HO2S(2), SFI, OBD(F)	5GMXR	176821	1		· · · · · · · · · · · · · · · · · · ·				
•		*	5GMXR	223841							
*		*	5GMXE	5GMXE0260843				8.1			
*		*	5GMXE	223842							

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).

day of April 2004.

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

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	HCHO≃form	naidenyde; i	ictor: 2/3 D (a/	CO=carbon monoxide; NOx=oxides of nitrogen; ;; 2/3 D [g/test]=2/3 day diurnal+								
CERT	STD	NMOG	NMHC	NMHC STD	not-soak; R	L [g/mi]=run	ning loss; OF	VR (g/gallor	n dispensed1=	on-board ref	ueling vapor r	ecovery, a=a	ram; <b>mg=m</b> illiç	gram
	* *	CERT [g/mi]	CERT [g/mi]	Contracts	CO [g/mi]		NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]		Hwy NOx [g/mi]	
<u> </u>			[9,]		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
	@ 50K	0.150	*	0.195	2.8	5.0	0.3	0.6	*	22.	*		0.05	1.2
	@ UL	0.150	*	0.280	2.8	7.3	0.3	0.9	*	32.	*	*	0.05	1.8
@ 5	50°F & 4K			*	*	*	*	*	*	*	*	*	*	*

CO [g/mi] @ 20°F & 50K			NMHC+NOx [g/mi] (composite)		CO [g/mi] (composite)		NMHC+NOx [g/mi] [US06]		CO [g/mi] [US06]		NMHC+NOx [g/mi] [SC03]		CO [g/mi] [SC03]	
@ 20	J-F & 50K		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	*	SFTP @ * miles	*	*	*	*	*	*	*	. *	*	*	*	•
STD	*	SFTP @ * miles	*	*	•	*	*	*	*	*	*	*	*	

Evaporative Family	3-Days Diurnal + Hot Soak (grams/test) @ UL		2-Days Diurnal + Hot Soak (grams/test) @ UL		Runnin (grams/m	g Loss iile) @ UL	On-Board Refueling Vapor Recovery (grams/gallon) @ UL		
	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
5GMXR0176821	0.61	1.00	0.67	1.25	0.00	0.05	0.14	0.20	
5GMXR0223841	0.41	1.00	0.54	1.25	0.00	0.05	0.09	0.20	
5GMXE0260843	0.38	1.00	0.28	1.25	0.00	0.05	*	*	
5GMXE0223842	0.41	1.00	0.54	1.25	0.00	0.05	*	*	

\* = 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)	INTERMEDIATE IN-USE COMPLIANCE (*=N/A or full in-use; A/E=exh. / evap. Intermediate in-use)		PHASE-IN STD.	OBD II
					EXH	EVAP		
CHEVROLET	C2500 HD SILVERADO 2WD	5GMXR0176821	1	8.1	*	E	*	Full
GMC	K3500 SIERRA 4WD	5GMXE0223842	1	8.1	*	E	*	Full
CHEVROLET	K2500 HD SILVERADO 4WD	5GMXR0176821	1	3.1	*	E	*	Full
CHEVROLET	C2500 HD SILVERADO 2WD	5GMXR0223841	1	8.1	*	Ε	•	Full
CHEVROLET	K2500 HD SILVERADO 4WD	5GMXR0223841	1	8.1	*	E	*	Full
CHEVROLET	K3500 SILVERADO 4WD	5GMXR0223841	1	8.1	*	E	*	Full
CHEVROLET	C2500 AVALANCHE 2WD	5GMXE0260843	1	8.1	*	E	*	Full
CHEVROLET	K2500 AVALANCHE 4WD	5GMXE0260843	1	8.1	*	E	*	Full
CHEVROLET	C2500 SUBURBAN 2WD	5GMXE0260843	1	8.1	*	E	*	Full
CHEVROLET	K2500 SUBURBAN 4WD	5GMXE0260843	1	8.1	*	E	*	Full
CHEVROLET	C3500 SILVERADO 2WD	5GMXE0223842	1	8.1	*	E	*	Full
CHEVROLET	K3500 SILVERADO 4WD	5GMXE0223842	1	8.1	*	E	*	Full
GMC	C2500 HD SIERRA 2WD	5GMXR0176821	1	8.1	*	E	*	Full
GMC	K2500 HD SIERRA 4WD	5GMXR0176821	1	8,1	*	E	*	Full
GMC	C2500 HD SIERRA 2WD	5GMXR0223841	1	8.1	*	E	*	Fuli
GMC	K3500 SIERRA 4WD	5GMXR0223841	1	8.1	*	E	*	Full



# GENERAL MOTORS CORPORATION

EXECUTIVE ORDER A-006-1238

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

GMC	C1500 YUKON XL 2WD	5GMXE0260843	1	8,1	*	F	T .	Full
GMC	K2500 YUKON XL 4WD	5GMXE0260843	1	8.1	*	E	*	Full
GMC	C3500 SIERRA 2WD	5GMXE0223842	1	8.1	*	E	*	Full
GMC	K2500 HD SIERRA 4WD	5GMXR0223841	1	8.1	*	E	*	Full