California Environmental Protection Agency AIR RESOURCES BOARD	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	USEFUL LIFE (miles)		INTERMEDIATE IN-USE COMPLIANCE (*=N/A or full in-use; A/E=exh. / evap. intermediate in-use)		FUEL TYPE
				EXH / ORVR	EVAP	EXH	EVAP	
2005	5GMXT08.1201	MDV: 5751-8500 Pounds ALVW	Low Emission Vehicle (LEV)	120K	150K	*	E	Gasoline (Tier 2 Unleaded)

No.	ECS & SPECIAL FEATURES	EVAPORATIVE FAMILY (EVAF)	DISPLACEMENT (L)
1	2WU-TWC,2TWC, 2HO2S(2), SFI, OBD(F)	5GMXR0176821	8.1
*	*	5GMXR0223841	
*	*	5GMXE0260843	
*	*	5GMXE0223842	

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 50^0 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 5TH day of April 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.)

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 diurnal+ 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

NMOG FLEET AVERAGE [g/mi]		NMOG @ RAF=* CH4 RAF = *		NMOG or NMHC STD [g/mi]	CO [g/mi]		NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]		Hwy NOx [g/mi]	
CERT	STD	NMOG CERT [g/mi]	NMHC CERT [g/mi]		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
	@ 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]	
			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		Running Loss (grams/mile) @ 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	*	E	*	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	*	Full
GMC	K3500 SIERRA 4WD	5GMXR0223841	1	8.1	*	E	*	Full

GMC	C1500 YUKON XL 2WD	5GMXE0260843	1	8.1	*	E	*	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