California Environmental Protection Agency AIR RESOURCES BOARD	GENERAL MOTORS CORPORATION	EXECUTIVE ORDER A-006-1446		
		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	USEFL (mi		 CON (*=N/A A/E=/	RMEDIATE N-USE IPLIANCE or full in-use; exh. / evap. idiate in-use)	FUEL TYPE	
2008 8GMXT02.4124	LDT: <6000# GVW, 3751-5750# LVW	USEPA Bin 4 Counted as ARB LEV2	EXH / ORVR	EVAP	EXH	EVAP	Gasoline (Tier 2		
			ULEV	120K	150K		*-	Unleaded)	
No.	ECS & SPECIAL FEATURES		EVAPORATIVE FAMILY (EVAF)			DISPLACEMENT (L)			
1	TWC(2), HO2S(2), SFI, OBD(F)		8GMXR0138813			1			
*	•		*						
	•		*				2.4		
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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).

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 <u>64</u> day of March 2007.

Annette Hebert, Chief

C 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 @ RAF=* CH4 RAF = * CH4=melhane; 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/m]=running loss; ORVR [g/gallon dispensed]=on-board refueling vapor recovery; g=gram; mg=milligram ml=mile; K=1000 miles; F=degrees Fahrenheit; SFTP=supplemental federal test procedure NMOG FLEET AVERAGE [g/mi] NMOG or NMHC CERT STD NMOG NMHC STD CERT CERT CO [g/ml] HCHO [mg/mi] CERT STD 0.047 0.050 [g/mi] NOx [g/mi] PM [g/mi] Hwy NOx [g/mi] [g/mi] [g/mi] CERT STD STD CERT CERT CERT STD CERT STD @ 50K ٠ * * . @ UL . 0.055 0.070 1.8 2.1 0.03 0.04 * 11. 0.01 0.002 0.05 @ 50°F & 4K . 6-6-22 S ан Артана Алтана Ала Алтана Ала Ала Ала Алтана Алтана Алтана Алтана Алтана Ала NMHC+NOx [g/mi] CO [g/mi] NMHC+NOx CO [g/mi] [US06] NMHC+NOx CO [g/mi] CO [g/mi] [SC03] (composite) composite [g/mi] [US06] [g/mi] [SC03] @ 20°F & 50K CERT STD CERT STD CERT STD CERT STD CERT STD CERT STD CERT 3.9 SFTP @ 4000 miles * 0.03 0.25 4.4 10.5 0.03 0.27 1.1 SFTP @ 120000 3.5 STD 12.5 0.05 ٠ + 0.93 . * * 4.4 miles 14.6 ٠ 1.1 4.9 3-Days Diurnal + Hot Soak 2-Days Diurnal + Hot Soak Running Loss On-Board Refueling Vapor **Evaporative Family** (grams/test) @ UL (grams/test) @ UL (grams/mile) @ UL Recovery (grams/gallon) @ UL CERT STD CERT STD CERT STD CERT STD 8GMXR0138813 0.32 0.65 0.46 0.85 0.00 0.05 0.04 0.20 ٠ * * + * . * . . ÷ * . Ŧ * ÷ . * . * . * = 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/liquefied natural gas; LPG=liquefied petroleum gas; E85="85%" Ethanol Fuel 2008 MODEL YEAR: VEHICLE MODELS INFORMATION INTERMEDIATE **EVAPORATIVE** IN-USE FAMILY COMPLIANCE ENGINE MAKE ECS MODEL PHASE-IN SIZE (*=N/A or full in-use: NO. OBD II A/E=exh. / evap. STD. (L) Intermediate In-use) EXH EVAP SATURN VUE FWD 8GMXR0138813 1 2.4 ٠ * SETP Full