	Colifornia Reviewamental Protection Accord		EXECUTIVE ORDER A006-1710		
	AIR RESOURCES BOARD	GENERAL MOTORS LLC	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		
	LDT: 6001-8500# GVW, 3751-	USEPA Bin 4 Counted as ARB LEV2	EXH / ORVR	EVAP	EXH	EVAP	Gasoline (Tier 2 Unleaded) plus			
2011	1 BGMXT06.0372	5750# ALVW	ULEV	120K	150K	*	•	Battery-Assist		
No.	the state of the s	SPECIAL FEATURES		EVAPORATIVE FAMILY (EVAF)			DISPLACEMENT (L)			
1	2TWC, TWC, 2HO2S(2), SFI, OBD(F)		BGMXR	BGMXR0176822						
•			*			6				
•				*						

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, 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 test group listed in this Executive Order is certified conditionally on the manufacturer providing test data to determine the greenhouse gas (GHG) emissions for the listed test group, expressed in grams per mile of carbon dioxide-equivalent the greenhouse gas (GHG) emissions for the listed test group, expressed in grams per mile of carbon dioxide-equivalent (g/mi CO2-e), as required in section E.2.5.2 of the California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, as amended August 4, 2005 (the Test Procedures). Manufacturer shall provide the required data within 45 days after the date of the Executive Order unless (a) an extension is granted by the Executive Officer, or (b) the manufacturer demonstrates to the satisfaction of the Executive Officer that it is exempt from determining GHG emissions for the listed test group under section E.2.5.3 (Intermediate Volume Manufacturers) or E.2.5.4 (Small Volume Manufacturers) of the Test Procedures. Failure to comply with the certification requirement to determine the GHG emissions for the listed test group may be cause for the Executive Officer to revoke the Executive Order. Vehicles in the revoked Executive Order shall be deemed uncertified and subject to penalties authorized under California law. Notwithstanding the requirement therein, the manufacturer is not required to penalties authorized under California law. Notwithstanding the requirement therein, the manufacturer is not required to determine GHG emissions for any medium-duty vehicles in the listed test group that are not medium-duty passenger vehicles.

#### **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 22 day of June 2010.

Annette Hebert, 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.

 

 CH4=methane; NMOG=non-CH4 organic gas; NMHC=non-CH4 hydrocarbon; CO=carbon monoxide; NOx=oxides of nitrogen;

 HCH0=formaldehyde; PMI=particulate matter; RAF=reactivity adjustment factor; 2/3 D [g/test]=2/3 day diumai+

 hot-soak; RL [g/mi]=running loss; ORVR [g/gellon dispensed]=on-board refueling vapor recovery; g=gram; mg=milligram

 ml=mile; K=1000 miles; F=degrees Fahrenheit; SFTP=supplemental federal test procedure

 CO [g/mi]
 NOx [g/mi]

 HCHO [mg/mi]
 PMI [g/mi]

 Hwy NOx [g/mi]
 HCHO [mg/mi]

 CERT
 STD

 CERT
 STD

 CERT
 STD

 CERT
 STD

 CERT
 STD

NMOG @ RAF=" NMOG FLEET NMOG or AVERAGE [o/mi] NMHC CERT STD NMOG NMHC STD CERT CERT 0.037 0.043 [g/mi] [g/mi] [g/mi] @ 50K ÷ . QUL 0.041 0.070 0.7 2.1 0.02 0.04 ٠ 11. ٠ 0.01 0.01 0.05 @ 50°F & 4K 4 1997) 1997 - 19 NMHC+NOx [g/mi] CÖ [g/ml] NMHC+NOx NMHC+NOx CO [g/ml] [US06] CO [g/ml] [SC03] CO [g/mi] (composite) (composite) [g/ml] [US06] [g/mi] [SC03] @ 20"F & 50K CERT STD CERT STD CERT CERT STD STD CERT STD CERT STD CERT 1.4 SFTP @ 4000 miles . \* \* . 0.00 04 0.1 10.5 0.01 0.31 0.02 3.5 SFTP @ 120000 STD 12.5 • 0.04 0.97 0.4 16.9 0.4 5.6 miles 3-Days Diurnal + Hot Soak 2-Days Diurnal + Hot Soak Running Loss (grams/mlie) @ UL **On-Board Refueling Vapor Evaporative Family** (grams/test) @ UL (grams/test) @ UL Recovery (grams/galion) @ UL CERT STD CERT STD CERT STD CERT 8TD BGMXR0176822 0.43 0.90 0.38 1.15 0.000 0.05 0.003 0.20 . . . \* . \* . -. . . \* . 7

\* = not applicable; UL=useful I/fe; 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; AllR=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=parallei; (2) suffix=series; CNG/LNG= compressed/iquefied natural gas; LPG=fiquefied petroleum gas; E85=\*85%; Ethanol Fuel

## 2011 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. / evep. intermediate in-use)		PHASE-IN STD.	obd II
····					EXH	EVAP	]	
GMC	C1500 YUKON 2WD HYBRID	BGMXR0176822	1	6	*	•	SFTP	Full
CADILLAC	ESCALADE 2WD HYBRID	BGMXR0176822	1	6	*	•	SFTP	Fuil
CADILLAC	ESCALADE 4WD HYBRID	BGMXR0176822	1	6	۰.	•	SFTP	Fuli
GMC	K1500 YUKON DENALI 4WD HYBRID	BGMXR0176822	1	6	*	•	SFTP	Fult
CHEVROLET	C1500 TAHOE 2WD HYBRID	BGMXR0176822	1	6	*	*	SFTP	Fuli
CHEVROLET	K1500 TAHOE 4WD HYBRID	BGMXR0176822	1	6	*	*	SFTP	Full
GMC	K1500 YUKON 4WD HYBRID	BGMXR0176822	1	6	*	*	SFTP	Full
GMC	C15 SIERRA 2WD HYBRID	BGMXR0176822	1	.6	*	*	SFTP	Full
CHEVROLET	C15 SILVERADO 2WD HYBRID	BGMXR0176822	1	6	*.		SFTP	Full
GMC	K15 SIERRA 4WD HYBRID	BGMXR0176822	1	6	*	*	SFTP	Full
CHEVROLET	K15 SILVERADO 4WD HYBRID	BGMXR0176822	1	6	+	*	SFTP	Full