### **GENERAL MOTORS LLC**

**EXECUTIVE ORDER A-006-1834** 

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 1 of 4

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			EXHAUST EMISSION STANDARD CATEGORY	USEFU (mil		IN- COMP (*=N/A or A/E=ex	MEDIATE USE LIANCE full in-use; h. / evap. iate in-use)	FUEL TYPE		
2013			USEPA Bin 4 Counted as ARB LEV2	EXH / ORVR	EVAP	EXH	EVAP	Flexible Fuel: Ethanol (E85) / Gasoline (Tier 2 Unleaded)		
2010			ULEV	120K	150K	*	*			
No.	ECS &	SPECIAL FEATURES	EVAPORATIVE	FAMILY (EV	AF)		DISPLACE	EMENT (L)		
1	1 2TWC, TWC, 2HO2S(2), SFI, OBD(F)		DGMXR	DGMXR0176820						
*	•		DGMXR	DGMXR0223840				6.2		
			•							

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 data to demonstrate compliance with California's greenhouse gas fleet average emission standard (CA GHG Standard) specified in Title 13, California Code of Regulations, (13 CCR) Section 1961.1 and the incorporated California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, amended March 29, 2010 (CA Test Procedures). The manufacturer has elected, under 13 CCR Section 1961.1(a)(1)(A)(ii) and under Section E.2.5.1(ii) of the CA Test Procedures, to demonstrate compliance with the CA GHG Standard by demonstrating compliance with the National greenhouse gas program (National GHG Program). Therefore, the test group listed in this Executive Order is certified conditionally further on the manufacturer complying with the requirements specified in said provisions in 13 CCR, and Sections E.2.5.1(ii) and H.4.5(b) and H.4.5(c) of the CA Test Procedures (among other things, concerning data and information submission, timing, and format as specified by the Executive Officer). Failure to comply with the certification requirements to demonstrate compliance with CA GHG Standard by demonstrating compliance with the National GHG Program under said provisions in 13 CCR and CA Test Procedures 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 herein, a manufacturer that becomes, after MY2009, a large-volume manufacturer, as defined in 13 CCR Section 1900, is not required to comply with the CA GHG Standard until the beginning of the fourth model-year from becoming a large-volume manufacturer. Additionally, notwithstanding the requirement herein, a small-volume manufacturer, independent low-volume manufacturer, or intermediate volume-manufacturer, as defined in 13 CCR Section 1900, is not required to comply with CA GHG Standard during model-years (MY) 2012 through 2015.

#### 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. The manufacturer has elected to certify the test group listed above to section 1.(b) of the proposed California Environmental Label Specifications for 2009 and Subsequent Model Year Passenger Cars, Light Duty Trucks and Medium-Duty Passenger Vehicles, considered by the California Air Resources Board (ARB or the Board) at a public hearing conducted on January 26-27, 2012 (California Specifications). The aforementioned test group is certified conditionally upon final approval of the California Specifications. In the event the California Specifications do not become effective, the manufacturer agrees to immediately, upon notification by ARB, (1) cease use of the label meeting section 1.(b) of the California Specifications, and (2) place a label meeting the California Environmental Label Specifications for 2009 and Subsequent Model Year Passenger Cars, Light Duty Trucks and Medium-Duty Passenger Vehicles, adopted May 2, 2008, on vehicles in production.



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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 2012.

Annette Hebert, Chief

Mobile Source Operations Division

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# **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.)

	G FLEET AGE [g/mi]	NMOG ( CH4 I		HCHO=form	aldehvde; P	M=particulat	e matter; RA	F=reactivity a	4 hydrocarbo	tor; 2/3 D [g/	test]=2/3 day	diurnal+			
CERT			NMHC	mi=mile; K=	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										
	0.040	CERT	CERT	[g/mi]	CO	g/mi]	NOx	[g/mi]	нсно	[mg/mi]	PM [	g/mi]	Hwy NO	x [g/mi]	
0.036	0.043	[g/mi]	[g/mi]	[g/iii]	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
	@ 50K					*			*	*	*	*	*	*	
	@ UL	0.046 (0.032)	•	0.070 (0.070)	1.1 (1.1)	2.1 (2.1)	0.01 (0.02)	0.04 (0.04)	1 (*)	11 (11)	*	0.01 (0.01)	0.01 (0.01)	0.05 (0.05)	
	@ 50°F & 4K		•		•	•	*	*	•		*	*	•		
				NMHC+NO	Ox [g/mi]	CO [g	/mi]	NMHC+N	Ox	CO [g/mi]	NMI	HC+NOx	CO	[g/mi]	

CC	) [g/mi]		NMHC+N (comp	Ox [g/mi] osite)	CO [	g/mi] oosite)	NMHC [g/mi]	:+NOx [US06]	co [		NMHC [g/mi]	+NOx [SC03]	co [sc	g/mi] :03]
	°F & 50K		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	(3.7)	SFTP @ 4000 miles	•		•		(0.00)	(0.4)	(0.4)	(10.5)	(0.001)	(0.31)	(0.8)	(3.5)
STD	(12.5)	SFTP @ 120000 miles	(0.04)	(0.97)	•	٠	•	•	(0.7)	(16.9)	*	٠	(1.1)	(5.6)

Evaporative Family	3-Days Diurna (grams/te			al + Hot Soak est) @ UL		ng Loss nile) @ UL	On-Board Refueling Vapor Recovery (grams/gallon) @ Ul		
	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
DGMXR0176820	0.55	0.90	0.38	1.15	0.000	0.05	(0.02)	(0.20)	
DGMXR0223840	0.71	0.90	0.76	1.15	0.000	0.05	(0.03)	(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; ULEV=ultra LEV; SULEV=super ULEV; TWC/OC=3-way/oxidizing catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; NAC=NOx adsorption catalyst; SCR-U/SCR-N= selective catalytic reduction-urea/ammonia; NH3OC=SCR-U/SCR-N ammonia slip catalyst; CTOX/PTOX= continuous/periodic trap oxidizer; HO2S/O2S=heated/oxygen sensor; AFS/HAFS=air-fuel ratio sensor / heated AFS; NOXS=NOx sensor; RDQS=reductant quality sensor; EGR=exhaust gas recirculation; AIR=secondary air injection; PAIR=pulsed AIR; SFI/MFI= sequentia/ multiport fuel injection; DFI=direct fuel injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD (F)/(P)(B)=full/partial/both 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 ("15%"gasoline) Fuel;

## 2013 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 I
					EXH	EVAP		
CADILLAC	ESCALADE 2WD	DGMXR0176820	1	6.2	*		SFTP	Full
CADILLAC	ESCALADE EXT AWD	DGMXR0223840	1	6.2	*	*	SFTP	Full
CADILLAC	ESCALADE ESV 2WD	DGMXR0223840	1	6.2		*	SFTP	Full
CADILLAC	ESCALADE AWD	DGMXR0176820	1	6.2	.*	*	SFTP	Full
CADILLAC	ESCALADE ESV AWD	DGMXR0223840	1	6.2	*	*	SFTP	Full
CHEVROLET	C15 SILVERADO 2WD	DGMXR0176820	1	6.2		*	SFTP	Full
CHEVROLET	K15 SILVERADO 4WD	DGMXR0176820	1	6.2	*	*	SFTP	Full
GMC	C15 SIERRA 2WD	DGMXR0176820	1	6.2		*	SFTP	Full
GMC	C1500 YUKON 2WD	DGMXR0176820	- 1	6.2		*	SFTP	Full
GMC	C1500 YUKON XL 2WD	DGMXR0223840	1	6.2			SFTP	Full
GMC	K15 SIERRA AWD	DGMXR0176820	1.	6.2			SFTP	Full
GMC	K15 SIERRA 4WD	DGMXR0176820	1	6.2		*	SFTP	Full
GMC	K1500 YUKON DENALI AWD	DGMXR0176820	1	6.2			SFTP	Full
GMC	K1500 YUKON XL AWD	DGMXR0223840	1	6.2	*	*	SFTP	Full