

GENERAL MOTORS LLC

EXECUTIVE ORDER A-006-1819

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 1 of 3

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	TEST GROUP	VEHICLE TYPE		XHAUST EMISSION ANDARD CATEGORY	USEFU (mil		IN- COMP (*=N/A or A/E=ex	MEDIATE USE LIANCE full in-use; h. / evap. ate in-use)	FUEL TYPE
2013	DGMXV01.4011	Passenger Car	"LEV II" Super Ultra Low Emission Vehicle (LEV II SULEV)		EXH / ORVR	EVAP	EXH	EVAP	Plug-in Gasoline
2013)	r assenger car			150K 150K		* *		Electric Hybrid
No.	ECS &	SPECIAL FEATURES	25	EVAPORATIVE I	FAMILY (EV	DISPLACEMENT (L)			
1	TWC(2), H	D2S(2), SFI, AIR, OBD(F)		DGMXR	060600	2.5		-	
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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, 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:

That the listed vehicle models have been certified as an advanced technology partial zero emission vehicle (AT-PZEV) - Type G Hybrid Electric Vehicle (HEV) and are granted a baseline partial zero emission vehicle (PZEV) allowance of 0.2 and additional PZEV allowance under 13 CCR Section 1962.1(c).

BE IT FURTHER RESOLVED:

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



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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.

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 May 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.)

AVERAGE [g/mi] NMOG @ RAF=* CH4 RAF = *			NMOG or HCHO-formaldehyde; PM=particulate matter; RAF=reactivity adjustment factor; 2/3 D [g/fest]=2/3 day diurnal+ NMUG or HCHO-formaldehyde; PM=particulate matter; RAF=reactivity adjustment factor; 2/3 D [g/fest]=2/3 day diurnal+ NMUG hot-soak; RL [g/mil=running loss; ORVR [g/gallon dispensed]=on-board refueling vapor recovery; g=gram; mg=milligram												
CERT	STD	NMOG NMHC		NMHC STD								ng vapor rec st procedure		am; mg =milli	gram
0.026	0.035	CERT	CERT	[g/mi]	CO [g/mi]		NO	NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]		Hwy NOx [g/ml]	
0.020	0.035	[g/mi]	[g/mi]		CERT	STD	CERT	STD CE		RT S	TD	CERT	STD	CERT	STD
	@ 50K	*	*	•	*	•	•	•	•		*	*	*	+	•
71 7 3 3 16	@ UL	0.007	*	0.010	0.2	1.0	0.01	0.03	2 '		4.	*	0.01	0.001	0.03
@	50°F & 4K	0.015	*	0.020	0.6	1.0	0.003	0.0	2		В.	*	*	*	*
CO (c	a/mil	N. S.	£ 2-,	NMHC+No (comp		CO [g	g/mi] oosite)		+NOx [US06]		g/mi] 306]		C+NOx [SC03]		g/mi] :03]
@ 20°F		W. W.		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	1.4	SFTP @ 40	000 miles	•	•	•	•	0.002	0.14	0.2	8.0	0.005	0.20	1.2	2.7
STD	10.0	SFTP 6	@ * miles	*	*	*	•	_ ,	*	*	+	*	*	*	*

Evaporative Family	3-Days Diurn (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	
DGMXR0060600	0.18	0.35	0.17	0.35	0.000	0.05	0.12	0.20	
•	*	•	*	•	•	•	*	*	
*	+	*	*	•	*	*	*	•	
	•	*	•		*	*	*	•	

^{* =} 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

MĄKE	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	VOLT	DGMXR0060600	1	1.4	*	•	SFTP	Full