#### California Environmental Protection Agency

**⊘** Air Resources Board

GENERAL MOTORS

Executive Order: A-006-2044

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), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: 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.

						TEST GRO	OUP	INF	ORMATI	ON					
MODE YEAR	- I TI	EST G	ROUP	VEHICLE CLASS(ES)					F	FUEL CATEGORY			FUEL TYPE		EL TYPE
2017	HG	MXV03	3.6042			PC	DEDICATED SINGLE FUEL VEHICLE						GASOLINE		
	USEFUL	LIFE	(miles)		V	EHICLE EMISS	ION	CA	TEGORY	/	IN	ITERIM / IN	ERM	EDIA	TE IN-USE STD
EXH	/ORVR		EVAP			FTP		-1.	SFTP			FTP			SFTP
15	0000		150000		LE	V3 ULEV125	LE	V 3	COMPOS	SITE		*			NMOG+NOX
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS					L		(	OBD S	TAT	JS	ENGINE DISPLACEMENT				
1		2TWC	, 2HO2S(	2), D	FI,	2TC, CAC			FULI	L	AL	L MODELS			
2	2 2TWC, TWC, 2HO2S(2), DFI, 2TC, CAC							11	PARTI	AL		*	3.0, 3.6		
*				*				F	PARTIAL FINE:			*			
			EV	APOR	ATIVE	& REFUELING	(EV	ΆP	/ORVR) F	AMILY	INF	ORMATION			
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGO						GOR	PRY EVAP EMISSION ST VEHICLE CLASS				SPECIAL FEATURES				
F	IGMXR01	33880	)			LEV 2		PC					HCT		
F	HGMXR0112835 LEV 2 PC									HCT					
F	HGMXR0120818 LEV 2				LEV 2		PC						*		
						EMISSION C	RED	IT I	NFORMA	TION					
	А	LLOW	ANCE FO	R TES	ST GR	OUP		NMOG CREDIT FOR			NMOG CREDIT F		FOR	OPTIONAL EXH. STD FOR WORK	
BASE	LINE P	ZEV	AT	PZEV		TZEV	N	ION	I-PZEV ZI	EKU-E	VAP	DC	K		TRUCKS
* * *							N 1			И					
					NM	OG AND FLEE	ΓΑ۷	ER	AGE INFO	ORMA	TION				
NMOG RAF	NMOG/NMHC:			O/NMH ATIO	PC+LDT (	NMOG+NOX FLEET PC+LDT (0-3750 LV (g/mi)						MDV (10001-14000			
*	*	:	1.10		*	0	.08	6			0	.101	*		

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:

The exhaust and 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+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

California Environmental Protection Agency

**⊘** Air Resources Board

GENERAL MOTORS LLC.. Executive Order: A-006-2044

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 2 of 4

BE IT FURTHER RESOLVED:

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 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for 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 31

day of May 2016

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

FTP@50K

FTP@UL

GASOLINE-

LEV3 E10

GENERAL MOTORS LLC.

Executive Order: A-006-2044 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 3 of 4

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0.01

## **ATTACHMENT**

#### EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)

CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon monoxide; NOx: oxides of nitrogen; HCHO: formaldehyde; PM: particulate matter; RAF: reactivity adjustment factor; 2DHS/3DHS [g HC/test]: 2/3 days diurnal+hot-soak; RL [g HC/mi]: running loss; ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: mile; K: 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP **FUEL TYPE** NMOG+NOx CO **HCHO** NOx PM (g/mi) (g/mi) (g/mi) (mg/mi) (g/mi) CERT CERT STD STD CERT STD CERT STD CERT STD

\*

0.125

0.59

0.0535

50°F @4K	*	*	*	*	*	*	*	*	*	
136 20 25 337			FUEL TYP	E		NN	IOG+N	NOx (g/mi)	C	O (g/mi)
			FUEL ITP	_		CEI	RT	STD	CERT	STD
HWFET @ 50K			*			*		*		
HWFET @ UL		GASO	LINE-LEV	3 E10		0.0	12	0.125		
20°F @ 50K		С	OLD CO E	10		为数 法制造	11.03	BANK TOLES	2.0	10.0

2.1

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		<b>1</b>		US06		SC03	3	COMPOSITE			
	FUEL TYPE		NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMOG+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	
@ 4K	*	CERT	*	*	9616	*	*				
@		STD	*	. *		*	*			- 11/4 (P. 1-40)	
		CERT	*	*	*	*	*	0.048	0.5	*	
@ UL	GASOLINE- LEV3 E10	STD	*	*	*	*	*	0.103	4.2	*	
		BIN						0.120			

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	AMILY FUEL TYPE 3DHS (g/test) @ UL	2DHS (g/test) @ UL			RL (g/mi) @ UL				
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
HGMXR0112835	GASOLINE - TIER 2 UNLEADED	0.34	0.50	. *	0.58	0.65	*	0.00	0.05
HGMXR0120818	GASOLINE - TIER 2 UNLEADED	0.34	0.50	*	0.58	0.65	*	0.00	0.05
HGMXR0133880	GASOLINE - TIER 2 UNLEADED	0.20	0.50	*	0.29	0.65	*	0.00	0.05

GENERAL MOTORS LLC. Executive Order: A-006-2044

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 4 of 4

# **⊘** Air Resources Board

				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/g	gallon) @	) UL	FUEL TYPE	3DHS R (g/test	IG TEST ) @ UL		IG TEST ) @ UL	BLEED CANISTER TEST (g/test) @ 4K			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
HGMXR0112835	GASOLINE - TIER 2 UNLEADED	0.02	0.20	*	*	*	*	*	*	*		
HGMXR0120818	GASOLINE - TIER 2 UNLEADED	0.02	0.20	*	*	*	*	*	*	*		
HGMXR0133880	GASOLINE - TIER 2 UNLEADED	0.01	0.20	*	* 1 7	*	*	*	*	*		

not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: LDT<6000#GVWR,3751-5750#LVW; LDT3: LDT 6001-8500#GVWR,3751-5750#ALVW; LDT4: LDT 6001-8500#GVWR,5751-8500#ALVW; MDV: medium-duty vehicle; MDV4: MDV 8501-10000#GVWR; MDV5: MDV 10001-14000#GVWR; MDPV: mediumduty passenger vehicle; HDV: heavy-duty vehicle; ECS: emission control system; CERT: certification; STD: standard; FEL: family emission limit; GVWR: gross vehicle weight rating; LVW: loaded vehicle weight; ALVW: adjusted LVW; LEV: low emission vehicle; ULEV: ultra LEV; SULEV: super ULEV; ZEV: zero-emission vehicle; PZEV: partial ZEV; AT PZEV: advanced technology PZEV; TZEV: transitional ZEV; TWC/OC: 3-way/oxidizing catalyst; ADSTWC: adsorbing TWC; HAC: HC adsorbing catalyst; WU: warm-up catalyst; NAC: NOx adsorption catalyst; SCR-U or SCRC/SCR-N or SCRC-NH3: selective catalytic reduction-urea/ammonia; NH3OC; ammonia oxidation catalyst; CTOX/PTOX: continuous/periodic trap oxidizer; DPF: diesel particulate filter (active); GPF: PM filter for spark-ignited engine: HO2S/O2S: heated/oxygen sensor; WR-HO2S or AFS: wide range/linear/heated air-fuel ratio sensor; NOXS: NOx sensor; PMS: PM sensor; RDQS: reductant quality sensor; NH3S: ammonia sensor; EGR: exhaust gas recirculation; EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fuel injection; DFI/IFI: direct/indirect fuel injection; TC/SC: turbo/super charger; CAC: charge air cooler; F/P/\$: full/partial/partial with fines on-board diagnostic; DOR: direct ozone reducing; HCT: hydrocarbon trap; BCAN: bleed carbon canister; prefix 2: parallel; (2) suffix: series; CNG/LNG: compressed/liquefied natural gas; LPG: liquefied petroleum gas; E85: "85%" ethanol ("15%"gasoline) fuel; E10: "10%" ethanol ("90%" gasoline) fuel; A: automatic (with lockup); M: manual transmission; SA: semi-automatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission; AMS: automated manual-selectable transmission; OT: other transmission

### 2017 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
CADILLAC	ATS-V	PC	3.6	M6,SA8	HGMXR0120818	1	F	*
CADILLAC	CT6 AWD	PC	3.0	SA8	HGMXR0112835	1	F	*
CADILLAC	CTS SEDAN	PC	3.6	SA8	HGMXR0133880	1	F	*
CADILLAC	XTS AWD	PC	3.6.	SA6	HGMXR0133880	2	F	*