## **GENERAL MOTORS LLC**

**EXECUTIVE ORDER A-006-2037** 

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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.

granted.										
			TES	T GROU	P INFORMA	TION				
MODEL YEAR	TEST GRO	UP VEHI	CLE CLASS(ES)		FUEL	CATEGORY	FU	EL TYPE		
2017	HGMXV02.0	0031	PC ==	7 -		ED SINGLE FUEI /EHICLE	G	GASOLINE		
A STATE SHEET REPORTED	USEFUL LIF	E (miles)	VEHICLI	EMISS	ON CATEGO	ORY	INTI	ERIM / INTERME	DIATE IN-USE STD	
EXH/O	RVR	EVAP	FTP		S	FTP		FTP	SFTP	
120,000 150,000			USEPA TIER3 B COUNTED AS LEV2 ULEV	ARB	LEV2 SFTF	STANDARD		*	*	
SPECIAL F	EATURES &	EXHAUST EMISSION	CONTROL SYSTEMS			OBD STATUS	Charles and the state of the	ENGIN	E DISPLACEMENT (L)	
1	1 TWC, HO2S(2), DFI, TC, CAC					FULL *				
*	*					ALL MOD	DELS		2.0	
*	* *					*				
10 may 10 may 10 miles			EVAPORATIVE & REFU	ELING (I	EVAP/ORVR	) FAMILY INFORM	MATION	A Company Control of the Control of		
EVA	P / ORVR FA	MILY EV	APORATIVE STD CATE	GORY	EVAP EN	ISSION STD VEH	HICLE CLAS	S SPE	CIAL FEATURES	
H	IGMXR01128	330	LEV2			PC		*		
H	IGMXR01208	318	LEV2		PC					
H	IGMXR01338	310	LEV2			PC		*		
The same of the same		The state of the s	EMISS	ION CRE	EDIT INFOR	MATION	1 1 1 N	THE PART AND A STATE OF THE PA		
		LLOWANCE FOR TES				CREDIT FOR	NMOG CR	EDIT FOR DOR	OPTIONAL EXH. STD FO	
BASELINE PZEV AT PZEV T					NON-PZEV ZERO-EVAP			N	WORK TRUCKS	
approximation of the	·克里·罗斯斯 表现语言	ARTON WELLOW CARE IN THE	The same was been as a second	The Market State of the	No de la Company	N	- Marie Committee	IN Access to the second	N N	
			NMOG AND	FLEET A	AVERAGE IN	FORMATION				
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO	HCHO/NMHC RATIO	)	NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)			NMOG+NOX FLEET STD LDT (375 8500 GVWR) + MDPV (g/mi		
*	w	1.04	*			0.086			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 Fleet Average" (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

## 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).

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### BE IT FURTHER RESOLVED:

The listed vehicle models are federally certified, and are certified under the provisions of 13 CCR Section 1961.2(a)(12) 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

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science 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.)

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

	FUEL TYPE	HCHO-formaldehyde; PM-particulate matter; RAF=reactivity adjustment factor; 2DHS/3DHS [g HC/test]=2/3 days diumal+hot-soak; RL [g HC/mi]=running loss; ORVR [g HC/gallon dispensed]=on-board refueling vapor recovery; g=gram; mg=milligram; ml=mile; K=1000 miles; F=degrees Fahrenheit; FTP=federal test procedure; SFTP=supplemental FTP  NMOG+NOx (g/ml)										
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
FTP @ 50K	*	*	*	. *	*	*	*	*	*	*	*	
FTP @ UL	GASOLINE-TIER2 UNLEADED	0.041	0.110	0.64	2.1	*	4	*	0.010	0.010	0.110	
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE	*	*	2.30	10.0	*	*		*	*	*	
50°F @ 4K	*	*	*	*	*	*	*	*	*	*	*	

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		US06					SC03				COMPOSITE					
	FUEL TYPE	NMHC (g/i		CO (	g/mi)	PM (m	ng/mi)	NMHC (g/	+NOx mi)	. co (	g/mi)	NMC	G+NOx (	g/mi)	CO (g	g/mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	BIN	CERT	STD
@ 4K	GASOLINE-TIER2 UNLEADED	0.024	0.14	1.44	8.0	*	*	0.011	0.20	2.55	2.7	* '	*	*	*	. *
@ UL	GASOLINE-TIER2 UNLEADED	*	*	*	*	*	*	*	*	*	*	0.025	0.103	0.110	*	*

#### WHOLE VEHICLE EVAPORATIVE/ORVR EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE	FUEL TYPE	WHOLE VEHICLE EVAPORATIVE TESTING							GLOSS	ON-BOARD REFUELING	
FAMILY		3-DAYS DIURNAL + HOT SOAK (g/test) @ UL			2-DAYS DIURNAL + HOT SOAK (g/test) @ UL			(g/mi)	@ UL	(g/gallon) @ UL	
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD	CERT	STD
HGMXR0112830	GASOLINE-TIER2 UNLEADED	0.343	0.50	*	0.580	0.65	*	0.00	0.05	0.025	0.20
HGMXR0120818	GASOLINE-TIER2 UNLEADED	0.343	0.50	*	0.580	0.65	*	0.000	0.05	0.025	0.20
HGMXR0133810	GASOLINE-TIER2 UNLEADED	0.205	0.50	*	0.288	0.65	*	0.000	0.05	0.011	0.20
*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*

## FUEL ONLY & CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY	FUEL TYPE							
		3-DAYS DIURNA (g/test)	AL + HOT SOAK ) @ UL	2-DAYS DIURNA (g/test)		CANISTER BLEED (g/test)		
		CERT	STD	CERT	STD	CERT	STD	
*	*	*	*	*	*	*	*	
*	*	*	*	*	*	*	*	
*	*	*	*	*	*	ŵ	*	

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\*=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#LVW; LDT3=LDT 6001-8500#GVWR,3751-5750#LVW; LDT4=LDT 6001-8500#GVWR,5751-8500#ALVW; MDV=medium-duty vehicle; MDV4=MDV 8501-10000#GVWR; MDV5=MDV 10001-14000#GVWR; MDPV=medium-duty passenger 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; EGRE=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; FIP/\$=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; E35-CARB: 85% ethanol+15% CA Phase2 gasoline; E35-EPA: 85% ethanol+15% Tier2 unleaded gasoline; E10-CARB: 10% ethanol+90% CA Phase2 gasoline; E10-CARB: 10% ethanol+90% CA Phase2 gasoline; E40-CARB: 10% ethanol+90% CA Phase2 gasoline; E40-CARB: 10% ethanol+90% CA Phase2 gaso

### 2017 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH	OBD	PZEV TYPE
CADILLAC	ATS	PC	2.0	M6,SA8	HGMXR0120818	1	Р	*
CADILLAC	ATS AWD	PC	2.0	SA8	HGMXR0120818	1	Р	*
CADILLAC	CT6	PC	2.0	SA8	HGMXR0112830	1	P	*
CADILLAC	CTS SEDAN	PC	2.0	SA8	HGMXR0133810	1	Р	*
CADILLAC	CTS SEDAN AWD	PC	2.0	SA8	HGMXR0133810	1	Р	. *
CHEVROLET	CAMARO	PC	2.0	M6,SA8	HGMXR0133810	1	Р	*
CHEVROLET	MALIBU	PC	2.0	A9	HGMXR0120818	1	Р	*