California Environmental Protection Agency

⊘ Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-2047

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

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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.

					TEST GRO	OUP INFO	RMATION		0			
MODE	_	TEST GROUP			VEHICLE CLASS(ES)			ATEGORY	FU	FUEL TYPE		
2017	HG	MXT05	. 3382		LDT3			EL VEHICLE FFV)	85% ETHA	85% ETHANOL, GASOLINE		
l	JSEFUL	LIFE	(miles)	VE	HICLE EMISS	SION CAT	EGORY	INTERIM /	NTERMEDIA	TE IN-USE STD		
EXH	ORVR		EVAP		FTP	S	FTP	FTP		SFTP		
15	0000		150000	LEV	3 ULEV125	LEV 3	COMPOSITE	PM	NMO	OG+NOX AND PM		
SPE	CIAL FE	ATUR		IAUST EMISS	SION CONTRO	DL	OBD S	TATUS	ENGINE	DISPLACEMENT (L)		
1		21	WC, TWC,	2HO2S(2),	DFI		FULL	*				
*	* PARTIAL ALL MODELS							s	5.3			
*			PARTIAL WITH *									
			EV	APORATIVE	& REFUELING	(EVAP/O	RVR) FAMIL	INFORMATIO	ON			
EVA	P / ORV	R FAN	MILY	EVAPORATI	VE STD CATE	GORY		SSION STD E CLASS	SPECIA	L FEATURES		
н	GMXR01	61502	A	LEV	3 OPTION2		LI	эт3		HCT		
н	GMXR02	12501	3	LEV 3 OP	TION2 WITH	FEL	LI	эт3		HCT		
					EMISSION C	REDIT IN	FORMATION					
	ALLOWANCE FOR TEST GROUP NMOG CREDIT FOR NMOG C									OPTIONAL EXH STD FOR WORK		
BASE	LINE P	ZEV	АТ	PZEV	TZEV	NON-F	PZEV ZERO-E	VAP	DOR	TRUCKS		
	* *				*	* N			N	N		
				NMC	G AND FLEE	TAVERA	GE INFORMA	TION				
NMOG RAF	CH4 RAF	RATIO		PC+LDT	OX FLEET (0-3750 L\ (g/mi)	VW) LDT	+NOX FLEET (3751 LVW-85 R) + MDPV (g/	00 MDV	NMOG+NOX FLEET STD MDV (10001-14000 GVWR) (g/mi)			
*	*		1.10	*		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 and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

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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 _______day of June 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS A	AND CERTIFICATION LEVELS
--	--------------------------

	EXHA	UST	AND	EVA	PORAT	IVE EN	VISS	SION S	TANE	DARD	S AND	CERTI	FIC	ATION	LEVE	_S		
		EXH	AUST	EMISSI	ON STAI	NDARDS	SAND	CERT	IFICAT	ION L	EVELS	(FTP, HW	FET,	50°F, 20	°F)			
	FUE	FUEL TYPE		nonoxio adjustm DRVR [le; NOx: o ent factor g HC/gall	xides of ; 2DHS/3 on dispe	f nitro 3DHS ensed]	gen; H(g HC/]: on-bo	CHO: fo test]: 2/ ard refu	rmalde 3 days eling v	ehyde; P diurnal- apor red	bon; NMH M: particu hot-soak; covery; g: ure; SFTP	late RL gran	matter; R. [g HC/mi] n; mg: mill	AF: read : running ligram; r	ctivit g los	y ss;	
				NMOG+NOx (g/mi)		,	CO (g/mi)			NOx (g/mi)		HCH (mg/n		-	(PM (g/mi)		
				CERT	STI	C	ERT	STD) C	ERT	STD	CER	T	STD	CERT		STD	
FTP@50	K	*		*	*		*	*		*	*			*	*		*	
FTP@UI	TIER (EPA	ETHAL 5% E: 3 F TIE:	PA ŒG	0.034 (0.031).4	2.1		(*)	(*)	(4)		4 (4)		0.000		
50°F @4	K	*		*	*		*	*		*	*	*		*	Park M			
					FUEL '	TYPE						Ox (g/mi)			CO (g/r	CO (g/mi)		
				FOLLTIFE						CERT		STD		CER	Γ	STD		
HWFET	@ 50K				*	*			* *									
HWFET	@ UL		85% I		DL + 15% EPA TIER 3 REG EPA TIER 3 REG)				0.004 0.125 (0.004) (0.125)		- 1							
20°F @	9 50K	E70	(GA	SOLIN	GASOL E-COLD	INE) CO LOW	OCT	ANE)		ND CI	ERTIFIC	ATION LE	EVEL	2.0 (1.4)		2.5	
		*					US06			SC03				COMPOSITE				
	FUEL T	YPE		11	OG+NOx g/mi)	Co (g/r	_	PI (mg/			+NOx mi)	CO (g/mi)		OG+NOx (g/mi)		CO (g/mi)		
@ 4K	*		CER		*	*	+			1		*	See					
			STD		*	*	+		. 16	1		*	7 7 1		1			
		PA TIER 3		T *		*	*			*		*	* 0		0.4	4	*	
@ UL 1					*	*	r	10		*		*		0.103	4.2	2	rk	
			BIN	1,754		17. 3			w Park		TWEET.			0.120	2 12 -	- 2		
		WH	OLE \	/EHICL	E EVAPO	DRATIVI	E EM	ISSION	STANI	DARD	SANDO	ERTIFIC	ATIC	N LEVEL	.S			
						WHOL	EVE	HICLE	EVAPO	RATI	/E TEST	ING						
	RATIVE MILY	F	UEL T	YPE	3DH	S (g/tes	t) @ (JL		2DHS	(g/test)	@ UL		R	_ (g/mi)	@	UL	
					CERT	STD		FEL	CER	Т	STD	FEL		CER	T	:	STD	
HGMXR(0161502	E	PA TI		0.383	0.500	0	*	0.37	6	0.500	*		0.0	0	C	0.05	
HGMXR	0212501	E	PA TI		0.470	0.500	0 0	.525	0.35	4	0.500	0.52	25	0.0	0	0.05		

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ORVR / FU	EL ONLY / CA	NISTER	BLEED	EVAPORATIVE	EMISSION	ISTANDA	RDS AND	CERTIFICA	ATION LEV	ELS			
				FUEL ONLY EVAP & CANISTER BLEED									
EVAPORATIVE FAMILY	ORVR (g/g	gallon) @	UL	FUEL TYPE	3DHS R (g/test	IG TEST) @ UL		IG TEST) @ UL	TEST (g/te				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD		STD			
HGMXR016150A	E10-EPA	0.01	0.20	EPA TIER 3 REG	*	*	*	*	0.007	0.020			
HGMXR021250B	E10-EPA	0.03	0.20	EPA TIER 3 REG	*	*	*	*	0.010	0.020			

*: 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; DRF: 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/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

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2017 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
CHEVROLET	C15 SILVERADO 2WD	LDT3	5.3	A 6	HGMXR016150A	1	P	*
CHEVROLET	C15 SILVERADO 2WD	LDT3	5.3	A6	HGMXR021250B	1	P	*
CHEVROLET	C1500 SUBURBAN 2WD	LDT3	5.3	A6	HGMXR021250B	1	P	*
CHEVROLET	C1500 TAHOE 2WD	LDT3	5.3	A6	HGMXR016150A	1	P	*
CHEVROLET	K15 SILVERADO 4WD	LDT3	5.3	A6	HGMXR016150A	1	P	*
CHEVROLET	K15 SILVERADO 4WD	LDT3	5.3	A6	HGMXR021250B	1	P	*
CHEVROLET	K1500 SUBURBAN 4WD	LDT3	5.3	A6	HGMXR021250B	1	P	*
CHEVROLET	K1500 TAHOE 4WD	LDT3	5.3	A6	HGMXR016150A	1	P	*
GMC	C15 SIERRA 2WD	LDT3	5.3	A6	HGMXR016150A	1	P	*
GMC	C15 SIERRA 2WD	LDT3	5.3	A6	HGMXR021250B	1	P	*
GMC	C1500 YUKON 2WD	LDT3	5.3	A6	HGMXR016150A	1	P	*
GMC	C1500 YUKON XL 2WD	LDT3	5. 3	, A/6	HGMXR021250B	1	P	*
GMC	K15 SIERRA 4WD	LDT3	5.3	A 6	HGMXR016150A	1	P	*
GMC	K15 SIERRA 4WD	LDT3	5.3	A6	HGMXR021250B	1	P	*
GMC	K1500 YUKON 4WD	LDT3	5.3	A6	HGMXR016150A	1	P	*
GMC	K1500 YUKON XL 4WD	LDT3	5.3	A6	HGMXR021250B	1	P	*