

#### GENERAL MOTORS LLC.

Executive Order: A-006-2190

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

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Pursuant to the authority vested in California 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: 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.

				TEST GR	OUP IN	FORM	ATION			
MODE! YEAR		EST GROUP	VEHIC	LE CLASS(I	ES)		FUEL C	ATEGORY	FUEL TYPE	
2020	LG	MXT02.8358	ID	T2, LDT3		D		SINGLE FUEL HICLE	DIESEL	
ı	JSEFUL	LIFE (miles)	VEH	IICLE EMIS	SION C	ATEG	ORY	INTERIM / INT	ERMEDIATE IN-USE STD	
EXH	/ORVR	EVAP		FTP		SFT	P	FTP	SFTP	
15	0000	*	LEV3	ULEV125	LEV	3 COM	POSITE	* 3	PM	
SPE	CIAL FE	ATURES & EXI	HAUST EMISSIC	ON CONTRO	OL		OBD ST	TATUS	ENGINE DISPLACEMENT	
1	CAC, TO	C, DFI, OC, O	OC+DPF, SCRC		RC,	F	ULL	*		
*			*				RTIAL	*	2.8	
*			*				IAL WITH	ALL MODELS		
angi:		EV	APORATIVE &	REFUELING	G (EVA	P/ORV	R) FAMILY	INFORMATION		
EVA	P / ORV	R FAMILY	EVAPORATIVE	STD CATE	EGORY	84 CER 1813 BES	EVAP EMIS VEHICLE	SSION STD CLASS	SPECIAL FEATURES	
	*			*					esting ready.	
		n with horoset and		EMISSION C	CREDIT	INFO	RMATION	ske i ske i san i	Alaka wasan a manaka da wasan sa	
	EDIT FO	X FLEET AVE. OR EXTENDED RRANTY		REDIT FOR I		ZEV	NMOG CF	REDIT FOR DOR	OPTIONAL EXH. STD FOR WORK TRUCKS	
		N		N		4. 10.		N	N	
			NMOG	AND FLEE	T AVE	RAGE	INFORMAT	ΓΙΟΝ		
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO	HCHO/NMHC RATIO	NMOG+NO PC+LDT			LDT (	+NOX FLEET ST 3751 LVW-8500 R) + MDPV (g/mi)		
*	* :	.; t1 ★ '* * *	* * * * *	16.16-5.5	0.065	and a		0.074	*	

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. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)



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### 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 fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c) (3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV 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).

#### BE IT FURTHER RESOLVED:

The listed vehicle models are conditionally certified in accordance with 13 CCR Section 1968.2(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the on-board diagnostic II (OBD) system of the vehicles has been determined to have five (5) deficiencies. The listed vehicle models are approved subject to the manufacturer paying a fine of one hundred twenty five dollars (\$125) per vehicle for the third through fifth deficiencies in the listed test group that is produced and delivered for sale in California.

On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of vehicles produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2020 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all vehicles covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$37,500 per violation per vehicle pursuant to HSC Section 43154.

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 2019.

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Allen Lyons, Chief

Emissions Compliance, Automotive Regulations and Science Division



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# **ATTACHMENT**

E	XHAUST AN	D EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS
	EXHAUS	Γ 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

			C+NOx mi)	C (g/i		N(		HC (mg		and the second second second	M mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	DIESEL-EPA	0.057	0.125	0.1	2.1	* *	* *	*	4	0.000	0.003
50°F @4K	*	*	*	*	*	*	*	*	*		
		-				NIA.	THC+NO	(a/mi)	T	CO (a/mi	1

	FUEL TYPE	NMHC+N	IOx (g/mi)	co	(g/mi)
	FUEL TIPE	CERT		Ox (g/mi)         CO (g/mi)           STD         CERT         STD           *         0.125	
HWFET @ 50K	* * * * * * * * * * * * * * * * * * * *	*	*		
HWFET @ UL	DIESEL-EPA	0.023	0.125		
20°F @ 50K	*			*	*

### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			US06			SC03	3	COMPOSITE		
	FUEL TYPE	-45	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*		*	* *			
		STD	*	*		*	*			
		CERT	*	*	0.6	*	*	0.073	0.0	*
@ UL	DIESEL-EPA	STD	*	*	6	*	*	0.083	4.2	*
		BIN						0.120		

### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

	E <sub>ij</sub>		WHOLE \	/EHICLE	EVAPORA	TIVE TESTI	NG		
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test) @	D UL	2DI	HS (g/test) (	@ UL	RL (g/n	ni) @ UL
		CERT	STD	FEL	CERT STD FEL			CERT	STD
*	*	*	*	*	*	*	*	*	*

## ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE ORVR (g/gallon) @ UL				FUEL ONLY EVAP & CANISTER BLEED						
	ORVR (g/g	gallon) @	) UL		3DHS R		2DHS R		BLEED C	
FAMILY				FUEL TYPE	(g/test	) @ UL	(g/test	) @ UL	TEST (g/t	est) @ 4K
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD
*	*	*	*	*	*	*	*	*	*	*

### EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)

EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD
*	*	*	*



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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#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; 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; FFH: fuel fired heater; 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; AER: all-electric range; EAER: equivalent AER; PHEV: plug-in hybrid electric vehicle; NMOG + NOx Fleet Ave. Credit for Extended Warranty: N = no credits, Y = credits, S = credits for some/select models

## 2020 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
CHEVROLET	COLORADO 2WD	LDT2	2.8	A6	*	1	\$
CHEVROLET	COLORADO 4WD	LDT3	2.8	A6	*	1	\$
GMC	CANYON 2WD	LDT2	2.8	A6	anda anda particu <b>k</b> da julius je Na rojeku silomana	1	\$
GMC	CANYON 4WD	LDT3	2.8	A6	*	1	\$

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