

### GENERAL MOTORS LLC.

Executive Order: A-006-2266

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-19-095:

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 GROUP INFORMATION															
MODE		EST GROUP		VEHIC	VEHICLE CLASS(ES)					EGORY		FUEL TYPE			
2021	L MC	MGMXD06.6377 MDV4							EL FFV	VEHICLE V)	85% ETHANOL, GASOLINE				
	USEFU	L LIFE (miles)		VEH	VEHICLE EMISSION CATEGOR					INTERIM / INT	ERM	ERMEDIATE IN-USE STD			
EXI	I/ORVR	EVAP		FTP SFTP			TP	FTP			SFTP				
15	50000	15000	0	LEV3	ULEV200	USO	6, SC	ULEV (FULL SC03, FTP * PM				PM			
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS						L		OBD STATUS			ENGINE DISPLACEMENT (L)				
1		DFI, 2TW	С, 2Н	025(2),	TWC			FULL	A	LL MODELS	ELS				
*	* PARTIAL *								6.6						
*	* PARTIAL WITH * FINES														
		Е	VAPO	RATIVE &	REFUELING	(EVA	P/OR	VR) FAMILY	Y IN	FORMATION					
EVA	AP / ORV	R FAMILY	EVA	PORATIVI	E STD CATE	GORY		EVAP EMISSION STD VEHICLE CLASS				SPECIAL FEATURES			
1	MGMXR021260A LEV 3 OPTION2 WITH FEL					FEL		ME	V4		HCT				
					EMISSION C	REDIT	INFO	RMATION							
1	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY  NMOG CREDIT FOR NON-I ZERO-EVAP						ZEV	EV NMOG CREDIT FOR DOR			OPTIONAL EXH. STD FOR WORK TRUCKS				
		N			N			n n							
NMOG AND FLEET AVERAGE INFORMATION															
NMOG RAF	G CH4 NMOG/NMHC RATIO I DT (3751 LVW-8					/W-85	00 G	STD NMOG+NOX FLEET STI GVW) MDV (8501-10000 GVWF (g/mi)							
*	*	1.10		*		*			(	0.203		0.298			

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).

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 on this 574 day of June 2020.

Allen Jons, Chief

Emissions Certification and Compliance Division



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# **ATTACHMENT**

	EX	HAL	JST	AND	EVA	PORA	TIVE	EMIS	SSION	STAI	NDAR	DS AN	D CE	RTIFI	CATION	LEVEL	S	
		Street or other Designation of the last							A STATE OF THE PARTY OF THE PAR	The same of the sa			-		T, 50°F, 20			
	F	FUEL	. TYP	CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbo 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: mil 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure: SFTP: supplemental FTP												tivity		
					NMOG+NOx			СО			NOx			НС	НО	PM		
					(g/mi)				(g/mi)		(g/mi)		(mg		ı/mi)	(9	g/mi)	
					CERT	ST	D	CERT	ST	D	CERT	STI	) C	ERT	STD	CERT	STD	
FTP@5	OK		*		*	*		*	*		*	*		*	*	*	*	
FTP@I		GASC	-EPA LINE E10	E- /	0.058 0.047	1		0.4	4.		* (*)	* (*)		2 (*)	6 (6)			
50°F @	,	GASC	-EPA CLINE E10	E- /	0.130	0.5		0.0	4.		* (*)	* (*)		3 (*)	16 (16)			
						FUEL	TVDE				N	MOG+N	Ox (g/r	ni)		CO (g/m	ıi)	
					FUEL TYPE					С	CERT STD		ΓD	CER	Г	STD		
HWFE	HWFET @ 50K *									*		k						
HWFET @ UL (GAS					(GASC	E85-EPA ASOLINE-TIER3 E10)				0.005 0.200 (0.002) (0.200)								
20°F	@ 50k	K				*									*		*	
-				S	FTP EX	HAUST	EMIS	SION	STAND	ARDS	AND C	ERTIFIC	CATION	LEVE	LS			
		-31 <sup>2</sup> L			US06							SC0	3		СО	MPOSITE		
	FUE	L TYI	PE		1	G+NOx g/mi)		CO g/mi)		M g/mi)		G+NOx /mi)	CO (g/m	1	MOG+NOx (g/mi)	CO (g/mi	PM (mg/m	
@ 4K		*	(	CERT		*		×				*	*					
				STD		*		*				*	*					
				CERT			+-	*		*	*		*		0.034	0.2		
@ UL	E85	5-EP	_	STD		*	+-			*		•			0.800	22.0	10	
		ASOLINE-		ERT			_	*		*	*		*		0.034	0.2	3	
@ UL				STD		*		*		*		*			0.800	22.0	10	
				BIN											*			
			WHO	LE VI	EHICLE	EVAP	DRATI	VE EN	MISSION	STAN	NDARD	SAND	CERTIF	ICATIO	ON LEVEL	s		
	EVAPORATIVE		FI T				WHOLE VEHICLE EVAP				ORATIVE TESTING  2DHS (g/test) @ UL				RL (g/mi) @ UL			
FA	MILY		. 5		-	CERT	ST		FEL	CE		STD	, _	EL	CER	т	STD	
		60-	GA:	SOLII	ATE _								_				0.05	
MGMXF	10212	6UA		ו כמים		0.365	0.6	UU	0.600	0.4	14	0.600	0	600	0.0	,	0.05	

TIER3 E10



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ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS													
				FUEL ONLY EVAP & CANISTER BLEED									
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE		3DHS RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K			
	FUEL TYP	CERT	STD			CERT	STD	CERT	STD	CERT	STD		
MGMXR021260A	GASOLINE- TIER3 E10 0.07		0.20	GASOLINE- TIER3 E10		*	*	*	*	0.018	0.030		
EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)													
EVAPORATIVE	FAMILY LEAK FAMIL			Y CERT					STD				
MGMXR0212	MGMXR0	21260A	-LK1		7	ł .		0.02					

\*: 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; HP/LP EGR: High/Low Pressure EGR; 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; a hyphen (-) between after treatment ECS indicates multiple functionalities of the after treatment device (ex. DPF-SCRC: SCR coated DPF); 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

2021 MODEL YEAR: VEHICLE MODELS INFORMATION												
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD					
CHEVROLET	SILVERADO 2500 HD 2WD	MDV4	6.6	A6	MGMXR021260A	1	F					
CHEVROLET	SILVERADO 2500 HD 4WD	MDV4	6.6	A6	MGMXR021260A	1	F					
GMC	SIERRA 2500 HD 2WD	MDV4	6.6	A6	MGMXR021260A	1	F					
GMC	SIERRA 2500 HD	MDV4	6.6	A6	MGMXR021260A	1	F					