

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.

Industrie Industrie Industrie   150000 150000 LEV3 SULEV30 LEV 3 COMPOSITE * PA   SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS ENGINE DISPLICIE   1 DFI, WR-H02S, H02S, TWC, TC, CAC FULL ALL MODELS 2.7   * * * PARTIAL * 2.7   * * * PARTIAL * 2.7   * * * PARTIAL WITH FINES * *   EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS SPECIAL FEAT   PGMXR016340A LEV 3 OPTION2 WITH FEL LDT3 HCT   PGMXR017350D LEV 3 OPTION2 WITH FEL LDT3 HCT   PGMXR022450C LEV 3 OPTION2 WITH FEL LDT3 HCT   EMISSION CREDIT INFORMATION EMISSION CREDIT INFORMATION OPTIONAL E											
2023 PGMXT02.7100 LDT2, LDT3, LDT4 VEHICLE GASOLIN   USEFUL LIFE (miles) VEHICLE EMISSION CATEGORY INTERIM / INTERMEDIATE IN-L   EXH/ORVR EVAP FTP SFTP FTP SF   150000 150000 LEV3 SULEV30 LEV 3 COMPOSITE * PR   SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS ENGINE DISPLICE) (L)   1 DFI, WR-HO2S, HO2S, TWC, TC, CAC FULL ALL MODELS 2.7   * * * PARTIAL * <	ЪЕ										
EXH/ORVREVAPFTPSFTPFTPSF150000150000150000LEV3 SULEV30LEV 3 COMPOSITE*PASPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMSOBD STATUSOBD STATUSENGINE DISPL (L)1DFI, WR-H02S, H02S, TWC, TC, CACFULLALL MODELS2.7***PARTIAL*2.7***PARTIAL*2.7***PARTIAL WITH FINES**EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATIONEVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATIONEVAP / ORVR FAMILYEVAPORATIVE STD CATEGORYEVAP EMISSION STD VEHICLE CLASSSPECIAL FEATPGMXR016340ALEV 3 OPTION2 WITH FELLDT2HCTPGMXR017350DLEV 3 OPTION2 WITH FELLDT3HCTPGMXR022450CLEV 3 OPTION2 WITH FELLDT3HCTEMISSION CREDIT INFORMATIONEMISSION CREDIT INFORMATIONEMISSION CREDIT FOR NON-PZEVNMOG CREDIT FOR NON-PZEV	(E										
150000 150000 LEV3 SULEV30 LEV 3 COMPOSITE * PA   SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS ENGINE DISPLA (L)   1 DFI, WR-HO2S, HO2S, TWC, TC, CAC FULL ALL MODELS 2.7   * * * PARTIAL * 2.7   * * * PARTIAL WITH FINES * *   EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS SPECIAL FEAT   PGMXR016340A LEV 3 OPTION2 WITH FEL LDT2 HCT   PGMXR017350D LEV 3 OPTION2 WITH FEL LDT3 HCT   PGMXR022450C LEV 3 OPTION2 WITH FEL LDT3 HCT   EMISSION CREDIT INFORMATION EMISSION CREDIT INFORMATION OPTIONAL E	ISE STD										
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS   OBD STATUS   ENGINE DISPLA (L)     1   DFI, WR-HO2S, HO2S, TWC, TC, CAC   FULL   ALL MODELS     *   *   *   PARTIAL   *     *   *   PARTIAL   *   2.7     *   *   *   PARTIAL   *   2.7     *   *   *   PARTIAL   *   2.7     *   *   *   PARTIAL   *   2.7     *   *   *   PARTIAL   *   2.7     *   *   *   PARTIAL   *   2.7     *   *   *   PARTIAL   *   2.7     *   *   *   PARTIAL   *   2.7     *   *   *   PARTIAL   *   2.7     *   *   *   *   PARTIAL   *   2.7     *   *   *   *   PARTIAL   *   2.7     *   *   *   *   *   *   2.7     *   *   *   * </td <td colspan="2">SFTP</td>	SFTP										
SYSTEMS OBD STATUS (L)   1 DFI, WR-HO2S, HO2S, TWC, TC, CAC FULL ALL MODELS   * * * PARTIAL *   * PARTIAL WITH FINES * * 2.7   * * * PARTIAL WITH FINES * 2.7   * * * PARTIAL WITH FINES * *   * * * * * 2.7   * * * * * *   * * * * * 2.7   * * * * * *   * * * * * *   * * * * * *   * * * * * *   * * * * * *   * * * * * *   * * * * * *   * * * * * *   * * * * * *   * * * * * *   * <td< td=""><td>1</td></td<>	1										
*   *   *   PARTIAL   *   2.7     *   *   PARTIAL WITH FINES   *   *     *   *   *   *   *   *     *   *   *   *   *   *   *     * <td< td=""><td>ACEMENT</td></td<>	ACEMENT										
* * PARTIAL PARTIAL   * * PARTIAL WITH FINES *   * * * *   * * * *   * * * *   * * * *											
*   FINES   *     EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION     EVAP / ORVR FAMILY   EVAPORATIVE STD CATEGORY   EVAP EMISSION STD VEHICLE CLASS   SPECIAL FEAT     PGMXR016340A   LEV 3 OPTION2 WITH FEL   LDT2   HCT     PGMXR017350D   LEV 3 OPTION2 WITH FEL   LDT3   HCT     PGMXR022450C   LEV 3 OPTION2 WITH FEL   LDT3   HCT     EMISSION CREDIT INFORMATION   EMISSION CREDIT INFORMATION   OPTIONAL E											
EVAP / ORVR FAMILY   EVAPORATIVE STD CATEGORY   EVAP EMISSION STD VEHICLE CLASS   SPECIAL FEAT     PGMXR016340A   LEV 3 OPTION2 WITH FEL   LDT2   HCT     PGMXR017350D   LEV 3 OPTION2 WITH FEL   LDT3   HCT     PGMXR022450C   LEV 3 OPTION2 WITH FEL   LDT3   HCT     EMISSION CREDIT INFORMATION     NMOG CREDIT FOR NON-PZEV     NMOG FLEET AVE. CREDIT FOR EXTENDED   NMOG CREDIT FOR NON-PZEV   NMOG CREDIT FOR DOR   OPTIONAL E											
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY VEHICLE CLASS SPECIAL FEAT   PGMXR016340A LEV 3 OPTION2 WITH FEL LDT2 HCT   PGMXR017350D LEV 3 OPTION2 WITH FEL LDT3 HCT   PGMXR022450C LEV 3 OPTION2 WITH FEL LDT3 HCT   EMISSION CREDIT INFORMATION   NMOG CREDIT FOR NON-PZEV NMOG CREDIT FOR NON-PZEV	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION										
PGMXR017350D LEV 3 OPTION2 WITH FEL LDT3 HCT   PGMXR022450C LEV 3 OPTION2 WITH FEL LDT3 HCT   EMISSION CREDIT INFORMATION   NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED NMOG CREDIT FOR NON-PZEV NMOG CREDIT FOR DOP OPTIONAL E	URES										
PGMXR022450C LEV 3 OPTION2 WITH FEL LDT3 HCT   EMISSION CREDIT INFORMATION   NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED NMOG CREDIT FOR NON-PZEV NMOG CREDIT FOR DOR OPTIONAL E											
EMISSION CREDIT INFORMATION       NMOG+NOX FLEET AVE.     NMOG CREDIT FOR NON-PZEV     NMOG CREDIT FOR DOP     OPTIONAL E	HCT										
NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED NMOG CREDIT FOR NON-PZEV NMOG CREDIT FOR DOR OPTIONAL E											
CREDIT FOR EXTENDED NMOG CREDIT FOR NON-PZEV NMOG CREDIT FOR DOR OPTIONAL E	EMISSION CREDIT INFORMATION										
WARRANTY ZERO-EVAP NMOG CREDITION DON FOR WORK	-										
N N N N											
NMOG AND FLEET AVERAGE INFORMATION											
NMOG RAFCH4 RAFFTP NMOG/NMHC RATIOHCHO/NMHC RATIONMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)NMOG+NOX FLEET STD MDV (10,001 GVWR) (g/mi)	-14,000										
* * 1.10 * 0.044 0.047 *	*										

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.)



## 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.

This Executive Order hereby cancels and supersedes Executive Order A-006-2363 dated June 7, 2022.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed on this <u>17th</u> day of January 2023.

Robin U. Lang, Chief Emissions Certification and Compliance Division



FUEL TYPE

# 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

		NMOG+N (g/mi)						NOx HC (g/mi) (mg		HO /mi)		PM g/mi)
			CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K		*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10		0.024	0.030	0.6	1.0	*	*	*	4	0.001	0.003
50°F @4K		OLINE- R3 E10 0.056 0.060			0.8	1.0	*	*	*	8		
							NN	NMOG+NOx (g/mi) CO			CO (g/m	ni)
		FUEL TYPE					CE	RT	STD	CER	Т	STD
HWFET @	⊉ 50K *				*	r	*					
HWFET @ UL GASOLINE-TIER3 E10			R3 E10		0.0	)12	0.030					
20°F @ 50K COLI		COLD (	CO E10 RE	EGULAR GA	ASOLINE	(TIER3)				1.4	l	12.5

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

	SFIP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS															
						US06			SC03	3		COMPOSITE				
	FUEL TYPE		FUEL TYPE		YPE NM		OG+NOx	CO	CO P		NMOG+NOx	со	NM	OG+NOx	СО	PM
				(g/mi)	(g/mi)	(mg	ı/mi)	(g/mi)	(g/mi)	(	g/mi)	(g/mi)	(mg/mi)			
@4K *		CERT		*	*	*		*	*							
			STD	*		*	*		*	*						
			CERT		*	*	:	3	*	*	C	0.023	1.1	*		
@ UL	@ UL GASOLINE- TIER3 E10		STD		*	*		6	*	*	C	0.063	4.2	*		
			BIN								C	0.050				
		WН	OLE VE	HICL	E EVAPO	ORATIVE E	MISSION	I STAND	ARDS AND	CERTIFIC	ATIO	N LEVELS	i			
						WHOLE VEHICLE EVAPORATIVE TESTING										
EVAPORATIVE FAMILY			UEL TY	ΈE	E 3DHS (g/test) @ UL				2DHS (g/test) @ UL				RL (g/mi) @ UL			
					CERT	STD	FEL	CERT	r std	FEI	L	CERT		STD		
PCMXR016340A		ASOLIN IER3 E		0.319	0.400	0.400	0.307	7 0.400	0.40	00	0.00		0.05			
PGMXR017350D		_	ASOLIN IER3 E		0.198	0.500	0.500	0.200	0 0.500	0.50	00	0.00		0.05		
PGMXF	R022450C	_	ASOLIN IER3 B		0.314	0.500	0.525	0.465	5 0.500	0.52	25	0.00		0.05		



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 CANISTE TEST (g/test) @ 4			
	FUEL TYPE	CERT	STD			CERT	STD	CERT	STD	CERT	STD		
PGMXR016340A	GASOLINE- TIER3 E10	0.05	0.20	GASOLINE- TIER3 E10		*	*	*	*	0.004	0.020		
PGMXR017350D	GASOLINE- TIER3 E10	0.02	0.20	GASOLINE- TIER3 E10		*	*	*	*	0.008	0.020		
PGMXR022450C	GASOLINE- TIER3 E10	0.02	0.20	0.20 GASOL TIER3		*	*	*	*	0.012	0.020		
E	EFFECTIVE	LEAK D	IAMET	ER STAI	NDARI	D AND CE	RTIFICA	TION LEV	'EL (INCH	ES)			
EVAPORATIVE FAMILY			Y CERT					STD					
PGMXR016340A PGMXR016340A			-LK1 *					0.02					
PGMXR017350D PGMXR017350D			-LK1 *					0.02					
PGMXR0224	50C	PGMXR0	22450C	-lK1	-LK1 *					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

2023 MODEI	YEAR: VEHICLE MODELS INFORMATION	

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
CHEVROLET	COLORADO 2WD	LDT2	2.7	A8	PGMXR016340A	1	F
CHEVROLET	COLORADO 2WD	LDT3	2.7	A8	PGMXR016340A	1	F
CHEVROLET	COLORADO 4WD	LDT2	2.7	A8	PGMXR016340A	1	F
CHEVROLET	COLORADO 4WD	LDT3	2.7	A8	PGMXR016340A	1	F
CHEVROLET	COLORADO 4WD MUD TERRAIN TIRES	LDT3	2.7	<b>A</b> 8	PGMXR016340A	1	F
CHEVROLET	COLORADO ZR2 4WD	LDT3	2.7	A8	PGMXR016340A	1	F
CHEVROLET	SILVERADO 2WD	LDT3	2.7	A8	PGMXR017350D	1	F
CHEVROLET	SILVERADO 2WD	LDT3	2.7	A8	PGMXR022450C	1	F
CHEVROLET	SILVERADO 4WD	LDT3	2.7	A8	PGMXR017350D	1	F
CHEVROLET	SILVERADO 4WD	LDT3	2.7	A8	PGMXR022450C	1	F
CHEVROLET	SILVERADO 4WD MUD TERRAIN TIRES	LDT4	2.7	<b>A</b> 8	PGMXR017350D	1	F
GMC	CANYON 2WD	LDT3	2.7	A8	PGMXR016340A	1	F



# 2023 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
GMC	CANYON 4WD	LDT3	2.7	A8	PGMXR016340A	1	F
GMC	CANYON 4WD MUD TERRAIN TIRES	LDT3	2.7	<b>A</b> 8	PGMXR016340A	1	F
GMC	CANYON AT4X 4WD	LDT3	2.7	A8	PGMXR016340A	1	F
GMC	SIERRA 2WD	LDT3	2.7	A8	PGMXR017350D	1	F
GMC	SIERRA 2WD	LDT4	2.7	A8	PGMXR022450C	1	F
GMC	SIERRA 4WD	LDT4	2.7	A8	PGMXR017350D	1	F
GMC	SIERRA 4WD	LDT4	2.7	A8	PGMXR022450C	1	F
GMC	SIERRA 4WD MUD TERRAIN TIRES	LDT4	2.7	<b>A</b> 8	PGMXR017350D	1	F