

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		TEST GROUP VEHICLE CLASS(ES							S) FUEL CATEGORY			FUEL TYPE		
2023	3	PGMXV02.0041 PC							DEDICATED SINGLE FUEL VEHICLE			GASOLINE		
USEFUL LIFE (miles) VEHICLE EMISSION								CATE	ATEGORY INTERIM / INTERMEDIATE IN-USE S					
EXI	H/ORV	/R	EVAP			FTP		SF	TP	FTP		SFTP		
1!	50000	0	150000		LEV3	SULEV30	LEV	3 C	OMPOSITE	*		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS							L		OBD S	ratus En		ENGINE DISPLACEMENT (L)		
1	1 DFI, TC, CAC, TWC, WR-HO2S, HO2S								FULL	ALL MODELS				
*				*				F	PARTIAL	*		2.0		
*	* *								RTIAL WITH *					
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION														
EVA	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR							r	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
	PGMXF	R011	03AA	LE	V З ОРТІ	ON2 WITH 1	FEL		I	2C	HCT			
					E	EMISSION CI	REDI	T INFO	ORMATION					
	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY							ZEV				OPTIONAL EXH. STD FOR WORK TRUCKS		
		N	1			N			N N					
					NMOG	AND FLEET	AVE	RAG		TION				
NMOG RAF	CH RA		FTP NMOG/NMHC RATIO	OG/NMHC HCHO/NMHC PC+LDT (0-37										
*	*		0		*	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.

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

Executed on this  $\underline{29th}$  day of March 2022.

Allen Lyons, 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

			_	G+NOx mi)	-	O mi)		Ox mi)	HC (mg	-	(	PM (g/mi)	
			CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
FTP@50K	*		*	*	*	*	*	*	*	*	*	*	
FTP@UL	GASOLINE- TIER3 E10		0.021	0.030	0.3	1.0	*	*	*	4	0.001	1 0.003	
50°F @4K		*	*	*	*	*	*	*	*	*			
					-	<u>.</u>	NN	NMOG+NOx (g/mi)			CO (g/mi)		
				FUEL TYP	E		CE	RT	STD	CER	т	STD	
HWFET @ 50K		*						* *					
HWFET @ UL		L GASOLINE-TIER3 E10						03	0.030				
20°F @ 50K		COLD (	CO E10 RI	EGULAR G	ASOLINE	(TIER3)				1.7	,	10.0	

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			SFT	PEXHAL	JST EN	ISSION	I STAND	ARDS /	AND	CERTIFIC	ATION LE	VELS				
						US06				SC03		C	OMPOS	ITE		
	FUEL TYPE		١	NMOG+NOx (g/mi)		CO (g/mi)				DG+NOx g/mi)	CO (g/mi)	NMOG+NC (g/mi)	0x C (g/i	-	PM (mg/mi)	
@4K *		C	ERT	*		*			*		*					
_		S	STD	*		*			*		*					
			ERT	*		* 0.3		3	*		*	0.029	0.	6	*	
@ UL	GASOLIN TIER3 E	S	STD	*		*	* 6		*		*	0.063	4.	2	*	
			BIN									0.050				
	WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS															
					WHOLE VEHICLE EVAPORATIVE TESTING											
	ORATIVE	FUEL TY		E 3	3DHS (g/		2) UL		2DHS (g/test) @		@ UL	@ UL F		L (g/mi) @ UL		
				CEF	CERT S		FEL	CER	RL	STD	FEL	CE	RT	T STD		
PGMXR01103AA			OLINE- R3 E10	0 211 0		.300	300 0.300 0.2		51	0.300	0.300	0.	0.00		0.05	
C	DRVR / FUR	EL ON	LY / CA	NISTER	BLEED	) EVAP	ORATIVE	EMIS	SION	I STANDA	RDS AND	CERTIFICA	TION L	EVE	LS	
								FU	EL C	ONLY EVA	P & CANIS	TER BLEE	D			
EVAPORATIVE FAMILY		OR	ORVR (g/gal				FUEL TYPE		HS RIG TEST g/test) @ UL			t) @ UL		BLEED CANISTI TEST (g/test) @		
		FUEL	TYPE	CERT	STD			CE	RT	STD	CERT	STD	CER	Г	STD	
PGMXF	R01103AA		LINE- 3 E10	0.05	0.20		OLINE- R3 E10	*		*	*	*	0.00	9	0.020	



EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
PGMXR01103AA	PGMXR01103AA-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 MODEL YEAR: VEHICLE MODELS INFO	RMATION
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MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
CADILLAC	CT4	PC	2.0	SA8	PGMXR01103AA	1	F
CADILLAC	CT4 AWD	PC	2.0	SA8	PGMXR01103AA	1	F
CADILLAC	CT5	PC	2.0	SA10	PGMXR01103AA	1	F
CADILLAC	CT5 AWD	PC	2.0	SA10	PGMXR01103AA	1	F