

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 GRO	DUP IN	NFOR	MATION					
MODE		EST GROUP		VEHICLE CLASS(ES)				FUEL CATEGORY			FUEL TYPE		
2023	PF	MXT03.54JK		LDT4				DEDICATED SINGLE FUEL VEHICLE			GASOLINE		
	USEFUL	. LIFE (miles)		VEF	VEHICLE EMISSION CATEGORY				INTERIM / IN	TERN	ERMEDIATE IN-USE STD		
EXH	/ORVR	EVAP		FTP				SFTP FTP			SFTP		
15	0000	15000	D	LEV3	ULEV50	LEV	3 CC	MPOSITE	*		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS								OBD S	TATUS	EN	ENGINE DISPLACEMENT		
1 2TWC, DFI, SFI, 2WR-HO2S, 2HO2S, 2TC, CAC, EGR, EGRC								FULL	*				
*			*				P	ARTIAL	ALL MODELS		3.5		
*	*							TIAL WITH	*				
		E	VAPO	RATIVE &	REFUELING	(EVA	P/OR	VR) FAMIL					
EVA	P / ORV	R FAMILY	PORATIVE	E STD CATE	GORY	,	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES			
E	FMXR02	00GDG	LE	V 3 OPTI	CON2 WITH	ON2 WITH FEL			DT4		HCT		
E	FMXR02	60NDG	LE	IV 3 OPTI	CON2 WITH	FEL		LI	DT4		HCT		
		ł			EMISSION C	REDI		ORMATION					
	EDIT FC	X FLEET AVE. DR EXTENDED RRANTY			REDIT FOR N ZERO-EVAP	ON-P	PZEV NMOG CREDIT FOR DOP			R OPTIONAL EXH. STD FOR WORK TRUCKS			
		N			N			N			N		
				NMOG	AND FLEE	T AVE	RAG	E INFORMA	TION				
NMOG RAF	G CH4 NMOG/NMHC HCHO/NMHC				PC+LDT (	NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)			+NOX FLEET S1 (3751 LVW-8500 R) + MDPV (g/mi				
*	*	1.10		*	0	.044			0.047		*		
Soo th		mont for Vahi			porativo Ea	mily	Engir		mont Emission	Cor	trol Systems Phase-		

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  $\underline{28th}$  day of September 2022.

Jolin U. Lang

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+NOx (g/mi)		CO (g/mi)			Ox mi)	HC (mg	-			
			CERT	STD	CERT	STD	CERT	CERT STD		STD	CERT	STD	
FTP@50K		*	*	*	*	*	*	*	*	*	*	*	
FTP@UL	GASOLINE- TIER3 E10		0.027	0.050	0.8	1.7	*	*	0	4	0.001	0.003	
50°F @4K		*	*	*	*	*	*	*	*	*			
					-		NN	/IOG+N	Ox (g/mi)		CO (g/mi)		
				FUEL TYP	E		CE	RT	STD	CER	Т	STD	
HWFET @ 50K				*			*	<b>,</b>	*				
HWFET @ UL			GASOI	LINE-TIE	R3 E10		0.0	)12	0.050				
20°F @ 50K		COLD (	CO E10 RE	EGULAR G	ASOLINE	(TIER3)				0.5	5	12.5	

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			SI	- I P E)	XHAUSI	EMISSION	ISTAND	ARDS	AND	CERTIFIC	ATION L	EVEL	.5			
						US06				SC03			COM	POSI	ΓЕ	
	FUEL TYPE				DG+NOx g/mi)	CO (g/mi)	-	PM g/mi)		)G+NOx g/mi)	CO (g/mi)		OG+NOx (g/mi)	CC (g/m		PM (mg/mi)
@ 4K	*		CERT		*	*				*	*					
-			STD		*	*				*	*					
				*		*	1			*	*	(	0.039	0.8	3	*
@ UL	OUL GASOLINE- TIER3 E10		STD			*		6		*	*	0.063		4.2		*
			BIN									0.060				
	WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS															
						WHOLE \	/EHICLE	EVAPO	ORAT	IVE TEST	ING					
	EVAPORATIVE FAMILY		FUEL TYPE		3DH	S (g/test) @	(g/test) @ UL			2DHS (g/test) @ UL			RL (g/mi) @ UL			IL
					CERT	STD	FEL	CER	RL	STD	FE	L	CERT			TD
PFMXR0200GDG		-	ASOLIN IER3 E	0 2989		0.500	0.500	*		0.500 0.50		00	0.000		0.	. 05
PFMXR0260NDG			ASOLIN IER3 E		0.2537	0.500	0.500	0.20	84	0.500	0.5	0.000		0.000 0.		. 05



ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS														
		FUEL ONLY EVAP & CANISTER BLEED												
EVAPORATIVE FAMILY	ORVR (g/	FUEL TYPE		3DHS R (g/test		-	RIG TEST t) @ UL	BLEED CANISTER TEST (g/test) @ 4K						
	FUEL TYPE	E CERT STD				CERT	STD	CERT	STD	CERT	STD			
PFMXR0200GDG	GASOLINE- TIER3 E10 0.028 0.20		0.20	GASOLINE- TIER3 E10		*	*	*	*	0.0100	0.020			
PFMXR0260NDG	GASOLINE- TIER3 E10 0.01		0.20	GASOLINE- TIER3 E10		*	*	*	*	0.0048	0.020			
E	EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)													
EVAPORATIVE	Y CERT					STD								
PFMXR0200GDG PFMXR0200GDG			-001	-001 *					0.02					
PFMXR0260	NDG	pfmxr0	260NDG	-001		*			0.02					

\*: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: \_DT<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/oxvgen 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 INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
FORD	F150 2WD	LDT4	3.5	SA10	PFMXR0200GDG	1	P
FORD	F150 2WD	LDT4	3.5	SA10	PFMXR0260NDG	1	P
FORD	F150 PICKUP 4WD	LDT4	3.5	SA10	PFMXR0200GDG	1	P
FORD	F150 PICKUP 4WD	LDT4	3.5	SA10	PFMXR0260NDG	1	P
FORD	F150 POLICE RESPONDER 4WD	LDT4	3.5	SA10	PFMXR0200GDG	1	Р