

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 GRC	UP IN	IFOR	MATION					
MODE YEAR		EST GROUP	GROUP VEHICLE CLASS(ES)					FUEL CATEGORY			FUEL TYPE		
2021	MF	MXD06.27BC		MDV5				FLEX-FUEL VEHICLE (FFV)			85% ETHANOL, GASOLINE		
	USEFUL	. LIFE (miles)	-	VEH	ICLE EMISS	ION C	ATEC	GORY	INTERIM / IN	TER	MEDIATE IN-USE STD		
EXH	/ORVR	EVAF)		FTP		SF	ГР	FTP		SFTP		
15	0000	15000	0	LEV3	ULEV270	(H (L2	ЮТ14 492),	ULEV 35 UC SC03, CYCLE)	*	*			
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS					L		OBD S	TATUS		NGINE DISPLACEMENT (L)			
1		2TWC, 2WE	R-H02S,2H02S,SFI					FULL	ALL MODELS				
*		*					P.	ARTIAL	*		6.2		
*	*							TIAL WITH FINES	*				
		E	VAPC	ORATIVE &	REFUELING	(EVA	P/OR	VR) FAMIL`	Y INFORMATIO	N			
EVA	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR						,	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
M	IFMXF02	50NDJ	L	EV 3 OPTI	ION2 WITH FEL			MI	VV5		*		
M	IFMXF03	60NHJ	L	EV 3 OPTI	7 3 OPTION2 WITH FEL			MDV5			*		
M	MFMXR0250NHJ LEV 3				3 OPTION2 WITH FEL			MDV5			*		
M	IFMXR03	60NHJ	L	EV 3 OPTI	ON2 WITH	FEL		ME)V5	*			
					EMISSION CI	REDIT		RMATION	L				
	EDIT FC	X FLEET AVE OR EXTENDED RANTY			EDIT FOR N ZERO-EVAP	ON-P	ZEV	NMOG CREDIT FOR DOR			OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N			N			N		
				NMOG	AND FLEET	AVE	RAGE	INFORMA	TION				
NMOG RAF	CH4 RAF				VW-85	500 G	r STD NMOG+NOX FLEET STI GVW) MDV (8501-10000 GVWF (g/mi)						
*	*	1.10		*		*			0.203		0.298		
Coo th	. <u>Attaak</u>	mant for Vah	iala M	ladala Eur	norotivo Fo	an ile e	—	a Diaulaaa	mont Emissio		ntrol 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 <u>11th</u> day of September 2020.

Toward

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)			CO /mi)			Ox /mi)		HCF (mg/			PM (g/n			
			ľ	CERT	STC		RT	ST	D	CERT	STD	CEF	ет	STD	CE	RT	STD		
FTP@5	0K	*		*	*		*	*		*	*	*		*	ł	r	*		
FTP@L	JL (GA	85-EE SOLII R3 E	NE-	0.221 (0.241)	0.27		.9 .5)	4.: (4.:		* (*)	* (*)	1 (*	,	6 0.0 (6) (0.0			0.010 (0.010)		
50°F @	4K E	85-EF	?A	0.221	0.67	5 0	. 8	4.3	2	*	*	3		20	20				
										N	MOG+N	Ox (g/mi)			CO (g/mi)			
					FUEL T	TPE				CE	RT	STD		CER	Г	STD			
HWFE ⁻	T @ 50K				*						*	*							
HWFE	T @ UL			(GASO	E85-H LINE-T	EPA IER3 E	10)				170 195)	0.270 (0.270)							
20°F	@ 50K				*									*			*		
				SFTP EX	HAUST	EMISSI	ON S	TAND	ARDS	AND C	ERTIFIC	ATION L	EVE	LS					
					US06					SC03					IPOSITE				
	FUEL TYPE		NMO	NMOG+NOx		CO PM		М	NMOC	S+NOx	со	N₩	NMOG+NOx		co	PM			
				(g	/mi)	(g/m	ni)	(mg	ı/mi)	(g/	mi)	(g/mi)		(g/mi)		/mi)	(mg/mi)		
@ 4K	*			-	*	*				_	*	*							
			STE		*	*					*	*			268 2.6				
	-0-	E85-EPA ST			*	*			*		*	*	-	0.268	.268 2.6 .550 6.0		2		
@ UL	E82-	EPA	STE		*	*			*		*	*	*		-	5.0	7		
			CER		*	*		-	*		*	*		0.243	3	3.8	1		
@ UL	GASOL TIER3		STD		*		* *		*		*	*	* 0.550		0.550 6.0		7		
			BIN											*					
		WF	IOLE	VEHICLE	EVAPC	RATIVE	EM	SSION	STA		S AND (ERTIFIC	ATIC	N LEVEL	.s				
						WHOLI	E VE	HICLE	EVAF	ORATI	VE TES	ING							
				3DHS	3DHS (g/test) @ UL				2DHS (g/test) @ UL				RL (g/		g/mi) @ UL				
					CERT	STD		FEL	CE	RT	STD	FE	FEL CER		Т		STD		
MFMXF0250NDJ		.т. Г	SASOL TIER3	10	0.352	0.600	0	. 600	0.2	231	0.600	0.6	00	0.00	0.000		0.05		
MFMXF0360NHJ			GASOL TIER3).377	0.600	0	. 600	0.3	356	0.600	0.6	00	0 0.00		0.000			0.05
MFMXF	0250NH		GASOL TIER3	1.0	0.352	0.600	0	.600	0.2	231	0.600	0.6	00	0.00	0	(0.05		
MFMXF	0360NH		GASOL).377	0.600	0	. 600	0.3	856	0.600	0.6	00	0.00	0		0.05		



ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS														
				FUEL ONLY EVAP & CANISTER BLEED										
EVAPORATIVE FAMILY	ORVR (g/	FUEL TYPE			IG TEST) @ UL		IG TEST :) @ UL	BLEED CANISTER TEST (g/test) @ 4P						
	FUEL TYPE	CERT STD					STD	CERT	STD	CERT	STD			
MFMXF0250NDJ	E10-EPA	PA * *		GASOLINE- TIER3 E10		*	*	*	*	0.007	0.030			
MFMXF0360NHJ	E10-EPA	*	* *		GASOLINE- TIER3 E10		*	*	*	0.010	0.030			
MFMXR0250NHJ	E10-EPA	EPA 0.040 0.20		GASOLINE- TIER3 E10		*	*	*	*	0.007	0.030			
MFMXR0360NHJ	E10-EPA	0.012	0.20	GASOL TIER3		*	*	*	*	0.010	0.030			
	EFFECTIVE	LEAK D	IAMET	ER STA	NDAR	D AND CE		TION LEV	'EL (INCH	IES)				
EVAPORATIVE	LY		CE	RT		STD								
MFMXR0250	NHJ	MFMXR0	250NHJ	-001		*			0.02					
MFMXF0250NDJ MFMX			250NDJ	-001	*				0.02					
MFMXR0360NHJ MFMXR0360NH			360NHJ	-001		k	r		0.02					
MFMXF0360	NHJ	MFMXF0	360мнј	-001	-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/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
FORD	F350 2WD BED DELETE FFV	MDV5	6.2	SA6	MFMXF0250NDJ	1	F
FORD	F350 2WD BED DELETE FFV	MDV5	6.2	SA6	MFMXF0360NHJ	1	F
FORD	F350 4WD BED DELETE FFV	MDV5	6.2	SA6	MFMXF0250NDJ	1	F
FORD	F350 4WD BED DELETE FFV	MDV5	6.2	SA6	MFMXF0360NHJ	1	F
FORD	F350 PICKUP 2WD FFV	MDV5	6.2	SA6	MFMXR0250NHJ	1	F



2021 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
FORD	F350 PICKUP 2WD FFV	MDV5	6.2	SA6	MFMXR0360NHJ	1	F
FORD	F350 PICKUP 4WD FFV	MDV5	6.2	SA6	MFMXR0250NHJ	1	F
FORD	F350 PICKUP 4WD FFV	MDV5	6.2	SA6	MFMXR0360NHJ	1	F