California Environmental Protection Agency

OB Air Resources Board

FORD MOTOR COMPANY

Executive Order: A-010-1955

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

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Pursuant to the authority vested in the 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-14-012;

IT IS ORDERED AND RESOLVED: 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	- I T	EST G	ROUP		VEHICLE CLASS(ES)				FUEL CATEGORY				FUEL TYPE			
2017	2017 HFMXT02.52FB LDT					LDT2	LDT2 DEDICATED SINGLE VEHICLE				GASOLINE		SOLINE			
ı	JSEFUL	LIFE	(miles)		V	EHICLE EMISS	ON C	CAT	EGORY		IN	ITERIM / IN	TER	MEDIA	E IN-USE STD	
EXH	/ORVR		EVAP			FTP		S	FTP			FTP		SFTP		
15	0000		150000		LEV	/3 ULEV125	LEV	3 (COMPOSI	TE		PM			PM	
SPE	CIAL FE	ATUR		HAUST TEMS	EMIS	SION CONTRO	L		OE	BD S	TAT	JS	E	NGINE	DISPLACEMENT (L)	
1 TWC(2), WR-HO2S, HO2S, EGR, SFI									FULL			*				
*				*		· · · · · · · · · · · · · · · · · · ·			PARTIAL	L	AL	ALL MODELS		2.5		
*	* *							PA	RTIAL W	/ITH	н *					
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION															
EVA	P / ORV	R FAN	MILY	EVAP	ORAT	IVE STD CATEO	SORY	DRY EVAP EM VEHICL				1	;	SPECIAI	FEATURES	
Н	FMXR01	30NDE	7	LEV	3 01	PTION2 WITH I	ON2 WITH FEL LDT			T2				HCT		
						EMISSION CF	REDI	ΓINI	FORMATI	ION						
			ANCE FO		T GR				OG CREDIT FOR NMOG CR		RED	IT FOR	OPTIONAL EXH. STD FOR WORK TRUCKS			
BASE	LINE PZ	2EV	AI	PZEV		TZEV									TROOKS	
	*			*		*			N			1	N		N	
					NM	OG AND FLEET	AVE	RAG	GE INFOR	RMA	TION	l				
NMOG RAF	RAF NMOG/NMHC RATIO PC+LDT (0-3			-3750 LVW)		NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)								
*	* * 1.10 * 0.08				.086		0.101 *			*						

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.

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 NMOG+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan 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],

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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 at El Monte, California on this ______ day of March 2016.

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Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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PM

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RVP @ LOW ALT.)

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 **FUEL TYPE**

			s+NOx mi)	CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	TIER 3 E10 REGULAR GASOLINE (9	0.0455	0.125	0.82	2.1	*	*	*	4	*	0.003

50°F @4K	*	*	*	*	*	*	*	*	*		
HWFET @ 50K			FUEL TYPE			NM	OG+NO	x (g/mi)	CO (g/mi)		
		•	FUEL TYPE			CER	RT	STD	CERT	STD	
HWFET @ 50	K		*			*		*			
HWEET @ II	TIER 3	E10 REGU	LAR GASOL	INE (9 R	VP @ LOW	0.03	97	0.125	Sugar dak		

HWFEI @ UL ALT.) 1.00 COLD CO E10 REGULAR GASOLINE (TIER 3) 12.5 20°F @ 50K

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

US06 SC03 COMPOSITE NMOG+NOx NMOG+NOx CO **FUEL TYPE** NMOG+NOx CO PM CO (g/mi) (mg/mi) (g/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi)

@ 4K	*	CERT	*	*	- 4	*	*		THE VALLEY	
@ 41.		STD	*	*		*	*	porter in the	M. S.S.	
		CERT	*	*	*	*	*	0.0424	1.10	*.
	TIER 3 E10 REGULAR GASOLINE (9 RVP @ LOW ALT.)	STD	*	*	10	*	*	0.103	4.2	*
		RIN					1.0	0.110	and the same	100

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

	FUEL TYPE		WHOLE						
EVAPORATIVE FAMILY		3DHS (g/test) @ UL			2DI	HS (g/test) (RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
HFMXR0130NDF	TIER 3 E10 REGULAR GASOLINE (9 RVP @ LOW ALT.)	0.1834	0.400	0.400	0.1434	0.400	0.400	0.000	0.05

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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		IG TEST) @ UL	2DHS R (g/test	IG TEST) @ UL	BLEED CANISTER TEST (g/test) @ 4K				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
HFMXR0130NDF	TIER 3 E10 REGULAR GASOLINE (9 RVP @ LOW ALT.)	0.032	0.20	TIER 3 E10 REGULAR GASOLINE (9 RVP @ LOW ALT.)	*	*	*	*	0.0095	0.020			

: 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; ŽEV: zero-emission vehicle; PZEV: partial ZEV; AT PZEV: advanced technology PZEV; 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; 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; 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; 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

2017 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
FORD	ESCAPE FWD	LDT2	2.5	SA6	HFMXR0130NDF	1	P	*