#### California Environmental Protection Agency

**O** Air Resources Board

FORD MOTOR COMPANY

Executive Order: A-010-1991

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 GROU	PIN	FORMAT	ION					
MODE	TEST CONID		VEHICLE CLASS(ES)			FUEL CATEGORY			FUEL TYPE				
2017	7 Н	HFMXT03.75HG		MDPV			FLEX-FUEL VEHICLE (FFV)			85% ETHANOL, GASOLINE			
	USEFU	LIFE	(miles)	II v	EHICLE EMISSIO	N C	ATEGOR	Υ	IN	TERIM / IN	TERMEDIA	TE IN-USE STD	
EXH/ORVR EVAP			EVAP		FTP			SFTP		FTP		SFTP	
120000			150000	COU	A TIER2 BIN8 NTED AS ARB EV2 ULEV	AS ARB *			*			*	
SPE	CIAL F	EATUR		IAUST EMIS	SION CONTROL	18.8		OBD ST	TATU	S	ENGINE	DISPLACEMENT (L)	
1		2TWC, 2WR-HO2S,			2HO2S, SFI		FULL		ALL MODELS				
*		*					PART	RTIAL *		3.7			
*		*					PARTIAL		*				
			EV	APORATIVE	& REFUELING (	EVA	P/ORVR)	FAMILY	INF	ORMATION	ı		
EVAP / ORVR FAMILY EVAPORATIVE S					IVE STD CATEG	STDCATECODY			MISSION STD LE CLASS		SPECIA	SPECIAL FEATURES	
	HFMXR0190NBD				LEV 2			MDV4			*		
					EMISSION CR	EDIT	INFORM	ATION					
ALLOWANCE FOR TEST GROUP						_				EDIT FOR OPTIONAL EXI			
BASELINE PZEV AT PZE				PZEV	V TZEV		NON-PZEV ZERO-EVAI		VAP	DOR		TRUCKS	
	* *				*		N			N		N	
				NM	OG AND FLEET	AVE	RAGE IN	FORMA	TION				
NMOG RAF	CH4 RAF			HCHO/NMI RATIO (GASOLIN	LDT (3751 LV	NMOG+NOX FLEET LDT (3751 LVW-8500 + MDPV (g/mi)		0 GVW) MDV (8501-				OG+NOX FLEET STD MDV (10001-14000 GVWR) (g/mi)	
*	*		1.04	*	* 0.10		1		*			*	

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.

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#### 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 for PC, LDT and MDV).

#### BE IT FURTHER RESOLVED:

The listed vehicle models are federally certified, and are certified under the provisions of 13 CCR Section 1961.2(a)(12) and the incorporated test procedures.

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 July 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

FUEL TYPE | CERT

0.169

E10-EPA

HFMXR0190NBD

STD

0.20

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# 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 NMOG** CO NOx **HCHO** PM (g/mi) (g/mi) (g/mi) (g/mi) (mg/mi) CERT STD CERT STD CERT CERT STD STD CERT STD E85-EPA (GASOLINE -0.0490 0.100 1.07 3.4 0.017 0.14 0.9 0.02 15 FTP@50K TIER 2 (0.0434) (0.100) (1.23)(0.024)(0.14)(3.4)(\*) (15)(\*) (0.02)UNLEADED) E85-EPA 0.0678 1.43 0.040 (GASOLINE -0.125 4.2 0.20 1.3 18 0.02 FTP@UL TIER 2 (0.0635) (0.125) (1.54)(4.2)(0.055)(0.20)(\*) (0.02)(\*) (18)UNLEADED \* 50°F @4K NOx (g/mi) CO (g/mi) **FUEL TYPE** CERT STD CERT STD HWFET @ 50K + HWFET @ UL GASOLINE-COLD CO LOW OCTANE 3.39 20°F @ 50K 12.5 SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS SC03 **US06** COMPOSITE PM **FUEL TYPE** NMHC+NO<sub>x</sub> CO PM NMHC+NOx CO NMOG+NO<sub>x</sub> CO (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi) (g/mi) (g/mi) (mg/mi) \* \* CERT @ 4K STD CERT \* \* \* \* \* \* \* \* STD + \* @ UL BIN WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS WHOLE VEHICLE EVAPORATIVE TESTING RL (g/mi) @ UL **EVAPORATIVE FUEL TYPE** 3DHS (g/test) @ UL 2DHS (g/test) @ UL **FAMILY** CERT STD FEL CERT STD FEL CERT STD HFMXR0190NBD E10-EPA 0.354 1.00 0.329 0.000 0.05 1.25 ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS **FUEL ONLY EVAP & CANISTER BLEED EVAPORATIVE** ORVR (g/gallon) @ UL 3DHS RIG TEST **2DHS RIG TEST BLEED CANISTER** FAMILY **FUEL TYPE** (g/test) @ UL (g/test) @ UL TEST (g/test) @ 4K

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\*: 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; GWWR: 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; 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	TRANSIT T150 WAGON FFV	MDPV	3.7	SA6	HFMXR0190NBD	1	F	*