#### California Environmental Protection Agency

**⊘** Air Resources Board

FORD MOTOR COMPANY

Executive Order: A-010-1994

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 1 of 4

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 GRO	UP IN	NFOR	MATION							
MODE	- I TE	ST G	ROUP		VEHI	CLE CLASS(E	S)		FUEL	. CA	ATE	GORY		FU	EL TYPE	
2017	HF	MXD06	5.26CH			MDV4 FLEX-F			K-FUEL VEHICLE (FFV)			85	85% ETHANOL, GASOLINE			
	USEFUL	LIFE	(miles)		VE	HICLE EMISS	ION C	CATE	GORY	П	IN	TERIM / IN	ΓEF	ERMEDIATE IN-USE STD		
EXI	I/ORVR		EVAP			FTP		SF	TP	7		FTP		SFTP		
15	50000		150000		LEV:	3 ULEV200	US0	6, S	EV (FULL CO3, FTP NMOG+NOX ANI		D I	PM NMC	G+NOX AND PM			
SPE	CIAL FE	ATUR		IAUST TEMS	EMISS	SION CONTRO	L		OBD	ST	TATU	JS	I	ENGINE	DISPLACEMENT (L)	
1		2TW	C, 2WR-H	102S,	2H02S	S, SFI			FULL	T		*				
*				*				F	PARTIAL		ALL MODELS		1	6.2		
*	* *							PAF	RTIAL WIT	Ή	*					
			EV	APOR	ATIVE	& REFUELING	(EVA	AP/OF	RVR) FAMI	ILY	INF	ORMATION	l			
EVA	AP / ORV	R FAN	MILY	EVAP	ORATI	VE STD CATE	GORY	Y EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES					
	HFMXF02	65NA	3			LEV 2 M			MDV	V4				*		
						EMISSION C	REDI	TINF	ORMATIO	N						
			ANCE FO		T GRO				G CREDIT			NMOG CREDIT F			OPTIONAL EXH. STD FOR WORK	
BAS	ELINE P	ZEV	AT	PZEV		TZEV									TRUCKS	
* *						*			N			1	Ŋ		N	
					NMC	OG AND FLEET	AVE	RAG	E INFORM	IAT	rion					
NMOG RAF	NMOG CH4 NMOG/NMHC RATIO (GASOLINE)			ATIO	LDT (3751 L	VW-8	500 C				NOX FLEET STD (10001-14000 /WR) (g/mi)					
*	*		1.10		*		*			*			*			

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.

California Environmental Protection Agency

**OB** Air Resources Board

FORD MOTOR COMPANY

Executive Order: A-010-1994

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 2 of 4

#### 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).

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 da

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Executive Order: A-010-1994

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 3 of 4

# **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 CO NOx HCHO PM (g/mi) (g/mi) (g/mi) (g/mi)

		NMOG+NOx (g/mi)		CO NOx (g/mi) (g/mi)		(g/mi) (mg/mi)				M mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	E85-EPA (TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.))	0.1192 (0.1162)	0.200	2.12 (3.21)	4.2 (4.2)	* (*)	* (*)	1.2 (0.9)	6 (6)	0.0004	0.008
50°F @4K	*	*	*	*	*	*	*	*	*		A STALL

Andrew Street	FUEL TYPE	NMOG+N	IOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	E85-EPA (TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.))	0.1699 (0.1449)	0.200 (0.200)			
20°F @ 50K	*	Table 10 Table 12 Safe		*	*	

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	COM	POSITE	
	FUEL TYPE		NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMOG+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*		*	*			
		STD	*	*		*	*			
		CERT	*	*	*	*	*	0.1813	7.96	1.1
@ UL	E85-EPA	STD	*	*	*	*	*	*	*	*
		BIN	-					*		財優勢
		CERT	*	*	*	*	*	0.1370	17.40	3.1
@ UL	TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.)	STD	*	*	*	*	*	0.800	22.0	10
		BIN		" all a se				*		<b>国类成功</b>

#### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE	VEHICLE	EVAPORA	TIVE TESTI	NG		
EVAPORATIVE	FUEL TYPE	3DHS	S (g/test)	@ UL	2DI	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
HFMXF0265NAS	E10-EPA	0.450	1.00	*	*	1.25	*	0.00	0.05

FORD MOTOR COMPANY Executive Order: A-010-1994

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 4 of 4

## ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

				FUEL ONLY EVAP & CANISTER BLEED									
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS R (g/test		2DHS Ri (g/test)		BLEED CANISTER TEST (g/test) @ 4K				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
HFMXF0265NAS	E10-EPA	*	*	*	*	*	*	*	*	*			

\*: 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; 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	F350 INCOMPLETE 2WD FFV	MDV4	6.2	SA6	HFMXF0265NAS	1	P	*
FORD	F350 INCOMPLETE 4WD FFV	MDV4	6.2	SA6	HFMXF0265NAS	1	P	*