California Environmental Protection Agency

⊘ Air Resources Board

BAYERISCHE MOTOREN WERKE AG Executive Order: A-008-0438

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 GR	OUP IN	FORMAT	ION					
MODE				VEHICLE CLASS(ES)			FUEL CATEGORY			Y	FUEL TYPE		
2017	нв	MXV00	.613R		PLUG-IN HYBRID ELECTRIC VEHICLE				GASOLINE				
USEFUL LIFE (miles)					VEHICLE EMISSION CATEGORY			RY INTERIM / INTE			RMEDIATE IN-USE STD		
EXH/ORVR EVAP			EVAP		FTP			SFTP		FTP		SFTP	
150000 150000			LEV	3 SULEV30	SULEV30 LEV 3 COMPOS		SITE	TTE PM		PM			
SPE	CIAL FE	ATUR		IAUST EMIS	SION CONTRO	DL		OBD ST	TATUS		ENGINE	DISPLACEMENT (L)	
1		TV	C, WR-H	02S, HO2S,		FULL ALL MO		DELS					
*				*			PART	IAL	*			0.6	
*				*			PARTIAL WITH FINES		*				
			EV	APORATIVE	& REFUELING	G (EVA	P/ORVR)	FAMILY	INFORM	ATION			
EVA	P / ORV	RFAN	MILY	EVAPORAT	VE STD CATE	GORY			SSION ST	'D	SPECIA	L FEATURES	
HBMXR0035I3R					LEV 2			PC			*		
					EMISSION C	REDIT	INFORM	ATION					
	Α	LLOW	ANCE FO	R TEST GRO	DUP		NMOG CR				DIT FOR	OPTIONAL EXH.	
BASELINE PZEV AT PZEV					TZEV	TZEV NON-PZEV ZERO-E		ZERO-E	RO-EVAP DOF		TRUCKS		
* * 2					ALL MODEL	S	s N			N		N	
				NM	OG AND FLEE	TAVE	RAGE IN	FORMA	TION				
NMOG RAF	NINACYCE/NINALIC		HCHO/NMH RATIO	HC NMOG+NOX FL PC+LDT (0-375 (g/mi)		O LVW) LDT		OG+NOX FLEET STD OT (3751 LVW-8500 'WR) + MDPV (g/mi)		NMOG+NOX FLEET STE MDV (10001-14000 GVWR) (g/mi)			
*	*	1	1.10	*		0.086			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

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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).

BE IT FURTHER RESOLVED:

Evaporative family HBMXR0035I3R is certified pursuant to 13 CCR Section 1976(b)(1)(G)3 and deemed to comply with the requirements of 13 CCR Section 1976(b)(1)(G)1 ["LEV III evaporative requirements"].

BE IT FURTHER RESOLVED:

The listed vehicle model is certified as a Type IIx Zero Emissions Vehicle (ZEV) and is granted ZEV multipliers and credits under 13 CCR Section 1962.1(d).

day of August 2016.

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

111 4

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

GASOLINE -

CA PHASE 2

0.28

0.35

0.35

0.00

0.05

HBMXR0035I3R

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ATTACHMENT

Week		-			PORATIV											
		FUEL TYPE		T 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)			NOx (g/mi)		HCH (mg/n		PI (g/r			
				CERT	STD	CERT	STD	CERT	STD	CER	T	STD	CERT	STD		
FTP@5	0K	*		*	*	*	*	*	*	*		*	*	*		
FTP@l	TIER 3 E10 REGULAR		(9	0.014	0.030	0.4	1.0	*	*	*		4	0.001	0.003		
50°F @	REG 4K GASOI	3 E: EULAR LINE @LOV LT.)	(9	0.035	0.060	0.2	1.0	*	*			8				
FUEL TYPE						NMOG+NOx (g/mi)			1.39	CO (g/mi)						
					FOEL TIPE				CERT S		CERT			STD		
HWFE'	HWFET @ 50K								****							
HWFE	HWFET @ UL		3 E	E10 REGULAR GASOLINE (9 RVP @LOW ALT.)					0.005 0.030							
20°F	@ 50K	COL	D CO	E10 F	EGULAR G	ASOLINE	(TIER 3					0.4		10.0		
			S	FTP E	KHAUST E	MISSION S	TANDAR	DS AND C	ERTIFIC	ATION L	EVEL	S				
						US06		SC03			COMPOSITE					
	FUEL TY	EL TYPE			OG+NOx g/mi)	CO (g/mi)	PM (mg/m		G+NOx /mi)	CO (g/mi)		OG+NOx (g/mi)	CO (g/mi)	PM (mg/m		
@ 4K		* C			*	*			*	*		de la companya dela companya dela companya dela companya de la com				
@ 4K					*	*		2	*	*	700			1024		
		CE FIER 3 E10 REGULAR ASOLINE (9 RVP @LOW ALT.) BI				* 2		10000	*		* 0		0.6	*		
@ UL	REGULA GASOLINA RVP @I					*	* 10		*		* 0.103		4.2	*		
				PARTY.		Market Land	277		1000	* Contract	(0.050				
		WHO	OLE V	EHICL	E EVAPOR	ATIVE EM	ISSION S	TANDARD	S AND	CERTIFIC	ATIO	N LEVELS	-			
					V	HOLE VE	HICLE EV	APORAT	VE TES	TING						
	ORATIVE MILY	FU	JEL T	YPE	3DHS (g/test) @	UL	2DH	2DHS (g/test) @ UL				RL (g/mi) @ UL			
					CERT	STD	TD FEL CE		RT STD		FEL		CERT STD			

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ORVR / FU	EL ONLY / CA	NISTER	BLEED	EVAPORATIVE	EMISSION	STANDA	RDS AND	CERTIFIC	ATION LEV	ELS		
				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS RIG TEST (g/test) @ UL			IG TEST	BLEED CANISTER TEST (g/test) @ 4K			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
HBMXR0035I3R	GASOLINE - TIER 2 UNLEADED		0.20	GASOLINE - CA PHASE 2	0.0	0.0	*	0.0	*	*		

*: 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
BMW	I3 REX	PC	0.6	SA1	HBMXR003513R	1	F	TZEV