California Environmental Protection Agency

OB Air Resources Board

BAYERISCHE MOTOREN WERKE AG Executive Order: A-008-0467

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	_ 1 _ 11	TEST GROUP VEHICLE CLASS(ES)					FUEL CATEGORY			RY	FUEL TYPE		
2018	JB	MXV00	.613R	PC PLUG-IN HYBRID ELECTRIC VEHICLE							GASOLINE		
- L	JSEFUL	LIFE	(miles)	II V	EHICLE EMISS	SION C	ATEGOR	Υ	INTE	RIM / INT	ERMEDIA	TE IN-USE STD	
EXH	ORVR		EVAP		FTP		SFTP			FTP		SFTP	
15	0000		150000	LE	73 SULEV30	LEV	3 сомро	SITE		PM		PM	
SPE	CIAL FE	ATUR	ES & EXH		SION CONTRO	DL		OBD S1	TATUS		ENGINE	DISPLACEMEN (L)	
1		TV	VC, WR-H	02S, H02S	SFI		FUL	L	ALL N	ODELS			
*				*			PART	IAL		*		0.6	
*		PARTIAL WITH *						*					
			EV	APORATIVE	& REFUELING	G (EVA	P/ORVR)	FAMILY	INFOR	MATION			
EVA	P / ORV	R FA	AILY	EVAPORAT	IVE STD CATE	GORY		AP EMIS			SPECIA	L FEATURES	
J	BMXR00	35131	R		LEV 2			P	С			*	
					EMISSION C	REDIT	INFORM	ATION					
	A	LLOW	ANCE FO	R TEST GR	OUP		MOG CR				DIT FOR	OPTIONAL EXH STD FOR WORK	
BASE	LINE P	ZEV	AT	PZEV	TZEV	NC	ION-PZEV ZERO-EVAP			БО	K	TRUCKS	
* * ALL MODELS					s	N N					N		
			•	NM	OG AND FLEE	T AVE	RAGE IN	ORMA	TION				
NMOG RAF	MOG CH4 NMOG/NMHC HCHO/NMHC		PC+LDT	NMOG+NOX FLEE PC+LDT (0-3750 L (g/mi)		NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)		VW-8500	MDV	NMOG+NOX FLEET STE MDV (10,001-14,000 GVWR) (g/mi)			
*	*		1.10	*		0.079			0.09	92		* ·	

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.

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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], 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:

For evaporative family JBMXR0035I3R, the manufacturer has attested to compliance with the 0.02 inch effective leak diameter standard in 13 CCR Section 1976(b)(1)(G)6 ["Effective Leak Diameter Standard And Procedure"].

BE IT FURTHER RESOLVED:

The listed vehicle models are certified as Zero Emission Vehicle (ZEV) – Range Extended Battery Electric Vehicle (BEVx) and are granted ZEV credits under 13 CCR Section 1962.2(d)(5).

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 October 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUS1	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+NOx (g/mi)				CO NOx (g/mi) (g/mi					M mi)		
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD		
FTP@50K	*	*	*	*	*	*	*	*	ŵ	*	*		
FTP@UL	GASOLINE- TIER3 E10	0.020	0.030	0.6	1.0	*	*	*	4	0.001	0.003		
50°F @4K	GASOLINE- TIER3 E10	0.022	0.060	0.4	1.0	*	*	*	8				

,	FUEL TVDF	NMOG+	NOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*	1		
HWFET @ UL	GASOLINE-TIER3 E10	0.010	0.030			
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)	- 1	7 -	1.1	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

7-3	-			US06		SC03	3	COMPOSITE			
	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	*	*		*	*		5		
		CERT	*	*	2	*	*	0.015	2.6	*	
@ UL	GASOLINE- TIER3 E10	STD	*	*	10	*	*	0.097	4.2	*	
		BIN					-	0.050	- 7	1	

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	FUEL TYPE	3DH:	S (g/test)	@ UL	2DI	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
JBMXR0035I3R	GASOLINE - CA PHASE 2	0.28	0.35	*	*	0.35	*	0.00	0.05

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 RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
JBMXR0035I3R	GASOLINE - TIER 2 UNLEADED	0.12	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; 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; 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; 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: semiautomatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission: AMS: automated manual-selectable transmission: OT: other transmission

2018 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH	OBD	PZEV TYPE
BMW	I3 (94AH) WITH RANGE EXTENDER	PC I	0.6	SA1	JBMXR003513R	1	F	TZEV
BMW	I3S (94AH) WITH RANGE EXTENDER	PC	0.6	SA1	JBMXR003513R	1	F	TZEV