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$\propto$	CALIFORNIA AIR RESOURCES BOARD
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Pursuant to the authority vested in California 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-19-095;

IT IS ORDERED AND RESOLVED: That 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.

				and a state of the	<u>, , , , , , , , , , , , , , , , , , , </u>	TEST GRO	UP IN	FORM	ATION						
MODE		TES	T GROUP		VEHICL	S)		FUEL CATEGORY			FUEL TYPE				
2023		MBMX				PC		L	DEDICATED SINGLE FUEL VEHICLE			GASOLINE			
	USEE		IFE (miles)	1	VEH	CLE EMISS	ION C	ATEG	ORY	T	INTERIM / INT	E	RMEDIATE IN-USE STD		
	HORV		EVAP			TP			FTP FTP			SFTP			
	50000		150000			ULEV70	LEV	3 CO	MPOSITE	ITE *		PM			
			TURES & EX	HAU	IST EMISSIO				OBD S	OBD STATUS		ENGINE DISPLACEME			
SYSTEMS 1 TWC, WR-HO2S, HO2S, DFI, TC, CAC									FULL	T	*				
*									ARTIAL	t	SOME MODELS	3.0			
*									TIAL WITH		SOME MODELS				
			E	VAP	ORATIVE &	REFUELING	i (EVA	P/OR	VR) FAMIL	Y	INFORMATION				
EV	AP / O	RVR	FAMILY		APORATIVE			1	EVAP EMISSION STD VEHICLE CLASS				SPECIAL FEATURES		
	MBMXR	2015	0G30	:	LEV 3 OPTI	ON2 WITH	FEL	PC				*			
					E	MISSION C	REDI	TINFO	RMATION						
NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY								N-PZEV NMOG CREDIT FOR DOR				2	OPTIONAL EXH. STD FOR WORK TRUCKS		
		ľ	Ň			N		N N					N		
					NMOG	AND FLEE	TAVE	RAG	E INFORMA	41	TION				
1	NMOG CH4 FTP RAF RAF NMOG/NMHC RATIO RATIO (g/mi)					(0-37		0 LVW)   LDT (3751 LVW-8500   MDV (10,			NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)				
*	*		1.10		*		0.058	3	0.065			*			

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. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)



## 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 fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c) (3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV 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:**

The listed vehicle BMW 540i and 540i xDrive models are conditionally certified in accordance with 13 CCR Section 1968.2(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the on-board diagnostic II (OBD) system of the vehicles has been determined to have three (3) deficiencies. The listed vehicle models are approved subject to the manufacturer paying a fine of twenty-five dollars (\$25) per vehicle for the third deficiency in the listed test group that is produced and delivered for sale in California.

On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of vehicles produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2021 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all vehicles covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$37,500 per violation per vehicle pursuant to HSC Section 43154.

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 on this 26th day of June 2020.

Allen Lyons, Chief Emissions Certification and Compliance Division



FUEL TYPE

# 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

	1.0		11 1																		
				NI	MOG+N( (g/mi)	Cx		CO g/mi)			lOx /mi)	1	HCHO ng/m			PN (g/m					
				CEF		TD	CERT	STD	0	CERT	STD	CERT		STD	CEF	ERT ST					
FTP@50	K	*		*		*	*	*		*	*	*		*	*		*				
FTP@U		ASOLI		0.0	36 0	.070	0.1	1.7		×	*	*		4	4 0.000		0.003				
50°F @4		ASOLI		0.0	31 0	.140	0.2	1.7		*	*	*		16	.6						
					CUE		=			N	MOG+NO	Dx (g/mi)	_		CO (g						
					FUE					CE	ERT	STD		CER	T	;	STD				
HWFET	r @ 50	ĸ				*					*	*									
	T @ UI			G	ASOLIN	E-TIEF	3 E10			0.	020	0.070									
20°F	@ 50K		COLD					C (TIER						0.4		10.0					
				SFTP	EXHAU	ST EM	ISSION	STANDA	RDS	AND C	ERTIFIC	ATION LE	VEL	S							
						ι	JS06				SC03					MPOSITE					
	FUEL	TYP	E	N	MOG+N (g/mi)	Ox	CO (g/mi)	Pl (mg/		1	G+NOx /mi)	CO (g/mi)		OG+NO: (g/mi)	1	CO /mi)	PM (mg/mi)				
	@4K *						CE	RT	*		*				*	*					
@ 4K			ST	D	*		*	*		+	*										
			CE		*		*	2	2		*	*	0	.032 0.2		.2	*				
@ UL	GASOLINE- TIER3 E10 STD		*	* *		6			*		0	0.077		4.2							
	TIER			N									0.070								
		V	VHOLI	VEHI	CLE EV	APORA	TIVE E	MISSION	STA	NDAR	DS AND	CERTIFIC	ATIO	N LEVE	LS						
		1				W	HOLE V	EHICLE	EVAP	ORAT	IVE TES	ring									
EVAPORATIVE FAMILY				FIFI YPF 1 30031						2DH	S (g/test	) @ UL	@ UL		(L (g/r	g/mi) @ UL					
	FAMILI		FAMILI		CEF	RT :	STD	FEL	CE	RT	STD	FEI	FEL		CERT		STD				
1	MBMXR0150G30		TTER	LINE-	0.1		.300	0.300		226 0.300			0.300 0.								
	ORVR	/ FUE	LONL	YICA	NISTER	BLEEL	DEVAP	ORATIVI	EEMI	SSION	STAND	ARDS ANI	DCE	RTIFICA	TION	LEVE	LS				
		1							F	UEL O	NLY EVA	AP & CAN	ISTE	R BLEE	D						
	L'UN OIOIIITE		APORATIVE ORVR (g/gall			gallon) (	on) @ UL FUEL TY				OHS RIG TEST g/test) @ UL			2DHS RIG (g/test) @			BLEED CANIST EST (g/test) @				
		ŀ	FUEL	TYPE	CERT	STD	1		C	ERT	STD	CERT		STD	CE	RT	STD				
MBMX	R0150	G30	GASO	INE- E10	0.04	0.20	GASOLINE- TIER3 E10		*	*	*		*	0.004		0.020					

CALI AIR RESO	FORNIA urces board	RNIA BAYERISCHE MOTOREN WERKE AG			Executive Order: A-008-0527 New Passenger Cars, Light-Duty Trucks a Medium-Duty Vehic Page 4 of					
EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)										
EVAPORATIVE FAMILY	LEAK FAMILY		CERT	Г	STD					
MBMXR0150G30	MBMXR0150G30-0	01	0.00	)	0.02					
LDT<6000#GVWR,3751-5750 8500#ALVW; MDV: medium-o duty passenger vehicle; HDV emission limit; GVWR: gross ULEV: ultra LEV; SULEV: sup ADSTWC: adsorbing TWC; H SCRC/SCR-N or SCRC-NH3 continuous/periodic trap oxidi heated/oxygen sensor; WR-H RDQS: reductant quality sens EGRC: EGR cooler; AIR/AIRI fuel injection; DFI/IFI: direct/ir	0#LVW; LDT3: LDT 600 duty vehicle; MDV4: ME heavy-duty vehicle; E0 vehicle weight rating; L per ULEV; ZEV: zero-en AC: HC adsorbing cata selective catalytic redu zer; DPF: diesel particu IO2S or AFS: wide rang sor; NH3S: ammonia se E: secondary air injection direct fuel injection; TO	01-8500 0V 850 CS: em VW: loa nission alyst; W uction-tu late filt ge/linea ensor; E on (belt C/SC: tu	0#GVWR,3751-5750 1-10000#GVWR; ME ission control system aded vehicle weight; vehicle; TZEV: trans /U: warm-up catalyst urea/ammonia; NH30 ter (active); GPF: PM tr/heated air-fuel ratio EGR: exhaust gas re driven)/(electric driv urbo/super charger; (	#ALVW; LDT4: I 0V5: MDV 1000 n; CERT: certific: ALVW: adjusted sitional ZEV; TW ; NAC: NOx ads DC: ammonia ox I filter for spark-i o sensor; NOXS circulation; HP/L en); PAIR: pulse CAC: charge air	cidation catalyst; CTOX/PTOX:					

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; a hyphen (-) between after treatment ECS indicates multiple functionalities of the after treatment device (ex. DPF-SCRC: SCR coated DPF); 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; AER: all-electric range; EAER: equivalent AER; PHEV: plug-in hybrid electric vehicle; NMOG + NOx Fleet Ave. Credit for Extended Warranty: N = no credits, Y = credits, S = credits for some/select models

	2021 MODEL Y	EAR: VEI	HICLE MO	ODELS INF	ORMATION		
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
BMW	5401	PC	3.0	SAS	MBMXR0150G30	1	\$
BMW	5401 XDRIVE	PC	3.0	SA8	MBMXR0150G30	1	\$
BMW	M340I	PC	3.0	SA8	MBMXR0150G30	1	P
BMW	M340I XDRIVE	PC	3.0	SA8	MBMXR0150G30	1	P
BMW	M440I XDRIVE COUPE	PC	3.0	SA8	MBMXR0150G30	1	P