

Executive Order: A-008-0505

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 1 of 4

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.

	TEST GROUP INFORMATION											
MODE YEAR		EST GROUP	VEHICLE CLASS(ES)				FUEL CATEGORY				FUEL TYPE	
2020	LB	MXJ04.4SM5	.4SM5 PC				DEDICATED SINGLE FUEL VEHICLE				GASOLINE	
	USEFUL	. LIFE (miles)		VEH	IICLE EMISS	ION CAT	CATEGORY INTERIM / INTERMEDIATE IN-USE					
EXH	I/ORVR	EVAP		194 194 195	FTP	S	FTP		FTP		SFTP	
15	0000	15000	0	LEV3	ULEV125	LEV 3	сомроз	SITE			PM	
SPE	CIAL FE	ATURES & EX	(HAUS		ON CONTRO			OBD S	TATUS	EN	GINE DISPLACEMENT (L)	
1	2WU-TW	C, 2TWC, 2W	R-H02 2CA		S, DFI, 2T	С,	FUL	L	*			
*	* *					PART	IAL	*	10	4.4		
*	* *				PA	RTIAL FINE	WITH S	ALL MODELS				
		E	VAPOI	RATIVE &	REFUELING	(EVAP/O	RVR) I	FAMILY	INFORMATION	1		
EVA	P / ORV	R FAMILY	EVA	PORATIVE STD CATEGORY					SSION STD CLASS	SP	ECIAL FEATURES	
L	BMXR01	50G1X	LE	V 3 OPT	ON2 WITH	FEL		P	c .		*	
					EMISSION CI	REDIT INF	ORMA	ATION				
	EDIT FO	X FLEET AVE. R EXTENDED RANTY			REDIT FOR N ZERO-EVAP		NI	NMOG CREDIT FOR DOR			OPTIONAL EXH. STD FOR WORK TRUCKS	
		N			· N			-	N		N	
	NMOG AND FLEET AVERAGE INFORMATION											
NMOG CH4 RAF NMOG/NMHC RATIO RATIO RATIO NMOG+NOX F			0-3750 LV	-3750 LVW) LDT (3751 LVW-8500 MDV		MOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)						
*	*	1.10	1.10 * 0.06						0.074		*	

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.)



Executive Order: A-008-0505

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

Page 2 of 4

### 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, LD7 and MDV).

### BE IT FURTHER RESOLVED:

The listed vehicle 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 four (4) deficiencies. The listed vehicle models are approved subject to the manufacturer paying a fine of seventy-five dollars (\$75) per vehicle for the third and fourth deficiencies in the listed test group that is produced and delivered for sale in California.

On a quarterly basis, the manufacturer shall submit to California 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 2020 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 at El Monte, California on this

Allen Lyons, Chief

Emissions Certification and Compliance Division



Executive Order: A-008-0505

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, HWF	=1,50°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**

1000 1000 1000 1000 1000		NMOG+NOx C (g/mi) (g/m			NOx (g/mi)			CHO PM g/mi) (g/mi)			
		CERT	STD	CERT	STD	CERT	STD	CÉRT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10	0.060	0.125	0.1	2.1	*	*	*	4	0.002	0.003
50°F @4K	GASOLINE- TIER3 E10	0.046	0.250	0.2	2.1	*	*	*	16		

		NMOG+N	Ox (g/mi)	co (	g/mi)
	FUEL TYPE	CERT	STD	CERT	STD
HWFET @ 50K	*	*	*		
HWFET @ UL	GASOLINE-TIER3 E10	0.020	0.125		
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			0.6	10.0

## SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

- Z.			-	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	*	*		*	*				
		CERT	*	*	3	*	*	0.050	0.2	*	
@ UL	GASOLINE- TIER3 E10	STD	*	*	6	*	*	0.083	4.2	*	
		BIN						0.120	1,11404		

## WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE \	NG	RL (g/mi) @ UL				
EVAPORATIVE FAMILY	FUEL TYPE	3DHS (g/test) @ UL						2DI	HS (g/test) (
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
LBMXR0150G1X	GASOLINE- TIER3 E10	0.319	0.300	0.400	0.345	0.300	0.400	0.01	0.05

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

				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/ç	gallon) @	) UL	FUEL TYPE	3DHS R (g/test		2DHS R (g/test	IG TEST ) @ UL	BLEED C TEST (g/t	NOT THE RESIDENCE OF THE PARTY		
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
LBMXR0150G1X	GASOLINE- TIER3 E10	0.04	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.004	0.020		



Executive Order: A-008-0505

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 4 of 4

EFFECTIV	EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)								
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
LBMXR0150G1X	LBMXR0150G1X-001	0.01	0.02						

\*: 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; 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; HP/LP EGR: High/Low Pressure EGR; 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; 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

## 2020 MODEL YEAR: VEHICLE MODELS INFORMATION

			10.00.00				
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
BMW	M5	PC	4.4	SA8	LBMXR0150G1X	1	\$
BMW	M5 COMPETITION	PC PC	4.4	SA8	LBMXR0150G1X	1	\$
BMW	M8 COMPETITION GRAN COUPE	PC	4.4	SA8	LBMXR0150G1X	1	\$
BMW	M8 CONVERTIBLE	PC	4.4	SA8	LBMXR0150G1X	1	\$
BMW	M8 CONVERTIBLE COMPETITION	PC	4.4	SA8	LBMXR0150G1X	1	\$
BMW	M8 COUPE	PC	4.4	SA8	LBMXR0150G1X	1	\$
BMW	M8 COUPE COMPETITION	PC	4.4	SA8	LBMXR0150G1X	1	\$
BMW	M8 GRAN COUPE	PC	4.4	SA8	LBMXR0150G1X	1	\$