

Executive Order: A-008-0546

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

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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.

	TEST GROUP INFORMATION												
MODE YEA	г	EST GROUP		VEHICLE CLASS(ES)		S)	FUEL CATEGORY			FUEL TYPE			
2022	2 NB	NBMXJ03.0G2X		LDT2, PC				HYBRID ELECTRIC VEHICLE			GASOLINE		
	USEFUL	. LIFE (miles)		VEHICLE EMISSION CATEGORY					INTERIM / IN	TERM	MEDIATE IN-USE STD		
EXI	I/ORVR	EVAP			FTP		SF	ТР	FTP		SFTP		
1	50000	150000)	LEV3	ULEV70	LEV	3 CC	MPOSITE	*		PM		
SPE	CIAL FE	ATURES & EX	HAUS STEMS		ON CONTRO	L		OBD S	TATUS	EN	IGINE DISPLACEMENT (L)		
1	D	FI, TC, CAC,	TWC	, WR-HO2	S, HO2S			FULL	*				
*			*				Р	ARTIAL	* 3.		3.0		
*	* *							TIAL WITH FINES	ALL MODELS				
		E/	/APO	RATIVE &	REFUELING	(EVA	P/OR	VR) FAMILY	/ INFORMATIO	٧			
EVA	AP / ORV	R FAMILY	EVA	PORATIVE	STD CATE	GORY	RY EVAP EMISSION STD VEHICLE CLASS SF			SPECIAL FEATURES			
:	NBMXR01	50G30	LE	V 3 OPTI	V 3 OPTION2 WITH FEL			PC			*		
				ı	EMISSION CI	REDI	T INFO	RMATION					
	REDIT FO	X FLEET AVE. OR EXTENDED RRANTY			REDIT FOR N ZERO-EVAP	ON-P	ZEV	NMOG C	REDIT FOR DO	D	OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N				N		N		
				NMOG	AND FLEET	AVE	RAGE	INFORMA	TION				
NMOG RAF	NMOG CH4 RAF NMOG/NMHC RATIO RATIO RATIO NMOG+NOX F			0-375	3750 LVW) LDT (37		NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)		D NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)				
*	*	1.10		*	0	.051			0.056		*		

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.)



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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 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 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 fifty dollars (\$50) 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 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 2022 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 \$40,725 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 9th day of June 2021.

Ållen **⊭**yons, Chief

Emissions Certification and Compliance Division



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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STAN	NDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)	
CH4: methane; N	MOG: 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 (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)		
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
FTP@50K	*	*	*	*	*	*	*	*	*	*	*	
FTP@UL	GASOLINE- TIER3 E10	0.037	0.070	0.3	1.7	*	*	*	4	0.001	0.003	
50°F @4K	GASOLINE- TIER3 E10	0.027	0.140	0.4	1.7	*	*	*	16			

	FUEL TYPE	NMOG+N	Ox (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE-TIER3 E10	0.018	0.070			
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			0.6	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				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	*	*	1	*	*	0.041	0.4	*
@ UL	GASOLINE- TIER3 E10	STD	*	*	6	*	*	0.070	4.2	*
		BIN					·	0.070		

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE \						
EVAPORATIVE FAMILY	FUEL TYPE	3DHS (g/test) @ UL			2DI	HS (g/test) (RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
NBMXR0150G30	GASOLINE- TIER3 E10	0.195	0.300	0.300	0.226	0.300	0.300	0.01	0.05

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

	ORVR (g/gallon) @ UL			FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY				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		
NBMXR0150G30	GASOLINE- TIER3 E10	0.04	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.004	0.020		



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EFFECTIV	EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)								
EVAPORATIVE FAMILY LEAK FAMILY		CERT	STD						
NBMXR0150G30	NBMXR0150G30-001	0.00	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

2022 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
BMW	5401 SEDAN	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	5401 XDRIVE SEDAN	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	M340I SEDAN	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	M3401 XDRIVE SEDAN	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	M440I CONVERTIBLE	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	M440I COUPE	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	M4401 XDRIVE CONVERTIBLE	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	M4401 XDRIVE COUPE	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	M4401 XDRIVE GRAN COUPE	PC	3.0	SA8	NBMXR0150G30	1	\$
BMW	X3 M40I	LDT2	3.0	SA8	NBMXR0150G30	1	\$
BMW	X4 M40I	LDT2	3.0	SA8	NBMXR0150G30	1	\$