California Environmental Protection Agency

⊘ Air Resources Board

BAYERISCHE MOTOREN WERKE AG Executive Order: A-008-0410

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 GRO	UP II	NFOR	MATION				-	
MOD		TEST G	ROUP	\	/EHICLI	E CLASS(E	S)		FUEL CATEGORY			FUEL TYPE		
201	.6	GBMXV03	3.0AH5		PC				HYBRID ELECTRIC VEHICLE			GASOLINE		
	USEF	UL LIFE	(miles)		VEHIC	CLE EMISS	ON (CATE	GORY	11	ITERIM / INT	ERMED	IA1	E IN-USE STD
EX	H/ORV		EVAP		F	TP		SF	TP		FTP			SFTP
1	20000		150000		LEV2	ULEV	I		SFTP		*	*		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS						-		OBD S	TAT	us	ENGII	ENGINE DISPLACEMENT		
1		TWC, W	R-HO2S,	HO2S, I	FI, T	C, CAC			FULL		*			
*				*				F	PARTIAL		*		3.0	
*	* *							PAF	RTIAL WITH FINES	ALL MODELS				
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION													
EV	AP / OF	RVR FAI	/IILY	EVAPOR	ATIVE	STD CATE	SORY	PRY EVAP EMISSION STD VEHICLE CLASS				SPECIAL FEATURES		
	GBMXR	0130AH	Y		LE	V 2		PC				*		
					E	VISSION CF	REDI	r INF	ORMATION					
		ALLOW	ANCE FO	OR TEST	GROUP				G CREDIT FO		NMOG CR		R	OPTIONAL EXH. STD FOR WORK
BAS	SELINE	PZEV	АТ	PZEV		TZEV	NC	ON-PZ	ZEV ZERO-E	VAP	DC)R		TRUCKS
	*			*		*	1		N		N	ī		N
					NMOG A	AND FLEET	AVE	RAG	E INFORMA	TION	1			
NMO	G RAF	RAF CH4 RAF FTP NMOG/NMHC RATIO HCHO/NMHC			HC R	C RATIO PC+LDT (0-		(0-3	OX FLEET STD (0-3750 LVW) g/mi)		NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)			
	*	*		1.04		,	r		0.093			0.110		

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 for PC, LDT and MDV).

BE IT FURTHER RESOLVED:

That the BMW vehicle models are conditionally certified in accordance with 13 CCR Section 1968.2(i)(3) (malfunction and diagnostic system) because the on-board diagnostic II system of the listed vehicle models has been determined to have four 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 2016 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 \$5000 per vehicle pursuant to HSC Section 43154.

8 day of September 2015.

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

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

O Air Resources Board

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS	AND CERTIFICATION LEVELS	FTP	HWEET	50°E	20°E)
EVUNOS I EINISSION STAINDAKDS	AND CERTIFICATION LEVELS	FIF	, HVVFEI	, DU'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

1,320,30													
		NMOG (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		1	M mi)		
37 (37 sain 37)		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD		
FTP@50K	GASOLINE - TIER 2 UNLEADED	0.017	0.040	0.2	1.7	0.01	0.05	*	8	*	*		
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.020	0.055	0.3	2.1	0.01	0.07	*	11	*	0.01		
50°F @4K	GASOLINE - TIER 2 UNLEADED	0.066	0.080	0.5	1.7	0.02	0.05	*	16		igyras viri eMiljell		

	FUEL TYPE	NOx	(g/mi)	CO (g/mi)		
	FOEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.00	0.07			
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.00	0.09			
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			0.7	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	COMPOSITE			
-,	FUEL TYPE		NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	
	GASOLINE	CERT	0.02	0.1		0.01	0.3	- 1			
@ 4K	- TIER 2 UNLEADED	STD	0.14	8.0		0.20	2.7				
		CERT	*	*	*	*	*	*	*	*	
@ UL	*	STD	*	*	*	*	*	*	*	*	
		BIN	التعلقين والعالم					*			

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY			WHOLE						
	FUEL TYPE	3DH	S (g/test) (@ UL	2D	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
GBMXR0130AHY	GASOLINE - TIER 2 UNLEADED	0.30	0.50	*	0.30	0.65	*	0.00	0.05

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ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS												
				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE		IG TEST) @ UL		IG TEST) @ UL	BLEED CANISTER TEST (g/test) @ 4K			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
GBMXR0130AHY	GASOLINE - TIER 2 UNLEADED	0.08	0.20	*	*	*	*	*	*	*		

*: 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

	2016 MODEL YEAR: VEHICLE MODELS INFORMATION											
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE				
BMW	ACTIVEHYBRID 5	PC	3.0	SA8	GBMXR0130AHY	1	\$	*				