

#### VOLKSWAGEN GROUP OF AMERICA, INC.

Executive Order: A-413-0189-1
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 GRO	UP IN	IFOR	MATION				
MODE YEAR	_	EST GROUP		VEHIC	LE CLASS(E	S)		FUEL C	ATEGORY		FUEL TYPE	
2021	MV	/GAJ03.0N7F		I	DT2, PC				SINGLE FUEL HICLE		GASOLINE	
	USEFUL	. LIFE (miles)		VEH	IICLE EMISS	ION C	ATE	GORY	INTERIM / IN	TERN	MEDIATE IN-USE STD	
EXH	EXH/ORVR EVAP FTP						SF	TP	FTP		SFTP	
15	0000	150000		LEV3	ULEV70	LEV	3 C	MPOSITE	*		PM	
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS  OBD STATUS  (L)							NGINE DISPLACEMENT (L)					
1	WU-TW	C, TWC, WR-H	02S,	HO2S, D	FI, TC, CA	.c		FULL	*			
*			*		PARTIAL ALL MODELS 3.0				3.0			
*			*		PARTIAL WITH FINES				*			
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION											
EVA	P / ORV	R FAMILY	EVA	PORATIVI	E STD CATE	GORY	ORY EVAP EMISSION STD VEHICLE CLASS			SI	PECIAL FEATURES	
M	IVGAR01	40NCN	LE	LEV 3 OPTION2 WITH FEL			ION2 WITH FEL LDT2				*	
M	IVGAR01	40NCP	LE	V 3 OPT	ION2 WITH	FEL		I	PC		*	
				I	EMISSION CI	REDIT	INFO	RMATION				
1	EDIT FO	X FLEET AVE. OR EXTENDED RRANTY			REDIT FOR N ZERO-EVAP	ON-P	ZEV	NMOG CREDIT FOR DOP			OPTIONAL EXH. STD FOR WORK TRUCKS	
		N			N				N		N	
				NMOC	AND FLEET	AVE	RAGI	INFORMA	TION			
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO		IO/NMHC RATIO	NMOG+NO PC+LDT (9			/) LDT	NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi		MOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)	
*	*	1.10		*	0	.058			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.)



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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).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

This Executive Order hereby supersedes Executive Order A-413-0189 dated May 29, 2020.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed on this 2/st day of November 2020.

A**ll**en Lyons, Chief

**Emissions Certification and Compliance Division** 

**FUEL TYPE** 

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# **ATTACHMENT**

# **EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS**

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°
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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

		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 PREM	0.0418	0.070	0.31	1.7	*	*	*	4	0.0010	0.003
50°F @4K	GASOLINE- TIER3 E10 PREM	0.0283	0.140	0.35	1.7	*	*	*	16		

		FUEL TYP	_		N	MOG+N	Ox (g/mi)		CO (g/r	ni)
	FOEL TIPE					ERT	STD	CEF	₹T	STD
HWFET @ 50K		*				*	*			
HWFET @ UL	GASOLIN	E-TIER3	E10 PRE	4	0.	0169	0.070			
20°F @ 50K	GASOLIN	E-TIER3	E10 PREN	1				0.5	7	10.0

## SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC0	3	COM	IPOSITE	
	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	*	*	5.0	*	*	0.0293	0.41	*
@ UL	GASOLINE- TIER3 E10 PREM	STD	*	*	6	*	*	0.077	4.2	*
		BIN						0.050		

#### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE \						
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test) @	D UL	2DI	HS (g/test) (	@ UL	RL (g/n	ni) @ UL
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
MVGAR0140NCN	GASOLINE- TIER3 E10	0.310	0.400	0.400	0.273	0.400	0.400	0.000	0.05
MVGAR0140NCP	GASOLINE- TIER3 E10 PREM	0.254	0.300	0.300	0.243	0.300	0.300	0.000	0.05

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ORVR / FUI	ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS													
		FUEL ONLY EVAP & CANISTER BLEED												
EVAPORATIVE FAMILY	ORVR (g/	gallon) @	) UL	FUEL 1	ГҮРЕ		IG TEST ) @ UL			G TEST	BLEED C TEST (g/t	ANISTER est) @ 4K		
	FUEL TYPE	CERT	STD			CERT	STD	CER	т	STD	CERT	STD		
MVGAR0140NCN	GASOLINE- TIER3 E10	0.019	0.20	GASOLINE- TIER3 E10		*	*	*		*	0.016	0.020		
MVGAR0140NCP	GASOLINE- TIER3 E10 PREM	0.102	0.20	GASOL TIER3 PRE	E10	*	*	*		*	0.008	0.020		
ı	FFECTIVE	LEAK D	IAMET	ER STA	NDAR	D AND CE	RTIFICA	TION L	ΕV	EL (INCH	ES)			
EVAPORATIVE	FAMILY	LEA	K FAMIL	_Y		CE	CERT				STD			
MVGAR0140	NCN	MVGAR0	140NCN	-001		*				0.02				
MVGAR0140	NCP	MVGAR0	140NCP	-001		*	,				0.02			

: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: DT<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

### 2021 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
AUDI	S4	PC	3.0	SA8	MVGAR0140NCP	1	P
AUDI	S5	PC	3.0	SA8	MVGAR0140NCP	1	P
AUDI	S5 CABRIOLET	PC	3.0	SA8	MVGAR0140NCP	1	P
AUDI	S5 SPORTBACK	PC	3.0	SA8	MVGAR0140NCP	1	P
AUDI	SQ5	LDT2	3.0	SA8	MVGAR0140NCN	1	P
AUDI	SQ5 SPORTBACK	LDT2	3.0	SA8	MVGAR0140NCN	1	P