California Environmental Protection Agency

OB Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0081

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	OUP IN	FORMAT	ION						
MODE		EST G	ROUP	VEHI	CLE CLASS(E	S)	FUEL CATEGORY			RY	FUEL TYPE			
2017	HV	GAT06	.OEAR		LDT4		DED	CATED	SINGL	E FUEL	GASOLINE			
-	USEFUL	LIFE	(miles)	VI	EHICLE EMISS	SION C	ATEGOR	Y	INTE	RIM / INT	RMEDIA	TE IN-USE STD		
EXH	/ORVR		EVAP		FTP		SFTP			FTP		SFTP		
15	0000		150000	LEV	3 ULEV125	LEV	3 СОМРО	SITE		*		NMOG+NOX		
SPE	CIAL FE	ATUR		AUST EMISS	SION CONTRO)L		OBD ST	TATUS		ENGINE	DISPLACEMENT (L)		
1	2WU-T	WC, 2		2-HO2S, 2HO 2CAC, AIR	D2S, SFI+DF	Ι,	FUL	L		*				
*				*			PART	IAL	ALL :	MODELS	6.0			
*				*			PARTIAL			*				
			. EV.	APORATIVE	& REFUELING	(EVAI	P/ORVR)	FAMILY	INFO	RMATION		**************************************		
EVA	P / ORV	R FAN	MILY	EVAPORATI	VE STD CATE	GORY		AP EMIS			SPECIA	L FEATURES		
H	IVGAR01	.55ECE	3		LEV 2			LD	T4			*		
-		-			EMISSION C	REDIT	INFORM	ATION			40-10-1			
	Α	LLOW	ANCE FO	R TEST GRO	OUP		MOG CR			MOG CRE		OPTIONAL EXH STD FOR WORK		
BASE	ELINE P	ZEV	AT	PZEV	TZEV	NO	N-PZEV Z	ZERO-E\	VAP	DO	R	TRUCKS		
	*			*	*		n n n					И		
				NMC	OG AND FLEE	T AVE	RAGE INF	ORMAT	TION					
NMOG RAF	CH4 RAF	NMO	FTP G/NMHC ATIO	HCHO/NMH RATIO	PC+LD1			STD NMOG+NOX FLEET STD NMOG+NOX		NOX FLEET STO (10001-14000 VWR) (g/mi)				
*	*		1.10	0.03		0.086			0.1	01		*		

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.

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

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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.

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

Executed at El Monte, California on this

_ day of August 2016

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVILATION EMICCION OTANDADDO	AND OFFICIOATION LEVELO	/FTD	1114/22		-
EXHAUST EMISSION STANDARDS	AND CERTIFICATION LEVELS	(FIP	, HWFEI	, 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

		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	0.1123	0.125	0.82	2.1	*	*	*	4	0.0000	0.01
50°F @4K	GASOLINE- TIER3 E10 PREM	0.1007	0.250	0.32	2.1	*	*	*	16		

	FUEL TYPE	NMOG+N	lOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*	1 7 Catalog Section	according to the second	
HWFET @ UL	GASOLINE-TIER3 E10 PREM	0.0717	0.125			
20°F @ 50K	GASOLINE-COLD E10 PREM		A halle they can decid	1.37	12.5	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

3-1414				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	*	*		*	*				
0		STD	*	*		*	*	THEMS			
		CERT	*	*	*	*	*	0.1309	0.94	*	
@ UL	GASOLINE- TIER3 E10 PREM	STD	*	*	*	*	*	0.103	4.2	*	
		BIN		Shirt in				0.140			

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE '	VEHICLE	EVAPORA	TIVE TESTIN	IG			
EVAPORATIVE FAMILY	FUEL TYPE	3DHS	S (g/test) (@ UL	2DHS (g/test) @ UL			RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD	
HVGAR0155ECR	GASOLINE - TIER 2 UNLEADED	0.725	0.90	*	0.354	1.15	*	0.001	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 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		
HVGAR0155ECR	GASOLINE - TIER 2 UNLEADED	0.066	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

2017 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
BENTLEY	BENTAYGA	LDT4	6.0	SA8	HVGAR0155ECR	1	P	*