California Environmental Protection Agency

Om Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0087

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 GROU	P INFOR	MATION			31113		
MODE	- I T	EST G	ROUP	VEHI	CLE CLASS(ES))	FUEL CATEGORY			IEL TYPE		
2017	HV	GAV0	.OVLN		PC	PC DEDICATED :			SINGLE FUEL G			
	USEFUL	LIFE	(miles)	VE	HICLE EMISSIC	N CATE	GORY	INTERIM/I	NTERMEDIA	TE IN-USE STD		
EXH	/ORVR		EVAP		FTP	SI	TP	FTP		SFTP		
12	0000		150000	Li	EVŹ LEV		2 SFTP NDARD		/	*		
SPE	CIAL FE	ATUR	RES & EXH		SION CONTROL		OBD ST	TATUS	ENGINE	DISPLACEMENT (L)		
2WU-TWC, 2TWC, 2WR-HO2S, 2HO2S, SFI, AIR, 2TC, 2CAC							FULL	*				
*				*			PARTIAL	ALL MODEL	S	6.0		
*				*		PAI	RTIAL WITH					
			EV	APORATIVE	& REFUELING (EVAP/O	RVR) FAMILY	INFORMATIO	ON			
EVA	P / ORV	R FAI	MILY	EVAPORATIV	VE STD CATEGO	ORY		SSION STD	SPECIA	L FEATURES		
H	IVGAR01	30EA	N		LEV 2	PC				*		
					EMISSION CRI	EDIT INF	ORMATION					
	Α	LLOW	ANCE FO	R TEST GRO	UP		G CREDIT FO		CREDIT FOR	OPTIONAL EXH STD FOR WORK		
BASE	ELINE P	ZEV	AT	PZEV	TZEV	NON-P	ZEV ZERO-E	VAP	DOR	TRUCKS		
	*			•	*		N		N	N		
				NMC	G AND FLEET	AVERAG	E INFORMA	TION				
NMOG RAF	NMOG/NMHC			HCHO/NMHO RATIO	PC+LDT (0-	NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)				NMOG+NOX FLEET STE MDV (10001-14000 GVWR) (g/mi)		
*	*		1.04	0.03	0.	086		0.101		*		

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.

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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.

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

Executed at El Monte, California on this 20 day of September 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 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 (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)			mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	GASOLINE - TIER 2 UNLEADED	0.0271	0.075	0.40	3.4	0.031	0.05	0.7	15	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.0345	0.090	0.58	4.2	0.040	0.07	0.9	18	0.001	0.01
50°F @4K	GASOLINE - TIER 2 UNLEADED	0.0417	0.150	0.50	3.4	0.032	0.05	1.2	30		

	FUEL TYPE	NOx	(g/mi)	CO (g/mi)		
and a complete second	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.014	0.07			
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.023	0.09		agong 6 st taler quebe a gigar equi,	
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			4.98	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	CON	POSITE	ΓE	
	FUEL TYPE		NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	
@ 4K	GASOLINE - TIER 2 UNLEADED	CERT	0.055	0.19		0.090	0.77				
		STD	0.14	8.0		0.20	2.7				
		CERT	*	*	*	*	*	0.0921	*	*	
@ UL	GASOLINE - TIER 2 UNLEADED	STD		*	*	*	*	0.103	*	*	
		BIN						0.140		A STATE OF THE STA	

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY			WHOLE						
	FUEL TYPE	3DHS	S (g/test) (@ UL	2Di	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
HVGAR0130EAN	GASOLINE - TIER 2 UNLEADED	0.430	0.50	*	0.450	0.65	*	0.000	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/g	gallon) @	D UL	FUEL TYPE	3DHS R (g/test		2DHS R (g/test		BLEED CAI TEST (g/tes			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
HVGAR0130EAN	GASOLINE - TIER 2 UNLEADED	0.011	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; ŽEV: 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	DEL VEH CLASS		TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE	
BENTLEY	CONTINENTAL GT	PC	6.0	SA8	HVGAR0130EAN	1	P	*	
BENTLEY	CONTINENTAL GT CONVERTIBLE	PC	6.0	SA8	HVGAR0130EAN	1	P	*	
BENTLEY	FLYING SPUR	PC	6.0	SA8	HVGAR0130EAN	1	P	*	