California Environmental Protection Agency

O Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0072

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 INF	ORMAT	ION					
MODE	- 1	EST G	ROUP	VEI	HICLE CLASS(ES	S) _.	FUEL CATEGORY			FL	FUEL TYPE		
2017	HV	GAV03	. 6VUF		PC	DEDICATED SINGLE FUEL VEHICLE				G.	GASOLINE		
	USEFUL	LIFE	(miles)	1	EHICLE EMISS	ON CA	TEGOR	Y	TERMEDIA	ERMEDIATE IN-USE STD			
EXH	EXH/ORVR EVAP FTP SFTP FTP				•	SFTP							
12	0000		150000	1	LEV2 ULEV		LEV 2 SFTP *		* *				
SPE	CIAL FE	ATUR		AUST EMIS	SSION CONTRO	-		OBD ST	ATUS	ENGINE	DISPLACEMENT (L)		
1	2W(J-TWC	, 2TWC,	2WR-HO2S,	2HO2S, DFI		FUL	_L	. *				
*	*						PAR1	TIAL	ALL MODELS		3.6		
*	*						PARTIAI FINI		*				
			EV	APORATIVI	& REFUELING	(EVAP	P/ORVR)	FAMILY	INFORMATIO	N			
EVA	P / ORV	'R FAN	/ILY	EVAPORAT	TIVE STD CATE	ORY		AP EMIS VEHICLE	SION STD CLASS	SPECIA	L FEATURES		
H	IVGAR01	.25VAI	7		LEV 2	PC *				*			
					EMISSION CF	REDIT	INFORM	ATION					
	A	LLOW	ANCE FO	R TEST GR	OUP			EDIT FO		REDIT FOR	OPTIONAL EXH STD FOR WORK		
BASE	BASELINE PZEV AT PZEV TZEV					NON	NON-PZEV ZERO-EVAP DO			OR	TRUCKS		
* * *					*		1	1		N	N		
				NN	OG AND FLEET	AVER	AGE IN	FORMAT	ION				
NMOG CH4 RAF NMOG/NMHC RATIO			PC+LDT (PC+LDT (0-3750 LVW) L		NMOG+NOX FLEET STE LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)		0 MDV	NMOG+NOX FLEET STD 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.

BE IT FURTHER RESOLVED:

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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 _____ day of August 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXTRACS I AND EVAPORATIVE ENIGOION STANDARDS AND CERTIFICATION LEVELS	EXHAUST AND EVAPORAT	VE EMISSION STANDARDS	AND CERTIFICATION LEVELS
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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

Can.		NM (g/r		C (g/i		NC (g/i		HC (mg	HO /mi)		M mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	GASOLINE - TIER 2 UNLEADED	0.0350	0.040	0.32	1.7	0.029	0.05	*	8	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.0405	0.055	0.35	2.1	0.029	0.07	*	11	*	0.01
50°F @4K	GASOLINE - TIER 2 UNLEADED	0.0387	0.080	0.35	1.7	0.021	0.05	*	16		

	FUEL TYPE	NOx	(g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.009	0.07			
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.009	0.09			
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			1.52	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

en til		7 'I		US06			3	COMPOSITE		
	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	0.083	1.06		0.018	0.20			
W TIN		STD	0.14	8.0		0.20	2.7			
		CERT	*	*	*	*	*	0.0607	*	*
@ UL	GASOLINE - TIER 2 UNLEADED	STD	*	*	*	*	*	0.103	*	*
		BIN						0.140		

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
HVGAR0125VAF	GASOLINE - TIER 2 UNLEADED	0.283	0.50	*	0.245	0.65	*	0.000	0.05

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ORVR / FU	EL ONLY / CA	NISTER	BLEED	EVAPORATIVE	EMISSION	STANDA	RDS AND	CERTIFIC	ATION LEV	ELS		
				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		
HVGAR0125VAF	GASOLINE - TIER 2 UNLEADED	0.003	0.20	*	*	*	*	*	*	*		

t: 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
VOLKSWAGEN	CC 4MOTION	PC	3.6	SA6	HVGAR0125VAF	1	P	*