

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: The following vehicles produced by the manufacturer are certified as plug-in hybrid electric vehicles pursuant to Title 13, California Code of Regulations (13 CCR) Sections 1961 or 1961.2, 1962.2, 1976, 1978 and the incorporated test procedures. Production vehicles shall be in all material respects the same as those for which certification is granted.

Set Port	GROUP	VEHICI		Street Service	1						
LVVXJ	TEST GROUP VEHIC			LE CLASS(ES) FU		FUEL CATEGORY		42.	FUEL TYPE		
2020 LVVXJ02.0P30		LDT2, LDT4, PC			1	PLUG-IN HYBRID ELECTRIC VEHICLE			GASOLINE		
FUL LIF	FE (miles)	VEH	ICLE EMISS	SION C	ATEGORY	1 - 2	INTERIM / IN	TERM	EDIATE IN-USE STD		
RVR	EVAP		FTP		SFTP		FTP	1.13	SFTP		
00	150000	LEV3	SULEV30	LEV	3 COMPOS	SITE	*		*		
L FEAT				DL Street	(OBD S	TATUS	EN	IGINE DISPLACEMENT (L)		
TWC, WE	R-HO2S, 2H	D2S, DFI, TO	, SC, CAC		FUL	L	*	11.11.11.11.11			
		*			PARTI	AL	ALL MODELS		2.0		
* *							1999 1997 1997 1997 1997 1997 1997 1997				
	EV	APORATIVE &	REFUELING	G (EVA	P/ORVR) F	FAMIL		1	2		
ORVR F	AMILY	EVAPORATIVE	STD CATE	GORY	, EVAP EMISSION STD VEHICLE CLASS			SI	SPECIAL FEATURES		
KR0142E	EP2	LEV 3	OPTION2			PC			*		
		E	MISSION C	REDIT	INFORMA	TION					
GROUP			AVE. CREDIT FOR NO			PZEV ZERO-		FOR OPTIONAL EXH. STD FOR WORK TRUCKS			
ALL MODELS N									N		
		NMOG	AND FLEE	T AVE	RAGE INF	ORMA	TION				
H4 AF	FTP MOG/NMHC RATIO	NMHC RATIO PC+LDT (0-3750				NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)			NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*	1.10	*	(0.065			0.074		*		
	O L FEAT WC, W DRVR F CR01421 ANCE F GROUI TZEV JL MODI	0 150000 L FEATURES & EXH SYST WC, WR-H02S, 2H EV DRVR FAMILY CR0142EP2 ANCE FOR TEST GROUP TZEV JL MODELS H4 FTP NMOG/NMHC RATIO 1.10	0 150000 LEV3 L FEATURES & EXHAUST EMISSIC SYSTEMS TWC, WR-HO2S, 2HO2S, DFI, TO * * EVAPORATIVE & DRVR FAMILY EVAPORATIVE & DRVR FAMILY EVAPORATIVE ER0142EP2 LEV 3 ANCE FOR TEST GROUP LEV 3 EXTENDED W/ AVE. CRED TZEV EXTENDED W/ AVE. CRED TZEV NMOG/NMHC AF NMOG/NMHC RATIO * 1.10 *	0 150000 LEV3 SULEV30 L FEATURES & EXHAUST EMISSION CONTRO- SYSTEMS TWC, WR-HO2S, 2HO2S, DFI, TC, SC, CAC * EVAPORATIVE & REFUELING DRVR FAMILY EVAPORATIVE STD CATE CR0142EP2 LEV 3 OPTION2 EMISSION CO ANCE FOR TEST GROUP LEV 3 OPTION2 EMISSION CO ANCE FOR TEST NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY JL MODELS N NMOG AND FLEE H4 NMOG/NMHC RATIO 1.10 *	0 150000 LEV3 SULEV30 LEV L FEATURES & EXHAUST EMISSION CONTROL SYSTEMS SYSTEMS IEV TWC, WR-H02S, 2H02S, DFI, TC, SC, CAC * * EVAPORATIVE & REFUELING (EVA ORVR FAMILY EVAPORATIVE & REFUELING (EVA ORVR FAMILY EVAPORATIVE & REFUELING (EVA ORVR FAMILY EVAPORATIVE STD CATEGORY EMISSION CREDIT ANCE FOR TEST NMOG+NOX FLEET ANCE FOR TEST OMOG AND FLEET AVE ANCE FOR TEST MMOG AND FLEET AVE ANGG AND FLEET AVE ANGG AND FLEET AVE ANGG AND FLEET AVE ANGG/NMHC ATIO ***********************************	0 150000 LEV3 SULEV30 LEV 3 COMPOSITE L FEATURES & EXHAUST EMISSION CONTROL SYSTEMS SULEV30 LEV 3 COMPOSITE TWC, WR-HO2S, 2HO2S, DFI, TC, SC, CAC FUL * PARTIAL * PARTIAL FINE PARTIAL FINE PARTIAL FINE PARTIAL * PARTIAL FINE PARTIAL FINE EVAPORATIVE & REFUELING (EVAP/ORVR) I DRVR FAMILY EVAPORATIVE STD CATEGORY VER0142EP2 LEV 3 OPTION2 EMISSION CREDIT INFORM/ NMOG+NOX FLEET ANCE FOR TEST NMOG+NOX FLEET GROUP NMOG+NOX FLEET AVE. CREDIT FOR NMOG CREDIT INFORM/ ANCE FOR TEST NMOG+NOX FLEET JL MODELS N NMOG AND FLEET AVERAGE INF HAF FTP AF NMOG/NMHC RATIO NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi) * 1.10 *	0 150000 LEV3 SULEV30 LEV 3 COMPOSITE L FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD S TWC, WR-HO2S, 2HO2S, DFI, TC, SC, CAC FULL * WC, WR-HO2S, 2HO2S, DFI, TC, SC, CAC * PARTIAL PARTIAL PARTIAL PARTIAL PARTIAL VERVERATIVE REFUELING (EVAP/ORVR) FAMILY DRVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMI VENDAL LEV 3 OPTION2 E EMISSION CREDIT INFORMATION ANCE FOR TEST NMOG+NOX FLEET NMOG CREDIT FOR GROUP NMOG+NOX FLEET NMOG CREDIT FOR EVAP L MODELS N N N NMOG AND FLEET AVERAGE INFORMA NMOG LOT LDT AF NMOG/NMHC HCHO/NMHC NMOG+NOX FLEET STD NMOG AF 1.10 * 0.065 LDT	0 150000 LEV3 SULEV30 LEV 3 COMPOSITE * L FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS TWC, WR-HO2S, 2HO2S, DFI, TC, SC, CAC FULL * * PARTIAL ALL MODELS * PARTIAL ALL MODELS * PARTIAL WITH * PARTIAL PARTIAL * EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION DRVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS PC EMISSION CREDIT INFORMATION ANCE FOR TEST NMOG+NOX FLEET NMOG CREDIT FOR GROUP NMOG+NOX FLEET NMOG CREDIT FOR AL MODELS N N MOG AND FLEET AVERAGE INFORMATION MOG/NMHC NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) UMOG+NOX FLEET STD LMOGINAMHC RATIO NMOG+NOX FLEET STD QF(MI) HCHO/NMHC NMOG+NOX FLEET STD QF(MI) HCHO/NMHC NMOG+NOX FLEET STD QF(MI) HCHO/NMHC </td <td>0 150000 LEV3 SULEV30 LEV 3 COMPOSITE * L FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS EN WC, WR-HO2S, 2HO2S, DFI, TC, SC, CAC FULL * * PARTIAL ALL MODELS PARTIAL ALL MODELS PARTIAL MILL MODELS PARTIAL VILL * PARTIAL PARTIAL ALL MODELS PARTIAL VILL * PARTIAL PARTIAL VILL PARTIAL VILL PARTIAL VILL PARTIAL VILL PARTIAL VILL PARTIAL</td>	0 150000 LEV3 SULEV30 LEV 3 COMPOSITE * L FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS EN WC, WR-HO2S, 2HO2S, DFI, TC, SC, CAC FULL * * PARTIAL ALL MODELS PARTIAL ALL MODELS PARTIAL MILL MODELS PARTIAL VILL * PARTIAL PARTIAL ALL MODELS PARTIAL VILL * PARTIAL PARTIAL VILL PARTIAL VILL PARTIAL VILL PARTIAL VILL PARTIAL VILL PARTIAL		

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.)



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.

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

Executed at El Monte, California on this 4777 day of September 2019.

Allen Lyons, Chief Emissions Certification and Compliance Division

							on the second state of the second states	
SPECIAL LE ATURES	RESORCES ASALO 3.		18006	tao ute	1/17.4K/Play S	- Y 1043 9720 3473		
ana ina manana na mpina na mpina na kaominina dia mpina mpina na mpina na mpina na mpina na mpina na mpina na m P	a nan ann fi centraren - rinar der dan da si centraria. An di	ne o ne operative (ne fight bing o calendar y	e caenada na contra anamany	1.00. I. (. L.)	A set a	$\int_{\mathbb{T}^{d}} \frac{d^{2}}{dt} \int_{\mathbb{T}^{d}} d$		
a – Ar Lawi, P.A. & Mich Change, 1997 – Ler al Lawie Party – Alware – Manusakan A	n nga pangka ka kata nga nga nga nga pang ang pang nga panga	的过去时中心问	the device of the second of th		en de mendere de la composition de la c Composition de la composition de la comp	an naga sanang sanang sanang ang sanang s	anna an taon a	
R OFTIONAL EXH STD FOR WOEK TRUCKS	NASS EREDIT FOR	いたまたり	gia, 1967-18	"中国本中	Y CHOOTHA MARA STAT MARA STATA	(* 2) - 004 03 		
ka sa	na na serie de la contraction de la con Serie de la contraction de la contraction Serie de la contraction		و به دید در میشوند و بیش می باشد و میدود.	$\label{eq:production} = \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} +$		guidens said		
ang term or out we can destroy where a set of out of the set of the	$\label{eq:states} \left\{ x \in \mathbb{Z}_{p}^{n}, x \in Z$	WESCHWE 20	4.513.74 [] 3	and the second	in and the second s	(1) The entropy of the Control of	(b =) returns a supposed sector a return to	
(unst (staat) cust (so t) Adv cust (so t) Adv		na l'iten			r Donashoridan Officia	FTA DHMM 2006H CITAR	14-01, 10.016 14:31 14:31	
[1] A. A. M.	The second s	and a spectrum from the second s	3 3	1.5	1		1 20 - Y	

Des 25 Adomarest for Vellade Monek, E., sparache Farmis, Engine Displacement, Enhacton Control Bystamy, Prinsoo Effendator: (76B Contributions), Entregion Stendards and Der forcerant energy and Adorestations. (As applicable neargy date unitions (HOV, over 14, 760, poundards and DEMAR receiver in this Executive Ciden and perified to the Restated and in 15 COV Becker (Bart 2 desideable to MOV constructed to 13 COP Section 1966-6(off3) of 13 COP Section 115, 5 (Frift), as which office



FUEL TYPE

VOLVO CAR CORPORATION Executive Order: A-018-0220 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 3 of 4

ATT	ACH	ME	NT
A 111	NOI		

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

			NMOG (g/I		C (g/i	O mi)	N((g/i		HC (mg		Pl (g/r		
			CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
FTP@50K			*		*	*	*	*	*	*	*	*	
FTP@UL		OLINE- 73 E10	0.0186	0.030	0.15	1.0	0.015	*	*	4	0.0004	0.01	
50°F @4K		OLINE- 73 E10	0.0103	0.060	0.25	1.0	0.006	*	*	8			
	FUEL TYPE						NN	NMOG+NOx (g/mi)			CO (g/mi)		
				CE	RT	STD	CEF	RT	STD				
HWFET @	50K *						*		*				
HWFET @ UL GASOLINE-LEV3				'3 E10		0.0	092	0.030					
20°F@50K GASOLINE-COLD CO LON				LOW OCTA	NE				0.5	58	10.0		

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03		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	*	*		*	*			
		CERT	*	*	*	*	*	0.0155	0.27	*
@ UL	GASOLINE- LEV3 E10	STD	*	***	*	*	*	0.083	4.2	*
		BIN					N. N. AN	0.060		

			WH	IOLE V	/EHICLE	EVAPORA	TIVE TEST	ING				
EVAPORATIVE FAMILY	FUEL TYPE	3	3DHS (g/test) @ UL			2Dł	HS (g/test)	@ UL		RL (g/mi) @ UL		
		CER	CERT S		FEL	CERT	STD	FEL	CE	RT	STD	
LVVXR0142EP2	GASOLINE- LEV3 E10 PREM	0.19	72 0.	300	*	0.1385	0.300	1010.077 1010 *	0.	000	0.05	
ORVR / FU	EL ONLY / CAI	VISTER	BLEED	EVAP	ORATIVE	EMISSION	STANDA	RDS AND	CERTIFIC	ATION LEV	'ELS	
					· · · ·	FUEL C	ONLY EVA	& CANIS	TER BLEE	D		
EVAPORATIVE FAMILY	ORVR (g/g	allon) @	llon) @ UL		L TYPE		IG TEST) @ UL	2DHS RIG TEST (g/test) @ UL		the second se	ANISTER test) @ 4K	
	FUEL TYPE	CERT	STD			CERT	STD	CERT	STD	CERT	STD	
LVVXR0142EP2	GASOLINE- TIER3 E10 PREM	0.049	0.20		*	*	*	*	*	*	*	

~		
A)	CALIFORNIA AIR RESOURCES BOARD	
TH	AIR RESOURCES BOARD	

VOLVO CAR CORPORATION

Executive Order: A-018-0220 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 4 of 4

EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD
LVVXR0142EP2	LVVXR0142EP2-001	n an	0.02
8500#ALVW; MDV: medium-d duty passenger vehicle; HDV: emission limit; GVWR: gross v ULEV: ultra LEV; SULEV: sup ADSTWC: adsorbing TWC; H/ SCRC/SCR-N or SCRC-NH3: continuous/periodic trap oxidiz heated/oxygen sensor; WR-H0 RDQS: reductant quality sensy EGRC: EGR cooler; AIR/AIRE fuel injection; DFI/IFI: direct/in full/partial/partial with fines on- prefix 2: parallel; (2) suffix: ser device (ex. DPF-SCRC: SCR ethanol ("15%"gasoline) fuel; I -automatic transmission; CV: c automated manual transmission	heavy-duty vehicle; ECS: emission rehicle weight rating; LVW: loaded er ULEV; ZEV: zero-emission veh AC: HC adsorbing catalyst; WU: w selective catalytic reduction-urea/ ter; DPF: diesel particulate filter (a O2S or AFS: wide range/linear/hea or; NH3S: ammonia sensor; EGR: ter secondary air injection (belt drive direct fuel injection; TC/SC: turbo/ board diagnostic; DOR: direct ozo ries; a hyphen (-) between after tre coated DPF); CNG/LNG: comprese E10: "10%" ethanol ("90%"gasolin continuously variable transmission on; AMS: automated manual-select /: plug-in hybrid electric vehicle; N	000#GVWR; MDV5: MDV 1000 n control system; CERT: certific vehicle weight; ALVW: adjuste icle; TZEV: transitional ZEV; TV arm-up catalyst; NAC: NOx add ammonia; NH3OC: ammonia o ctive); GPF: PM filter for spark- ated air-fuel ratio sensor; NOXS exhaust gas recirculation; HP/ en)/(electric driven); PAIR: puls super charger; CAC: charge air ne reducing; HCT: hydrocarbo atment ECS indicates multiple sed/liquefied natural gas; LPG e) fuel; A: automatic (with lockut ; SCV: selectable continuously table transmission; OT: other t	01-14000#GVWR; MDPV: medium- cation; STD: standard; FEL: family ad LVW; LEV: low emission vehicle; WC/OC: 3-way/oxidizing catalyst; sorption catalyst; SCR-U or oxidation catalyst; CTOX/PTOX: -ignited engine; HO2S/O2S: S: NOx sensor; PMS: PM sensor; 'LP EGR: High/Low Pressure EGR; and AIR; SFI/MFI: sequential/multipo r cooler; FFH: fuel fired heater; F/P/\$ on trap; BCAN: bleed carbon canister functionalities of the after treatment : liquefied petroleum gas; E85: "85% up); M: manual transmission; SA: ser variable transmission; AM: transmission; AER: all-electric range;

MODEL	MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
1	VOLVO	S60 T8 AWD	PC	2.0	SA8	LVVXJ02.0P30	1	P
2	VOLVO	S60 T8 AWD POLESTAR ENGINEERED	PC	2.0 1.2.0	SA8	LVVXJ02.0P30	1	P
3	VOLVO	S90 T8 AWD	PC	2.0	SA8	LVVXJ02.0P30	1	P
4	VOLVO	V60 T8 AWD	PC	2.0	SA8	LVVXJ02.0P30	1	P
5	VOLVO	V60 T8 AWD POLESTAR ENGINEERED	PC	2.0	SA8	LVVXJ02.0P30	1	P
6	VOLVO	XC60 T8 AWD	LDT2	2.0	SA8	LVVXJ02.0P30		P
7	VOLVO	XC60 T8 AWD POLESTAR ENGINEERED	LDT2	2.0	SA8	LVVXJ02.0P30	1	P
8	VOLVO	XC90 T8 AWD	LDT4	2.0	SA8	LVVXJ02.0P30	1	P

ELECTRIC RANGE AND ZEV ALLOWANCE INFORMATION

MODEL	Carolina de activita de la policidade de la Esta de la companya d	UDDS AER	UDDS EAER (MILES)	US06 AER (MILES)	HIGHW	ZEV	
NUMBER	PHEV TYPE	(MILES)			AER	EAER	ALLOWANCE
	TZEV	29.6	29.5	e este angla 🕇 specers si tra	29.8	30.5	0.60
4	TZEV	30.6	31.8	的情绪。2019年月月1日日 1月19日日 - 1月1日日 1月19日日 - 1月1日日	31.4	31.5	0.62
5	TZEV	30.6	31.8		31.4	31.5	0.62
6	TZEV	26.0	26.7	*	25.9	26.1	0.57
7	TZEV	26.0	26.7	*****	25.9	26.1	0.57
8	TZEV	25.6	26.7	*	25.1	25.1	0.57
1	TZEV	30.6	31.8	*	31.4	31.5	0.62
2	TZEV	30.6	31.8		31.4	31.5	0.62