VOLVO CAR CORPORATION

EXECUTIVE ORDER A-018-0141 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515-39516 and Executive Order G-02-003;

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.

	MODEL TEST GROUI				VEHICLE TYPE PC=passenger car; LDT=light-duty truc dDV=medium-duty vehicle; LVW=loade vehicle weight; ALVW=adjusted LVW; GVW=gross vehicle weight)	k; STA ed (LEV=lo transition	(HAUST EMISSION NDARD CATEGORY ow emission vehicle; TLE onal LEV; ULEV=ultra LE SULEV=super ULEV)		EXHAUST & ORVR / EVAPORATIVE USEFUL LIFE (UL) (miles)	FUEL TYPE (CNG/LNG=compressed/ liquefied natural gas; LPG=liquefied petroleum gas)				
200	6	6VVXB02.5U2T			PC and LDT ≤ 8,500 pounds GVW PC; LDT 3,751 – 5,750 pounds LV		LEV II ULEV		120K / 150K	Gasoline				
No.		EVAPORATIVE FAMILY (EVAF)			SPECIAL FEATURE EMISSION CONTROL SYS		* = not applicable	∥₩	U≖ warm-up cat. O2S/HO	at. ADSTWC=adsorbing TWC 2S=oxygen sensor/heated O2S				
1	6V√	6VVXR0130EV4			TWC, SFI, HO2S, H	IAFS, TC, CAC	re	circulation AIR/PAIR=sec	nsor/heated AFS EGR=exhaust gas condary air injection/pulsed AIR					
2	βVV	6VVXR0130ET1				*	bc	ody Injection TC/SC=turt	ction/sequential MFI TBI= throttle to /super charger CAC=charge air action QBD (F) / (P)=full /partial on-					
3	βV\	BVVXR0132EV2				*			parallel (2) suffix=series					
EVAI No.	F	ECS No.	ENGIN SIZE (L		MAKES & MODELS S	TANDARDS A	SJECT TO SFTP		REVIATIONS:					
1		1	2.5		Volvo: (PC) V70 2.5T, V70 2.5T AWD, S60 2.5T, S60 2.5T AWD, S80, S80 AWD									
2		1	2.5		Volvo: (LDT 3,751 – 5,750 pounds LVW) XC70 AWD, XC90 AWD, XC90									
3		1 2.				Volvo: (PC) S40 T5, S40 T5 AWD, V50 T5, V50 T5 AWD								

The exhaust and evaporative emission standards (STD) and certification emission levels (CERT) for the listed vehicles are as follows (compliance with the 50 °F testing requirement (for TLEV, LEV, ULEV, SULEV) may have been met based on the manufacturer's submitted compliance plan in lieu of testing). Any debit in the manufacturer's "NMOG Fleet Average" (PC and LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

NMOG FLEET AVERAGE STD [g/mi]		D	NMOG @ RAF= * CH4 RAF = *		NMOG or NMHC	CH4=methane NMOG=non-CH4 organic gas NMHC=non-CH4 hydrocarbon. CO=carbon monoxide. NOx=oxides of nitrogen. HCHO=formaldehyde. PM=particulate matter. RAF=reactivity adjustment factor. 2/3 D [g/test]=2/3 day diurnal+hot-soak. RL [g/mi]=running loss. ORVR [g/gallon dispensed]=on-board refueling vapor recovery g=gram mg=milligram. mi=mille. K=1000 miles. F=degrees Fahrenhet. STFP=supplemental federal test procedure.											
PC/LD	[1 LD	-	NMOG CERT	NMHC CERT	STD [g/mi]				Ox [g/ml]		HCHO [mg/mi]			PM [g/ml]		Hwy NOx [g/ml]	
0.046	0.0	eo	[g/mi]	[g/mi]		CERT	STD	CERT		D q	CEF		TD	CERT	STD	CERT	STD
	@	50K	0.015	*	0.040	0.3	1.7	0.02	0.0	5	•		8	•	*	0.004	0.07
	0	D UL	0.017	*	0.055	0.3	2.1	6.02	0.0	7	*	1	11)	*	*	0.004	0.09
	@ 50°F	& 4K	0.038	*	0.080	0.3	1.7	0.03	0.0	5	*		16	*	*	*	*
CO [g			@ 4K (SULE or 50K (Tie	EV, ULEV, er 1, TLEV)	NMHC+NOx [g/mi] CO [g/ (composite) (compo										[g/mi] C03]		
501			@ UL (Tier		CERT	STD	CERT	STD	CERT	ST	D	CERT	STD	CERT	STD	CERT	STD
CERT	0.7			SFTP 1	*	*		*	0.01	0.1	14	0.3	8.0	0.01	0.20	0.2	2.7
STD	10.0			SFTP 2	*		•	*	*			*	*	*	*	*	*
@ UL	EVAPORATIVE FAMILY 1				EVAPORATIVE FAMILY 2				EVAPORATIVE FAMILY 3				EVAPORATIVE FAMILY 4				
	3-D	2-D	RL	ORVR	3-D	2-D	RL,	ORVR	3-D	2-D)	RL	ORVR		2-D	RL	ORVR
CERT	0.44	0.43	0.01	0.08	0,48	0.61	0.01	0.03	0.31	0.32	-	0.01	0.04	*	*	*	*
STD	0.50	0.65	0.05	0.20	0.65	0.85	0,05	0.20	0.50	0.6	5	0.05	0.20	*	*	*	<u> </u>

BE IT FURTHER RESOLVED: That 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 Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

BE IT FURTHER RESOLVED: That at the request of the manufacturer, LDT models in this test group with a GVW over 6,000 pounds are certified to the evaporative emission standards applicable to LDT under 6,000 pounds GVW.

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 May 2005.

Allen Lons, Chief Mobile Source Operations Division