California Environmental Protection Agency AIR RESOURCES BOARD

VOLVO CAR CORPORATION

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

MOD YEA 		TEST GROUP			VEHICLE TYPE PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; LVW=loaded vehicle weight; ALVW=adjusted LVW; GVW=gross vehicle weight) PC and LDT ≤ 6,000 pounds GVW	EXHAUST EMISSION STANDARD CATEGORY (LEV=low emission vehicle; TLEV= transitional LEV; ULEV=uitra LEV; SULEV=super ULEV)			EXHAUST & ORVR / EVAPORATIVE USEFUL LIFE (UL) (miles)	FUEL TYPE (CNG/LNG=compressed/ liquefled natural gas; LPG=liquefled petroleum gas)			
No.	EVAP				C; LDT 3,751 - 5,750 pounds LVW) SPECIAL FEATURES &	LEV II ULEV			120K / 150K	Gasoline			
1	8VVXR		36	No. 1	EMISSION CONTROL SYSTEM 2TWC(2), SFI, 2HO2S,	S (ECS)	* = not applicable 3D (P)	AFS	OC/TWC=oxidizing/3-way cat. ADSTWC=adsorbing TWC WU= warm-up cat. O2S/HO2S=oxygen sensor/heated O2S AFS/HAFS=air-fuel ratio sensor/heated AFS_EGR=exhaust gat recirculation_ADP/ADP=================================				
3 EVAF		VXR0130ET3			*			recirculation ARPAIR=secondary air injection/pulsed AR MF/SFI= multiport fuel injection/sequential MFI TBI= throtite body injection TC/SC=turbo /super charger CAC=charge air cooler DOR-direct 03 reduction OBD (F) / (P)=ful /partial on- board diagnostic prefix 2=parallel (2) suffix=series					
<u>No.</u>	EC: No	. SI	VGINE ZE (L) 3.2		STANL	DARDS AR		ABBR	EVIATIONS:	parallel (2) suffix=series			
2	1	1 3.2		+	Volvo: (PC) S80 3.2, S80 3.2 AWD, V70 3.2, XC70 3.2 AWD Volvo: (LDT 3,751 – 5,750 LVW) XC90 3.2, XC90 3.2 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.

AVE	OG FL RAGE [g/mi]	STD	NMOG (CH4 R	0 RAF= * AF = *		CH4=meti nitrogen diurnal+ha	ane NMO HCHO=fo	G=non-CH rmaldehyd	4 organic g le PM=par	as NMHC	=non-CH4	hydrocart	ion CO=ca			oxides of
PC/LE	0T1	LDT2		NMHC	STD	i ng≃milig	ot-solak R rami mi⊧	L (g/mi)≐n mile K≃	Inning loss	ORVR [c	/gallon di rees Fahr	spensed]=	on-board re	fueling van	2/3 D [g/tes	t]=2/3 day
0.04	0	0.050	CERT CERT [g/mi] [g/mi]		[g/mi]	CO	[g/mi] STD CF		NOx [g/ml]		HCHO [mg/mi]		PM [g/mi]		federal test procedure Hwy NOx [g/m	
		@ 50K	0.019	*	0.040		<u> </u>	CER	T ST			STD	CERT	STD	CERT	STD
		@ UL			0.040	0.2	1.7	0.04	0.0	5	• T	8	•	*	0.01	
			0.025	•	0.055	0.3	2.1	0.06	0.0	,		11				0.07
	@ 50	F & 4K	0.059	*	0.080	0.3	1.7	0.03	_		<u> </u>			0.01	0.01	0.09
CO [@ 20 50	r e j	洌 LE	= @ 4K (SUL) V) or 50K (Tie = @ UL (Tier	TI TI EVA	NMHC+NC (comp CERT	Dx [g/mi] osite) STD	00	g/mi] osite)	NMHC [g/m/]	+NOx [US06]		16 [g/mi] [S06]		+ C+NOx [SC03]	- CO	(g/mi) C031
ERT	1.4	1111	the first	SFTP 1			CERI	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
TD	10.0			SFTP 2					0.04	0.14	0.1	8.0	0.07	0.20	0.3	2.7
UL	E	VAPORA	TIVE FAM		EVA		-	<u> </u>	•	<u> </u>	*	*	•	*	*	*
_ ۲ و	3-D	2-D	RL	ORVR	EVAPORATIVE FAMILY 2				EVAPORATIVE FAMILY 3				EVAPORATIVE FAMILY 4			
ERT	0.40	0.39		0.02	0.34	2-D 0.38	· · · · · · · · · · · · · · · · · · ·	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	
D	0.50	0.65		0.20	0.65		0.01	0.01	•	*	*	*	•	*	*	
				0.40	0.05	0.85	0.05	0.20	*	•	*	*	· ·	*		

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 and shall be required to comply with, the evaporative emission standards applicable to LDT under 6,000 pounds GVW. At the request of the manufacturer, LDT models in this test group with a LVW 3751 to 5750 pounds are certified to, and shall be required to comply with, the passenger car SFTP standards.

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 _28 day of June 2007.

Annette Hebert, Chief Mobile Source Operations Division