VOLVO CAR CORPORATION

EXECUTIVE ORDER A-018-0127-2 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.

*	*	*	1				*						
3	1	2.5		<u>Volvo: (PC) S40 T5</u>									
2	1	2.5		Volvo: (PC) S60 FWD, V70 FWD									
1	1	2.5		Volvo: (PC) S60 AWD, S80 A	WD, V	– 5,750 LVW) XC 70 AWD, X	750 LVW) XC 70 AWD, XC 90 AWD, XC 90 FWD						
No.	No.	SIZE (L)		VEHICLE MAKES & MODELS			ECT TO SFTP	ABBREVIATIONS:					
EVAF				VEHICLE	VC10	OLEC CUD I	2-paramet (2) sumx-seme	3					
3 4	4VVXR	0132EV2	3		<u> </u>		cooler OBD (F) / (P)=full /partial on-board diagnostic prefix 2=parallel (2) suffix=series						
2					*		MFI/SFI= multiport fuel injection/sequential MFI TBI= throttle body injection TC/SC=turbo /super charger CAC=charge air						
1		0133AAA	2	TWC, SFI, HO2S	, HAFS	, TC, CAC, C	AFS/HAFS=air-fuel ratio sensor/heated AFS EGR=exhaust gas recirculation AIR/PAIR=secondary air injection/pulsed AIR						
No.	FAMIL	PRATIVE (EVAF)	No.		SPECIAL FEATURES & *= not applicable ON CONTROL SYSTEMS (ECS)				OC/TWC=oxidizing/3-way cat. ADSTWC=adsorbing TWC WU= warm-up cat. O2S/HO2S=oxygen sensor/heated O2S				
2004	2004 4VVXX2.52U2T			PC and LDT ≤ 8,500 pounds G C; LDT 3,751 – 5,750 pounds L		EV II ULEV	EXH: 120K EVAF1/ORVR: 100K EVAF2& 3/ORVR: 150K/120K	100K VR: Gasoline					
	MODEL TEST GROUP			VEHICLE TYPE (PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; LVW=loaded vehicle weight; ALVW=adjusted LVW)			JST EMISSION ARD CATEGORY ARD category Aremission vehicle; Aremissitional LEV; A LEV; SULEV=super ULEV)	EXHAUST / EVAPORATIVE USEFUL LIFE (UL) (miles)	FUEL TYPE (CNG/LNG=compressed/ liquefied natural gas; LPG=liquefled petroleum gas)				

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. (For LDT, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

NMOG FLEET AVERAGE STD [g/mi]		NMOG @ RAF= * CH4 RAF = *		NMOG or	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/galion dispensed]=on-board refueling vapor recovery g=gram												
PC/LD	T1	LDT2	NMOG	T CERT	STD	mg=milligram mi=mile K=1000 miles F=degrees Fahrenheit SFTP=supplemental federal test procedure											
0.053	3	0.085	CERT [g/mi]		[g/mi]	-	[g/mi]	NOx [g/mi]			HCHO [mg		PM (g.	/mi]	Hwy NOx [g/mi]		
						CERT	STD	CER	T ST	D CI	ERT	STD	CERT	STD	CERT	STD	
1 4 1		@ 50K	0.024	*	0.040	0.3	1.7	0.03	0.0)5	*	8	*	*	0.005	0.07	
		@ UL	0.029	*	0.055	0.3	2.1	0.04	0.0	07	*	11	*	*	0.01	0.09	
	@ 50	°F & 4K	*	*	*	*	*	*	*		*	*	*	*	*	*	
	CO [g/mi] SFTP 1 = @ 4K (SULEV, ULEV, LEV) or 50K (Tier 1, TLEV)				HC+NOx [g/mi] CO [g/n (composite) (compos			NMHC+NOx [g/mi] [US06]					IC+NOx [[SC03]		CO [g/mi] [SC03]		
50		SFTP 2	= @ UL (Ti	er 1, TLEV)	CERT	STD	CERT	STD	CERT	STD	CER	STC	CERT	STD	CERT	STD	
CERT	1.6		6448	SFTP 1	*	*	•	*	0.05	0.14	2.3	8.0	0.02	0.20	0.4	2.7	
STD	10.0	10		SFTP 2	*	*	*	*	*	*	*	*	*	*	*	*	
@ UL	EVAPORATIVE FAMILY 1				EVAPORATIVE FAMILY 2 EVAPOR					APORATI	DRATIVE FAMILY 3 EVAPORATIVE FAMILY 4					Y 4	
	3-D	2-[RL	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVE	₹ 3-D	2-D	RL	ORVR	
CERT	0.9	1.8	0.0	0.001	0.43	0.44	0.01	0.004	0.31	0.32	0.01	0.04	*	*	*	*	
STD	2.0	2.5	0.0	0.20	0.50	0.65	0.05	0.20	0.50	0.65	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).

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.

This Executive Order hereby supersedes Executive Order A-018-0127-1 dated December 24, 2003.

Executed at El Monte, California on this ______ day of January 2004.

Raghael Susnowitz

Mobile Source Operations Division