

#### **VOLVO CAR CORPORATION**

EXECUTIVE ORDER A-018-0126
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 YEAR	=   IPS  (BOOLD   VEUICLE TYPE		EXHAUST EMISSION STANDARD CATEGORY	USEFU (mil		IN- COMP (*=N/A or A/E=ex	MEDIATE USE LIANCE full in-use; h. / evap. late in-use)	FUEL TYPE		
2004	2004 4VVXV2.52L1T Passenger Car		Low Emission Vehicle (LEV)	EXH / ORVR	EVAP	EXH EVAP		Gasoline		
				100K 100K						
No.		PECIAL FEATURES	RC-4	EVAPORATIVE FAMILY (EVAF) DISPLACEMENT (L)						
1	TWC, HAFS, HO	2S, SFI, TC, CAC, OBD(P)	4VVXR0	4VVXR0133AAA						
*		4VVXR0	4VVXR0133C70							
• .		*		•		2.3, 2.4, 2.5				
•		•	•	•	•					

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:**

That the exhaust and the 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 Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

### **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], 1968.1 [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.

Executed at El Monte, California on this 24th day of April 2003.

Allen Lvons. Chief

Mobile Source Operations Division

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

# California Environmental Protection Agency AIR RESOURCES BOARD

## **ATTACHMENT**

## EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

NMOG FLEET NMOG @ RAF=* AVERAGE [g/mi] CH4 RAF = *		I MINIOG OF	NMOG or CH4=methane; NMOG=non-CH4 organic gas; NMHC=non-CH4 hydrocarbon; CO=carbon monoxide; NMOG or HCHO=formaldehyde; PM=particulate matter; RAF=reactivity adjustment factor; 2/3 D [g/test]=2/3 day											
CERT	STD	NMOG	NMHC	NMHC	NMHC  not-soak; RL [g/mi]=running loss; ORVR [g/gallon dispensed]=on-board refueling vapor recovery; g=gram; mg=mill									
0.046	0.053	CERT [g/mi]	CERT	[g/mi]	CO	g/mi]	NOx	[g/mi]	нсно	[mg/mi]		g/mi]	Hwy NO	x [g/mi]
gatest raigrant of a secretarion			[a,]		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
	@ 50K	0.036	•	0.075	0.4	3.4	0.02	0.2	*	15.	*	•	0.003	0.3
	@ UL	0.044	•	0.090	0.6	4.2	0.03	0.3	*	18.	*	*	0.004	0.4
<b></b> @	50°F & 4K	0.058	*	0.150	0.5	3.4	0.02	0.2		30.	•		•	*
	79		NOTE THE PROPERTY OF THE PARTY	NMUCANO	S (-113	00.1		MARIA						

CO [g/ml]				Ox [g/mi] osite)	CO [	g/mi] osite)		C+NOx [US06]		[g/mi] 306]		:+NOx [SC03]	CO (SC	g/mi] 03]
@ 20	0°F & 50K		CERT	SŢD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	2.3	SFTP @ 4000 miles	*	*	*	•	0.05	0.14	2.5	8.0	0.03	0.20	0.2	2.7
STD	10.0	SFTP @ * miles	*	*		*	*	*	•	•	•	•	*	•

Evaporative Family		al + Hot Soak est) @ UL	2-Days Diurn (grams/te	al + Hot Soak est) @ UL	Runnir (grams/m	ig Loss iile) @ UL	On-Board Ref Recovery (gram	
	CERT	STD	CERT	STD	CERT	STD	CERT	STD
4VVXR0133AAA	0.9	2.0	1.8	2.5	0.00	0.05	0,001	0.20
4VVXR0133C70	0.9	2.0	0.9	2.5	0.00	0.05	0.03	0.20
•	•	*	*	*	*	•	*	*
*	*	*	*	*	•	*	*	•

\* = not applicable; UL=useful life; PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; ECS= Emission Control System; STD= Standard; CERT= Certification; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; TLEV=transitional LEV; ULEV=ultra LEV; SULEV=super ULEV; TWC=3-way catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; OC=oxidizing catalyst; O2S=oxygen sensor; HO2S=heated O2S; AFS/HAFS=air- fuel ratio sensor / heated AFS; EGR=exhaust gas recirculation; AIR=secondary air injection; PAIR=pulsed AIR; MFI= multiport fuel injection; SFI=sequential MFI; TBI=throttle body injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD (F)/(P)=full/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG= compressed/liquefled natural gas; LPG=liquefled petroleum gas; E85="85%" Ethanol Fuel;

### 2004 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	IN- COMP "(*=N/A or A/E=exi	INTERMEDIATE IN-USE COMPLIANCE (*=N/A or full in-use; A/E=exh. / evap. intermediate in-use)		IN-USE COMPLIANCE PM/A or full in-use; A/E=exh. / evap: Intermediate in-use)		OBD II
				,	EXH	EVAP				
VOLVO	V70 T5	4VVXR0133AAA	1	2.3	*	* .	SFTP	Partial		
VOLVO	S60 T5	4VVXR0133AAA	1	2.3	*	*	SFTP	Partial		
VOLVO	V70 R AWD	4VVXR0133AAA	1	2.5	*	*	SFTP	Partial		
VOLVO	S60 R AWD	4VVXR0133AAA	1	2.5	*	*	SFTP	Partial		
VOLVO	C70 CONVERTIBLE	4VVXR0133C70	1	2.3	*	• .	SFTP	Partial		
VOLVO	C70.CONVERTIBLE	4VVXR0133C70	1	2.4	*	*	SFTP	Partial		