

### **VOLVO CAR CORPORATION**

EXECUTIVE ORDER A-018-0133
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	TEST GROUP VEHICLE TYPE		EXHAUST EMISSION STANDARD CATEGORY	USEFU (mi		IN- COMP (*=N/A or A/E=ex	MEDIATE USE LIANCE full in-use; h. / evap. ate in-use)	FUEL TYPE			
2005	5VVXV02.5L2T	Passenger Car	"LEV II" Low Emission Vehicle (LEV II LEV)	EXH / ORVR EVAP		EXH	EVAP	Gasoline			
				120K			E				
No.		SPECIAL FEATURES	Sacration and the sacration an	EVAPORATIVE FAMILY (EVAF)			DISPLACEMENT (L)				
1	TWC, HAFS, H	O2S, SFI, TC, CAC, OBD(P)	5VVXR0	5VVXR0130EV4							
•		*		*				* .			
•		*		•				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], 1968.2 [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.

Executed at El Monte, California on this 3 day of August 2004

Allen Lyons, Chief

Mobile Source Operations Division

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

# **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.)

		@ RAF=* RAF = *	NMOG or		thane; NMOG											
		NMOG CERT			mi=mile;	K=1000 mile:								ram; mg=mill	gram	
0.024 0.049		[g/mi]	CERT [g/mi]	STD [g/mi]	CC	CO [g/mi]		NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]		Hwy NOx [g/mi]		
	Ø 50K		10000		CERT		CER			RT S	STD	CERT	STD	CERT	STD	
			<del></del>	0.075	0.4	3.4	0.03		5 '		15.	•	*	0.002	0.07	
	@ UL		<u> </u>	0.090	0.5	4.2	0.05	0.0	<u>'                                    </u>	·	18.	*	*	0.003	0.09	
	@ 50°F & 4K	*	<u> </u>	*	•	*	•	*	-	•	*	•	*	*	•	
CO [g/mi]			N		NMHC+NOx [g/mi] (composite)		CO [g/mi] (composite)		NMHC+NOx [g/mi] [US06]		CO [g/mi] [US06]		NMHC+NOx [g/mi] [SC03]		CO [g/mi] [SC03]	
@ 20°F & 50K				CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
CERT	2.0	SFTP @ 4	000 miles	*	*	•	•	0.11	0.14	0.9	8.0	0.02	0.20	0.6	2.7	
STD	10.0	SFTP	@ * miles	•	. *	•		•	*	•		*	+	+	2.1	
		urnal + Hot s/test) @ U			iurnal + Hot Soak Running L ns/test) @ UL (grams/mile)							rueling Vapor ns/gallon) @ UL				
		S1	ΓD	CERT		STD	CER	Т	STD		CERT		STD			
		0.44	0.	50	0.43		0.65			0.05		0.08		0.20		
		* .		•	*		*	*		*		*		U.ZU		

\* = 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=utra 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; DGI=direct gasoline fuel injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD (F)/(P)=fuil/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85="85%" Ethanol Fuel;

## 2005 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	INTERMEDIATE IN-USE COMPLIANCE (*=N/A or full in-use; A/E=exh. / evap. Intermediate in-use)		PHASE-IN STD.	OBD II
					EXH	EVAP		
VOLVO	\$60 T5	5VVXR0130EV4	1	2.4	Α	E	SFTP	Partial
VOLVO	V70 T5	5VVXR0130EV4	1	2.4	A	E	SFTP	Partial
VOLVO	S60 R AWD	5VVXR0130EV4	1	2.5	A	E	SFTP	Partial
VOLVO	V70 R AWD	5VVXR0130EV4	1	2.5	Α	E	SFTP	Partial