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 (PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; LVW=loaded vehicle weight; GVW=gross VW)	EXHAUST EMISSION STANDARD CATEGORY (LEV=low emission vehicle; TLEV=transitional LEV; ULEV=ultra LEV; SULEV=super ULEV)	EXHAUST & ORVR / EVAPORATIVE USEFUL LIFE (UL) (miles)	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas)
2011	BVVXJ03.2U2N	PC and LDT ≤ 6,000 pounds GVW (PC; LDT 3,751-5,750 pounds LVW)	LEV II ULEV	120K / 150K	Gasoline

No.	EVAPORATIVE FAMILY (EVAF)	No.	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS (ECS)	* = not applicable
1	BVVXR0130EB6	1	2TWC(2), SFI, 2HO2S, 2HAFS, OBD(P)	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 gas recirculation AIR/PAIR=secondary air injection/pulsed AIR MFI/SFI= multiport fuel injection/sequential MFI TBI= throttle body injection TC/SC=turbo /super charger CAC=charge air cooler OBD (F) / (P)=full /partial on-board diagnostic prefix 2=parallel (2) suffix=series
2	BVVXR0130ET3	2	*	
3	*	3	*	
4	*	4	*	

EVAF No.	ECS No.	ENGINE SIZE (L)	VEHICLE MAKES & MODELS	VEHICLES SUBJECT TO SFTP STANDARDS ARE UNDERLINED	ABBREVIATIONS:
1	1	3.2	VOLVO: (LDT 3,751-5,750 pounds LVW) XC70 3.2; XC60 3.2; XC70 3.2 AWD; XC60 3.2 AWD		
1	1	3.2	VOLVO: (PC) S80 3.2		
2	1	3.2	VOLVO: (LDT 3,751-5,750 pounds LVW) XC90 3.2; XC90 3.2 AWD		
*	*	*	*		

The exhaust and evaporative emission standards (STD), as requested by the manufacturer, 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 bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

NMOG FLEET AVERAGE [g/mi] STD PC	STD LDT2	NMOG @ RAF= * CH4 RAF = * NMOG CERT [g/mi]	NMHC CERT [g/mi]	NMOG or NMHC STD [g/mi]	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=mile K=1000 miles F=degrees Fahrenheit SFTP=supplemental federal test procedure
0.035	0.043				

		CO [g/mi] CERT	CO [g/mi] STD	NOx [g/mi] CERT	NOx [g/mi] STD	HCHO [mg/mi] CERT	HCHO [mg/mi] STD	PM [g/mi] CERT	PM [g/mi] STD	Hwy NOx [g/mi] CERT	Hwy NOx [g/mi] STD
[redacted]	@ 50K	0.016	*	0.040	0.4	1.7	0.03	0.05	*	8	*	*	0.03	0.07
[redacted]	@ UL	0.023	*	0.055	0.4	2.1	0.03	0.07	*	11	*	0.01	0.03	0.09
[redacted]	@ 50°F & 4K	0.028	*	0.080	0.4	1.7	0.02	0.05	*	16	*	*	*	*

CO [g/mi] @ 20°F & 50K		SFTP 1 = @ 4K (SULEV, ULEV, LEV) or 50K (Tier 1, TLEV) SFTP 2 = @ UL (Tier 1, TLEV)		NMHC+NOx [g/mi] (composite) CERT	NMHC+NOx [g/mi] (composite) STD	CO [g/mi] (composite) CERT	CO [g/mi] (composite) STD	NMHC+NOx [g/mi] [US06] CERT	NMHC+NOx [g/mi] [US06] STD	CO [g/mi] [US06] CERT	CO [g/mi] [US06] STD	NMHC+NOx [g/mi] [SC03] CERT	NMHC+NOx [g/mi] [SC03] STD	CO [g/mi] [SC03] CERT	CO [g/mi] [SC03] STD
CERT	1.3	[redacted]	SFTP @ 4K	*	*	*	*	0.08	0.14	1.3	8.0	0.03	0.20	0.7	2.7
STD	10.0		SFTP @ UL	*	*	*	*	*	*	*	*	*	*	*	*

@ UL	EVAPORATIVE FAMILY 1 3-D	2-D	RL	ORVR	EVAPORATIVE FAMILY 2 3-D	2-D	RL	ORVR	EVAPORATIVE FAMILY 3 3-D	2-D	RL	ORVR	EVAPORATIVE FAMILY 4 3-D	2-D	RL	ORVR
CERT	0.40	0.39	0.01	0.03	0.34	0.38	0.01	0.02	*	*	*	*	*	*	*	*
STD	0.50	0.65	0.05	0.20	0.65	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: The test group listed in this Executive Order is certified conditionally on the manufacturer providing test data to determine the greenhouse gas (GHG) emissions for the listed test group, expressed in grams per mile of carbon dioxide-equivalent (g/mi CO2-e), as required in section E.2.5.2 of the California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, as amended August 4, 2005 (the Test Procedures). Manufacturer shall provide the required data within 45 days after the date of the Executive Order unless (a) an extension is granted by the Executive Officer, or (b) the manufacturer demonstrates to the satisfaction of the Executive Officer that it is exempt from determining GHG emissions for the listed test group under section E.2.5.3 (Intermediate Volume Manufacturers) or E.2.5.4 (Small Volume Manufacturers) of the Test Procedures. Failure to comply with the certification requirement to determine the GHG

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 17 day of June 2010.

Annette Hebert, Chief
Mobile Source Operations Division