

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)
2012	CVVXJ03.2U2N	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	CVVXR0130EB6	1	2TWC(2), 2HO2S, 2HAFS, SFI, OBD(F)	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 MF/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	CVVXR0130ET3	2	*		
3	*	3	*		
4	*	4	*		
EVAF No.	ECS No.	ENGINE SIZE (L)	VEHICLE MAKES & MODELS	VEHICLES SUBJECT TO SFTP STANDARDS ARE UNDERLINED	
1	1	3.2	VOLVO: (LDT 3,751-5,750 pounds LVW)	<u>XC60 3.2 AWD; XC70 3.2 AWD</u>	
1	1	3.2	VOLVO: (PC)	<u>S80 3.2; XC60 3.2; XC70 3.2</u>	
2	1	3.2	VOLVO: (LDT 3,751-5,750 pounds LVW)	<u>XC90 3.2; XC90 3.2 AWD</u>	
*	*	*		*	

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]		NMOG @ RAF = * CH4 RAF = *		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											
STD	STD	NMOG CERT	NMHC CERT		CO [g/mi]		NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]		Hwy NOx [g/mi]			
PC	LDT2	[g/mi]	[g/mi]	CERT	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD		
0.035	0.043															
	@ 50K	0.016	*	0.040	0.4	1.7	0.03	0.05	*	*	8	*	*	0.03 0.07		
	@ UL	0.023	*	0.055	0.4	2.1	0.03	0.07	*	*	11	*	*	0.03 0.09		
	@ 50°F & 4K	0.028	*	0.080	0.4	1.7	0.02	0.05	*	*	16	*	*	* *		
CO [g/mi]	SFTP 1 = @ 4K (SULEV, ULEV, LEV) or 50K (Tier 1, TLEV) SFTP 2 = @ UL (Tier 1, TLEV)	NMHC+NOx (composite)		CO [g/mi] (composite)		NMHC+NOx [g/mi] [US06]		CO [g/mi] [US06]		NMHC+NOx [g/mi] [SC03]		CO [g/mi] [SC03]				
CERT	1.3		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				EVAPORATIVE FAMILY 2				EVAPORATIVE FAMILY 3				EVAPORATIVE FAMILY 4			
	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR
CERT	0.40	*	0.01	0.03	0.34	*	0.01	0.01	*	*	*	*	*	*	*	*
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 data to demonstrate compliance with California's greenhouse gas fleet average emission standard (CA GHG Standard) specified in Title 13, California Code of Regulations, (13 CCR) Section 1961.1 and the incorporated California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, amended March 29, 2010 (CA Test Procedures). The manufacturer has elected, under 13 CCR Section 1961.1(a)(1)(A)(ii) and under Section E.2.5.1(ii) of the CA Test Procedures, to demonstrate compliance with the CA GHG Standard by demonstrating compliance with the National greenhouse gas program (National GHG Program). Therefore, the test group listed in this Executive Order is certified conditionally further on the manufacturer complying with the requirements specified in said provisions in 13 CCR, and Sections E.2.5.1(ii) and H.4.5(b) and H.4.5(c) of the CA Test Procedures (among other things, concerning data and information submission, timing, and format as specified by the Executive Officer). Failure to comply with the certification requirements to demonstrate compliance with CA GHG Standard by demonstrating compliance with the National GHG Program under said provisions in 13 CCR and CA Test Procedures may be cause for the Executive Officer to revoke the Executive Order. Vehicles in the revoked Executive Order shall be deemed uncertified and subject to penalties authorized under California law. Notwithstanding the requirement herein, a manufacturer that becomes, after MY2009, a large-volume manufacturer, as defined in 13 CCR Section 1900, is not required to comply with the CA GHG Standard until the beginning of the fourth model-year from becoming a large-volume manufacturer. Additionally, notwithstanding the requirement herein, a small-volume manufacturer, independent low-volume manufacturer, or intermediate volume-manufacturer, as defined in 13 CCR Section 1900, is not required to comply with CA GHG Standard during model-years (MY) 2012 through 2015.

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 15 day of June 2011.

Annette Hebert, Chief
Mobile Source Operations Division