

Pursuant to the authority vested in California Air Resources Board by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-19-095;

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.

EXH/ORVR EVAP FTP SFTP FTP 150000 150000 LEV3 SULEV30 LEV3 COMPOSITE * SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS ENG 1 DFI, SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC FULL ALL MODELS * * * PARTIAL *											
2025 SHYXT02.5VR3 LDT2 VEHICLE USEFUL LIFE (miles) VEHICLE EMISSION CATEGORY INTERIM / INTERME EXH/ORVR EVAP FTP SFTP FTP 150000 150000 LEV3 SULEV30 LEV3 COMPOSITE * SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS ENG 1 DFI, SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC FULL ALL MODELS * * * PARTIAL *	FUEL TYPE										
EXH/ORVR EVAP FTP SFTP FTP 150000 150000 150000 LEV3 SULEV30 LEV3 COMPOSITE * SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS ENG 1 DFI, SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC FULL ALL MODELS * * * PARTIAL *	GASOLINE										
1 DFI, SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC FULL ALL MODELS * * * PARTIAL *	ERMEDIATE IN-USE STD										
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS 1 DFI, SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC FULL ALL MODELS * * *	SFTP										
SYSTEMS OBD STATUS 1 DFI, SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC FULL * * * *	*										
I EGRC FULL ALL MODELS * * PARTIAL * * * PARTIAL WITH *	NGINE DISPLACEMENT (L)										
* * PARTIAL WITH *											
	2.5										
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION											
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS SPE	PECIAL FEATURES										
SHYXR0145VRG LEV 3 OPTION2 LDT2	нст										
EMISSION CREDIT INFORMATION											
	OPTIONAL EXH. STD FOR WORK TRUCKS										
N N N	N										
NMOG AND FLEET AVERAGE INFORMATION											
NMOG RAFCH4 RAFFTP NMOG/NMHC RATIOHCHO/NMHC HCHO/NMHC RATIONMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)NM	0 MDV (10,001-14,000										
* * 1.10 * 0.030 0.030 *											

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. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)



BE IT FURTHER RESOLVED:

The exhaust and 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 fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c) (3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV shall be equalized as required.

BE IT FURTHER RESOLVED:

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 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for 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 on this 24 th day of July 2024.

Kim Yacoukian for

Robin U./Lang, Chief Emissions Certification and Compliance Division



FUEL TYPE

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)

CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon monoxide; NOx: oxides of nitrogen; HCHO: formaldehyde; PM: particulate matter; RAF: reactivity adjustment factor; 2DHS/3DHS [g HC/test]: 2/3 days diurnal+hot-soak; RL [g HC/mi]: running loss; ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: mile; K: 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP

			NMOG (g/I	6+NOx mi)		O mi)		Ox mi)	HC (mg	HO /mi)		PM g/mi)				
			CERT STD		CERT	STD	CERT	STD	CERT	STD	CERT	STD				
FTP@50K	*		*	*	*	*	*	*	*	*	*	*				
FTP@UL	GASOLINE- TIER3 E10		0.019	0.030	0.2	1.0	*	*	*	4	0.001	0.003				
50°F @4K		SOLINE- R3 E10	0.011	0.060	0.2	1.0	*	*	*	8						
					E		NN	10G+N	Ox (g/mi)		CO (g/n	ni)				
	FUEL TYPE						CE	RT	STD	CER	Т	STD				
HWFET @ 50K			*			*		ok			*	r	*			
HWFET @	@ UL	GASOLINE-TIER3 E10						010	0.030							
20°F @ 50K		COLD	CO E10 R	EGULAR G	ASOLINE	(TIER3)				0.3	3	12.5				

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			561	PE/	KHAU		122101	ISTANDA	ARD2	AND	CERTIFIC	ATION LE	VELS							
							US06 SC03				COMPOSITE									
	FUEL TYPE			NMC)G+N	Ox	СО	PI	М	NMC)G+NOx	СО	NMOG+NC	Dx C	0	PM				
				(g/mi)		(g/mi)	(mg	/mi)	(g/mi)	(g/mi)	(g/mi)	(g/ı	ni)	(mg/mi)				
@4K *			CERT	*			*				*	*								
-			STD		*		*			*		*								
@ UL GASOLINE- TIER3 E10			CERT		*		* 1		*		*	0.019	0.	3	*					
			STD		*		*	e	5		*	*	0.050 4		2	*				
			BIN										0.030							
	WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS																			
WHOLE VEHICLE EVAPORATIVE TESTING																				
	EVAPORATIVE FAMILY						JEL TYP	E	3	DHS (g	/test) @	DUL		2DH	IS (g/test)	@ UL	F	RL (g/mi)@	UL
				Γ	CER	TS	STD	FEL	CEF	R	STD	FEL	CE	RT		STD				
CHVYD0145VDC			ASOLINE EV3 E1(0.24	17 0.	400	*	0.23	35	0.400	*	0.	00	(0.05				
(orvr / Fue	EL O	NLY / C	ANIS	TER	BLEED	EVAP	ORATIVE	EMIS	SION	STANDA	RDS AND	CERTIFICA	TION L	EVE	LS				
									FU	IEL C	NLY EVA	P & CANIS	TER BLEE	D						
	EVAPORATIVE FAMILY		ORVR (g		g/gallon) @ UL			-		3DHS RIG TEST (g/test) @ UL		_	IG TEST) @ UL	-		-				
		FUE	EL TYPE	CE	RT	STD			CEI	RT	STD	CERT	STD	CERT	r	STD				
SHYXE	R0145VRG		SOLINE- ER3 E10	0.	.01	0.20		OLINE- 73 E10	*		*	*	*	0.01	C	0.020				



EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
SHYXR0145VRG	SHYXR0145VRG-NX4	0.00	0.02						

: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: LDT<6000#GVWR.3751-5750#LVW; LDT3: LDT 6001-8500#GVWR.3751-5750#ALVW; LDT4: LDT 6001-8500#GVWR.5751-8500#ALVW; MDV: medium-duty vehicle; MDV4: MDV 8501-10000#GVWR; MDV5: MDV 10001-14000#GVWR; MDPV: mediumduty passenger vehicle; HDV: heavy-duty vehicle; ECS: emission control system; CERT: certification; STD: standard; FEL: family emission limit; GVWR: gross vehicle weight rating; LVW: loaded vehicle weight; ALVW: adjusted LVW; LEV: low emission vehicle; ULEV: ultra LEV; SULEV: super ULEV; ZEV: zero-emission vehicle; TZEV: transitional ZEV; TWC/OC: 3-way/oxidizing catalyst; ADSTWC: adsorbing TWC; HAC: HC adsorbing catalyst; WU: warm-up catalyst; NAC: NOx adsorption catalyst; SCR-U or SCRC/SCR-N or SCRC-NH3: selective catalytic reduction-urea/ammonia; NH3OC: ammonia oxidation catalyst; CTOX/PTOX: continuous/periodic trap oxidizer; DPF: diesel particulate filter (active); GPF: PM filter for spark-ignited engine; cGPF (coated gasoline particulate filter); HO2S/O2S: heated/oxygen sensor; WR-HO2S or AFS: wide range/linear/heated air-fuel ratio sensor; NOXS: NOx sensor; PMS: PM sensor; RDQS: reductant quality sensor; NH3S: ammonia sensor; EGR: exhaust gas recirculation; HP/LP EGR: High/Low Pressure EGR; EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fuel injection; DFI/IFI: direct/indirect fuel injection; TC/SC: turbo/super charger; CAC: charge air cooler; FFH: fuel fired heater; F/P/\$: full/partial/partial with fines on-board diagnostic; DOR: direct ozone reducing; HCT: hydrocarbon trap; BCAN: bleed carbon canister; prefix 2: parallel; (2) suffix: series; a hyphen (-) between after treatment ECS indicates multiple functionalities of the after treatment device (ex. DPF-SCRC: SCR coated DPF); CNG/LNG: compressed/liquefied natural gas; LPG: liquefied petroleum gas; E85: "85%" ethanol ("15%"gasoline) fuel; E10: "10%" ethanol ("90%"gasoline) fuel; A: automatic (with lockup); M: manual transmission; SA: semi-automatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission; AMS: automated manual-selectable transmission; OT: other transmission; AER: all-electric range; EAER: equivalent AER; PHEV: plug-in hybrid electric vehicle; NMOG + NOx Fleet Ave. Credit for Extended Warranty: N = no credits, Y = credits, S = credits for some/select models

2025 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
HYUNDAI	SANTA CRUZ AWD	LDT2	2.5	SA8	SHYXR0145VRG	1	F
HYUNDAI	SANTA CRUZ FWD	LDT2	2.5	SA8	SHYXR0145VRG	1	F