

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.

					TEST GRO	UP II	NFOR	MATION						
MODE YEAR		EST GROUP		VEHICLE CLASS(ES)				FUEL CATEGORY			FUEL TYPE			
2025	ST	ҮХТО2.5НЗА		LD	T2, LDT3				ELECTRIC		GASOLINE			
l	USEFUL	. LIFE (miles)		VEHICLE EMISSION CATEGORY INTERIM / I				EHICLE EMISSION CATEGORY INTERIM / INTE						
EXH	/ORVR	EVAP		FTP S				FTP FTP			SFTP			
15	0000	150000		LEV3	SULEV30 LEV3 CO			MPOSITE	PM		*			
SPECIAL FEATURES & EXHAUST EMISSION CON SYSTEMS						L		OBD S	STATUS		ENGINE DISPLACEMENT (L)			
1	DFI,	SFI, EGR, EG	WR-HO2S	(2), TWC(2))		FULL	ALL MODELS						
*	*							PARTIAL *			2.5			
*			*				PAR	TIAL WITH	*		-			
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION														
EVA	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR						(EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES			
s	TYXR01	65J82	LE	LEV 3 OPTION2 WITH FEL				LDT2			*			
s	TYXR01	95J82	LE	LEV 3 OPTION2 WITH FEL				LDT3			*			
		·		I	EMISSION CI	REDI	T INFO	ORMATION						
	EDIT FC	X FLEET AVE. OR EXTENDED RRANTY			EDIT FOR N ZERO-EVAP	ON-P	ZEV	NMOG C	REDIT FOR DC	R	OPTIONAL EXH. STD FOR WORK TRUCKS			
		N			N			N			N			
				NMOG	AND FLEET	AVE	RAG	E INFORMA	TION					
NMOG RAF	CH4 RAF					0-375								
*	*	1.10		*	0	.030			0.030		*			
Soo th	o Attook	mont for Vahi			norativa Ca	milu		o Dianlaga	mont Emissia	n (Control Systems Phase			

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).

This Executive Order hereby supersedes Executive Order A-014-1212 dated February 26, 2024.

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 <u>3rd</u> day of July 2024.

Robin U. Lang

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+NOx (g/mi)		CO (g/mi)		NOx (g/mi)		HO /mi)		PM g/mi)
			CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K		*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10		0.0178	0.030	0.15	1.0	*	*	*	4	0.0002	2 0.001
50°F @4K		*	*	*	*	*	*	*	*	*		
					-		NN	10G+N	Ox (g/mi)	CO (g/mi)		
				FUEL TYP	E		CE	RT	STD	CER	T	STD
HWFET @ 50K				*			*	*				
HWFET @ UL			GASOI	LINE-TIE	R3 E10		0.0	064	0.030			
20°F @ 50K		COLD	CO E10 R	EGULAR G	ASOLINE	(TIER3)				0.7	9	12.5

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

	SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS															
						US06			SC03				COMPOSITE			
	FUEL TYPE				DG+NOx g/mi)	CO (g/mi)	-	PM g/mi)		S+NOx mi)	CO (g/mi)		OG+NOx (g/mi)	CC (g/m		PM (mg/mi)
@ 4K	< *		CERT STD		*	*				* *						
					*	*			ŕ	*	*					
	OUL GASOLINE- TIER3 E10		CERT		*	*	0	.5	ł	*	*	0.0156		0156 0.21		*
@ UL			STD	*		* *		6		*	*	C	0.050 4		2	*
			BIN									C	0.040			
		WН	OLE VE	HICL	E EVAPO	ORATIVE E	MISSIO	N STAN	DARD	S AND C	ERTIFIC	ATIO	N LEVELS	;		
						WHOLE \	/EHICLE	EVAPC)RATI\	/E TEST	ING					
	EVAPORATIVE FAMILY		FUEL TYPE		3DH	S (g/test) @	(g/test) @ UL			2DHS (g/test) @ UL			RL (g/mi) @ UL			JL
					CERT	STD	FEL	CER	Т	STD	FEI	CERT		S		STD
STYXE0165.T82		_	ASOLIN IER3 E	10 185		0.400	0.400	0.19	22	0.400	0.40	0.400			0	.05
STYXR0195J82			GASOLINE- TIER3 E10		0.1530	0.500	0.400	0.13	31	0.500	0.40	0.005		0.005 0.		.05



TOYOTA MOTOR CORPORATION

ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS													
		FUEL ONLY EVAP & CANISTER BLEED											
EVAPORATIVE FAMILY	ORVR (g/	FUEL TYPE		3DHS R (g/test)		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4P					
	FUEL TYPE	CERT	STD			CERT	STD	CERT	STD	CERT	STD		
STYXR0165J82	GASOLINE- TIER3 E10 0.003 0.20		*		*	*	*	*	*	*			
STYXR0195J82	GASOLINE- TIER3 E10	0.006	0.20	*		*	* *		*	*	*		
l	EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)												
EVAPORATIVE	Y CERT					STD							
STYXR0165	STYXR0165J82-001				*	7		0.02					
STYXR0195	J82	STYXR0	195J82	-001		*			0.02				

*: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: _DT<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
LEXUS	NX 350H AWD	LDT2	2.5	SCV6	STYXR0165J82	1	F
LEXUS	RX 350H AWD	LDT2	2.5	SCV6	STYXR0165J82	1	F
TOYOTA	GRAND HIGHLANDER HYBRID	LDT3	2.5	SCV6	STYXR0165J82	1	F
TOYOTA	GRAND HIGHLANDER HYBRID AWD	LDT3	2.5	SCV6	STYXR0165J82	1	F
TOYOTA	GRAND HIGHLANDER HYBRID LIMITED	LDT3	2.5	SCV6	STYXR0165J82	1	F
TOYOTA	SIENNA	LDT3	2.5	SCV6	STYXR0195J82	1	F
TOYOTA	SIENNA AWD	LDT3	2.5	SCV6	STYXR0195J82	1	F