

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 GRC	OUP I	NFOR	MATION					
MODE YEAI	T	EST GROUP		VEHIC	LE CLASS(E	S)		FUEL C	ATEGORY		FUEL TYPE		
2022	2 NI	ISXT03.8PRA			ldt3			-	SINGLE FUEL HICLE		GASOLINE		
USEFUL LIFE (miles) VEHICLE EMISSION							CATE	GORY INTERIM / INTERMEDIATE IN-USE STD					
EXH	i/orvr	EVAP			FTP		SF	тр	FTP		SFTP		
15	50000	150000)	LEV3	ULEV70	LEV	' 3 C	OMPOSITE	*		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS						L		OBD S	TATUS	EN	ENGINE DISPLACEMENT (L)		
1	2TWC(2), 2HO2S, 2WR-HO2S, DFI							FULL	ALL MODELS				
*	*							PARTIAL	ARTIAL *		3.8		
*			*				PAF	RTIAL WITH FINES	*				
•		E	VAPO	RATIVE &	REFUELING	i (EV	AP/OF	RVR) FAMIL					
EVA	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR						Y		SSION STD E CLASS	SPECIAL FEATURES			
1	NNSXR0	155PFB	LE	V 3 OPTI	ION2 WITH	FEL		LI)ТЗ		*		
					EMISSION CI	REDI	T INF	ORMATION					
	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY						ZEV	NMOG C	REDIT FOR DOP	,	OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N				N				
				NMOG	AND FLEE		RAG	E INFORMA	TION				
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO		IO/NMHC RATIO				N) LDT	+NOX FLEET S1 (3751 LVW-8500 R) + MDPV (g/mi		D NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*	*	1.10		*	0	.051			0.056		*		

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 $\frac{15th}{1000}$ day of June 2021.

Allen Zyons, 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	-	-	O mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
			CERT	STD	CERT STD C		CERT	STD	CER	r std	CEF	RT	STD
FTP@50K	к *		*	*	*	*	*	*	*	*	*		*
FTP@UL	L GASOLINE- LEV3 E10		0.018	0.070	0.1	1.7	*	*	*	4	0.00	001	0.003
50°F @4K	GASOLINE- LEV3 E10		0.028	0.140	0.2	1.7	*	*	*	16			
				E		NN	IOG+N	Ox (g/mi)		CO (g/mi)			
				FUEL TYP	E		CE	RT	STD	CE	RT		STD
HWFET @ 50K			*					•	*				
HWFET @ UL		GASOLINE-LEV3 E10						09	0.070				
20°F @ 50K		COLD C	CO E10 RE	GULAR G	ASOLINE	(TIER3)				0.	4		12.5

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			311			1133101	ISTANDA	1803	AND	CERTIFIC		VELS		
						US06				SC03		C	OMPOSIT	E
	FUEL TY	PE	١	NMOG+N (g/mi)		CO (g/mi)	Pl (mg			DG+NOx g/mi)	CO (g/mi)	NMOG+NO (g/mi)	x CO (g/mi	PM) (mg/mi)
@ 4K	*	CE	RT	*		*				*	*			
•		ST	D			*				*	*			
		CE	RT	*		*	1	L		*	*	0.019	0.3	*
@ UL	GASOLIN LEV3 E1		D	*		*	e	5		*	*	0.070	4.2	*
		BI	N									0.090		
		WHOLE	E VEHI		APOR/	ATIVE E	MISSION	STAN	IDAR	DS AND C	ERTIFICA	TION LEVE	LS	
WHOLE VEHICLE EVAPORATIVE TESTING														
	ORATIVE AMILY			3DHS (g		(g/test) @ UL			2DHS (g/test)		@ UL	F	RL (g/mi) @	
				CEF	RL	STD	FEL	CEF	RT	STD	FEL	CE	RT	STD
NNSXF	R0155PFB		LINE- 3 E10	0.2	89 0	.500	0.500	0.1	92	0.500	0.50	0.0	00	0.05
(ORVR / FUE	EL ONL	Y/CA	NISTER	BLEE) EVAP	ORATIVE	EMIS	SION	I STANDA	RDS AND	CERTIFICA	TION LE	'ELS
								FU	JEL C	ONLY EVA	P & CANIS	TER BLEE	D	
	ORATIVE AMILY	ORV	/R (g/g	gallon) @	0 UL	FUE	L TYPE	-	-	IG TEST) @ UL	-	RIG TEST t) @ UL		CANISTER test) @ 4K
		FUEL "	TYPE	CERT	STD			CE	RT	STD	CERT	STD	CERT	STD
NNSXE	R0155PFB	GASOL TIER3		0.07	0.20		OLINE- 73 E10	*		*	*	*	0.008	0.020



EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
NNSXR0155PFB	NNSXR0155PFB-001	*	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; 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

2022 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
NISSAN	FRONTIER 2WD	LDT3	3.8	SA9	NNSXR0155PFB	1	F
NISSAN	FRONTIER 4WD	LDT3	3.8	SA9	NNSXR0155PFB	1	F