

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		TEST GROUP			VEHIC	CLE CLASS(ES) FU			FUEL (	CATEGORY		FUEL TYPE		
2023	3 1	PHYXV02	2.0KE3		PC				-	SINGLE FUEL		GASOLINE		
USEFUL LIFE (miles)					VEH	IICLE EMISS	EMISSION CATEGORY					ERMEDIATE IN-USE STD		
EXH/ORVR EVAP						FTP		SFTP			FTP SFTP			
150000 150000					LEV3	SULEV30	LEV	3 C	OMPOSITE	*		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS							L		OBD S	TATUS	E	ENGINE DISPLACEMENT		
1	1 SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC								FULL	ALL MODELS				
*	*								PARTIAL	*		2.0		
*	* *								RTIAL WITH *					
			EV	APOF	RATIVE &	REFUELING	(EVA	AP/OF	RVR) FAMIL	Y INFORMATION	1			
EVA	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR							Y	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
	PHYXRO	)125KE	G		LEV 3	OPTION2			PC			*		
					E	EMISSION CI	REDI	T INF	ORMATION					
NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY						ON-P	ZEV				OPTIONAL EXH. STD FOR WORK TRUCKS			
		N				N				N				
					NMOG	AND FLEET	AVE	RAG	E INFORMA	TION				
NMOG RAF	CH4 RAF						0-375							
*	*		1.10		*	0	.044			0.047		*		

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 <u>19th</u> day of May 2022.

Johns Schi for

Allen Lyons, 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 CO (g/mi) (g/mi)				NOx (g/mi)		HCHO (mg/mi)		PM g/mi)	
			CERT	STD	CERT STD C		CERT	STD	CERT	STD	CERT	STD	
FTP@50K	*		*	*	*	*	*	*	*	*	*	*	
FTP@UL	GASOLINE- TIER3 E10		0.012	0.030	0.4	1.0	*	*	*	4	0.000	0.003	
50°F @4K		SOLINE- R3 E10	0.020	0.060	0.4	1.0	*	*	*	8			
					F		NN	NMOG+NOx (g/mi)			CO (g/mi)		
		FUEL TYPE						RT	STD	CER	Т	STD	
HWFET @ 50K			*						*				
HWFET @ UL		GASOLINE-TIER3 E10						05	0.030				
20°F @ 50K		COLD (	CO E10 RE	GULAR G	ASOLINE	(TIER3)				0.6	5	10.0	

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			361			1122101	1 STANDA	1803	AND	CERTIFIC		VELO		
					US06					SC03		C	OMPOSITE	
	FUEL TY	PE		NMOG+I (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	*		CERT	*	*					*	*			
•			STD	*		*				*	*			
		C	CERT	*		*	0	)		*	*	0.011	0.8	*
@ UL	GASOLIN TIER3 E		STD	*		*	6	5		*	*	0.063	4.2	*
			BIN									0.030		
		ωно	LE VEH	ICLE EV	APOR	ATIVE E	MISSION	STAN	DAR	DS AND C	ERTIFICA	TION LEVE	LS	
					WHOLE VEHICLE EVAPORATIVE TESTING									
	ORATIVE	FUEL TYPE		TYPE 3DHS		HS (g/test) @ UL			2DHS (g/test) @		@ UL	F	RL (g/mi) @ l	
				CE	RT	STD	FEL	CER	RL	STD	FEL	CEI	RT	STD
PHYXI	R0125KEG	-	SOLINE EV3 E10	102	56 0	.300	*	0.19	94	0.300	*	0.0	03	0.05
(	orvr / Fui	EL ON	NLY / CA	NISTER	BLEE	D EVAP	ORATIVE	EMIS	SION	STANDA	RDS AND	CERTIFICA	TION LEV	ELS
								FU	EL C	ONLY EVA	P & CANIS	TER BLEE	D	
	ORATIVE	0	RVR (g/	gallon) (	@ UL	FUE	L TYPE	-	-	IG TEST ) @ UL	-	t) @ UL		ANISTER est) @ 4K
		FUE	L TYPE	CERT	STD			CEI	RT	STD	CERT	STD	CERT	STD
PHYXP	R0125KEG		OLINE- R3 E10	0.01	0.20		OLINE- 73 E10	*		*	*	*	0.006	0.020



EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
PHYXR0125KEG	PHYXR0125KEG-OS2	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; 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

## 2023 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
HYUNDAI	KONA AWD	PC	2.0	SCV1	PHYXR0125KEG	1	F
HYUNDAI	KONA FWD	PC	2.0	SCV1	PHYXR0125KEG	1	F