

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 GROUP INFORMATION														
	MODEL YEAR TEST GROUP VEHICLE CLASS(ES)								FUEL CATEGORY			FUEL TYPE		
202	2021 MHYXV02.0CE3 PC							DEDICATED SINGLE FUEL VEHICLE				GASOLINE		
	USEFU	UL LI	IFE (miles)		VEH					INTERIM / IN	IEDIATE IN-USE STD			
EXH/ORVR EVAP						FTP		SF	TP	FTP		SFTP		
1	50000		150000)	LEV3	SULEV30	LEV	3 C	MPOSITE	*		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS									OBD S	DBD STATUS		ENGINE DISPLACEMENT (L)		
1	1 SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC								FULL	ALL MODELS				
*				*				F	ARTIAL	*		2.0		
*	* *								RTIAL WITH *					
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION														
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY										SSION STD E CLASS	SI	SPECIAL FEATURES		
	MHYXR	0130	CEG		LEV 3	OPTION2			F	PC		HCT		
					I	EMISSION CI	REDIT	r info	ORMATION					
NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY								NMOG CREDIT FOR DOR			OPTIONAL EXH. STD FOR WORK TRUCKS			
		N				N			N N					
					NMOG	AND FLEET	AVE	RAG	E INFORMA	TION				
NMOG RAF						0-375					NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)			
* * 1.10 * 0.058 0.							0.065		*					

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>28th</u> day of August 2020.

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

													I
			NMOG (g/I	i+NOx mi)	C (g/	O mi)		Ox mi)		HO /mi)	PM (g/mi)		
			CERT	STD	CERT	CERT STD CE		STD	CERT	STD	CER	T S	TD
FTP@50K		*	*	*	*	*	*	*	*	*	*	* *	
FTP@UL	OUL GASOLINE- TIER3 E10		0.014	0.030	0.2	1.0	*	*	*	4	0.00	00 0.	003
50°F @4K		SOLINE- R3 E10	0.016	0.060	0.2	1.0	*	*	*	8			
							NN	/IOG+N	Ox (g/mi)		CO (g/mi)		
	FUEL TYPE						CE	RT	STD	CERT		STD	
HWFET @ 50K				*			*	*		*			
HWFET @	@ UL		GASOLINE-TIER3 E10						0.030				
20°F@50K COLD CO E1				GULAR G	ASOLINE	(TIER3)				0.5	;	10.0	D

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

	SFIP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS																	
				US06						SC03		С	OMPO	SITE				
	FUEL TY	PE		MOG+N	IOx	СО	P	N	NMC	G+NOx	со	NMOG+NC)x (0	PM			
				(g/mi)		(g/mi)	(mg/	/mi)	(g/mi)	(g/mi)	(g/mi)	(g	/mi)	(mg/mi)			
@ 4K	*	С	ERT	*		*			*		*							
		S	STD	*		*				*	*		0.077 4.2 0.030 N LEVELS RL (g/mi) @					
		CI	ERT	*		*	1			*	*	0.013	0	. 5	*			
@ UL	GASOLIN TIER3 E	- 19	STD	*		*	6	;		*	*	COMPOSITE NMOG+NOx (g/mi) CO (g/mi) 0.013 0.5 0.013 0.5 0.013 0.5 0.013 0.5 0.030 J TION LEVELS RL (g/mi) @ U CERT S 0.03 0. CERTIFICATION LEVEL TER BLEED IG TEST BLEED CAN)@ UL CERT	*					
		E	BIN									0.030						
WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS																		
	WHOLE VEHICLE EVAPORATIVE TESTING																	
EVAPORATIVE FAMILY	FUEL TYPE		YPE 3DHS		DHS (g/test) @ UL			2DHS (g/test) @ UL			RL (g/mi) @ l			UL				
					CERT ST		FEL	CEF	RT	STD	FEL	CE	RT	STD				
MHYXF	HYXR0130CEG GASOLINE- LEV3 E10 0			0.2	56 0	0.300 * 0.194 0.300 *		0.	.03 (0.05							
0	DRVR / FUI	EL ON	LY/CA	NISTER	BLEEI) EVAP	ORATIVE	EMIS	SION	STANDA	RDS AND	CERTIFIC	TION	LEVE	LS			
								FU	IEL C	NLY EVA	P & CANIS	TER BLEE	RT STD 03 0.05					
	ORATIVE	OR	RVR (g/g	gallon) @	DUL	FUE	L TYPE			G TEST @ UL		RIG TEST t) @ UL						
		FUEL	. TYPE	CERT	STD]		CEI	RT	STD	CERT	STD	CER	т	STD			
MHYXF	R0130CEG		LINE- 3 E10	0.01	0.20		OLINE- 73 E10	*		*	*	*	0.00					



EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)										
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD							
MHYXR0130CEG	MHYXR0130CEG-CN7	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

2021 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
HYUNDAI	ELANTRA	PC	2.0	SCV1	MHYXR0130CEG	1	F