

Executive Order: A-254-0473

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 1 of 4

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													
MOD	I T	EST GROUP	ST GROUP VEHICLE CLASS(ES)					FUEL C	ATEGORY		FUEL TYPE		
202	1 MH	YXV01.6CC5	PC						SINGLE FUEL HICLE		GASOLINE		
USEFUL LIFE (miles) VEHICLE EMISSIO						ION (ATE	GORY	INTERIM / IN	TERM	ERMEDIATE IN-USE STD		
EXH/ORVR EVAP					FTP		SFTP FTP				SFTP		
1	50000	150000		LEV3	ULEV70	LEV	3 C	OMPOSITE	*		PM		
SP	ECIAL FE	EATURES & EX	HAU:		ON CONTRO	L		OBD S	TATUS	EN	ENGINE DISPLACEMENT (L)		
1	DFI,	WR-HO2S, HO2	S, W	U-TWC, T	WC, TC, CA	.c		FULL	ALL MODELS				
*			*			\neg	F	PARTIAL *		1	1.6		
*	*							ARTIAL WITH * FINES		1			
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION												
EV	AP / ORV	R FAMILY	EVA	PORATIVE	STD CATE	GORY	,		SSION STD E CLASS	SF	SPECIAL FEATURES		
	MHYXR01	.30CCG		LEV 3	OPTION2			PC			нст		
				I	EMISSION CI	REDIT	INF	ORMATION	·				
	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY NMOG CREDIT FOR NON- ZERO-EVAP						ZEV	NMOG C	REDIT FOR DO		OPTIONAL EXH. STD FOR WORK TRUCKS		
	N N								n n				
	NMOG AND FLEET AVERAGE INFORMATION												
NMOG RAF	2 NMOG/NMHC 1 2 1 PC+1 DT /0-375			0-375		V) LDT	+NOX FLEET S (3751 LVW-8500 R) + MDPV (g/m)	NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)				
*	*	1.10		*	0.058 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.)



Executive Order: A-254-0473

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 2 of 4

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>25th</u> day of November 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Executive Order: A-254-0473

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 3 of 4

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

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: carb 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 los ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: m 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP										ty ss;				
		NMO		S+NOx	со			NOx		HCF		PM			
			L		mi)	- "	/mi)		mi)		mg/		(g/mi		·
				CERT	STD	CERT	STD	CERT	STD	CER	T	STD	CER	₹T	STD
FTP@50		*		*	*	*	*	*	*	*	_	*	*		*
FTP@U		OLIN R3 E		0.037	0.070	0.4	1.7	*	*	*		4	0.00	01	0.003
50°F @4		OLIN R3 E		0.034	0.140	0.2	1.7	*	*	*		16			
FUEL TYPE NMOG+NOx (g/mi) CO (g/mi)										/mi)					
					· OLL · ·	· -		CE	RT	STD		CERT			STD
HWFET @ 50K					*			*	* *						
HWFET @ UL				GASO1	LINE-TI	ER3 E10		0.0	0.015 0.070						
20°F @ 50K COLD						GASOLINE	•						0.3 10.0		
				FTP EXI	HAUST E	MISSION S	TANDARD	S AND CE			EVE				
						US06	T		SC03				MPOS		
FUEL TYPE				S+NOx mi)	CO (g/mi)	PM (mg/mi)	NMOG (g/ı		CO (g/mi)	NM	lOG+NOx (g/mi)		O mi)	PM (mg/mi)	
@ 4K *			CERT *		*	*		,	*						
		S ⁻		,	*	*		*	•	*	*				
		GASOLINE- TIER3 E10		r	*	*	1	*	•	*		0.044	0	. 4	*
@ UL				,	*	*	6	*	•	*		0.077	4	. 2	*
			BIN									0.070			
		WH	OLE V	EHICLE	EVAPOR	RATIVE EMI	SSION STA	ANDARDS	S AND	CERTIFIC	ATIC	N LEVEL	.S		
WHOLE VEHICLE EVAPORATIVE TESTING															

			WHOLE \						
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test) () UL	2DI	HS (g/test) (RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
MHYXR0130CCG	GASOLINE- LEV3 E10	0.219	0.300	*	0.207	0.300	*	0.00	0.05

ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS												
				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE		IG TEST) @ UL	2DHS R (g/test	IG TEST) @ UL	BLEED CANISTER TEST (g/test) @ 4K			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
MHYXR0130CCG	GASOLINE- TIER3 E10	0.02	0.20	GASOLINE- LEV3 E10	*	*	*	*	0.003	0.020		



Executive Order: A-254-0473

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 4 of 4

EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)										
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD							
MHYXR0130CCG	MHYXR0130CCG-CN7	0.00	0.02							

the included in the control of the c .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; 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 **EVAPORATIVE EXH TRANS TYPE MAKE** MODEL **VEH CLASS ENGINE (L)** OBD **FAMILY ECS** MHYXR0130CCG HYUNDAI ELANTRA PC 1.6 AMS7,M6 F