California Environmental Protection Agency

@ Air Resources Board

HYUNDAI MOTOR COMPANY

Executive Order: A-254-0324

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

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Pursuant to the authority vested in the 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-14-012;

IT IS ORDERED AND RESOLVED: 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	VFO	RMATION							
MODI		TEST GROUP VEHICLE CLASS(ES)							FUEL CATEGORY				FUEL TYPE			
201	7 HHYXV02.01VF PC DEDICA									CATED SINGLE FUEL VEHICLE				GASOLINE		
USEFUL LIFE (miles) VEHICLE EMISSION							ION (ATEGORY INTERIM / INTERMEDIATE IN-						TE IN-USE STD		
EXH/ORVR EVAP						FTP SFTP			FTP	FTP				SFTP		
1	20000		150000		I	EV2 ULEV	1		2 SFTP NDARD			* - *				
SPECIAL FEATURES & EXHAUST EMISSION CONTROL OBD STATUS SYSTEMS								IS	E	DISPLACEMENT (L)						
1	WU-TWC, TWC, WR-HO2S, HO2S, DFI, TC, CAC								FULL	ALL MODELS		7				
*	* PARTIAL *									2.0						
*	* PARTIAL WITH * FINES															
			EV	APOR	ATIVE	& REFUELING	(EVA	P/O	RVR) FAMI	LY	INF	ORMATIO	1			
EV	AP / OR\	/R FAI	/IILY	EVAP	ORAT	IVE STD CATE	GORY	RY EVAP EMISSION STD VEHICLE CLASS			;	SPECIAL FEATURES				
	HHYXR0130AVE					LEV 2	LEV 2 PC					*				
						EMISSION CF	REDI	TINE	ORMATIO	V						
	A	LLOW	ANCE FO	R TES	ST GR	OUP		NMOG CREDIT FOR NMOG CREDIT FOR STD E					OPTIONAL EXH. STD FOR WORK			
BAS	BASELINE PZEV AT PZEV						TZEV NON-PZEV ZERO-EVAP			VAP	DOR			TRUCKS		
* * *						*		N I				N	N			
NMOG AND FLEET AVERAGE INFORMATION																
NMOG RAF	NMOG/NMHC			O/NMI ATIO	PC+LDT (NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)			NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)				
*	* 1.04 * 0.086 0.101 *						*									

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.

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 NMOG+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan 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],

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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.

day of January 2016

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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*

0.02

0.05

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GASOLINE -

CA PHASE 2

0.39

0.50

HHYXR0130AVE

ATTACHMENT

						^	IIAC) I IIVI	LI4 I								
	EXH	HAUST	AND	EVAI	PORAT	IVE EMIS	SSION	STAN	DAR	OS ANI	CERT	IFIC	ATION L	EVELS			
		EXH	AUSTE	MISSI	ON STAP	IDARDS A	ND CER	TIFICA	ATION L	EVELS	(FTP, HW	FET	,50°F, 20°	F)			
	Fl	FUEL TYPE		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													
					MOG g/mi)		CO (g/mi)			Ox /mi)	1						
				CERT	STE	CER	T ST	D	CERT	STD	CER	Т	STD	CERT	STD		
GASOLINE - FTP@50K TIER 2 UNLEADED				0.032	0.04	0 0.3	1.	7	0.02	0.05	*		8	*	*		
FTP@l	JL	ASOLINE TIER 2 JNLEADE	2	0.039	0.05	5 0.4	2.	1	0.03	0.07	*	11 .		*	0.01		
50°F @	4K	SOLINE TIER 2 JNLEADE	2	0.033	0.08	0.3	1.	7	0.01	0.05	*		16		#. \\ - :		
			,		FUEL 1	VDE				NOx (g/mi)		non-CH4 He e matter; RAL [g HC/mi]: am; mg: milli upplemental cHO g/mi) STD 8 8 11 16 CERT 0.6 ELS COMMHC+NOX (g/mi) 0.069 0.103 0.130 ION LEVELS RL	CO (g/mi)			
				POEL TIPE				CERT		STD	STD			STD			
HWFET @ 50K			GA:	GASOLINE - TIER 2 UNLEADED					0.	0.01		0.07					
HWFE	T@UI	L	GA:	GASOLINE - TIER 2 UNLEADED					0.	0.01							
20°F	@ 50K		GAS	GASOLINE-COLD CO LOW OCTANE							i Vien		0.6		10.0		
			SI	TP EX	CHAUST	EMISSION	STAND	ARDS	AND C	ERTIFIC	ATION LI	EVEL	.S				
			-			US06				SC03			CON	POSITE			
) — <u>—</u>	FUEL	. TYPE			HC+NOx g/mi)	CO (g/mi)		PM g/mi)	1	c+NOx mi)	CO (g/mi)			CO (g/mi)	PM (mg/mi		
@ 4K	TIE	LINE - ER 2 EADED	CERT	C	0.04	1.0	- 1		0.	06	0.4	1077	non-CH4 HC matter; RA [g HC/mi]: m; mg: millipplemental HO mi) STD 8 11 16 CERT 0.6 LS COM MHC+NOX (g/mi) 0.069 0.103 0.130 ON LEVELS RL				
			STD	C	.14	8.0			0.	20	2.7			C; CO: car AF: reactivi running lo gram; mi: IFTP PM (g/n CERT * * CO (g/mi) MPOSITE CO (g/mi) * * * * * * * * CO (g/mi) * * * * * * * * * * * * *			
			CERT		*	*		*		*	*		0.069	*	*		
@ UL	TIE	LINE - ER 2 EADED	STD		*	*		*		*	*	1	0.103	CO (g/mi) MPOSITE CO (g/mi) *	*		
			BIN		- 4			11:			·		0.130				
		WH	OLE VI	HICLI	EEVAPO	RATIVE E	MISSIO	N STA	NDARD	SAND	ERTIFIC	ATIO	N LEVELS	3			
						WHOLE \	/EHICLE	EVAF	ORATI	VE TEST	ING						
	ORATI	VE F	UEL TY	PE	3DHS	6 (g/test) @	UL		2DHS	G (g/test)	@ UL	rticulate matter; RAF: recoak; RL [g HC/mi]: runiv; g: gram; mg: milligram FTP: supplemental FTF HCHO (mg/mi) EERT STD CE * 8 * 11 * 16 CO (TD CERT .07 .09 0.6 N LEVELS COMPO NMHC+NOX (g/mi) (g/mi) (g/mi) (g/mi) 7 0.069 0.103 0.130 FICATION LEVELS	(g/mi) @	ni) @ UL			
					CERT	STD	FEL	CE	RT	STD	FEI		CERT		STD		

0.50

0.65

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ORVR / FU	EL ONLY / CA	NISTER	BLEED	EVAPORATIVE	EMISSION	STANDA	RDS AND	CERTIFICA	TION LEV	ELS			
				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			
HHYXR0130AVE	GASOLINE - TIER 2 UNLEADED	0.03	0.20	*	*	*	*	*	*	*			

: 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; PZEV: partial ZEV; AT PZEV: advanced technology PZEV; 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; 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; 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; 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

2017 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
HYUNDAI	SANTA FE SPORT AWD	PC	2.0	SA6	HHYXR0130AVE	1	F	*
HYUNDAI	SANTA FE SPORT FWD	PC	2.0	SA6	HHYXR0130AVE	1	F	*
HYUNDAI	SANTA FE SPORT ULTIMATE AWD	PC	2.0	SA6	HHYXR0130AVE	1	F	*
HYUNDAI	SANTA FE SPORT ULTIMATE FWD	PC	2.0	SA6	HHYXR0130AVE	1	F	*