# California Environmental Protection Agency

# **⊘** Air Resources Board

KIA MOTORS CORPORATION Executive Order: A-314-0254

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	NFO	RMATION							
MODE YEAR	- I T	EST G	ROUP	VEHICLE CLASS(ES)					FUEL CATEGORY				FU	EL TYPE		
2017	нк	MXV02	2.04EP			PC		DEDICATED SINGLE FUEL VEHICLE			GASOLINE					
	USEFUL	LIFE	(miles)		\	EHICLE EMISS	ON (	CAT	EGORY		1N	TERIM / IN	ERM	EDIA	E IN-USE STD	
EXH	I/ORVR		EVAP			FTP		S	FTP	$\neg \sqcap$		FTP		SFTP		
15	0000		150000		LE.	V3 SULEV30	LEV	3 (	COMPOSIT	E		PM		NMC	G+NOX AND PM	
SPE	CIAL FE	ATUR		IAUS <sup>*</sup> TEMS		SION CONTROI	L		ОВГ	D ST.	ATU	ıs	EN	GINE	DISPLACEMENT (L)	
1	W	U-TW	C, TWC,	WR-H	02S, 1	HO2S, SFI			FULL		ALI	L MODELS				
*				*					PARTIAL			*	2.0			
*	* *							PA	RTIAL WI							
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION															
EVA	P / ORV	R FAÑ	MILY	EVAP	ORAT	IVE STD CATEO	3OR\	RY EVAP EMISSION STD VEHICLE CLASS			SP	ECIAI	FEATURES			
H	KMXR01	344E0	3			LEV 2		PC HCT			нст					
						EMISSION CF	REDI.	T INI	ORMATIC	ON						
	Α	LLOW	ANCE FO	R TES	ST GR	OUP	_		G CREDIT				CREDIT FOR		OPTIONAL EXH. STD FOR WORK	
BASE	ELINE P	ZEV	AT	PZEV		TZEV		J14-F	ZEV ZERO	O-EV	AP	ь	λK		TRUCKS	
ALI	ALL MODELS * *								N			1	ī		N	
					NM	OG AND FLEET	AVE	RAG	SE INFORI	MAT	ION					
NMOG RAF	CH4 RAF					)-375		/W) LI	DT (3	3751	K FLEET ST LVW-8500 IDPV (g/mi					
*	*	:	1.10		*	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

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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).

#### BE IT FURTHER RESOLVED:

Evaporative family HKMXR01344EG is certified pursuant to 13 CCR Section 1976(b)(1)(G)3 and deemed to comply with the requirements of 13 CCR Section 1976(b)(1)(G)1 ["LEV III evaporative requirements"].

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 at El Monte, California on this

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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# **ATTACHMENT**

# **EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS**

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

**FUEL TYPE** 

		NMOG+NOx (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
Joseph .		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	TIER 3 E10 REGULAR GASOLINE (9RVP @ LOW ALT.)	0.016	0.030	0.3	1.0	*	*	*	4	0.000	0.003
50°F @4K	TIER 3 E10 REGULAR GASOLINE (9RVP @ LOW ALT.)	0.003	0.060	0.2	1.0	*	*	*	8		

	FUEL TYPE	NMOG+	NOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*	fan .		
HWFET @ UL	TIER 3 E10 REGULAR GASOLINE (9RVP @ LOW ALT.)	0.008	0.030		2 - 4 July	
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE			0.7	10.0	

# SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		3 1		US06		SC03	3	COMPOSITE		
	FUEL TYPE	- '_ -	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMOG+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*	· '	*	*			
@		STD	*	*		*	*			
		CERT	*	*	6	*	*	0.016	1.4	*
@ UL	TIER 3 E10 REGULAR GASOLINE (9RVP @ LOW ALT.)	STD	*	*	10	*	*	0.103	4.2	*
		BIN			1.00			0.030	175	

### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			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
HKMXR01344EG	GASOLINE - CA PHASE 2	0.21	0.35	*	0.22	0.35	*	0.02	0.05

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ORVR / FUI	ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS												
				FUEL ONLY EVAP & CANISTER BLEED									
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
HKMXR01344EG	GASOLINE - TIER 2 UNLEADED	0.04	0.20	GASOLINE - CA PHASE 2	0.04	0.0	0.04	0.0	*	*			

: 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

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
KIA	FORTE	PC	2.0	SA6	HKMXR01344EG	1	F	PZEV