

Executive Order: A-314-0312

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

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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-14-012;

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.

	, T-1				2.4	TEST GRO	UP IN	IFOR	MATION					
MOD	1	EST GROU	Р		VEHIC	LE CLASS(E	-			ATEGORY	FUEL TYPE			
201		KMXV02.4DI	13	PC					DEDICATED SINGLE FUEL VEHICLE			GASOLINE		
	USEFU	L LIFE (mile	s)		VEH	IICLE EMISS	ION C	ATE	GORY	INTERIM / IN	TER	MEDIATE IN-USE STD		
EX	H/ORVR	EV	AP			FTP		SF	TP	FTP		SFTP		
1	50000	150	000		LEV3	SULEV30	LEV	3 CC	MPOSITE	NMOG+NOX AN	D P	M PM		
SP	ECIAL F		EXH SYST			ON CONTRO	L		OBD S	TATUS	E	NGINE DISPLACEMENT		
1		DFI, WR-H	)2S,	HO2	s, wu-Tv	C, TWC			FULL	*	1			
*			-	*				Р	ARTIAL	ALL MODELS	2.4			
*		-		*					TIAL WITH FINES	*				
			EV	APO	RATIVE &	REFUELING	(EVA	P/OR	VR) FAMIL	INFORMATIO	١			
EV	AP / OR	VR FAMILY		EVA	PORATIVE	STD CATE	GORY	,		SSION STD E CLASS	8	SPECIAL FEATURES		
	KKMXR0	143DHG		LEV 3 OPTION1					PC			HCT		
						EMISSION CI	REDIT	INFO	RMATION					
	REDIT F	OX FLEET A OR EXTEND RRANTY				REDIT FOR N ZERO-EVAP	ON-P	PZEV NMOG CREDIT FOR DOR			R	OPTIONAL EXH. STD FOR WORK TRUCKS		
		N				N				N		N		
					NMOG	AND FLEET	AVE	RAGI	INFORMA	TION				
NMO(	CH4 RAF	FTP NMOG/NI RATIO			HO/NMHC RATIO	NMOG+NO PC+LDT (			V) LDT	+NOX FLEET S (3751 LVW-850 R) + MDPV (g/m	)	NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*	*	1.10			*	0	.072			0.083		*		

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.



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#### 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 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)				NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10	0.020	0.030	0.4	1.0	*	*	*	4	0.001	0.003
50°F @4K	GASOLINE- TIER3 E10	0.028	0.060	0.3	1.0	*	*	*	8		

	FUEL TYPE	NMOG+N	Ox (g/mi)	CO (	g/mi)
	FUEL TYPE	CERT	STD	CERT	STD
HWFET @ 50K	*	*	*		
HWFET @ UL	GASOLINE-TIER3 E10	0.011	0.030		
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			1.1	10.0

### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	CON	POSITE	
	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	*	*	1	*	*	0.020	0.8	*
@ UL	GASOLINE- TIER3 E10	STD	*	*	6	*	*	0.090	4.2	*
		BIN						0.030		

#### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

				WHOLE V	RL (g/mi) @ UL					
EVAPORATIVE FAMILY		FUEL TYPE	3DHS (g/test) @ UL			2DI	HS (g/test) (	RL (g/mi) @ UL		
			CERT	STD	FEL	CERT	STD	FEL	CERT	STD
	KKMXR0143DHG	GASOLINE- LEV3 E10	0.258	0.350	*	0.287	0.350	*	0.02	0.05

## ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

						FUEL ONLY EVAP & CANISTER BLEED						
EVAPORATIVE FAMILY	ORVR (g/g	gallon) @	) UL	FUEL TYPE	3DHS R (g/test	_	2DHS R (g/test		BLEED C TEST (g/t			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
KKMXR0143DHG	GASOLINE- TIER3 E10	0.02	0.20	GASOLINE- LEV3 E10	0.0	0.0	0.0	0.0	*	*		



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EFFECTIV	E LEAK DIAMETER STANDA	RD AND CERTIFICATION I	EVEL (INCHES)
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD
KKMXR0143DHG	KKMXR0143DHG-JF1	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; 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; 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

# 2019 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
KIA	OPTIMA	PC	2.4	SA6	KKMXR0143DHG	1	P
KIA	OPTIMA FE	PC	2.4	SA6	KKMXR0143DHG	1	P