

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.

| _ | | | | | TEST GRO | UP IN | IFOR | MATION | | | | | |
|--|--|---|------------|-----------------------------------|--|--|-----------------------|---------------------------------------|---|------------------|--|--|--|
| MODE | | TEST GROUP | | VEHICLE CLASS(ES) | | | FUEL CATEGORY | | | FUEL TYPE | | | |
| 2020 |) LF | KMXV02.0CE3 | PC | | | | SINGLE FUE HICLE | L | GASOLINE | | | | |
| | L LIFE (miles) | | ICLE EMISS | ION C | ATE | GORY | INTERIM / I | NTE | ERMEDIATE IN-USE STD | | | | |
| EXH | I/ORVR | EVAP | | - | FTP | | SF | TP | FTP | | SFTP | | |
| 15 | 50000 | 150000 |) . | LEV3 | SULEV30 | LEV | 3 CC | MPOSITE | PM | | PM | | |
| SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS | | | | | | L | | OBD S | TATUS | | ENGINE DISPLACEMENT | | |
| 1 | SFI, WR-HO2S, HO2S, WU-TWC, TWC, EGR, EGRC | | | | | | | FULL | ALL MODELS | 3 | | | |
| * | * | | | | | | P | ARTIAL | * | 1 | 2.0 | | |
| * | * | | | | | | | TIAL WITH | * | | | | |
| EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION | | | | | | | | | | | | | |
| EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR | | | | | | | | EVAP EMISSION STD VEHICLE CLASS | | | SPECIAL FEATURES | | |
| I | LKMXR01 | 130CEG | | LEV 3 | OPTION2 | | | PC | | | нст | | |
| | | | | E | EMISSION CI | REDIT | INFO | ORMATION | | | | | |
| | EDIT FO | OX FLEET AVE. OR EXTENDED RRANTY | | | EDIT FOR N ZERO-EVAP | ON-P2 | ZEV | EV NMOG CREDIT FOR DOR | | | OPTIONAL EXH. STD FOR WORK TRUCKS | | |
| | | N | | | N | | | N N | | | | | |
| | | | | NMOG | AND FLEET | AVE | RAG | E INFORMA | TION | | | | |
| NMOG RAF | CH4 RAF | FTP NMOG/NMHC RATIO | | RATIO NMOG+NOX FL RATIO (g/mi) | | | | | | 00 | NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi) | | |
| * | * | 1.10 | | * | 0 | .065 | | | 0.074 | | * | | |
| CR NMOG RAF * | CH4 RAF | OR EXTENDED RRANTY N FTP NMOG/NMHO RATIO 1.10 | HCH | NMOG IO/NMHC RATIO * | XERO-EVAP N AND FLEET NMOG+NO PC+LDT (((g 0 | AVE X FLE 0-3750 (/mi) . 065 | RAGI ET S D LVV | E INFORMA TD NMOG V) LDT GVW | N TION +NOX FLEET 3 (3751 LVW-850 R) + MDPV (g/n 0.074 | STD 20 ni) | FOR WORK TR N NMOG+NOX FLE MDV (10,001-1/ | | |

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 at El Monte, California on this _____ day of June 2019.

Allen Lxons, Chief

Emissions Compliance, Automotive Regulations and Science Division



FUEL TYPE

KIA MOTORS

Executive Order: A-314-0332 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 3 of 4

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

| | | NMOG+NOx (g/mi) | | CO (g/mi) | | | NOx (g/mi) | | HCHO (mg/mi) | | 'M 'mi) | |
|------------------------|----------------------------|---|---|--|--|--|--|---|---|---|---|--|
| | | CERT | STD | CERT | STD | CERT | STD | CERT | STD | CERT | STD | |
| * | | * | * | * | * | * | * | * | * | * | * | |
| GASOLINE- TIER3 E10 | | 0.011 | 0.030 | 0.3 | 1.0 | * | * | * | 4 | 0.000 | 0.003 | |
| | | 0.022 | 0.060 | 0.4 | 1.0 | * | * | * | 8 | | | |
| 1 ²⁰ Ge(A | | | | - | | NN | NMOG+NOx (g/mi) | | | CO (g/mi) | | |
| | FUEL TYPE | | | | | | RT | STD | CER | RT | STD | |
|) 50K | * | | | | | | | * | | | ling the set | |
| DUL | GASOLINE-TIER3 E10 | | | | | 0.0 | 06 | 0.030 | | | | |
| 20°F @ 50K | | DLD CO E10 REGULAR GAS | | | (TIER3) | 中部派出 | 的法律的 | | 1.0 | D I | 10.0 | |
| | TIE GAS TIE 9 50K | GASOLINE- TIER3 E10 GASOLINE- TIER3 E10 2 50K | (g/r CERT * * GASOLINE- TIER3 E10 0.011 GASOLINE- TIER3 E10 0.022 0.022 0.022 0.022 0.022 0.022 0.022 | (g/mi) CERT STD * * * GASOLINE- TIER3 E10 0.011 0.030 GASOLINE- TIER3 E10 0.022 0.060 FUEL TYP * * 2 50K * * | (g/mi) (g/mi) (g/mi) (g/mi) CERT STD CERT * * * * GASOLINE- TIER3 E10 0.011 0.030 0.3 GASOLINE- TIER3 E10 0.022 0.060 0.4 FUEL TYPE * * 2 50K * * QUL GASOLINE-TIER3 E10 * | (g/mi) (g/mi) CERT STD CERT STD * * * * * GASOLINE- TIER3 E10 0.011 0.030 0.3 1.0 GASOLINE- TIER3 E10 0.022 0.060 0.4 1.0 GASOLINE- TIER3 E10 0.022 * * * 9 50K * * * * | (g/mi) (g/mi) (g/ CERT STD CERT STD CERT * </td <td>(g/mi) (g/mi) (g/mi) CERT STD CERT STD CERT STD * <t< td=""><td>(g/mi) (g/mi) (g/mi) (g/mi) (mg CERT STD CERT *<!--</td--><td>$\begin{array}{c c c c c c c c c c c c c c c c c c c$</td><td>(g/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi</td></td></t<></td> | (g/mi) (g/mi) (g/mi) CERT STD CERT STD CERT STD * <t< td=""><td>(g/mi) (g/mi) (g/mi) (g/mi) (mg CERT STD CERT *<!--</td--><td>$\begin{array}{c c c c c c c c c c c c c c c c c c c$</td><td>(g/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi</td></td></t<> | (g/mi) (g/mi) (g/mi) (g/mi) (mg CERT STD CERT * </td <td>$\begin{array}{c c c c c c c c c c c c c c c c c c c$</td> <td>(g/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi</td> | $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | (g/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi | |

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

| | FUEL TYP | | | US06 | | | | | | | |
|-----------------------|----------------------|-------------------|--------------------|--------------|----------|--------------------|--------------------|--------------|--------------------|----------------|---------------|
| | FUEL TYP | 1、2、2、2、2、2、2、2、2 | | 0000 | | | SC03 | | COMPOSITE | | |
| | | E | NMOG+NOx (g/mi) | CO (g/mi) | | 'M N J/mi) | IMOG+NOx (g/mi) | CO (g/mi) | NMOG+NOx (g/mi) | CO (g/mi) | PM (mg/mi) |
| @ 4K | * | CERT | * | * * | | | * | * * | | | |
| Ŭ | | STD | . * | | | | * | * | | | |
| | | CERT | * | * * | | 2 | * | * | 0.009 | 0.4 | * |
| @ | GASOLINE TIER3 E1 | I SID I | * | * | | 6 | * | * | 0.083 | 4.2 | * |
| | | BIN | | | ka ingah | | | | 0.030 | | |
| | v | VHOLE VE | HICLE EVAPO | ORATIVE E | MISSION | STAND | ARDS AND C | ERTIFIC | ATION LEVELS | 5 | |
| | | | | WHOLE \ | /EHICLE | EVAPOR | RATIVE TEST | ING | | | |
| EVAPORATIVE FAMILY | | | | S (g/test) @ | DUL | 2DHS (g/test) @ UL | | | RL | RL (g/mi) @ UL | |
| | | | | STD | FEL | CERT | STD | FEI | L CERT | 2) 2 | STD |
| LKMXR0130CEG | | GASOLIN LEV3 E | 10.256 | 0.300 | * | 0.194 | 0.300 | * | 0.03 | | 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 | 3DHS R (g/test | IG TEST) @ UL | 2DHS RIG TEST (g/test) @ UL | | BLEED CANISTER TEST (g/test) @ 4K | | | | |
| | FUEL TYPE | CERT | STD | | CERT | STD | CERT | STD | CERT | STD | | | |
| LKMXR0130CEG | GASOLINE- TIER3 E10 | 0.01 | 0.20 | GASOLINE- LEV3 E10 | * | * * | * | * | 0.006 | 0.020 | | | |

| AIR RESO | FORNIA urces board | KIA MOTORS CORPORATION | | Executive Order: A-314-0332 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 | | | | | | | | |
| LKMXR0130CEG | | | A state of the second | and the second second second | 0.02 | | | | | | | | |
| LDT<6000#GVWR,3751-5750 8500#ALVW; MDV: medium- duty passenger vehicle; HDV emission limit; GVWR: gross ULEV: ultra LEV; SULEV: sup ADSTWC: adsorbing TWC; H SCRC/SCR-N or SCRC-NH3 continuous/periodic trap oxidi heated/oxygen sensor; WR-H RDQS: reductant quality sens secondary air injection (belt direct/indirect fuel injection; T fines on-board diagnostic; DC suffix: series; CNG/LNG: com E10: "10%" ethanol ("90%"ga continuously variable transmi automated manual-selectable | LKMXR0130CEGLKMXR0130CEG-BD10.000.02*: 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: medium- duty 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: neated/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; 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; toontinuously variable transmission; SC: selectable continuously v | | | | | | | | | | | | |
| 2020 | MODEL YEAR | : VE | EHICLE MOD | ELS INFO | RMATION | | | | | | | | |

| MAKE | MAKE MODEL | | ENGINE (L) | TRANS TYPE | EVAPORATIVE FAMILY | EXH ECS | OBD | |
|------|------------|----|------------|------------|-----------------------|------------|-----|--|
| KIA | FORTE | PC | 2.0 | CV1 | LKMXR0130CEG | 1 | F | |
| KIA | FORTE 5 | PC | 2.0 | CV1 | LKMXR0130CEG | 1 | F | |
| KIA | FORTE FE | PC | 2.0 | CV1 | LKMXR0130CEG | 1 | F | |