JAGUAR LAND ROVER LIMITED

EXECUTIVE ORDER A-409-0021

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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.

| granted. | | | | | | | | | | |
|----------------|------------|------------------------|---------------------|---------------|------------------------------------|------------|----------------|---|--|--|
| | | | TEST | GROUP INFORI | MATION | | | | | |
| MODEL. YEAR | TEST GRO | OUP VEHIC | CLE CLASS(ES) | FU | EL CATEGORY | | FUEL TYPE | | | |
| 2015 | FJLXV03.0 | FSP | PC . | DEDICA | ATED SINGLE FUE VEHICLE | L | GASOLINE | | | |
| | USEFUL LIF | E (miles) | VEHICLE E | EMISSION CATE | GORY | INT | ERIM / INTERME | DIATE IN-USE STD | | |
| EXH/C | DRVR | EVAP | FTP | | SFTP | | FTP | SFTP | | |
| 150, | 000 | 150,000 | LEV3 SULEV30 | | V3 SULEV ND-ALONE | | * NMOG | | | |
| SPECIAL I | FEATURES & | EXHAUST EMISSION | CONTROL SYSTEMS | | OBD STATUS | | ENGIN | IE DISPLACEMENT (L) | | |
| 1 | 2TWC, | 2AFS, 2HO2S(2), DFI | SC, CAC | FULL | ALL MOI | DELS | | | | |
| | | * | | PARTIAL | . * | 4 | 3.0 | | | |
| * | | * | | PARTIAL WITH | н . | | | | | |
| | | E | VAPORATIVE & REFUEL | LING (EVAP/OR | VR) FAMILY INFORI | MATION | 1.0 | | | |
| | EVAP / OI | RVR FAMILY | EVAPO | RATIVE STD CA | TEGORY | EVA | AP EMISSION ST | TD VEHICLE CLASS | | |
| | FJLXR | 0160P1Z | | LEV3 OPTION | 2 | | P | С | | |
| | | * | 1 | * | | | | • | | |
| | | • | | * | | * | | | | |
| | | | EMISSIO | N CREDIT INFO | RMATION | 1 m m 2 m | | | | |
| | A | LLOWANCE FOR TEST | GROUP | NM | OG CREDIT FOR | NIII 00 00 | EDIT 500 000 | OPTIONAL EXH. STD FOR | | |
| BASELI | NE PZEV | AT PZEV | TZEV | NON- | PZEV ZERO-EVAP | NMOG CR | EDIT FOR DOR | WORK TRUCKS | | |
| ALL M | ODELS | * | * | | N | | N | N | | |
| | | | NMOG AND FL | LEET AVERAGE | INFORMATION | | | | | |
| NMOG RAF | CH4 RAF | FTP NMOG/NMHC RATIO | HCHO/NMHC RATIO | | OG+NOX FLEET DT (0-3750 LVW) (g | | | EET STD LDT (3751 LVW- VR) + MDPV (g/mi) | | |
| * | * | 1.10 | | | 0.100 | | | 0.119 | | |

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 the 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 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], 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, amended December 6, 2012).

BE IT FURTHER RESOLVED:

The test group listed in this Executive Order is certified conditionally on the manufacturer providing data to demonstrate compliance with California's greenhouse gas fleet average emission standard (CA GHG Standard) specified in Title 13, California Code of Regulations, (13 CCR) Section 1961.1 and the incorporated California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for PC, LDT, and MDV, amended December 6, 2012 (CA Test Procedures). The manufacturer has elected, under 13 CCR Section 1961.1(a)(1)(A)(ii) and under Section E.2.5.1(ii) of the

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CA Test Procedures, to demonstrate compliance with the CA GHG Standard by demonstrating compliance with the National greenhouse gas program (National GHG Program). Therefore, the test group listed in this Executive Order is certified conditionally further on the manufacturer complying with the requirements specified in said provisions in 13 CCR, and Sections E.2.5.1(ii) and H.4.5(b) and H.4.5(c) of the CA Test Procedures (among other things, concerning data and information submission, timing, and format as specified by the Executive Officer). Failure to comply with the certification requirements to demonstrate compliance with CA GHG Standard by demonstrating compliance with the National GHG Program under said provisions in 13 CCR and CA Test Procedures may be cause for the Executive Officer to revoke the Executive Order. Vehicles in the revoked Executive Order shall be deemed uncertified and subject to penalties authorized under California law. Notwithstanding the requirement herein, a manufacturer that becomes, after MY2009, a largevolume manufacturer, as defined in 13 CCR Section 1900, is not required to comply with the CA GHG Standard until the beginning of the fourth model-year from becoming a large-volume manufacturer. Additionally, notwithstanding the requirement herein, a small-volume manufacturer, independent low-volume manufacturer, or intermediate volumemanufacturer, as defined in 13 CCR Section 1900, is not required to comply with CA GHG Standard during model-years (MY) 2012 through 2015.

BE IT FURTHER RESOLVED:

The listed vehicle models have been certified using assigned deterioration factors for evaporative emissions on the condition that the manufacturer complete deterioration factor development and provide new evaporative emission deterioration factors by October 24, 2014. Failure to submit the deterioration factors by the specified date, or failure of the submitted test data to show compliance with the emission standards, shall be cause for the Air Resources Board to revoke this Executive Order and vehicles sold under the revoked conditional certification shall be deemed uncertified.

day of June 2014.

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. 26 %

Executed at El Monte, California on this _

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Annetté Hebert, Chief Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50 °F, 20 °F)

| | FUEL TYPE | HCHO=formale HC/mi]=runnin | dehyde; PM=pa g loss; ORVR [| rticulate matter; | RAF=reactivity ensed)=on-box | adjustment fact and refueling vap | or, 2DHS/3DH | | days diumal | s of nitrogen; +hot-soak; RL [g ; K=1000 miles; F | |
|------------|--------------------------------|-------------------------------|---------------------------------|-------------------|---------------------------------|--------------------------------------|--------------|-----------|-------------|---|-------|
| / | | NMOG+NOx (g/mi) | | CO (g/mi) | | HCHO (mg/mi) | | PM (g/mi) | | HWY NMOG+NOx (g/mi) | |
| the ten | | CERT | STD | CERT | STD | CERT | STD | CERT | STD | CERT | STD |
| FTP @ 50K | * | * | * . | * | | 4 | 4 | * | * | | * |
| FTP @ UL | GASOLINE-LEV3 E10 | 0.023 | 0.030 | 0.4 | 1.0 | 0.2 | 4 | 0.002 | 0.01 | 0.008 | 0.030 |
| 20°F @ 50K | GASOLINE-COLD CO LOW OCTANE | * | | 1.3 | 10.0 | * | .* | * | | * | 4 |
| 50°F @ 4K | GASOLINE-LEV3 E10 | 0.059 | 0.060 | 0.4 | 1.0 | 1 | 8 | | * | * | * |

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

| | | US06 / UC (LA92) | | | | | SC03 | | | | 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) | |
| | | CERT | STD | CERT | STD | CERT | STD | CERT | STD | CERT | STD | CERT | STD | BIN | CERT | STD |
| @ UL | GASOLINE-LEV3 E10 | 0.030 | 0.050 | 0.8 | 9.6 | * | * | 0.014 | 0.020 | 0.4 | 3.2 | * | * | | * | |

WHOLE VEHICLE EVAPORATIVE/ORVR EMISSION STANDARDS AND CERTIFICATION LEVELS

| EVAPORATIVE | | | EHICLE EV | APORATIVI | RUNNIN | G LOSS | ON-BOARD REFUELING | | | | |
|--------------|----------------------|--|-----------|-----------|--|--------|--------------------|--------|------|-----------------------------------|------|
| FAMILY | FUEL TYPE | 3-DAYS DIURNAL + HOT SOAK (g/test) @ UL | | | 2-DAYS DIURNAL + HOT SOAK (g/test) @ UL | | | (g/mi) | | VAPOR RECOVERY (g/gailon) @ UL | |
| | | CERT | STD | FEL | CERT | STD | FEL | CERT | STD | CERT | STD |
| FJLXR0160P1Z | GASOLINE-LEV3 E10 | 0.245 | 0.300 | * | * | 0.300 | * | 0.001 | 0.05 | 0.01 | 0.20 |

FUEL ONLY & CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

| EVAPORATIVE FAMILY | FUEL TYPE | | FUEL ONLY EVAP | | | | |
|--------------------|-------------------|---------------------------|-------------------------|---------------------------|-----|-------------------------|-------|
| | | 3-DAYS DIURN/ (g/test) | AL + HOT SOAK) @ UL | 2-DAYS DIURNA (g/test) | | CANISTER BLEED (g/test) | |
| | | CERT | STD | CERT | STD | CERT | STD |
| FJLXR0160P1Z | GASOLINE-LEV3 E10 | * | * | * | * | 0.015 | 0.020 |
| * | * | * | * | * | | * | * |

*=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#LVW; 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; 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; Alr/AlRE=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 transmission; M=manual transmission; OT=other transmission; L=lock-up automatic transmission; CV=continuously variable transmission; AM=automated manual

2015 MODEL YEAR: VEHICLE MODELS INFORMATION

| MAKE | MODEL | VEH | ENGINE (L) | TRANS TYPE | EVAPORATIVE FAMILY | EXH ECS | OBD | PZEV TYPE |
|--------|--------------------|-----|---------------|---------------|-----------------------|------------|------|--------------|
| JAGUAR | XF | PC | 3.0 | SA8 | FJLXR0160P1Z | 1 | FULL | PZEV |
| JAGUAR | XF AWD | PC | 3.0 | SA8 | FJLXR0160P1Z | 1 | FULL | PZEV |
| JAGUAR | F-TYPE COUPE | PC | 3.0 | SA8 | FJLXR0160P1Z | 1 | FULL | PZEV |
| JAGUAR | F-TYPE CONVERTIBLE | PC | 3.0 | SA8 | FJLXR0160P1Z | 1 | FULL | PZEV |

California Environmental Protection Agency

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| JAGUAR | F-TYPE S COUPE | PC | 3.0 | SA8 | FJLXR0160P1Z | 1 | FULL | PZEV |
|--------|----------------------|----|-----|-----|--------------|-----|------|------|
| JAGUAR | F-TYPE S CONVERTIBLE | PC | 3.0 | SA8 | FJLXR0160P1Z | _ 1 | FULL | PZEV |