

# FORD MOTOR COMPANY

Executive Order: A-010-2238

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-19-095;

IT IS ORDERED AND RESOLVED: The following vehicles produced by the manufacturer are certified as plug-in hybrid electric vehicles pursuant to Title 13, California Code of Regulations (13 CCR) Sections 1961 or 1961.2, 1962.2, 1976, 1978 and the incorporated test procedures. Production vehicles shall be in all material respects the same as those for which certification is granted.

|   |   |                |  |                   | TEST GR                 | OUP IN                                    | FORMA         | TION            |                  |  |                           |  |  |
|---|---|----------------|--|-------------------|-------------------------|---|---------------|-----------------|------------------|--|---------------------------|--|--|
| MODE<br>YEAR  | - 1 - 1   | EST GROUP      |  | VEHICLE CLASS(ES) |                         |   |               | FUEL CATEGORY   |                  |  | FUEL TYPE                 |  |  |
| 2020  | LFMXT03.03P1 LDT4   |                |  |                   |                         | Dut 4                                     |               |                 | N HYBRID         |  | GASOLINE                  |  |  |
|   | USEFUL  | . LIFE (miles) |  | VEH               | HICLE EMISSION CATEGORY |   |               |                 | INTERIM / IN     | INTERIM / INTERMEDIATE IN-USE  |                           |  |  |
| EXH/ORVR EVAP   |   |                |  | FTP S             |                         |   | SFTP          | P FTP           |                  |  | SFTP                      |  |  |
| 15  | 0000  | 150000         |  | LEV3              | SULEV30                 | LEV                                       | 3 СОМР        | OSITE           | OSITE PM         |  | PM                        |  |  |
| SPECIAL FEATURES & EXHAUST EMISSION CO  |   |                |  |                   |                         | OL  |               | OBD :           | OBD STATUS       |  | IGINE DISPLACEMENT<br>(L) |  |  |
| 1   | TWC, DFI, WR-HO2S, HO2S, TC, CAC  |                |  |                   |                         |   |               | JLL             | ALL MODELS       |  |                           |  |  |
| *   | *   |                |  |                   |                         |   |               | TIAL            | *                | 6  | 3.0                       |  |  |
| *   | *   |                |  |                   |                         |   | PARTIA<br>FIN | L WITH          | *                | CHE CONTROL OF THE CO |                           |  |  |
| EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION                          |   |                |  |                   |                         |   |               |                 |                  |  |                           |  |  |
| EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS     |   |                |  |                   |                         |   |               | SI              | SPECIAL FEATURES |  |                           |  |  |
| LFMXR0165LDG LEV 3 OPT  |   |                |  |                   | ON2 WITH FEL LDT4       |   |               | DT4             | HCT              |  |                           |  |  |
|   |   |                |  | I                 | EMISSION                | CREDIT                                    | INFORI        | MATION          |                  |  |                           |  |  |
| ALLOWANCE FOR TEST GROUP  TZEV  NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANT |   |                |  |                   |                         | NMOG CREDIT FOR<br>NON-PZEV ZERO-<br>EVAP |               | NMOG CREDIT FOR |                  | OPTIONAL EXH. STD<br>FOR WORK TRUCKS   |                           |  |  |
| ALL MODELS N  |   |                |  |                   |                         | N   |               |                 | N                |  | N                         |  |  |
| NMOG AND FLEET AVERAGE INFORMATION  |   |                |  |                   |                         |   |               |                 |                  |  |                           |  |  |
| NMOG<br>RAF   | CH4 RAF RAFIO RATIO RATIO RHCHO/NMHC RATIO RHCHO/NMHC RATIO RHCHO/NMHC RATIO RHCHO/NMHC RATIO RHCHO/NMHC RATIO RHCHO/NMHC RATIO |                |  | (0-3750           |                         |   |               | 0               |                  |  |                           |  |  |
| *   | *   | 1.10           |  | *                 |                         | 0.065                                     |               |                 | 0.074            |  | *                         |  |  |
|   |   |                |  |                   |                         |   |               |                 |                  |  |                           |  |  |

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.)



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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 \_\_\_\_

Allen Lvons, Chief

**Emissions Certification and Compliance Division** 



GASOLINE-

TIER3 E10

0.004

0.20

LFMXR0165LDG

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## **ATTACHMENT**

|                       | EVIIAI                          | ICT                              | AND               | EV                                | A DOD                           | A TI\/E                         | CRAIC                                   | SCION                                | AAT                                      | DAD                                     | DS AND   | CERTI   | FICA                            | ATION   | LEVELS   |               |          |          |
|-----------------------|---------------------------------|----------------------------------|-------------------|-----------------------------------|---------------------------------|---------------------------------|---|--------------------------------------|--|---|--|---|---------------------------------|---|--|---------------|----------|----------|
|                       | Settlement Settle Victor Street |                                  |                   |                                   |                                 |                                 |   | ND CERT                              |  |   |  |   |                                 |   |  | <u>'</u>      |          |          |
|                       | FUEL                            |                                  | C<br>m<br>ac<br>O | H4: n<br>onox<br>djustr<br>RVR    | nethane<br>tide; NC<br>nent fac | e; NMO<br>0x: oxide<br>ctor; 2D | G: non-<br>es of ni<br>HS/3D<br>ispense | -CH4 orga<br>trogen; H0<br>HS [a HC/ | inic ga<br>CHO: f<br>(test]: 2<br>ard re | s; HC:<br>formalo<br>2/3 day<br>fueling | hydrocarl<br>dehyde; P<br>vs diurnal-<br>vapor rec | oon; NMH<br>M: particul<br>hot-soak;<br>overy; g: | C: no<br>late n<br>RL [<br>gram | n-CH4 H<br>natter; R<br>g HC/mi]<br>; mg: mil | IC; CO: ca<br>AF: reactiv<br> : running l<br> igram; mi: | ∕ity<br>oss;  |          |          |
|                       |                                 |                                  |                   | *                                 |                                 | NN                              | MOG+N                                   | Ox                                   |  | CO                                      |  |   | lOx                             | 1   | HCH(   |               | P<br>(g/ | M<br>mi) |
|                       |                                 |                                  |                   |                                   |                                 | CERT                            |   | (g/mi)<br>T STD                      |  | (g/mi) CERT STD                         |  | (g/mi) CERT STD                                   |                                 | (mg/r   |  | STD           | CERT     |          |
| ETDØE                 | nk                              | *                                |                   | ·*                                | .1                              | *                               | *                                       | *                                    | _  | *                                       | *  | *   | +                               | *   | *  | *             |          |          |
| FTP@L                 | CA COL THE                      |                                  |                   | 0.02                              | 21. 0                           | .030                            | 0.87                                    | 7 1.0                                | )  | *                                       | *  |   |                                 | 4   | 0.002  | 0.003         |          |          |
| 50°F @4               |                                 | *                                |                   | *                                 | _                               | *                               | *                                       | *                                    | _  | *                                       | *  | *   | 7                               | *   |  |               |          |          |
|                       |                                 |                                  |                   |                                   |                                 | - T/D                           | _                                       |                                      |  | N                                       | MOG+NO   | x (g/mi)  |                                 |   | CO (g/mi   | )             |          |          |
|                       |                                 |                                  |                   |                                   | FUE                             | EL TYPI                         | =                                       |                                      |  | CI                                      | CERT STD   |   |                                 | CERT  |  | STD           |          |          |
| HWFE                  | T @ 50K                         |                                  |                   | *                                 |                                 |                                 |   |                                      | *  |   | *  |   |                                 |   |  |               |          |          |
| HWFE                  | T@UL                            |                                  |                   | GASOLINE-TIER3 E10                |                                 |                                 |   | 0.                                   | 015                                      | 0.030                                   |  | gun a dun an agus de santan an                    |                                 |   |  |               |          |          |
| 20°F@50K COLD C       |                                 |                                  | LD CO             | O E10 REGULAR GASOLINE (TIER3)    |                                 |                                 | .3)                                     |                                      |  |   |  | 0.78  |                                 | 12.5  |  |               |          |          |
|                       |                                 | •                                | S                 | FTP                               | EXHAU                           | ST EM                           | SSION                                   | STANDA                               | RDS                                      | AND C                                   | ERTIFIC  | ATION LE  | VEL                             | S   |  |               |          |          |
|                       |                                 |                                  |                   | US06                              |                                 |                                 |   |                                      | SC03                                     |   |  |   | COMPOSITE                       |   |  |               |          |          |
|                       | FUEL TY                         |                                  |                   | NMOG+NOx<br>(g/mi)                |                                 |                                 | CO PM<br>(g/mi) (mg/r                   |                                      |  | i) NMOG+NOx<br>(g/mi)                   |  |   |                                 | OG+NOx<br>g/mi)                               | ( CO<br>(g/mi)   | PM<br>(mg/mi) |          |          |
| @ 4K                  | *                               | * CEI                            |                   |                                   | *                               |                                 | *                                       |                                      |  |   | *  | *   |                                 |   |  |               |          |          |
|                       |                                 |                                  |                   |                                   | *.                              |                                 | *                                       |                                      |  |   | *  | *   |                                 |   |  |               |          |          |
|                       |                                 | CEI<br>GASOLINE-<br>SIER3 E10 BI |                   |                                   | *                               |                                 | *                                       | 4                                    | l  |   | *  | *   | 0                               | .0285   | 0.87   | *             |          |          |
| @ UL                  |                                 |                                  |                   |                                   | *                               |                                 | *                                       | 6                                    | 5  |   | *  | *   | C                               | .083  | 4.2  | *             |          |          |
|                       | -                               |                                  |                   |                                   |                                 |                                 |   | b v                                  |  |   |  | 的特殊是  | C                               | .040  | 排列的  |               |          |          |
|                       |                                 | WH                               | OLE V             | EHIC                              | LE EV                           |                                 |   | MISSION                              |  |   |  |   | ATIO                            | N LEVE  | LS   |               |          |          |
|                       |                                 |                                  |                   | WHOLE VEHICLE EVAPORATIVE TESTING |                                 |                                 |   |                                      |  |   | DI (()\ @  |   |                                 |   |  |               |          |          |
| EVAPORATIVE<br>FAMILY |                                 | F                                | FUEL TYPE         |                                   |                                 | 3DHS (g/t                       |   | test) @ UL                           |  | 2DHS (g/test)                           |  |   |                                 |   | RL (g/mi) @ UL   |               |          |          |
|                       |                                 | GASOLINE-                        |                   | CER                               | CERT ST                         |                                 | FEL (                                   |                                      | RT STD                                   |   | FEL  |   | CEF                             |   | STD  |               |          |          |
| LFMXR0165LDG          |                                 |                                  | IER3              |                                   | 10 21381 0 5                    |                                 |   | 500 0.500 *                          |  |   | 0.500  |   |                                 | 0.000 0.05                                    |  | 0.05          |          |          |
| C                     | ORVR / FL                       | EL (                             | ONLY /            | CAN                               | IISTER                          | BLEED                           | EVAP                                    | ORATIVE                              |  |   |  |   |                                 |   | TION LEV   | ELS           |          |          |
|                       | 200                             |                                  |                   |                                   |                                 |                                 |   |                                      |  | UEL ONLY EVAP & CANISTE                 |  |   |                                 |   |  |               |          |          |
| EVAPORATIVE<br>FAMILY |                                 |                                  | ORVR              | RVR (g/gallon) @ UL               |                                 |                                 |   |                                      |  | OHS RIG TEST<br>(g/test) @ UL           |  | 2DHS RIG 1<br>(g/test) @                          |                                 |   | BLEED C.<br>TEST (g/t                                    |               |          |          |
|                       |                                 | FU                               | JEL TYI           | PE                                | CERT                            | STD                             |   |                                      |  | RT                                      | STD  | CERT  |                                 | STD   | CERT   | STD           |          |          |



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| EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES) |                  |      |      |  |  |  |  |  |  |
|---|------------------|------|------|--|--|--|--|--|--|
| EVAPORATIVE FAMILY  | LEAK FAMILY      | CERT | STD  |  |  |  |  |  |  |
| LFMXR0165LDG  | LFMXR0165LDG-001 | *    | 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; ŽEV: 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; HP/LP EGR: High/Low Pressure EGR; EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fruel 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; a hyphen (-) between after treatment ECS indicates multiple functionalities of the after treatment device (ex. DPF-SCRC: SCR coated DPF); 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; NMOG + NOx Fleet Ave. Credit for Extended Warranty: N = no credits, Y = credits, S = credits for some/select models

## 2020 MODEL YEAR: VEHICLE MODELS INFORMATION

| MODEL<br>NUMBER | MAKE    | MODEL               | VEH<br>CLASS | ENGINE (L) | TRANS TYPE | EVAPORATIVE<br>FAMILY | EXH<br>ECS | OBD |
|-----------------|---------|---------------------|--------------|------------|------------|-----------------------|------------|-----|
| 1               | LINCOLN | AVIATOR AWD<br>PHEV | LDT4         | 3.0        | SA10       | LFMXR0165LDG          | 1          | F   |

### **ELECTRIC RANGE AND ZEV ALLOWANCE INFORMATION**

| MODEL  |           | UDDS AER | UDDS EAER | US06 AER | HIGHW | ZEV  |           |
|--------|-----------|----------|-----------|----------|-------|------|-----------|
| NUMBER | PHEV TYPE | (MILES)  | (MILES)   | (MILES)  | AER   | EAER | ALLOWANCE |
| 1      | TZEV      | 23.3     | 25.5      | 0        | 24.0  | 24.0 | 0.56      |