| California Environmental Protection Agency |            | EXECUTIVE ORDE                             |
|--|------------|--|
|  | FCA US LLC | New Diese<br>Medium-Duty Vehicles Using Ce |
| OB Air Resources Board                     |            | Medium-Duty venicles Using Ge              |

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: The following diesel or incomplete medium-duty vehicles (MDV) with a manufacturer's GVWR from 8501 to 14000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

|                   | ENGINE FAMILY     |                                    | ENGINE                |                                 |             | EL TYPE <sup>1</sup> | STANDARDS                       | ENGINE                    | ECS & SPECIAL                    | · · · · · · · · · · · · · · · · · · · |
|-------------------|-------------------|------------------------------------|-----------------------|---------------------------------|-------------|----------------------|---------------------------------|---------------------------|----------------------------------|---------------------------------------|
| MODEL<br>YEAR     | НС                | EXH0408BAQ                         | MANUFACTURER          | EMISSION STD CATEGORY 2         |             |                      | & TEST<br>PROCEDURE             | SIZES (L)                 | FEATURES *                       | OBD                                   |
|                   | EXE               | CUTIVE ORDER                       | CUMMING INC.          | Diesei                          |             | Diesel               | 6.7                             |                           | DDI, TC, CAC, ECM,               | OPDIA                                 |
| 2017              |                   | A-021-0652                         | CUMMINS, INC.         | ULEV                            | take film j |                      | Diesel                          | 0.1                       | EGR, OC, PTOX,<br>SCR-U, AMOX    | OBD(\$)                               |
| Gasoline, L       | PG or /<br>Onl    | Alcohol Vehicles<br>V              |                       |                                 |             | VEHICLE DI           | ESCRIPTION                      |                           |                                  |                                       |
| EVAPORA<br>FAMILY | TIVE<br>UL<br>(K) | FUEL TANK<br>CAPACITY<br>(gallons) | VEHICLE<br>MODEL YEAR | VEHICLE MAKE &<br>MODELS        | VEH.<br>OBD | ENGINE<br>(L)        | EN                              | GINE MODEL<br>(rated powe |                                  | ENG.<br>OBD                           |
| *                 | *                 | *                                  | 2017                  | Ram 3500 Cab Chassis<br>2WD/4WD | OBD(\$)     | 6,7                  | ISB6.7 320 / 4827;FR95329 (320) |                           | OBD(\$)                          |                                       |
| *                 | *                 | *                                  | 2017                  | Ram 3500 Cab Chassis<br>2WD/4WD | OBD(\$)     | 6,7                  | ISB6.7                          | 325 / 4825;               | FR95327 (320)                    | OBD(\$                                |
| *                 | *                 | *                                  | 2017                  | Ram 3500 Cab Chassis<br>2WD/4WD | OBD(\$)     | 6,7                  |                                 |                           | 5;FR95327 (320)<br>hicle rating) | OBD(\$                                |

=not applicable; GVWR=gross vehicle weight rating; 13 CCR xyz=Title 13, California Code of Regulations, Section xyz; 40 CFR 86.abc=Title 40, Code of Federal Regulations, Section 86.abc; L=itler; hp=horsepower; kw=kilowatt; EF=engine family;
(2004jun02)
CNG/LNG=compressed/liquefied natural gas; LPG=ilquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a BF=bi fuel; DF=dual fuel; FF=flexible fuel;
SULEV / ULEV / LEV=super uitra / uitra / low emission vehicle;

SOLEV / DLEV = super luiter / luiter / low emission venicle; 3 ECS=emission control system; TWC/OC=three-way/oddizing catalyst; NAC=NOx adsorption catalyst; SCR-U / SCR-N=selective catalytic reduction – urea / – ammonia; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; PTOX=periodic trap oxidizer; HO2S/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); TBI=throttie body fuel injection; SFI/MFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor; IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/ super charger; CAC=charge air cooler; EGR / EGR/=C=exhaust gas recirculation / cooled EGR; PAIR/AIR=pulsed/secondary air injection; SPL=smoke putf limiter; OBD(F) / (P) / (\$)=full / partial with a fine / on-board diagnostic; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallel; (2) (suffix)=in series;

Following are: 1) the FTP exhaust emission standards or family emission limit(s) as applicable under 13 CCR 1956.8; 2) the SET and NTE limits under the applicable California exhaust emission standards and test procedures for heavyduty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, in g/bhp-hr, for this engine family. "Diesel" CO, SET and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For dual- and flexible-fuel, the CERT values in brackets [] are those when tested on conventional test fuel.)

|      | NM    | HC    | N    | Эх   | NMHC             | C+NOx          | er aval and an a | со   | F     | PM    | нс     | CHO    |
|------|-------|-------|------|------|------------------|----------------|------------------|------|-------|-------|--------|--------|
|      | FTP   | SET   | FTP  | SET  | FTP              | SET            | FTP              | SET  | FTP   | SET   | FTP    | SET    |
| STD  | 0.14  | 0.14  | 0.20 | 0.20 | <sup>17</sup> 54 | *              | 15.5             | 15.5 | 0.01  | 0.01  | 0.050  | 0.050  |
| FEL  | *     | *     | 0.30 | 0,30 | *                |                | š. *             | *    | . *   | *     | *      | *      |
| CERT | 0.003 | 0.000 | 0.19 | 0.11 | 28 <b>*</b> 10 1 | 5 <b>*</b> , 7 | 0,7              | 0.1  | 0.000 | 0.002 | 0.0002 | 0.0000 |
| NTE  | 0.    | 21    | 0.   | 45   |                  | *              | · · · ·          | 19.4 | · _ 0 | .02   |        | 075    |

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET=Supplemental emissions testing; NTE=Not-to-Exceed; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;

**BE IT FURTHER RESOLVED:** The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1956.8 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Diesel-Engines and Vehicles" (HDDE Test Procedures) adopted Dec. 12, 2002, as last amended Oct. 21, 2014 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1036 of the HDDE Test Procedures. The manufacturer has submitted the required information and therefore has met the criteria necessary to receive a California Executive Order based on the Environmental Protection Agency's Certificate of Conformity for the above listed engine family.

| EPA CERTIFICATE OF CONFORMITY<br>HCEXH0408BAQ-004 |     | OF CONFORMITY  | PRIMARY INTENDED SERVICE CLASS<br>VOCATIONAL |      |  |
|---|-----|----------------|--|------|--|
|   |     | 08BAQ-004      |  |      |  |
| in CO2<br>g/bhp-hr FTP SET                        |     | O <sub>2</sub> | 01   | N₂O  |  |
|   |     | SET            | CH₄  |      |  |
| TD  | 576 | *              | 0.10   | 0.10 |  |
| CL  | 597 | *              | *  | *    |  |
| EL  | 615 | *              | 0.10   | 0.10 |  |
| ERT   | 597 | *              | 0.03   | 0.06 |  |

FCL=family certification level; CERT=certification level; CO2=carbon dioxide; CH4=methane; VOCATIONAL=vocational engine; TRACTOR=tractor engine N₂O≕nitrous oxide;

| Celifornia Environmental Protection Agency |            | EXECUTIVE ORDER A-009-1348                   |  |  |
|--|------------|--|--|--|
| Canonias chynolinianal Frotacuon Agancy    | FCA US LLC | New Diesel or Incomplete                     |  |  |
| OB Air Resources Board                     |            | Medium-Duty Vehicles Using Certified Engines |  |  |
|  |            | Page 2 of 2                                  |  |  |

**BE IT FURTHER RESOLVED:** Certification to the FEL(s) / FCL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) / FCL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

**BE IT FURTHER RESOLVED:** That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

**BE IT FURTHER RESOLVED:** The listed engine models are conditionally certified in accordance with 13 CCR Section 1968.2(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the on-board diagnostic II (OBD) system of the listed engine models has been determined to have twelve deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of \$400 per engine for the third through twelfth deficiencies in the listed test group that is produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of engines produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2017 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive. Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all engines covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$5000 per engine pursuant to HSC Section 43154.

**BE IT FURTHER RESOLVED:** The listed engine models have been certified to the optional emission standards and test procedures in 13 CCR 1956.8 applicable to diesel or incomplete MDV with a 8501–14000 pound GVWR and shall be subject to 13 CCR 2139(c) (in-use testing of engines certified for use in diesel or incomplete MDV with a 8501–14000 pound GVWR).

**BE IT FURTHER RESOLVED:** For the listed vehicle models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1968.2 (on-board diagnostic, full or partial compliance), 13 CCR 1976(b)(1)(B)-(C) or 13 CCR 1976(b)(1)(F) {evaporative emission standards}, 13 CCR 2035 et seq. (emission control warranty), and 13 CCR 2235 [fill pipes and openings of motor vehicle fuel tanks]. (The braces {} are for gasoline, LPG or alcohol fueled vehicles only.)

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 August 2016.

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