Pursuant to the authority vested in California 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 engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

**Model Year**
- **Model Year:** 2019
- **Engine Family:** KCEXH5540LAT
- **Engine Sizes (L):** 8.9
- **Fuel Type:** Diesel
- **Standards & Test Procedure:** Diesel UB
- **Intended Service Class:** DDI, TC, CAC, ECM, EGR, OC, PTOX, SCR-AM, UAMX
- **Diagnostic:** OBD

**Primary Engine's Idle Emissions Control:***
- **Exempt:** N/A

**Engine (L):**
- **N/A**

**Engine Model/Code (rated power, in hp):**
- **L9 330 / 4760, FR95192 (310), L9 280 / 4760, FR95193 (285)**

**Emissions Control System:**
- L-Filter, L-Filter, L-Filter, L-Filter, L-Filter, L-Filter, L-Filter, L-Filter
- V-Filter, V-Filter, V-Filter, V-Filter, V-Filter, V-Filter, V-Filter, V-Filter
- CNG/LPG, CNG/LPG, CNG/LPG, CNG/LPG, CNG/LPG, CNG/LPG, CNG/LPG, CNG/LPG
- EGR, EGR, EGR, EGR, EGR, EGR, EGR, EGR
- SCR, SCR, SCR, SCR, SCR, SCR, SCR, SCR
- DPF, DPF, DPF, DPF, DPF, DPF, DPF, DPF
- PTOX, PTOX, PTOX, PTOX, PTOX, PTOX, PTOX, PTOX

**Following are: 1) the FTP exhaust emission standards, for family emission limits (if applicable, under 13 CCR 1956.8; 2) the SET and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, 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 flexible- and dual-fueled engines, the CERT values in brackets [ ] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses)."

<table>
<thead>
<tr>
<th>g/bhp-hr</th>
<th>NMHC</th>
<th>NOx</th>
<th>NMHC+NOx</th>
<th>CO</th>
<th>PM</th>
<th>HCHO</th>
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<tbody>
<tr>
<td>STD</td>
<td>0.14</td>
<td>0.20</td>
<td>0.20</td>
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<tr>
<td>CERT</td>
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<td>0.002</td>
<td>0.17</td>
<td>0.06</td>
<td>0.001</td>
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<tr>
<td>NTE</td>
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<td>0.30</td>
<td>0.19</td>
<td>0.01</td>
<td>0.02</td>
<td>0.01</td>
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</tbody>
</table>

**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 1036.108 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**
- **Model Year:** KCEXH5540LAT-012

**Primary Intended Service Class**
- **CO:**
  - STD: 555
  - FCL: 555
  - FEL: 572
  - CERT: 548

- **CH₄:**
  - STD: 0.10
  - FCL: 0.10
  - FEL: 0.10
  - CERT: 0.12

- **N₂O:**
  - STD: 0.02
  - FCL: 0.11
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: For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1971.1 (on-board diagnostic, full or partial compliance) and 13 CCR 2035 et seq. (emission control warranty).

BE IT FURTHER RESOLVED: The listed engine models are conditionally certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the heavy-duty on-board diagnostic (HD OBD) system of the listed engine models has been determined to have ten deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of $275 per engine for the third through tenth deficiencies in the listed engine family that is produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to California 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 2019 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 $37,500 per engine pursuant to HSC Section 4315.

BE IT FURTHER RESOLVED: Per Cummins' request for conditional Executive Order (EO) approval (Cummins' Request) dated December 17, 2018, the listed engine models are certified conditionally on Cummins' completing the agreed upon testing and submittal of a test report by February 11, 2019. Cummins agrees to cooperate with CARB on any potential remedies identified through the agreed upon 2019 MY engine testing including, if necessary, the need for a service campaign for in use vehicles, and running changes to engines still in production. If a service campaign (voluntary recall) is needed, a year after the implementation of the service campaign, Cummins shall report to CARB the Vehicle Identification Numbers (VINs) of these vehicles that do not have the improvements provided in the CARB-approved running change. Cummins understands that failure to submit the test data in the allowed time, or failure of the submitted test data or information to demonstrate compliance with the emission standards, or Heavy Duty On-Board Diagnostics (HD OBD) requirements, shall be cause for the Executive Officer to revoke the conditional EO ab initio. Engines sold or introduced into commerce under the revoked conditional EO shall be deemed uncertified and subject to a civil penalty of up to $37,500 per violation per vehicle pursuant to HSC Section 4315.

Engines certified under this Executive Order must 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 20 day of December 2018.

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division
**Engine Model Summary Template**

<table>
<thead>
<tr>
<th>Engine Family</th>
<th>Engine Code</th>
<th>Engine Model</th>
<th>3. HP@RPM (SAE Gross)</th>
<th>4. Fuel Rate: min/stroke @ peak HP (for diesel only)</th>
<th>5. Fuel Rate: lbs/hr @ peak HP (for diesel only)</th>
<th>6. Torque @ RPM (SAE Gross)</th>
<th>7. Fuel Rate: min/stroke @ peak torque (for diesel only)</th>
<th>8. Fuel Rate: lbs/hr @ peak torque (for diesel only)</th>
<th>9. Emission Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCE:KH0640LAt</td>
<td>4769;FR95192</td>
<td>L9 330</td>
<td>310@2100</td>
<td>150</td>
<td>106</td>
<td>1100@1300</td>
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<tr>
<td>KCE:KH0640LAt</td>
<td>4769;FR95193</td>
<td>L9 280</td>
<td>285@2100</td>
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<td>99</td>
<td>900@1300</td>
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<td>75</td>
<td>SCRC, PTOX, PC</td>
</tr>
</tbody>
</table>

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