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 GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

<table>
<thead>
<tr>
<th>MODEL YEAR</th>
<th>ENGINE FAMILY</th>
<th>ENGINE SIZES (L)</th>
<th>FUEL TYPE</th>
<th>STANDARDS &amp; TEST PROCEDURE</th>
<th>INTENDED SERVICE CLASS</th>
<th>ECS &amp; SPECIAL FEATURES</th>
<th>DIAGNOSTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>KCEXH0912XAX</td>
<td>14.9</td>
<td>Diesel</td>
<td>Diesel</td>
<td>HHDD</td>
<td>DDI, TC, CAC, ECM, EGR, OC, PTOX, SCR-U, AMOX</td>
<td>OBD($)</td>
</tr>
</tbody>
</table>

### PRIMARY ENGINE’S IDLE EMISSIONS CONTROL

- **GM**: Not applicable
- **GVWR**: vehicle weight rating
- **FTP**: Federal Test Procedure

### ADDITIONAL IDLE EMISSIONS CONTROL

- **N/A**: Not applicable

### ENGINE (L)

- **See attachment for engine models and ratings**

### ENGINE MODELS / CODES

- **(rated power, in hp)**

### FUEL TYPE

- **Gasoline**: gasoline injection
- **LPG**: liquefied petroleum gas
- **Ethanol**: 85% ethanol fuel
- **Diesel**: multfuel a.k.a. bi-fuel, dual fuel, F-flexible fuel

### STANDARDS & TEST PROCEDURE

- **FTP**: Federal Test Procedure
- **SET**: Supplemental emissions testing
- **TWC/OC**: three-way/oxidizing catalyst
- **NAC**: NOx adsorption catalyst
- **SCR-U**: selective catalytic reduction
- **AMOX**: amines oxidation catalyst
- **DIUDDl**: indirect/direct diesel injection

### INTENDED SERVICE CLASS

- **TC**: Tier 3
- **SC**: Tier 4
- **turbo**: turbocharged
- **SCR-U**: selective catalytic reduction
- **AMOX**: amine oxidation catalyst
- **SCR-N**: selective catalytic reduction

### ECS & SPECIAL FEATURES

- **DDI**: dual injection
- **SCR-U**: selective catalytic reduction
- **AMOX**: amine oxidation catalyst
- **SCR-N**: selective catalytic reduction
- **DIUDDl**: indirect/direct diesel injection

### DIAGNOSTIC

- **OBD($)**: onboard diagnostic

### FUEL TYPE

- **CNG/LNG**: compressed/liquefied natural gas
- **LPG**: liquefied petroleum gas
- **E85**: 85% ethanol fuel
- **MF**: multi fuel
- **BF**: bi fuel
- **DF**: dual fuel
- **FF**: flex fuel
- **HDO**: heavy-duty Otto
- **SBU**: super clean

### EMISSIONS CONTROL

- **PM**: particulate matter
- **CO**: carbon monoxide
- **CO**: carbon dioxide
- **NOx**: nitrogen oxides
- **NMHC**: non-methane hydrocarbon
- **HCHO**: formaldehyde

### Model Engine Family

- **ENGINE (LI I ENGINE MODELS / CODES**
- **CODES**

<table>
<thead>
<tr>
<th>ENGINE</th>
<th>FUEL TYPE</th>
<th>NMHC</th>
<th>NOx</th>
<th>NMHC+NOx</th>
<th>CO</th>
<th>PM</th>
<th>HCHO</th>
</tr>
</thead>
<tbody>
<tr>
<td>STD</td>
<td>0.14</td>
<td>0.20</td>
<td>0.20</td>
<td>15.5</td>
<td>0.01</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>CERT</td>
<td>0.000</td>
<td>0.17</td>
<td>0.17</td>
<td>0.1</td>
<td>0.003</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>NTE</td>
<td>0.21</td>
<td>0.30</td>
<td>19.4</td>
<td></td>
<td>0.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Additional Information

- 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” (HDD Test Procedures) adopted December 12, 2002, as last amended September 1, 2017 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1036.108 of the HDOE 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

<table>
<thead>
<tr>
<th>TRACTOR / VOCATIONAL</th>
<th>PRIMARY INTENDED SERVICE CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kCEXH0912XAX-009</td>
</tr>
</tbody>
</table>

### FUEL TYPE

- **CNG/LNG**: compressed/liquefied natural gas
- **LPG**: liquefied petroleum gas
- **Ethanol**: 85% ethanol fuel
- **MF**: multi fuel
- **BF**: bi fuel
- **DF**: dual fuel
- **FF**: flex fuel
- **HDO**: heavy-duty Otto
- **SBU**: super clean

### EMISSIONS CONTROL

- **PM**: particulate matter
- **CO**: carbon monoxide
- **CO**: carbon dioxide
- **NOx**: nitrogen oxides
- **NMHC**: non-methane hydrocarbon
- **HCHO**: formaldehyde

### Additional Information

- 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: Except in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [30 g/hr NOx] and section 35.B.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" (HDDE Test Procedures) adopted December 12, 2002, as last amended September 1, 2017, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

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: 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 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 twelve deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of $350 per engine for the third through twelfth 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.

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 13th 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>1.Engine Code</th>
<th>2.Engine Model</th>
<th>3.BHP@RPM (SAE Gross)</th>
<th>4.Fuel Rate: mm/stroke @ peak HP (for diesel only)</th>
<th>5.Fuel Rate: (bhp) @ peak HP (for diesel only)</th>
<th>6.Torque @ RPM (SEA Gross)</th>
<th>7.Fuel Rate: mm/stroke@peak torque</th>
<th>8.Fuel Rate: (bhp)/peak torque Device Per SAE J1930</th>
<th>9.Emission Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11348</td>
<td>X15 485</td>
<td>492@1877</td>
<td>262</td>
<td>166</td>
<td>1650@1150</td>
<td>293</td>
<td>114</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11349</td>
<td>X15 485</td>
<td>492@1877</td>
<td>262</td>
<td>166</td>
<td>1850@1150</td>
<td>330</td>
<td>128</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11351</td>
<td>X15 505</td>
<td>512@1877</td>
<td>274</td>
<td>173</td>
<td>1650@1150</td>
<td>293</td>
<td>114</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11352</td>
<td>X15 505</td>
<td>512@1877</td>
<td>274</td>
<td>173</td>
<td>1850@1150</td>
<td>330</td>
<td>128</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11354</td>
<td>X15 525</td>
<td>534@1877</td>
<td>287</td>
<td>181</td>
<td>1850@1150</td>
<td>330</td>
<td>126</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11355</td>
<td>X15 565</td>
<td>580@1877</td>
<td>316</td>
<td>200</td>
<td>1850@1150</td>
<td>337</td>
<td>131</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11356</td>
<td>X15 565</td>
<td>576@1877</td>
<td>313</td>
<td>198</td>
<td>2050@1150</td>
<td>370</td>
<td>143</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11357</td>
<td>X15 605</td>
<td>605@1877</td>
<td>333</td>
<td>211</td>
<td>1850@1150</td>
<td>337</td>
<td>131</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11358</td>
<td>X15 605</td>
<td>605@1877</td>
<td>333</td>
<td>211</td>
<td>2050@1150</td>
<td>370</td>
<td>143</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11371</td>
<td>X15 565RV</td>
<td>540@1966</td>
<td>284</td>
<td>188</td>
<td>1850@1150</td>
<td>330</td>
<td>128</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11372</td>
<td>X15 605RV</td>
<td>578@1966</td>
<td>307</td>
<td>203</td>
<td>1950@1150</td>
<td>349</td>
<td>135</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>Emergency</td>
<td>Vehicle</td>
<td>Models</td>
<td>Below</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11361</td>
<td>X15 505EV</td>
<td>474@1966</td>
<td>247</td>
<td>164</td>
<td>1850@1150</td>
<td>330</td>
<td>128</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11362</td>
<td>X15 565EV</td>
<td>540@1966</td>
<td>284</td>
<td>188</td>
<td>1850@1150</td>
<td>330</td>
<td>128</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11641</td>
<td>X15 600EV</td>
<td>578@1966</td>
<td>307</td>
<td>203</td>
<td>1850@1150</td>
<td>330</td>
<td>128</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
<tr>
<td>CEXH0912XAX</td>
<td>4343:FR11851</td>
<td>X15 605EV</td>
<td>605@1877</td>
<td>333</td>
<td>211</td>
<td>2050@1150</td>
<td>370</td>
<td>143</td>
<td>DDI, TC, CAC, ECM</td>
</tr>
</tbody>
</table>

**Notes:**
- BDI, TC, CAC, ECM, EGR, OC, PTOX, SCR-L, Amox