Concerning “Future Policy for Motor Vehicle Emission Reduction”  
(Tenth Report)

The Atmospheric Environment Committee of the Central Environment Council, at a meeting held on July 28, 2010, adopted the Future Policy for Motor Vehicle Emission Reduction (Tenth Report) concerning the future policy for heavy-duty diesel vehicle emission reductions and the chairperson of the Central Environment Council submitted the report to the Minister of the Environment on the same day.

Outline of Future Policy for Heavy-Duty Diesel Vehicle Emission Reductions

In order to ensure and sustain the achievement of environmental standards in metropolitan areas into the future and secure Japanese automakers’ international competitiveness in environmental technology, future policy for reducing emissions from heavy-duty diesel vehicles shall be set as follows:

- The new permissible limit target level for nitrogen oxide (NOx) shall be set at 0.4g/kWh (the permissible limit under 2009 regulations was 0.7g/kWh). The new permissible limit target level should encourage the development of the world’s highest level of environmental technology in comparison with Europe and the United States, while allowing for margins for improvements of fuel efficiency.

- In order to contribute to reducing costs of technological development, the current motor vehicle emission test cycle (JE05 Mode) shall be changed to the World Harmonized Transient Cycle (WHTC).

- In order to reduce exhaust gas emissions under engine cold start conditions when exhaust gas after-treatment devices show low purification performance, the exhaust gas test under engine cold start conditions shall be introduced in addition to the existing exhaust gas test under engine hot start conditions.

- The new permissible limit target level shall be applied by the end of 2016 in order to allow for a period of time for technological development for the achievement of fuel efficiency standards for heavy-duty motor vehicles in 2015 and avoid the congestion of technological development schedules. However, the application of the new permissible limit target level shall be delayed for some vehicle models with high technological hurdles to clear (by the end of 2017 for tractors, and by the end of 2018 for small-sized motor vehicles).

- In order to ensure the exhaust gas emission reduction performance in actual-use conditions, measures for exhaust gas remission reductions under test conditions other than those prescribed by test cycles, etc. upon which exhaust gas emission regulations are based
(off-cycle measures) shall be introduced. In addition, more sophisticated on-board diagnostics (OBD) systems for detecting the degradation of performance of exhaust gas emission reduction devices shall be introduced at the earliest possible date, within approximately three years of the commencement of the application of the next exhaust gas emission regulations.

Table: New permissible limit target level and 2009 regulations(current regulations)

<table>
<thead>
<tr>
<th>Regulated substance</th>
<th>NOx</th>
<th>NMHC</th>
<th>CO</th>
<th>PM</th>
<th>(Mode)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next-phase target level</td>
<td>0.4g/kWh</td>
<td>0.17g/kWh</td>
<td>2.22g/kWh</td>
<td>0.01g/kWh</td>
<td>WHTC</td>
</tr>
<tr>
<td>2009 regulations</td>
<td>0.7g/kWh</td>
<td>0.17g/kWh</td>
<td>2.22g/kWh</td>
<td>0.01g/kWh</td>
<td>JE05</td>
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</tbody>
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