Central Environment Council Presents
“Future Policy for Motor Vehicle Exhaust Emission Reduction (Fifth Report)”

Upon completion of the report, “Future Policy for Motor Vehicle Exhaust Emission Reduction (Fifth Report),” by the Air Quality Committee (chaired by Prof. Makoto Ikegami, of the Engineering Dept., Fukui University of Technology,) of the Central Environment Council held on April 6, the Chairman of the Council submitted the Report to the Ministry of the Environment on the same day.

The main content of the Report are related to the New Long-term Targets for diesel-powered motor vehicles as outlined in the attached paper.

Upon receiving the Report, the Ministry of the Environment will initiate the necessary procedures to tighten the regulations based on the Report.

In the meantime, the Central Environment Council will continue deliberations on the future policy for motor vehicle exhaust emission reduction.

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Outline of “Future Policy for Motor Vehicle Exhaust Emission Reduction (Fifth Report)”  
Presented by the Central Environment Council


(Target Values)
- Against a backdrop of serious air pollution due to suspended particulate matters (SPM), nitrogen dioxides (NOx) and others, the health risk from particulate matters emitted from diesel-powered motor vehicles has been identified as being high. Hence, countermeasures focusing on particulate matters (PM) shall be implemented, while also reducing NOx and other pollutants. In particular, PM emissions from heavy-duty motor vehicles (over 3.5 tons in gross vehicle weight) shall be significantly reduced.

Meanwhile, as regards carbon monoxide (CO), the New Short-term target values shall be used as is because CO concentration complies with the environmental quality standards (EQS).

- A study shall be made as to the motor vehicle exhaust emission reduction measures (new reduction targets) to be applied after the New Long-term Targets have been achieved. In doing so, fuel countermeasures, such as reduction of the sulfur content in diesel fuel, will also be examined.

(Remarks)
The timing for accomplishment is to be “by the end of 2005” as stated in the Fourth Report.

II. Exhaust Emission Reduction Measures for Gasoline-powered Motor Vehicles (New Long-term Targets)

(Target Values)
- NOx and other pollutants shall be reduced, while seeing to it that the exhaust emission and carbon dioxide reduction measures are compatible with one another. Meanwhile, as regards carbon monoxide (CO), the New Short-term target values shall be used as is because CO concentration complies with the EQS.
A study shall be made as to the motor vehicle exhaust emission countermeasures (new reduction targets) to be applied after the New Long-term Targets have been achieved. In doing so, fuel countermeasures, such as reduction of the sulfur content in gasoline, will also be examined.

(Timing of Accomplishment)
- Compliance shall be achieved by the end of 2005. However, it shall be by the end of 2007 for mini-sized trucks.

(Fuel Evaporative Emission Countermeasures)
- Fuel evaporative emissions lead to SPM and photochemical oxidants. Hence, in order to achieve SPM compliance with the EQS, it is necessary to advance studies on comprehensive countermeasures which combine the countermeasures for motor vehicles and those for stationary emission sources.

(Others)
- Through the low exhaust emission motor vehicle approval certification program and others, it is appropriate to continue to work on the popularization of low exhaust emission motor vehicles.

III. Exhaust Emission Test Mode
- In order to accurately assess the performance of exhaust emissions, the test mode shall be changed.
- The new test mode shall be phased in over the period from 2005 to 2011. (Heavy-duty vehicles: 2005; passenger cars, etc.: 2008-2011.)

IV. Fuel Countermeasures
(Gasoline)
- The sulfur content shall be reduced to 50ppm (currently 100ppm) by the end of 2004.
- As regards the Reid Vapor Pressure of gasoline supplied during summer, it is appropriate for fuel producers to reduce to 65Pa or less after 2005 on a voluntary basis.
## New Long-term Target Values for Diesel- and Gasoline-powered Motor Vehicles

### (Diesel Motor Vehicles)

<table>
<thead>
<tr>
<th></th>
<th>PM</th>
<th>NOx</th>
<th>NMHC</th>
<th>CO</th>
<th>Achievement Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passenger Cars</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small-sized</td>
<td>0.013</td>
<td>0.14</td>
<td>0.024</td>
<td>0.63</td>
<td>2005</td>
</tr>
<tr>
<td>Medium-sized</td>
<td>0.014</td>
<td>0.15</td>
<td>0.024</td>
<td>0.63</td>
<td>2005</td>
</tr>
<tr>
<td><strong>Trucks &amp; Buses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light-duty (Less than 1.7tons in GVW)</td>
<td>0.013</td>
<td>0.14</td>
<td>0.024</td>
<td>0.63</td>
<td>2005</td>
</tr>
<tr>
<td>Medium-duty (over 1.7tons and less than 3.5tons in GVW)</td>
<td>0.015</td>
<td>0.25</td>
<td>0.024</td>
<td>0.63</td>
<td>2005</td>
</tr>
<tr>
<td>Heavy-duty (Over 3.5tons in GVW)</td>
<td>0.027</td>
<td>2.0</td>
<td>0.17</td>
<td>2.22</td>
<td>2005</td>
</tr>
</tbody>
</table>

### (Gasoline Motor Vehicles)

<table>
<thead>
<tr>
<th></th>
<th>NOx</th>
<th>NMHC</th>
<th>CO</th>
<th>Achievement Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passenger Cars, Mini-sized passenger Cars</strong></td>
<td>0.05</td>
<td>0.05</td>
<td>1.15</td>
<td>2005</td>
</tr>
<tr>
<td><strong>Mini-sized Trucks</strong></td>
<td>0.05</td>
<td>0.05</td>
<td>4.02</td>
<td>2007</td>
</tr>
<tr>
<td><strong>Trucks &amp; Buses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light-duty (Less than 1.7tons in GVW)</td>
<td>0.05</td>
<td>0.05</td>
<td>1.15</td>
<td>2005</td>
</tr>
<tr>
<td>Medium-duty (over 1.7tons and less than 3.5tons in GVW)</td>
<td>0.07</td>
<td>0.05</td>
<td>2.55</td>
<td>2005</td>
</tr>
<tr>
<td>Heavy-duty (Over 3.5tons in GVW)</td>
<td>0.7</td>
<td>0.23</td>
<td>16.0</td>
<td>2005</td>
</tr>
</tbody>
</table>

**Notes:**
1) Unit of target values: g/kWh (heavy-duty trucks & buses), g/km (all others).
2) GVW: Gross Vehicle Weight. NMHC: Non-methane Hydrocarbon.
Test Mode Applied to Motor Vehicles
with Gross Vehicle Weight of 3,500kg or less

Representative Running Mode As the Basis of Test Mode
for Motor Vehicles with Gross Vehicle Weight of over 3,500kg