Economic Commission for Europe
Executive Body for the Convention on Long-range Transboundary Air Pollution
Working Group on Strategies and Review
Forty-eighth session
Geneva, 11–15 April 2011
Item 3 of the provisional agenda
Options for revising the technical annexes to the Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

Options for revising the annexes to the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

Note by the Chair of the ad hoc group of technical experts

Contents

<table>
<thead>
<tr>
<th>Paragraphs</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>1–3</td>
</tr>
<tr>
<td>II. Amendment proposals to draft revised technical annex IV</td>
<td>4–6</td>
</tr>
<tr>
<td>III. Amendment proposals to draft revised technical annex V</td>
<td>7–9</td>
</tr>
<tr>
<td>IV. Amendment proposals to draft revised technical annex VI</td>
<td>10–33</td>
</tr>
<tr>
<td>V. Amendment proposals to draft technical annex on dust emissions from stationary sources</td>
<td>34–38</td>
</tr>
<tr>
<td>VI. Amendment proposals to draft technical annex on solvent content of products</td>
<td>39–41</td>
</tr>
<tr>
<td>VII. Amendment proposals to draft revised technical annex VIII</td>
<td>42–44</td>
</tr>
</tbody>
</table>
I. Introduction

1. In accordance with the relevant decisions by the Executive Body to the Convention on Long-range Transboundary Air Pollution at its twenty-eighth session in 2010, the Working Group on Strategies and Review is invited to continue negotiations with a view to concluding the revision of the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol), and to present the proposed amendments for adoption by the Parties to the Protocol meeting at the twenty-ninth session of the Executive Body in 2011 (see ECE/EB.AIR/106/Add.1).

2. This document presents further work by the ad hoc group of technical experts to the Working Group on the draft revised annexes IV, V, VI and VIII to the Gothenburg Protocol, as well as on the new draft annexes on dust and on limit values for the solvent contents of products, which had been prepared by the Expert Group on Techno-economic Issues and presented in documents ECE/EB.AIR/WG.5/2009/17–22.1

3. As requested by the Working Group at its forty-seventh session in September 2010,2 the present document lists all the amendment proposals made to documents ECE/EB.AIR/WG.5/2009/17–22 since September 2009, indicating for each of the draft annexes three proposed options for emission limit values (ELVs). Proposed new text in the tables is indicated in bold.

II. Amendment proposals to draft revised technical annex IV

4. Following are the amendment proposals to draft revised technical annex IV on limit values for emissions of sulphur from stationary sources, as contained in document ECE/EB.AIR/WG.5/2009/17.

5. In paragraph 10, amend table 5 on “Suggested options for limit values for SO\textsubscript{x} emissions released from titanium dioxide production” as follows:

<table>
<thead>
<tr>
<th>Plant type</th>
<th>Suggested ELV for SO\textsubscript{x} [kg/t of TiO\textsubscript{2}]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Option 1\textsuperscript{1/}</td>
</tr>
<tr>
<td>Sulphate process, total emission</td>
<td>3</td>
</tr>
<tr>
<td>Chloride process, total emission</td>
<td>1.5</td>
</tr>
</tbody>
</table>

6. In section C, which applies to the United States of America, amend paragraph 12 as follows: at the end of paragraph 12 (d), add the words “and Subpart Ja”; and add new subparagraphs 12 (l) to (n) as follows:

   (l) Stationary Combustion Turbines – 40 C.F.R. Part 60, Subpart KKKK;
   (m) Small Municipal Waste Combustors – 40 C.F.R. Part 60, Subpart AAAA;
   (n) Kraft Pulp Mills – 40 C.F.R. Part 60, Subpart BB.

---


2 ECE/EB.AIR/WG.5/102, para. 12 (c).
III. Amendment proposals to draft revised technical annex V

7. Following are the amendment proposals to draft revised technical annex V on limit values for emissions of nitrogen oxides from stationary sources, as contained in document ECE/EB.AIR/WG.5/2009/18 and Corr.1.

8. In section C, which applies to the United States, amend paragraph 14 by adding new subparagraphs 14 (h) to (l), as follows:

(h) Petroleum Refineries – 40 C.F.R. Part 60, Subpart J, and Subpart Ja;

(i) Stationary Internal Combustion Engines – Spark Ignition, 40 C.F.R. Part 60, Subpart JJJJ;

(j) Stationary Internal Combustion Engines – Compression Ignition, 40 C.F.R. Part 60, Subpart III;

(k) Stationary Combustion Turbines – 40 C.F.R. Part 60, Subpart KKKK;

(l) Small Municipal Waste Combustors – 40 C.F.R. Part 60, Subpart AAAA.

9. Delete the appendix on justifications for the options for “stationary engines”.

IV. Amendment proposals to draft revised annex VI

10. Following are the amendment proposals to draft revised annex VI on limit values for emissions of volatile organic compounds from stationary sources, as presented in document ECE/EB.AIR/WG.5/2009/19.

11. In subparagraphs 3 (b), (c) and (d), replace “process” or “processes” with “activity”.

12. Amend the initial words of subparagraph 3 (d), before “passenger cars” to read: “Coating activity” means any activity in which a single or multiple application of a continuous film of coating is laid onto:

13. At the end of subparagraph 3 (d) (v), after the word “film” substitute for the rest of the text: “paper surfaces and leather surfaces”.

14. In subparagraphs 3 (e), (f), (h) and (h) (i)–(vii), (j) and (k) replace “process” or “processes” with “activity”.

15. Paragraph 3 (n) should read: “Wood impregnation” means any activity giving a loading of preservative in timber;”.

16. After paragraph 3 (y), add a new paragraph 3 (z) as follows: “Footwear manufacture” means any activity of producing complete footwear or part of it.

17. In paragraph 6, replace “paragraphs 9 to 22” with “paragraphs 8 to 22”.

18. Amend table 2 as follows:

3 Here and elsewhere in this document, amendments to tables do not affect the table notes, which remain unchanged, unless otherwise stated.
Table 2: Suggested options for limit values for adhesive coating

<table>
<thead>
<tr>
<th>Activity and threshold</th>
<th>Suggested ELV for VOC [daily for ELVc and yearly for ELVf and total ELV]</th>
</tr>
</thead>
</table>
|                        | Option 1  
|                        | Option 2  
|                        | Option 3  |
| Footwear manufacture (solvent consumption > 5 tonnes/y) | As option 3 | As option 3 | 25 a g VOC / pair of shoes |
| Other adhesive coating, except footwear; new and existing installations (solvent consumption 5–15 tonnes/y) | As option 3 | As option 3 | ELVc = 50 mg b C/Nm³  
ELVf = 10 wt-% or less of the solvent input  
Or total ELV of 0.6 kg or less of VOC/kg of solid input  
Or total ELV of 0.8 kg or less of VOC/kg of solid input |
| Other adhesive coating, except footwear; new and existing installations (solvent consumption 15–200 tonnes/y) | ELVc = 50 mg d C/Nm³  
ELVf = 10 wt-% or less of the solvent input  
Or total ELV of 0.6 kg or less of VOC/kg of solid input | ELVc = 50 mg e C/Nm³  
ELVf = 15 wt-% or less of the solvent input  
Or total ELV of 0.8 kg or less of VOC/kg of solid input | ELVc = 50 mg f C/Nm³  
ELVf = 20 wt-% or less of the solvent input  
Or total ELV of 1 kg or less of VOC/kg of solid input |
| Other adhesive coating, except footwear; new and existing installations (solvent consumption > 200 tonnes/y) | ELVc = 50 mg d C/Nm³  
ELVf = 10 wt-% or less of the solvent input  
Or total ELV of 0.6 kg or less of VOC/kg of solid input | ELVc = 50 mg e C/Nm³  
ELVf = 15 wt-% or less of the solvent input  
Or total ELV of 0.8 kg or less of VOC/kg of solid input | ELVc = 50 mg f C/Nm³  
ELVf = 20 wt-% or less of the solvent input  
Or total ELV of 1 kg or less of VOC/kg of solid input |

19. In paragraph 11, replace “processes” with “activities”.
20. Amend table 4 as follows:

Table 4: Suggested options limit values for coating activities in the vehicle industry

<table>
<thead>
<tr>
<th>Activity and threshold</th>
<th>Suggested ELV for VOC [yearly for total ELV]</th>
</tr>
</thead>
</table>
|                        | Option 1  
|                        | Option 2  
|                        | Option 3  |
| Manufacture of cars(M1, M2) (solvent consumption > 15 tonnes/y and ≤ 5,000 coated items/y or > 3,500 chassis-built) | As option 3 | As option 3 | 90 g VOC/m² or 1.5 kg/body + 70 g/m² |
### Existing installations

#### Manufacture of cars
- **(M1, M2)**
  - **15–200 tonnes/year and > 5,000 coated items/y**
    - 60 g VOC/m² or 1.9 kg/body + 41 g/m²
  - **Manufacture of cars** *(M1, M2)*
    - **Solvent consumption > 200 tonnes/year and > 5,000 coated items/y**
      - 25 g VOC/m² or 0.7 kg/body + 17 g/m²
    - **35 g VOC/m² or 1 kg/body + 26 g/m²**

#### New installations
- **45 g VOC/m² or 1.3 kg/body + 33 g/m²**

### Manufacture of truck cabins (N1, N2, N3)
- **Solvent consumption > 15 tonnes/y and ≤ 5,000 coated items/y**
  - **35 g VOC/m²**
  - **55 g VOC/m²**

### Manufacture of trucks and vans
- **Solvent consumption > 15 tonnes/y and ≤ 2,500 coated items/y**
  - **35 g VOC/m²**
  - **50 g VOC/m²**

### Manufacture of trucks and vans
- **Solvent consumption > 200 tonnes/year and > 2,500 coated items/y**
  - **35 g VOC/m²**
  - **50 g VOC/m²**
21. In paragraph 12, replace “processes” with “activities”. After “plastic”, delete “leather” and insert “paper”.

22. Amend table 5 as follows:

Table 5: Suggested options limit values for coating activities in various industrial sectors

<table>
<thead>
<tr>
<th>Activity and threshold</th>
<th>Suggested ELV for VOC [daily for ELVc and yearly for ELVf and total ELV]</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>New and existing installations: wood coating (solvent consumption 15–25 tonnes/y)</td>
<td>As option 3</td>
<td>As option 3</td>
<td>ELVc = 100 mg C/Nm³ for drying and 75 mg C/Nm³ for coating ELVf = 25 wt-% or less of the solvent input Or total ELV of 1.6 kg or less of VOC / kg of solid input</td>
<td>ELVc = 100 mg C/Nm³ for drying and 75 mg C/Nm³ for coating ELVf = 25 wt-% or less of the solvent input Or total ELV of 1.6 kg or less of VOC / kg of solid input</td>
</tr>
<tr>
<td>New and existing installations: wood coating (solvent consumption 25–200 tonnes/y)</td>
<td>ELVc = 50 mg C/Nm³ for drying and 75 mg C/Nm³ for coating ELVf = 10 wt-% or less of the solvent input Or total ELV of 0.50 kg or less of VOC / kg of solid input</td>
<td>ELVc = 50 mg C/Nm³ for drying and 75 mg C/Nm³ for coating ELVf = 15 wt-% or less of the solvent input Or total ELV of 0.75 kg or less of VOC / kg of solid input</td>
<td>ELVc = 50 mg C/Nm³ for drying and 75 mg C/Nm³ for coating ELVf = 20 wt-% or less of the solvent input Or total ELV of 1 kg or less of VOC / kg of solid input</td>
<td></td>
</tr>
<tr>
<td>New and existing installations: wood coating (solvent consumption &gt; 200 tonnes/y)</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 50 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for drying and 75 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for coating ELV&lt;sub&gt;f&lt;/sub&gt; = 10 wt-% or less of the solvent input Or total ELV of 0.50 kg or less of VOC / kg of solid input</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 50 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for drying and 75 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for coating ELV&lt;sub&gt;f&lt;/sub&gt; = 15 wt-% or less of the solvent input Or total ELV of 0.75 kg or less of VOC / kg of solid input</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 50 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for drying and 75 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for coating ELV&lt;sub&gt;f&lt;/sub&gt; = 20 wt-% or less of the solvent input Or total ELV of 1 kg or less of VOC / kg of solid input</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New and existing installations: coating of metal and plastics, (solvent consumption 5–15 tonnes/y)</td>
<td>As option 3</td>
<td>As option 3</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 100&lt;sup&gt;a/b&lt;/sup&gt; mg C/Nm&lt;sup&gt;3&lt;/sup&gt; ELV&lt;sub&gt;f&lt;/sub&gt; = 20&lt;sup&gt;b&lt;/sup&gt; wt-% or less of the solvent input Or total ELV of 0.525 kg or less of VOC / kg of solid input</td>
<td></td>
</tr>
<tr>
<td>New and existing installations: other coating, incl. textile, fabric, foil and paper (excl. web screen printing for textiles, see printing) (solvent consumption 5 - 15 tonnes/y)</td>
<td>As option 3</td>
<td>As option 3</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 100&lt;sup&gt;a/b&lt;/sup&gt; mg C/Nm&lt;sup&gt;3&lt;/sup&gt; ELV&lt;sub&gt;f&lt;/sub&gt; = 20&lt;sup&gt;b&lt;/sup&gt; wt-% or less of the solvent input Or total ELV of 1.4 kg or less of VOC / kg of solid input</td>
<td></td>
</tr>
<tr>
<td>New and existing installations: textile, fabric, foil and paper coating, incl. (excl. web screen printing for textiles, see printing) (solvent consumption &gt; 15 tonnes/y)</td>
<td>As option 3</td>
<td>As option 3</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 50 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for drying and 75 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for coating ELV&lt;sub&gt;f&lt;/sub&gt; = 10&lt;sup&gt;b/c&lt;/sup&gt; wt-% or less of the solvent input Or total ELV of 0.225 kg or less of VOC / kg of solid input</td>
<td></td>
</tr>
<tr>
<td>New and existing installations: coating of plastic workpieces (solvent consumption 15–200 tonnes/year)</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 50 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for drying and 75 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for coating ELV&lt;sub&gt;f&lt;/sub&gt; = 10&lt;sup&gt;b&lt;/sup&gt; wt-% or less of the solvent input Or total ELV of 0.225 kg or less of VOC / kg of solid input</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 50 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for drying and 75 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for coating ELV&lt;sub&gt;f&lt;/sub&gt; = 15&lt;sup&gt;b&lt;/sup&gt; wt-% or less of the solvent input Or total ELV of 0.30 kg or less of VOC / kg of solid input</td>
<td>ELV&lt;sub&gt;c&lt;/sub&gt; = 50 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for drying and 75 mg C/Nm&lt;sup&gt;3&lt;/sup&gt; for coating ELV&lt;sub&gt;f&lt;/sub&gt; = 20&lt;sup&gt;b&lt;/sup&gt; wt-% or less of the solvent input Or total ELV of 0.375 kg or less of VOC / kg of solid input</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> ELV: Emission Limit Value

<sup>b</sup> C/Nm<sup>3</sup>: Cubic Newton per cubic meter

<sup>c</sup> VOC: Volatile Organic Compound

<sup>d</sup> kg: Kilogram

<sup>e</sup> wt-%: Weight Percent

<sup>f</sup> option 3: Indicates the specific option number or code for these conditions.
| New and existing installations: coating of plastic workpieces (solvent consumption > 200 tonnes/y) | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 10<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.225 kg or less of VOC / kg of solid input | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 15<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.30 kg or less of VOC / kg of solid input | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 20<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.375 kg or less of VOC / kg of solid input |
| New and existing installations: coating of metal surfaces (solvent consumption 15–200 tonnes/year) | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 10<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.225 kg or less of VOC / kg of solid input | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 15<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.30 kg or less of VOC / kg of solid input | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 20<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.375 kg or less of VOC / kg of solid input |
| New and existing installations: coating of metal surfaces (solvent consumption > 200 tonnes/y) | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 10<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.225 kg or less of VOC / kg of solid input | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 15<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.30 kg or less of VOC / kg of solid input | ELV<sub>c</sub> = 50 mg C/Nm<sup>3</sup> for drying and 75 mg C/Nm<sup>3</sup> for coating<br>ELVF = 20<sup>b</sup> wt-% or less of the solvent input<br>Or total ELV of 0.375 kg or less of VOC / kg of solid input |

23. In paragraph 13, replace “processes” with “activities”.

24. Amend table 7 as follows:
### Table 7: Suggested options limit values for coil coating

<table>
<thead>
<tr>
<th>Activity and threshold</th>
<th>Suggested ELV for VOC [daily for ELVc and yearly for ELVf and total ELV]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option 1</strong></td>
<td><strong>Option 2</strong></td>
</tr>
<tr>
<td>New installation</td>
<td></td>
</tr>
<tr>
<td>(solvent consumption 25–200 tonnes/year)</td>
<td></td>
</tr>
<tr>
<td>ELVc = 30mg&lt;sup&gt;c&lt;/sup&gt; C/Nm&lt;sup&gt;3&lt;/sup&gt;</td>
<td>ELVc = 50 mg&lt;sup&gt;b&lt;/sup&gt; C/Nm&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>ELVf = 5 wt-% or less of the solvent input</td>
<td>ELVf = 5 wt-% or less of the solvent input</td>
</tr>
<tr>
<td>Or total ELV of 0.225 kg or less of VOC/kg of solid input</td>
<td>Or total ELV of 0.3 kg or less of VOC/kg of solid input</td>
</tr>
</tbody>
</table>

25. Amend Table 8 on suggested options limit values for dry cleaning by adding a table note<sup>b</sup> as follows:

<sup>b</sup> This emission level can be achieved by using at least type IV machines or more efficient ones.
26. Amend table 9 as follows:

<table>
<thead>
<tr>
<th>Activity and threshold</th>
<th>Suggested ELV for VOC [daily for ELVc and yearly for ELVf and total ELV]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Option 1 ( \text{^1} )</td>
</tr>
<tr>
<td>New and existing installations with an annual organic solvent consumption between 100 and 1,000 tonnes/year</td>
<td>Total ELV of 3 wt-% of solvent input</td>
</tr>
<tr>
<td>New and existing installations with an annual organic solvent consumption &gt; 1,000 tonnes/year</td>
<td>Total ELV of 1 wt-% of solvent input</td>
</tr>
</tbody>
</table>

27. In paragraph 17, after the word “printing” add the word “activities”.

28. Amend table 10, as follows:

### Table 10: Suggested options limit values for printing activities

<table>
<thead>
<tr>
<th>Activity and threshold</th>
<th>Suggested ELV for VOC [daily for ELVc and yearly for ELVf and total ELV]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Option 1 ( \text{^1} )</td>
</tr>
<tr>
<td>Heatset offset (solvent consumption 15–25 tonnes/y)</td>
<td>As option 3</td>
</tr>
<tr>
<td>Heatset offset (solvent consumption 25–200 tonnes/y)</td>
<td>For new and upgraded presses</td>
</tr>
<tr>
<td>For existing presses</td>
<td>Total ELV = 5 wt-% or less of the ink consumption ( a )</td>
</tr>
<tr>
<td></td>
<td>Total ELV = 10 wt-% or less of the ink consumption ( a )</td>
</tr>
<tr>
<td>Heatset offset (solvent consumption &gt; 200 tonnes/y)</td>
<td>For new and upgraded presses</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>
| Total ELV = 5 wt-% or less of the ink consumption \(a/\) | ELV\(_c\) = 20 mg C/Nm\(^3\)  
ELV\(_f\) = 30 wt-% or less of the solvent input \(a/\) | ELV\(_c\) = 20 mg C/Nm\(^3\)  
ELV\(_f\) = 30 wt-% or less of the solvent input \(a/\) |
| For existing presses | Total ELV = 10 wt-% or less of the ink consumption \(a/\) | Total ELV = 15 wt-% or less of the ink consumption \(a/\) |

<table>
<thead>
<tr>
<th>Publication gravure (solvent consumption 25–200 tonnes/y)</th>
<th>For new installations</th>
<th>For existing installations</th>
</tr>
</thead>
</table>
| Total ELV = 4 wt-% or less of the solvent input | Total ELV = 5 wt-% or less of the solvent input | ELV\(_c\) = 75 mg C/Nm\(^3\)  
ELV\(_f\) = 10 wt-% or less of the solvent input  
Or total ELV of 0.6 kg or less of VOC/kg of solid input |
| For existing installations | Total ELV = 5 wt-% or less of the solvent input | Total ELV = 7 wt-% or less of the solvent input |
| ELV\(_c\) = 75 mg C/Nm\(^3\)  
ELV\(_f\) = 15 wt-% or less of the solvent input  
Or total ELV of 0.8 kg or less of VOC/kg of solid input |

<table>
<thead>
<tr>
<th>Publication gravure (solvent consumption &gt; 200 tonnes/y)</th>
<th>For new installations</th>
<th>For existing installations</th>
</tr>
</thead>
</table>
| Total ELV = 4 wt-% or less of the solvent input | Total ELV = 5 wt-% or less of the solvent input | ELV\(_c\) = 75 mg C/Nm\(^3\)  
ELV\(_f\) = 10 wt-% or less of the solvent input  
Or total ELV of 0.6 kg or less of VOC/kg of solid input |
| For existing installations | Total ELV = 5 wt-% or less of the solvent input | Total ELV = 7 wt-% or less of the solvent input |
| ELV\(_c\) = 75 mg C/Nm\(^3\)  
ELV\(_f\) = 15 wt-% or less of the solvent input  
Or total ELV of 0.8 kg or less of VOC/kg of solid input |
29. In table 12, delete table note \( a' \) (notes \( b' \) and \( c' \) thus becoming notes \( a' \) and \( b' \)).

| Packaging rotogravure and flexography (solvent consumption 15–25 tonnes/y) | As option 3 | As option 3 | ELV$_c$ = 100 mg C/Nm$^3$ ELV$_f$ = 25 wt-% or less of the solvent input Or total ELV of 1.2 kg or less of VOC/kg of solid input |
| Packaging rotogravure and flexography (solvent consumption 25–200 tonnes/y) and rotary screen printing (solvent consumption > 30 tonnes/y) | As option 3 | As option 3 | ELV$_c$ = 100 mg C/Nm$^3$ ELV$_f$ = 20 wt-% or less of the solvent input Or total ELV of 1.0 kg or less of VOC/kg of solid input |
| Packaging rotogravure and flexography (solvent consumption > 200 tonnes/y) | For plants with all machines connected to oxidation: Total ELV = 10% of the reference emission $^{b'}$ For plants with all machines connected to carbon adsorption: Total ELV = 12.5% of the reference emission $^{b'}$ For existing mixed plants where some existing machines may not be attached to an incinerator or solvent recovery: Emissions from the machines connected to oxidisers or carbon adsorption are below the emission limits of 10% or 12.5% respectively. For machines not connected to gas treatment: use of low solvent or solvent free products, connection to waste gas treatment when there is spare capacity and preferentially run high solvent content work on machines connected to waste gas treatment. Total emissions below 25% of reference emission (as defined in annex IIb of the Solvent Directive $^{b'}$) | ELV$_c$ = 100 mg C/Nm$^3$ ELV$_f$ = 20 wt-% or less of the solvent input Or total ELV = 25% of reference emission $^{b'}$ |
30. Amend table 13 as follows:

**Table 13: Suggested options limit values for surface cleaning**

<table>
<thead>
<tr>
<th>Activity and threshold</th>
<th>Suggested ELV for VOC [daily for ELVc and yearly for ELVf and total ELV]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Options 1 and 2 ¹/</td>
</tr>
<tr>
<td>New and existing installations: surface cleaning using substances mentioned in article 3 y (i)</td>
<td></td>
</tr>
<tr>
<td>1–5</td>
<td>ELVc = 10 mg compound /Nm³</td>
</tr>
<tr>
<td>&gt; 5</td>
<td>ELVc = 10 mg compound /Nm³</td>
</tr>
<tr>
<td>New and existing installations: other surface cleaning</td>
<td>As option 3</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>As option 3</td>
</tr>
</tbody>
</table>

31. Amend table 15 as follows:

**Table 15: Suggested options limit values for impregnation of wooden surfaces**

<table>
<thead>
<tr>
<th>Activity and threshold</th>
<th>Suggested ELV for VOC [daily for ELVc and yearly for ELVf and total ELV]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Option 1 ¹/</td>
</tr>
<tr>
<td>Wood preservation (solvent consumption 25–200 tonnes/y)</td>
<td></td>
</tr>
<tr>
<td>ELVc = 100 ** mg C/Nm³</td>
<td>ELVf = 25 wt-% or less of the solvent input</td>
</tr>
<tr>
<td>Or 7 kg or less of VOC / m³</td>
<td>Or 9 kg or less of VOC / m³</td>
</tr>
<tr>
<td>Wood preservation (solvent consumption &gt; 200 tonnes/y)</td>
<td></td>
</tr>
<tr>
<td>ELVc = 100 ** mg C/Nm³</td>
<td>ELVf = 25 wt-% or less of the solvent input</td>
</tr>
<tr>
<td>Or 7 kg or less of VOC / m³</td>
<td>Or 9 kg or less of VOC / m³</td>
</tr>
</tbody>
</table>

32. In section C, which applies to the United States, amend paragraph 24 as follows: delete “and” at the end of paragraph 24 (s); and after 24 (t) add the following new subparagraphs (u) to (y):

(u) Stationary Internal Combustion Engines – Spark Ignition, 40 C.F.R. Part 60, Subpart JJJJ;
(v) Municipal Solid Waste Landfills – 40 C.F.R. Part 60, Subpart WWW;
(w) SOCMI Wastewater – 40 C.F.R. Part 60, Subpart YYY;
(x) Portland cement – 40 C.F.R. Part 60, Subpart F; and
(y) Stationary Internal Combustion Engines – Compression Ignition, 40 C.F.R. Part 60, Subpart IIII.

33. After paragraph 24, add two new paragraphs 25 and 26 as follows:

25. Limit values for controlling emissions of VOC from sources subject to National Volatile Organic Compound Emission Standards for Consumer and Commercial Products are specified in the following documents:
   (a) Automobile refinish coatings – 40 C.F.R. Part 59, Subpart B;
   (b) Consumer products – 40 C.F.R. Part 59, Subpart C;
   (c) Architectural coatings – 40 C.F.R. Part 59, Subpart D;
   (d) Aerosol coatings – 40 C.F.R. Part 59, Subpart E; and
   (e) New and in-use portable fuel containers – 40 C.F.R. Part 59, Subpart F.

26. Limit values for controlling emissions of VOC from new and existing sources subject to National Emission Standards for Hazardous Air Pollutants (HAPs) are specified in the following documents:
   (a) Organic HAPs from the Synthetic Organic Chemical Manufacturing Industry – 40 C.F.R. Part 63, Subpart F;
   (c) Organic HAPs: Equipment Leaks – 40 C.F.R. Part 63, Subpart H;
   (d) Coke oven batteries – 40 C.F.R. Part 63, Subpart L;
   (e) Commercial ethylene oxide sterilizers - 40 C.F.R. Part 63, Subpart O;
   (f) Bulk gasoline terminals and pipeline breakout stations – 40 C.F.R. Part 63, Subpart R;
   (g) Halogenated solvent degreasers – 40 C.F.R. Part 63, Subpart T;
   (h) Polymers and resins (Group I) – 40 C.F.R. Part 63, Subpart U;
   (i) Polymers and resins (Group II) – 40 C.F.R. Part 63, Subpart W;
   (j) Secondary lead smelters – 40 C.F.R. Part 63, Subpart X;
   (k) Marine tank vessel loading – 40 C.F.R. Part 63, Subpart Y;
   (l) Petroleum refineries – 40 C.F.R. Part 63, Subpart CC;
   (m) Offsite waste and recovery operations – 40 C.F.R. Part 63, Subpart DD;
   (n) Magnetic tape manufacturing – 40 C.F.R. Part 63, Subpart EE;
   (o) Aerospace manufacturing – 40 C.F.R. Part 63, Subpart GG;
   (p) Oil and natural gas production – 40 C.F.R. Part 63, Subpart HH;
   (q) Ship building and ship repair – 40 C.F.R. Part 63, Subpart II;
(r) Wood furniture – 40 C.F.R. Part 63, Subpart JJ;
(s) Printing and publishing – 40 C.F.R. Part 63, Subpart KK;
(t) Pulp and paper II (combustion) – C.F.R. Part 63, Subpart MM;
(u) Storage tanks – 40 C.F.R. Part 63, Subpart OO;
(v) Containers – 40 C.F.R. Part 63, Subpart PP;
(w) Surface impoundments – 40 C.F.R. Part 63, Subpart QQ;
(x) Individual drain systems – 40 C.F.R. Part 63, Subpart RR;
(y) Closed vent systems – 40 C.F.R. Part 63, Subpart SS;
(z) Equipment leaks: control level 1 – 40 C.F.R. Part 63, Subpart TT;
(aa) Equipment leaks: control level 2 – 40 C.F.R. Part 63, Subpart UU;
(cc) Storage Vessels (Tanks): Control Level 2 – 40 C.F.R. Part 63, Subpart WW;
(dd) Ethylene Manufacturing Process Units – 40 C.F.R. Part 63, Subpart XX;
(ee) Generic Maximum Achievable Control Technology Standards for several categories – 40 C.F.R. Part 63, Subpart YY;
(ff) Mineral wool manufacturing – 40 C.F.R. Part 63, Subpart DDD;
(gg) Hazardous waste combustors – 40 C.F.R. Part 63, Subpart EEE;
(hh) Pharmaceutical manufacturing – 40 C.F.R. Part 63, Subpart GGG;
(ii) Natural Gas Transmission and Storage – 40 C.F.R. Part 63, Subpart HHH;
(jj) Flexible Polyurethane Foam Production – 40 C.F.R. Part 63, Subpart III;
(kk) Polymers and Resins: group IV – 40 C.F.R. Part 63, Subpart JJJ;
(ll) Portland cement manufacturing – 40 C.F.R. Part 63, Subpart LLL;
(mm) Pesticide active ingredient production – 40 C.F.R. Part 63, Subpart MMM;
(oo) Polymers and resins: group III – 40 C.F.R. Part 63, Subpart OOO;
(pp) Polyether polyols – 40 C.F.R. Part 63, Subpart PPP;
(qq) Secondary aluminum production – 40 C.F.R. Part 63, Subpart RRR;
(rr) Petroleum refineries – 40 C.F.R. Part 63, Subpart UUU;
(ss) Publicly owned treatment works – 40 C.F.R. Part 63, Subpart VVV;
(tt) Nutritional Yeast Manufacturing – 40 C.F.R. Part 63, Subpart CCCC;
(uu) Plywood and composite wood products – 40 C.F.R. Part 63, Subpart DDDD;
(vv) Organic liquids distribution (non-gasoline) – 40 C.F.R. Part 63, Subpart EEEE;

(ww) Miscellaneous organic chemical manufacturing – 40 C.F.R. Part 63, Subpart FFFF;

(xx) Solvent Extraction for Vegetable Oil Production – 40 C.F.R. Part 63, Subpart GGGG;

(yy) Wet Formed Fiberglass Mat Production – 40 C.F.R. Part 63, Subpart HHHH;

.zz) Auto and Light Duty Truck Coatings – 40 C.F.R. Part 63, Subpart IIII;

aaa) Paper and Other Web Coating – 40 C.F.R. Part 63, Subpart JJJJ;

bbb) Surface Coatings for Metal Cans – 40 C.F.R. Part 63, Subpart KKKK;

ccc) Miscellaneous Metal Parts and Products Coating – 40 C.F.R. Part 63, Subpart MMMM;

(ddd) Surface Coatings for Large Appliances – 40 C.F.R. Part 63, Subpart NNNN;

(eee) Printing, Coating and Dyeing of Fabric – 40 C.F.R. Part 63, Subpart OOOO;

(fff) Surface Coating of Plastic Parts and Products – 40 C.F.R. Part 63, Subpart PPPP;

(ggg) Surface Coating of Wood Building Products – 40 C.F.R. Part 63, Subpart QQQQ;

(hhh) Metal Furniture Surface Coating – 40 C.F.R. Part 63, Subpart RRRR;

(iii) Surface coating for metal coil – 40 C.F.R. Part 63, Subpart SSSS;

(jjj) Leather finishing operations – 40 C.F.R. Part 63, Subpart TTTT;

(kkk) Cellulose products manufacturing – 40 C.F.R. Part 63, Subpart UUUU;

(III) Boat manufacturing – 40 C.F.R. Part 63, Subpart VVVV;

(mmm) Reinforced Plastics and Composites Production – 40 C.F.R. Part 63, Subpart WWWW;

(nnn) Rubber tire manufacturing – 40 C.F.R. Part 63, Subpart XXXX;

(ooo) Stationary Combustion Engines – 40 C.F.R. Part 63, Subpart YYYY;

(ppp) Stationary Reciprocating Internal Combustion Engines: Compression Ignition – 40 C.F.R. Part 63, Subpart ZZZZ;

(qqq) Semiconductor manufacturing – 40 C.F.R. Part 63, Subpart BBBBB;

(rrr) Iron and steel foundries – 40 C.F.R. Part 63, Subpart EEEE;

(sss) Integrated iron and steel manufacturing – 40 C.F.R. Part 63, Subpart FFFFF;

(ttt) Asphalt Processing and Roofing Manufacturing – 40 C.F.R. Part 63, Subpart LLLLL;

(uuu) Flexible Polyurethane Foam Fabrication – 40 C.F.R. Part 63, Subpart MMMMMM;
(vvv) Engine test cells/stands – 40 C.F.R. Part 63, Subpart PPPPP;

(www) Friction products manufacturing – 40 C.F.R. Part 63, Subpart QQQQQ;

(xxx) Refractory products manufacturing – 40 C.F.R. Part 63, Subpart SSSSS;

(yyy) Hospital ethylene oxide sterilizers – 40 C.F.R. Part 63, Subpart WWWWW;

(zzz) Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities – 40 C.F.R. Part 63, Subpart BBBBBB;

(aaaa) Gasoline Dispensing Facilities – 40 C.F.R. Part 63, Subpart CCCCCC;

(bbbb) Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources – 40 C.F.R. Part 63, Subpart HHHHHH;

(cccc) Acrylic Fibers/Modacrylic Fibers Production (Area Sources) – 40 C.F.R. Part 63, Subpart LLLLLL;

(dddd) Carbon Black Production (Area Sources) - 40 C.F.R. Part 63, Subpart MMMMMM;

(eeee) Chemical Manufacturing Area Sources: Chromium Compounds – 40 C.F.R. Part 63, Subpart NNNNNN;

(ffff) Chemical Manufacturing for Area Sources – 40 C.F.R. Part 63, Subpart VVVVVV;

(gggg) Asphalt Processing and Roofing Manufacturing (Area Sources) – 40 C.F.R. Part 63, Subpart AAAAAA; and

(hhhh) Paints and Allied Products Manufacturing (Area Sources) – 40 C.F.R. Part 63, Subpart CCCCCC.

V. Amendment proposals to draft technical annex on dust emissions from stationary sources

34. Following are the amendment proposals to the draft technical annex on limit values for emissions of dust from stationary sources, as set out in document ECE/EB.AIR/WG.5/2009/21.

35. Delete paragraph 15 and table 12 on wood processing.

36. Renumber paragraph 16 as paragraph 15 and table 13 as table 12. Amend the new table 12 as follows:
Table 12. Suggested options for limit values for dust emissions released from titanium dioxide production

<table>
<thead>
<tr>
<th>Suggested ELV for dust [mg/Nm³]</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphate process, total emission</td>
<td>12</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Chloride process, total emission</td>
<td>20</td>
<td>35</td>
<td>50</td>
</tr>
</tbody>
</table>

37. Add a new paragraph 16 and tables 13 through 15, as follows:

16. Small combustion installations with a rated thermal input < 50 MWth:

1. Small combustion installations with a rated thermal input < [300] [500] kW:
   (a) Emissions from new residential combustion stoves and boilers with a rated thermal input < [300] [500] kWth can be reduced by the application of:
      (i) Product standards as described in CEN standards (e.g., EN 303–5) and equivalent product standards in the United States and Canada. Countries applying such product standards may define additional national requirements. Table 13 is recommending options for additional ELVs for dust for wood combustion appliances;
      (ii) Ecolabels specifying performance criteria that are typically stricter than the minimum efficiency requirements of the EN product standards or national regulations.

Table 13: Suggested options for limit values for dust emissions released from new small wood combustion installations with a rated thermal input < [300] [500] kWth to be used with product standards. (O₂ reference content: 13%).

<table>
<thead>
<tr>
<th>Dust concentration (mg/Nm³)</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open / closed fireplaces</td>
<td>40</td>
<td>75</td>
<td>110</td>
</tr>
<tr>
<td>Wood stoves</td>
<td>40</td>
<td>75</td>
<td>110</td>
</tr>
<tr>
<td>Log wood boilers (with heat storage tank)</td>
<td>20</td>
<td>40</td>
<td>110</td>
</tr>
<tr>
<td>Pellet stoves and boilers</td>
<td>20</td>
<td>40</td>
<td>110</td>
</tr>
<tr>
<td>Automatic combustion plants</td>
<td>20</td>
<td>50</td>
<td>110</td>
</tr>
</tbody>
</table>

(b) Emissions from existing residential combustion stoves and boilers can be reduced by the following primary measures:
   (i) By public information and awareness-raising programmes regarding:
      a. The proper operation of stoves and boilers;
      b. The use of untreated wood only;

---

Paragraph 16.A.2 (a)–(c) has a recommendatory character and might be deferred to the Guidance Document.
c. The correct seasoning of wood for moisture content;

(ii) By establishing a programme to promote the replacement of the oldest existing boilers and stoves by modern appliances; or

(iii) By establishing an obligation to exchange or retrofit old appliances.

2. **Combustion installations with a rated thermal input [50] [70] [100] kWth–1 MWth**

Table 14: Suggested options for limit values for dust emissions released from boilers [and process heaters] with a rated thermal input of [50] [70] [100] kWth–1 MWth. (O: reference content: wood, other solid biomass and peat: 13%; Coal, lignite and other fossil solid fuels: 6%)

<table>
<thead>
<tr>
<th>Dust concentration (mg/Nm³)</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid fuels [50][70][100]–500 kWth</td>
<td>New installations 30</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td>Solid fuels 500 kWth–1 MWth</td>
<td>New installations 20</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td>Existing installations</td>
<td>100</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Existing installations</td>
<td>30</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

3. **Combustion installations with a rated thermal input > 1–50 MWth**

Table 15: Suggested options for limit values for dust emissions released from boilers [and process heaters] with a rated thermal input of 1 MWth–50 MWth (O: reference content: Wood, other solid biomass and peat: 11%; Coal, lignite and other fossil solid fuels: 6%; Liquid fuels, including liquid biofuels: 3%)

<table>
<thead>
<tr>
<th>Dust concentration (mg/Nm³)</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid fuels &gt; 1–5 MWth</td>
<td>New installations 10</td>
<td>20</td>
<td>150</td>
</tr>
<tr>
<td>Solid fuels &gt; 5–50 MW</td>
<td>New installations 10</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Existing installations</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Existing installations</td>
<td>20</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Liquid fuels &gt; 1–5 MW</td>
<td>New installations 10</td>
<td>20</td>
<td>150</td>
</tr>
<tr>
<td>Liquid fuels &gt; 5–50 MW</td>
<td>New installations 10</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Existing installations</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
</tbody>
</table>

38. Add a section that applies to the United States, including the following two paragraphs:

[x]. Limit values for controlling emissions of PM from new stationary sources in the following stationary source categories are specified in the following documents:

(a) Steel Plants: Electric Arc Furnaces – 40 C.F.R. Part 60, Subpart AA and Subpart AAa;

(b) Small Municipal Waste Combustors – 40 C.F.R. Part 60, Subpart AAAA;

(c) Kraft Pulp Mills – 40 C.F.R. Part 60, Subpart BB;

(d) Glass Manufacturing – 40 C.F.R. Part 60, Subpart CC;
(e) Electric Utility Steam Generating Units – 40 C.F.R. Part 60, Subpart D, and Subpart Da;
(f) Industrial-Commercial-Institutional Steam Generating Units – 40 C.F.R. Part 60, Subpart Db and Subpart Dc;
(g) Grain Elevators – 40 C.F.R. Part 60, Subpart DD;
(h) Municipal Waste Incinerators – 40 C.F.R. Part 60, Subpart E, Subpart Ea, and Subpart Eb;
(i) Hospital/Medical/Infectious Waste Incinerators – 40 C.F.R. Part 60, Subpart Ec;
(j) Portland Cement – 40 C.F.R. Part 60, Subpart F;
(k) Lime Manufacturing – 40 C.F.R. Part 60, Subpart HH;
(l) Hot Mix Asphalt Facilities – 40 C.F.R. Part 60, Subpart I;
(m) Stationary Internal Combustion Engines: Compression Ignition – 40 C.F.R. Part 60, Subpart III;
(n) Petroleum Refineries – 40 C.F.R. Part 60, Subpart J and Subpart Ja;
(o) Secondary Lead Smelters – 40 C.F.R. Part 60, Subpart L;
(p) Metallic Minerals Processing – 40 C.F.R. Part 60, Subpart LL;
(q) Secondary Brass and Bronze – 40 C.F.R. Part 60, Subpart M;
(r) Basic Oxygen Process Furnaces – 40 C.F.R. Part 60, Subpart N;
(s) Basic Process Steelmaking Facilities – 40 C.F.R. Part 60, Subpart Na;
(t) Phosphate Rock Processing – 40 C.F.R. Part 60, Subpart NN;
(u) Sewage Treatment Plant Incineration – 40 C.F.R. Part 60, Subpart O;
(v) Nonmetallic Minerals Processing Plants – 40 C.F.R. Part 60, Subpart OOO);
(w) Primary Copper Smelters – 40 C.F.R. Part 60, Subpart P;
(x) Ammonium Sulfate Manufacturing – 40 C.F.R. Part 60, Subpart PP;
(y) Wool Fiberglass Insulation – 40 C.F.R. Part 60, Subpart PPP;
(z) Primary Zinc Smelters – 40 C.F.R. Part 60, Subpart Q;
(aa) Primary Lead Smelters – 40 C.F.R. Part 60, Subpart R;
(bb) Asphalt Processing and Asphalt Roofing Manufacturing – 40 C.F.R. Part 60, Subpart UU;
(cc) Calciners and Dryers in Mineral Industries – 40 C.F.R. Part 60, Subpart UUU;
(dd) Coal Preparation Plants – 40 C.F.R. Part 60, Subpart Y;
(ee) Ferroalloy Production Facilities – 40 C.F.R. Part 60, Subpart Z.

[x.] Limit values for controlling emissions of PM from new and existing sources subject to National Emission Standards for Hazardous Air Pollutants (HAPs):
(a) Coke oven batteries – 40 C.F.R. Part 63, Subpart L;
(b) Secondary lead smelters – 40 C.F.R. Part 63, Subpart X;
(c) Phosphoric Acid Manufacturing Plants – 40 C.F.R. Part 63, Subpart AA;
(d) Phosphate Fertilizers Production Plants – C.F.R. Part 63, Subpart BB
(e) Magnetic Tape Manufacturing – 40 C.F.R. Part 63, Subpart EE;
(f) Pulp and paper II (combustion) – C.F.R. Part 63, Subpart MM;
(g) Mineral wool manufacturing – C.F.R. Part 63, Subpart DDD;
(h) Hazardous waste combustors – C.F.R. Part 63, Subpart EEE;
(i) Portland cement manufacturing – C.F.R. Part 63, Subpart LLL;
(j) Wool fiberglass manufacturing – 40 C.F.R. Part 63, Subpart NNN;
(k) Primary copper – 40 C.F.R. Part 63, Subpart QQQ;
(m) Primary lead smelting – 40 C.F.R. Part 63, Subpart TTT;
(n) Petroleum refineries – 40 C.F.R. Part 63, Subpart UUU;
(o) Ferroalloys production – 40 C.F.R. Part 63, Subpart XXX;
(p) Lime manufacturing – 40 C.F.R. Part 63, Subpart AAAAA;
(q) Coke Ovens: Pushing, Quenching, and Battery Stacks – 40 C.F.R. Part 63, Subpart CCCCC;
(r) Iron and steel foundries – 40 C.F.R. Part 63, Subpart EEEEE;  
(s) Integrated iron and steel manufacturing – 40 C.F.R. Part 63, Subpart FFFFF;
(t) Site remediation – 40 C.F.R. Part 63, Subpart GGGGG;
(u) Miscellaneous coating manufacturing – 40 C.F.R. Part 63, Subpart HHHHH;
(v) Asphalt Processing and Roofing Manufacturing – 40 C.F.R. Part 63, Subpart LLLLL;
(w) Taconite Iron Ore Processing – 40 C.F.R. Part 63, Subpart RRRRR;
(x) Refractory products manufacturing – 40 C.F.R. Part 63, Subpart SSSSS;
(y) Primary magnesium refining – 40 C.F.R. Part 63, Subpart TTTTT;
(z) Electric Arc Furnace Steelmaking Facilities – 40 C.F.R. Part 63, Subpart YYYY;
(aa) Iron and steel foundries – 40 C.F.R. Part 63, Subpart ZZZZZ;
(bb) Primary Copper Smelting Area Sources – 40 C.F.R. Part 63, Subpart EEEEE;
(cc) Secondary Copper Smelting Area Sources – 40 C.F.R. Part 63, Subpart FFFFF;
(dd) Primary Nonferrous Metals Area Sources: Zinc, Cadmium, and Beryllium – 40 C.F.R. Part 63, Subpart GGGGG;
(ee) Lead Acid Battery Manufacturing (Area sources) – 40 C.F.R. Part 63, Subpart PPPPPP;
(ff) Glass manufacturing (area sources) – 40 C.F.R. Part 63, Subpart SSSSSS;

(gg) Secondary Nonferrous Metal Smelter (Area Sources) – 40 C.F.R. Part 63, Subpart TTTTTT;


(ii) Area Source Standards for Nine Metal Fabrication and Finishing Source Categories – 40 C.F.R. Part 63, Subpart XXXXXX;

(jj) Ferroalloys Production (Area Sources) – 40 C.F.R. Part 63, Subpart YYYYYY;

(kk) Aluminum, Copper, and Nonferrous Foundries (Area Sources) – 40 C.F.R. Part 63, Subpart ZZZZZZ;

(ll) Asphalt Processing and Roofing Manufacturing (Area Sources) – 40 C.F.R. Part 63, Subpart AAAAAAA;

(mm) Paints and Allied Products Manufacturing (Area Sources) – 40 C.F.R. Part 63, Subpart CCCCCCCC;

(nn) Prepared animal feeds manufacturing (Area Sources) – 40 C.F.R. Part 63, Subpart DDDDDDDD.

VI. Amendment proposals to draft technical annex on limit values for solvent content of products

39. Following are the amendment proposals to the draft technical annex on limit values for solvent content of products, as contained in document ECE/EB.AIR/WG.5/2009/22.

40. Amend table 1 as follows:

Table 1. Suggested maximum VOC content for paints and varnishes

<table>
<thead>
<tr>
<th>Product Subcategory</th>
<th>Type</th>
<th>Phase I (g/l)*</th>
<th>Phase II (g/l)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior matt wall and ceilings</td>
<td>Water-borne coatings (WB)</td>
<td>75</td>
<td>30</td>
</tr>
<tr>
<td>(Gloss ≤ 25@60°)</td>
<td>Solvent-borne coatings (SB)</td>
<td>400</td>
<td>30</td>
</tr>
<tr>
<td>Interior glossy walls and ceilings</td>
<td>WB</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>(Gloss &gt; 25@60°)</td>
<td>SB</td>
<td>400</td>
<td>100</td>
</tr>
<tr>
<td>Exterior walls of mineral substrate</td>
<td>WB</td>
<td>75</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>SB</td>
<td>450</td>
<td>430</td>
</tr>
<tr>
<td>Interior/exterior trim and cladding</td>
<td>WB</td>
<td>150</td>
<td>130</td>
</tr>
<tr>
<td>paints for wood and metal</td>
<td>SB</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>Description</td>
<td>SB</td>
<td>WB</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>Interior/exterior trim varnishes and woodstains, including opaque woodstains</td>
<td>500</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Interior and exterior minimal build woodstains</td>
<td>700</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Primers</td>
<td>450</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Binding primers</td>
<td>750</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>One pack performance coatings</td>
<td>600</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>2 pack reactive performance coatings for specific end use</td>
<td>550</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Multicoloured coatings</td>
<td>400</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

41. Add a section that applies to the United States, and includes the following paragraph:

[x]. Limit values for controlling emissions of VOC from sources subject to National Volatile Organic Compound Emission Standards for Consumer and Commercial Products are specified in the following documents:

(a) Automobile refinish coatings – 40 C.F.R. Part 59, Subpart B;
(b) Consumer products – 40 C.F.R. Part 59, Subpart C;
(c) Architectural coatings – 40 C.F.R. Part 59, Subpart D;
(d) Aerosol coatings – 40 C.F.R. Part 59, Subpart E; and
(e) New and in-use portable fuel containers – 40 C.F.R. Part 59, Subpart F.

VII. Amendment proposals to draft revised technical annex VIII

42. Following are the amendment proposals to the draft revised technical annex VIII on limit values for fuels and new mobile sources, as presented in document ECE/EB.AIR/WG.5/2009/20.

43. In section C, which applies to the United States, amend paragraph 15 to read:

15. Implementation of a mobile source emission control programme for light-duty vehicles, light-duty trucks, heavy-duty trucks and fuels to the extent required by sections 202 (a), 202 (g) and 202 (h) of the Clean Air Act, as implemented through:

(a) Registration of fuels and fuel additives – 40 C.F.R Part 79;
(b) Regulation of fuels and fuel additives – 40 C.F.R Part 80, including: Subpart A – general provisions; Subpart B – controls and prohibitions; Subpart D – reformulated gasoline; Subpart H – gasoline sulphur standards; Subpart I – motor
vehicle diesel fuel; non-road, locomotive, and marine diesel fuel; and ECA marine fuel; Subpart L – gasoline benzene; and

(c) Control of emissions from new and in-use highway vehicles and engines – 40 C.F.R Part 85 and Part 86.

44. Add a new paragraph 16, as follows:

16. Standards for non-road engines and vehicles are specified in the following documents:

(a) Fuel sulphur standards for non-road diesel engines – 40 C.F.R Part 80, Subpart I;

(b) Aircraft engines – 40 C.F.R Part 87;

(c) Exhaust emission standards for non-road diesel engines – Tier 2 and 3; 40 C.F.R Part 89;

(d) Non-road compression-ignition engines – 40 C.F.R Part 89 and Part 1039;

(e) Non-road and marine spark-ignition engines – 40 C.F.R Part 90, Part 91, Part 1045, and Part 1054;

(f) Locomotives – 40 C.F.R Part 92 and Part 1033;

(g) Marine compression-ignition engines – 40 C.F.R Part 94 and Part 1042;

(h) New large non-road spark-ignition engines – 40 C.F.R Part 1048;

(i) Recreational engines and vehicles – 40 C.F.R Part 1051;

(j) Control of evaporative emissions from new and in-use non-road and stationary equipment – 40 C.F.R. Part 1060;

(k) Engine testing procedures – 40 C.F.R Part 1065;