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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

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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_x emissions released from titanium dioxide production" as follows:

Discharge	Suggested ELV for SO_x [kg/t of TiO ₂]				
Plant type	Option 1 ^{1/}	Option 2 ^{1/}	Option 3 ^{1/}		
Sulphate process, total emission	3	6	10		
Chloride process, total emission	1.5	1.7	3		

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.

¹ Documents ECE/EB.AIR/WG.5/2009/17–22, submitted to the Working Group on Strategies and Review at its forty-fifth session in September 2009, are available at:

http://www.unece.org/env/lrtap/WorkingGroups/wgs/docs45th%20session.htm.

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 IIII;

(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 "processs" 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

³ Here and elsewhere in this document, amendments to tables do not affect the table notes, which remain unchanged, unless otherwise stated.

Activity and	Suggested ELV for VOC					
threshold	[daily for ELVc and yearly for ELVf and total ELV]					
	Option 1 ^{1/}	Option 2 ^{1/}	Option 3 $^{1/}$			
Footwear	_	_	25 ^{a/} g VOC / pair of			
manufacture			shoes			
(solvent	As option 3	As option 3				
consumption > 5						
tonnes/y)						
Other adhesive			$ELVc = 50 \text{ mg}^{b/2}$			
coating, except			C/Nm ³			
footwear; new and			ELVf = 25 wt-% or			
existing	As option 3	$\Lambda_{\rm S}$ option 3	less of the solvent			
installations	As option 5	As option 5	input			
(solvent			Or total ELV of 1.2			
consumption			kg or less of VOC/kg			
5-15 tonnes/y)			of solid input			
Other adhesive	$ELVc = 50 \text{ mg}^d$	$ELVc = 50 \text{ mg}^{c/2}$	$ELVc = 50 \text{ mg}^{b/2}$			
coating, except	C/Nm ³	C/Nm ³	C/Nm ³			
footwear; new and	ELVf = 10 wt-% or	ELVf = 15 wt-% or	ELVf = 20 wt-% or			
existing	less of the solvent	less of the solvent	less of the solvent			
installations	input	input	input			
(solvent	Or total ELV of 0.6	Or total ELV of 0.8	Or total ELV of 1 kg			
consumption 15–	kg or less of	kg or less of	or less of VOC/kg of			
200 tonnes/y)	VOC/kg of solid	VOC/kg of solid	solid input			
	input					
Other adhesive	$ELVc = 50 mg^{d}$	$ELVc = 50 mg^{c/2}$	$ELVc = 50 \text{ mg}^{b/2}$			
coating, except	C/Nm ³	C/Nm ³	C/Nm ³			
footwear; new ELVf = 10 wt-%		ELVf = 15 wt-% or	ELVf = 20 wt-% or			
and existing	or less of the	less of the solvent	less of the solvent			
installations	solvent input	input	input			
(solvent	Or total ELV of	Or total ELV of 0.8	Or total ELV of			
consumption >	0.6 kg or less of	kg or less of	1 kg or less of			
200 tonnes/y))	VOC/kg of solid	VOC/kg of solid	VOC/kg of solid			
	input	input	input			

Table 2: Suggested options for limit values for adhesive coating

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

Activity and threshold	Suggested ELV for VOC					
	Option 1 ^{a/ 1/}	$\begin{array}{c c c c c c c c c c c c c c c c c c c $				
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/m ² or 1.5 kg/body + 70 g/m ²			

Manufacture of cars (M1, M2) (solvent consumption 15–200 tonnes/year and > 5,000 coated items/y)	25 g VOC/m ² or 0.7 kg/body + 17 g/m ²	35 g VOC/m ² or 1 kg/body + 26 g/m ²	Existing installations: 60 g VOC/m ² or 1.9 kg/body + 41 g/m ² New installations: 45 g VOC/m ² or 1.3 kg/body + 33 g/m ²
Manufacture of cars (M1, M2) (solvent consumption > 200 tonnes/year and > 5,000 coated items/y)	25 g VOC/m ² or 0.7 kg/body + 17 g/m ²	35 g VOC/m ² or 1 kg/body + 26 g/m ²	Existing installations: 60 g VOC/m ² or 1.9 kg/body + 41 g/m ² New installations: 45 g VOC/m ² or 1.3 kg/body + 33 g/m ²
Manufacture of truck cabins (N1, N2, N3) (solvent consumption > 15 tonnes/y and \leq 5,000 coated items/y)	As option 3	As option 3	Existing installations: 85 g VOC/m ² New installations: 65 g VOC/m ²
Manufacture of truck cabins (N1, N2, N3) (solvent consumption 15-200 tonnes/year and > 5,000 coated items/y)	35 g VOC/m²	55 g VOC/m²	Existing installations: 75 g VOC/m ² New installations: 55 g VOC/m ²
Manufacture of truck cabins (N1, N2, N3)			<i>Existing installations:</i> 75 g VOC/m ²
(solvent consumption > 200 tonnes/year and > 5,000 coated items/y)	35 g VOC/m ²	55 g VOC/m ²	New installations: 55 g VOC/m ²
Manufacture of trucks and vans			<i>Existing installations</i> : 120 g VOC/m ²
(solvent consumption > 15 tonnes/y and $\leq 2,500$ coated items/y)	As option 3	As option 3	<i>New installations</i> : 90 g VOC/m ²
Manufacture of trucks and vans (solvent consumption	35 g	50 g VOC/m^2	<i>Existing installations</i> : 90 g VOC/m ²
15–200 tonnes/year and $> 2,500$ coated items/y)	VOC/m ²	50 g VOC/III	<i>New installations</i> : 70 g VOC/m ²
Manufacture of trucks and vans (solvent consumption			Existing installations: 90 g VOC/m ²
	35 g		

Manufacture of buses (solvent consumption >	$\Lambda_{\rm c}$ option 3	As antion 2	<i>Existing installations</i> : 290 g VOC/m ²
15 tonnes/y and \leq 2,000	As option 5	As option 5	New installations: 210 g
coated items/y)			VOC/m ²
Manufacture of buses			Existing installations: 225
(solvent consumption	120 g	150 g VOC/m ²	g VOC/m ²
15–200 tonnes/year	VOC/m^2		
and $> 2,000$ coated	v o c/m		New installations: 150 g
items/y)			VOC/m ²
Manufacture of buses			Existing installations:
(solvent consumption	120 ~		225 g VOC/m ²
> 200 tonnes/year and	120 g	150 g VOC/m ²	New installations 150 a
> 2,000 coated	VUC/M2	-	New instatiations: 150 g
items/y)			VUC/m ²

21. In paragraph 12, replace "processes" with "activities". After "plastic", delete "leather" and insert "paper".

22. Amend table 5 as follows:

T 1. 1	C		1:		C			÷		· · · · ·	1	4
Taple 5:	Suggestea	options	umit	values	tor	coamng	acuvines	1n	various	1 <i>n</i> (iustriai	sectors
1 00 00 01	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	opnono			,	000000			101110110			0001010

Activity and	Suggested ELV for VOC				
threshold	[daily for EL	f and total ELV]			
	Option 1 $^{1/}$	Option 2 $^{1/}$	Option 3 $^{1/}$		
New and existing installations: wood coating (solvent consumption 15–25 tonnes/y)	As option 3	As option 3	ELVc = $100^{a'}$ mg C/Nm ³ ELVf = 25 wt-% or less of the solvent input Or total ELV of 1.6 kg or less of VOC / kg of solid input		
New and existing installations: wood coating (solvent consumption 25–200 tonnes/y)	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ 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	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ 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	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ 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		

New and existing installations: wood coating (solvent consumption > 200 tonnes/y)	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ 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	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ 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	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ 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
New and existing installations: coating of metal and plastics, (solvent consumption 5–15 tonnes/y)	As option 3	As option 3	ELVc = 100^{a} mg C/Nm ³ ELVf = $20^{b/}$ wt-% or less of the solvent input Or total ELV of 0.525 kg or less of VOC / kg of solid input
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)	As option 3	As option 3	ELVc = 100^{ab} mg C/Nm ³ ELVf = $20^{b/}$ wt-% or less of the solvent input Or total ELV of 1.4 kg or less of VOC / kg of solid input
New and existing installations: textile, fabric, foil and paper coating, incl. (excl. web screen printing for textiles, see printing) (solvent consumption > 15 tonnes/y)	As option 3	As option 3	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating $^{b' c'}$ ELVf = 20 $^{b'}$ wt-% or less of the solvent input Or total ELV of 1 kg or less of VOC / kg of solid input
New and existing installations: coating of plastic workpieces (solvent consumption 15–200 tonnes/year)	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = $10^{b/}$ wt-% or less of the solvent input Or total ELV of 0.225 kg or less of VOC / kg of solid input	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = $15^{b/}$ wt-% or less of the solvent input Or total ELV of 0.30 kg or less of VOC / kg of solid input	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = 20 ^{b/} wt-% or less of the solvent input Or total ELV of 0.375 kg or less of VOC / kg of solid input

New and existing installations: coating of plastic workpieces (solvent consumption > 200 tonnes/y)	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{$b/$} ELVf = 10 ^{$b/$} wt-% or less of the solvent input Or total ELV of 0.225 kg or less of VOC / kg of solid input	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = $15^{b/}$ wt-% or less of the solvent input Or total ELV of 0.30 kg or less of VOC / kg of solid input	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = $20^{b/}$ wt-% or less of the solvent input 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)	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = $10^{b/}$ wt-% or less of the solvent input Or total ELV of 0.225 kg or less of VOC / kg of solid input	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = $15^{b/}$ wt-% or less of the solvent input Or total ELV of 0.30 kg or less of VOC / kg of solid input	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = $20^{b/}$ wt-% or less of the solvent input Or total ELV of 0.375 kg or less of VOC / kg of solid input
	As option 3	As option 3	Exception for coatings in contact with food: Total ELV of 0.5825 kg or less of VOC / kg of solid input
New and existing installations: coating of metal surfaces (solvent consumption > 200 tonnes/y)	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = $10^{b/}$ wt-% or less of the solvent input Or total ELV of 0.225 kg or less of VOC / kg of solid input	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = 15 ^{b/} wt-% or less of the solvent input Or total ELV of 0.30 kg or less of VOC / kg of solid input	ELVc = 50 mg C/Nm ³ for drying and 75 mg C/Nm ³ for coating ^{b/} ELVf = 20 ^{b/} wt-% or less of the solvent input Or total ELV of 0.375 kg or less of VOC / kg of solid input
	As option 3	As option 3	Exception for coatings in contact with food: Total ELV of 0.5825 kg or less of VOC / kg of solid input

23. In paragraph 13, replace "processes" with "activities".

24. Amend table 7 as follows:

Activity and	Suggested ELV for VOC					
threshold	[daily for ELVc and yearly for ELVf and total ELV]					
	Option $1^{1/2}$	Option 2 ^{1/}	Option 3 $^{1/}$			
Existing	$ELVc = 30mg^{c/}$	$ELVc = 50 \text{ mg}^{b/}$	$ELVc = 50mg^{a/}$			
installation	C/Nm ³	C/Nm ³	C/Nm ³			
(solvent	ELVf = 5 wt-% or	ELVf = 5 wt-% or	ELVf = 10 wt-% or			
consumption	less of the solvent	less of the solvent	less of the solvent			
25-200	input	input	input			
tonnes/year)	Or total ELV of	Or total ELV of 0.3	Or total ELV of 0.45			
	0.225 kg or less of	kg or less of	kg or less of VOC/kg			
	VOC/kg of solid	VOC/kg of solid	of solid input			
	input	input				
Existing	$ELVc = 30mg^{c/}$	$ELVc = 50 \text{ mg}^{\text{b/}}$	$ELVc = 50mg^{a/2}$			
installation	C/Nm ³	C/Nm ³	C/Nm ³			
(solvent	ELVf = 5 wt-% or	ELVf = 5 wt-% or	ELVf = 10 wt-% or			
consumption >	less of the solvent	less of the solvent	less of the solvent			
200 tonnes/year)	input	input	input			
	Or total ELV of	Or total ELV of	Or total ELV of 0.45			
	0.225 kg or less of	0.3 kg or less of	kg or less of VOC/kg			
	VOC/kg of solid	VOC/kg of solid	of solid input			
	input	input				
New installation	$ELVc = 30mg^{\circ}$	$ELVc = 30mg^{\circ}$	$ELVc = 50 \text{ mg}^{\omega}$			
(solvent	C/Nm ³	C/Nm ³	C/Nm ³			
consumption	ELVI = 3 wt-% or	ELVt = 5 wt-% or	ELVI = 5 wt-% or			
25-200	less of the solvent	less of the solvent	less of the solvent			
tonnes/year)	input	input	input			
	Or total ELV of	Or total ELV of	Or total ELV of 0.3			
	U.15 kg of less of	U.18 kg of less of	kg of less of VOC/kg			
	vOC/kg of solid	vOC/kg of solid	of solid liput			
Now installation	1000000000000000000000000000000000000	$\mathbf{FI} \mathbf{V}_{0} = \mathbf{30mg}^{\mathbf{b}/\mathbf{b}}$	$\mathbf{FLV}_{a} = 50 \mathbf{m} a^{a/2}$			
(solvont	LLVC = 30 mg C/Nm^3	C/Nm^3	ELVC = 50 mg C/Nm^3			
(Solvent	C/10III FIVf - 3 wt-% or	C/1VIII FI Vf = 5 wt-% or	C/1MII FLVf – 5 wt-% or			
200 tonnes/vear)	less of the solvent	less of the solvent	less of the solvent			
======================================	innut	innut	innut			
	Or total ELV of	Or total ELV of	Or total ELV of 0.3			
	0.15 kg or less of	0.18 kg or less of	kg or less of VOC/kg			
	VOC/kg of solid	VOC/kg of solid	of solid input			
	input	input	· · · · · · · · · · · · · · · · · · ·			

Table 7: Suggested options limit values for coil coating

25. Amend table 8 on suggested options limit values for dry cleaning by adding an table note $^{b/}$ as follows:

 $^{\mathrm{b/}}$ This emission level can be achieved by using at least type IV machines or more efficient ones.

Suggested ELV for VOC					
[daily for	· ELVc and yearly f	or ELVf and total ELV]			
Option 1 $^{1/}$	Options 2 $^{1/}$	Option 3 $^{1/}$			
Total ELV of 3 inj	wt-% of solvent out	ELVc = 150 mg C/Nm ³ ELVf $a' = 5$ wt-% or less of the solvent input Or total ELV of 5 wt-% or less of the solvent input			
	-				
Total ELV of 1 wt-% of solvent input	Total ELV of 2 wt-% of solvent input	ELVc = 150 mg C/Nm ³ ELVf a' = 3 wt-% or less of the solvent input Or total ELV of 3 wt-% or less of the solvent input			
	[daily for Option 1 ¹⁷ Total ELV of 3 inj Total ELV of 1 wt-% of solvent input	Suggested ELV [daily for ELVc and yearly f Option 1 Options 2 I Total ELV of 3 wt-% of solvent input of solvent input Total ELV of 2 Wt-% of solvent input wt-% of solvent input solvent input			

26. Amend table 9 as follows:

- 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

Activity and	Suggested ELV for VOC			
threshold	[daily for ELVc and yearly for ELVf and total ELV]			
	Option 1 $^{1/}$	Option 2 $^{1/}$	Option 3 $^{1/}$	
Heatset offset (solvent consumption 15–25 tonnes/y)	As option 3	As option 3	ELVc = 100 mg C/Nm ³ ELVf = 30 wt-% or less of the solvent input $a^{a/2}$	
Heatset offset (solvent	For new and upgraded presses		New and existing installations	
consumption 25–200 tonnes/y)	Total ELV = 5 wt-% or less of the ink consumption ^{a/}	Total ELV = 10 wt-% or less of the ink consumption $a^{a/2}$	ELVc = 20 mg C/Nm ³ ELVf = 30 wt-% or less of the solvent	
	For existing presses		input ^{a/}	
	Total ELV = 10 wt-% or less of the ink consumption ^{a/}	Total ELV = 15 wt- % or less of the ink consumption $a^{a/2}$		

Heatset offset	For new and	upgraded presses	New and existing
(solvent		1	installations
consumption >	Total ELV = 5	ELVc = 20 mg	ELVc = 20 mg
200 tonnes/y)	wt-% or less of	C/Nm ³	C/Nm ³
	the ink	ELVf = 30 wt-% or	ELVf = 30 wt-% or
	consumption ^{a/}	less of the solvent	less of the solvent
	_	input ^{a/}	input ^{a/}
	For exis		
	Total ELV = 10	Total ELV = 15 wt-	
	wt-% or less of	% or less of the ink	
	the ink	consumption ^{a/}	
	consumption ^{a/}	consumption	
Publication gravure	consumption	For new installations	
(aclouent	T_{a} to $1 E I V = 4$	Total ELV = 5 and $0/$	$EIV_{2} = 75$ mg
(solvent	10tal ELV = 4	10tal ELV = 5 Wt-%	ELVC = 75 mg
consumption	wt-% or less of	or less of the solvent	C/Nm ²
25–200 tonnes/y)	the solvent input	input	ELVf = 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 installation	18
	Total FLV = 5	Total ELV = 7 wt -%	FIVc = 75 mg
	10 tur LLV = 5	or less of the solvent	C/Nm^3
	the column tinnut	input	C/NIII ELVf = 15 wt 9/ or
	the solvent input	mput	ELVI = 15 Wl - 70 OI
			less of the solvent
			input
			Or total ELV of 0.8
			kg or less of
			VOC/kg of solid
			input
Publication		For new installations	5
gravure (sorvent	Total FI V – 4	Total FLV - 5+ 0/	FI Vc - 75 mg
200 toppog(w)	10tal ELV = 4	10tal ELV = 5 Wt - 70	ELVC = 75 mg
200 tonnes/y)	wt-% or less of	or less of the solvent	
	the solvent input	input	ELVI = 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 instal	lations	
	Total ELV = 5	Total $ELV = 7 \text{ wt-}\%$	ELVc = 75 mg
	wt-% or less of	or less of the solvent	C/Nm ²
	the solvent input	input	ELVf = 15 wt-% or
			less of the solvent
			input
			Or total ELV of 0.8
			kg or less of
			VOC/kg of solid
			input

Packaging rotogravure and flexography (solvent consumption 15–25 tonnes/y)	As option 3	As option 3	ELVc = 100 mg C/Nm ³ ELVf = 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	ELVc = 100 mg C/Nm3 ELVf = 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 is oxidation: Total ELV = 10% of emission b/ For plants with all is carbon adsorption: Total ELV = 12.5% emission b/ For existing mixed j existing machines in an incinerator or so Emissions from the oxidisers or carbon the emission limits respectively. For machines not con- treatment: use of low free products, connec- treatment when then preferentially run his work on machines of treatment. Total emissions believes Solvent Directive b/	machines connected to of the reference machines connected to of the reference plants where some hay not be attached to olvent recovery: machines connected to adsorption are below of 10% or 12.5% onnected to gas w solvent or solvent ection to waste gas re is spare capacity and igh solvent content connected to waste gas ow 25% of reference d in annex IIb of the)	ELVc = 100 mg C/Nm ³ ELVf = 20 wt-% or less of the solvent input Or total ELV = 25% of reference emission ^{b/}

29. In table 12, delete table note a' (notes b' and c' thus becoming notes a' and b').

30. Amend table 13 as follows:

Activity and threshold	Threshold value for	Suggested ELV for VOC [daily for ELVc and yearly for ELVf and total ELV]			
	solvent consumptio n (Mg/year)	Options 1 and 2 $^{1/}$		Option 3 ^{1/}	
New and existing installations: surface	1–5	ELVc = 10 mg compound /Nm ³	ELVf = 1% of solvent input	ELVc = 20 mg compound/N m ³	ELVf = 15 % of solvent input
cleaning using substances mentioned in article 3 y (i)	> 5	ELVc = 10 mg compound /Nm ³	ELVf = 0.5 % of solvent input	ELVc = 20 mg compound/N m ³	ELVf = 10 % of solvent input
New and existing installations:	2–10	As option 3	As option 3	ELVc = 75mg C/Nm ^{3 a/}	ELVf = 20 % ^{a/} of solvent input
other surface cleaning	> 10	As option 3	As option 3	ELVc = 75 mg C/Nm ^{3 a/}	ELVf = 15% ^{a/} of solvent input

Table 13: Suggested options limit values for surface cleaning

31. Amend table 15 as follows:

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

Activity and	Suggested ELV for VOC			
threshold	[daily for ELVc and yearly for ELVf and total ELV]			
	Option 1 $^{1/}$	Option 2 $^{1/}$	Option 3 $^{1/}$	
Wood	$ELVc = 100^{a} mg$	$ELVc = 100^{a} mg$	$ELVc = 100^{a/} mg$	
preservation	C/Nm ³	C/Nm ³	C/Nm ³	
(solvent	ELVf = 25 wt-% or	ELVf = 35 wt-% or	ELVf = 45 wt-% or less	
consumption	less of the solvent	less of the solvent	of the solvent input	
25-200	input	inpu	Or 11 kg or less of	
tonnes/y)	Or 7 kg or less of	Or 9 kg or less of	VOC / m ³	
-	VOC / m ³	VOC / m ³		
Wood	$ELVc = 100^{a/} mg$	$ELVc = 100^{a/} mg$	$ELVc = 100^{a} mg$	
preservation	C/Nm ³	C/Nm ³	C/Nm ³	
(solvent	ELVf = 25 wt-%	ELVf = 35 wt-% or	ELVf = 45 wt-% or	
consumption	or less of the	less of the solvent	less of the solvent input	
> 200	solvent input	inpu	Or 11 kg or less of	
tonnes/y)	Or 7 kg or less of	Or 9 kg or less of	VOC / m^3	
	VOC / m^3	VOC / m ³		

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;

(b) Organic HAPs from the Synthetic Organic Chemical Manufacturing Industry: Process Vents, Storage Vessels, Transfer Operations, and Wastewater – 40 C.F.R. Part 63, Subpart G;

- (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;

(bb) Oil-Water Separators and Organic-Water Separators – 40 C.F.R. Part 63, Subpart VV;

(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 ;

- (nn) Wool fiberglass manufacturing 40 C.F.R. Part 63, Subpart NNN;
- (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 Coatings – 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;

(000) 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 EEEEE;

(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 MMMMM;

(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 WWWW;

(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 NNNNN;

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

(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 CCCCCCC.

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:

	Suggested ELV for dust [mg/Nm ³]			
	Option $1^{1/}$ Option $2^{1/}$ Optio			
Sulphate process, total emission	12	20	50	
Chloride process, total emission	20	35	50	

Table 12. Suggested options for limit values for dust emissions released from titanium dioxide production

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. (O_2 reference content: 13%).

Dust concentration (mg/Nm ³)	Option 1	Option 2	Option 3
Open / closed fireplaces	40	75	110
Wood stoves	40	75	110
Log wood boilers (with heat storage tank)	20	40	110
Pellet stoves and boilers	20	40	110
Automatic combustion plants	20	50	110

(b) Emissions from existing residential combustion stoves and boilers can be reduced by the following primary measures:⁴

- (i) By public information and awareness-raising programmes regarding:
 - a. The proper operation of stoves and boilers;
 - b. The use of untreated wood only;

⁴ 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_2 reference content: wood, other solid biomass and peat: 13%; Coal, lignite and other fossil solid fuels: 6%)

Dust concentration (mg/NmP ³)		Option 1	Option 2	Option 3
Solid fuels	New installations	30	50	150
[50][70][100]–500 kWth	-500 Existing installations	100	150	150
Solid fuels	New installations	20	50	150
500 kWth-1 MWth Existing installatio	Existing installations	30	150	150

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_2 reference content: Wood, other solid biomass and peat: 11%; Coal, lignite and other fossil solid fuels: 6%; Liquid fuels, including liquid biofuels: 3%)

Dust concentration (mg/Nm ³)		Option 1	Option 2	Option 3
Solid fuels	New installations	New installations 10		150
> 1–5 MWth	Existing installations	20	50	150
Solid fuels	New installations	10	20	50
> 5–50 MW	Existing installations	20	30	50
Liquid fuels New	New installations	10	20	150
> 1–5 MW	Existing installations	20	50	150
Liquid fuels	New installations	10	20	50
> 5–50 MW	Existing installations	20	30	50

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;

(1) 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 IIII;

(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;
- (l) Secondary aluminum 40 C.F.R. Part 63, Subpart RRR;
- (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 AAAAAA;

(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 YYYYY;

(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 EEEEEE;

(cc) Secondary Copper Smelting Area Sources – 40 C.F.R. Part 63, Subpart FFFFFF;

(dd) Primary Nonferrous Metals Area Sources: Zinc, Cadmium, and Beryllium – 40 C.F.R. Part 63, Subpart GGGGGG;

(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 TTTTT;

(hh) Plating and Polishing Operations (Area sources) – 40 C.F.R. Part 63, Subpart WWWWW;

(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 AAAAAA;

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

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

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:

Product Subcategory	Туре	Phase I (g/l)*	Phase II (g/l)*
Interior matt wall and ceilings	Water-borne coatings (WB)	75	30
$(Gloss \le 25@60^\circ)$	Solvent-borne coatings (SB)	400	30
Interior glossy walls and ceilings	WB	150	100
(Gloss > 25@60°)	SB	400	100
Exterior walls of mineral	WB	75	40
substrate	SB	450	430
Interior/exterior trim and cladding	WB	150	130
paints for wood and metal	SB	400	300

Table 1. Suggested maximum VOC content for paints and varnishes

Interior/exterior trim varnishes	WB	150	130
woodstains	SB	500	400
Interior and exterior minimal	WB	150	130
build woodstains	SB	700	700
Drimora	WB	50	30
r miicis	SB	450	350
Rinding primers	WB	50	30
Dinging primers	SB	750	750
One neek performance costings	WB	140	140
One pack performance coatings	SB	600	500
2 pack reactive performance	WB	140	140
coatings for specific end use	SB	550	500
Multipolourad postings	WB	150	100
Multicoloured coallings	SB	400	100

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 lightduty 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;

(l) General compliance provisions for non-road programs – 40 C.F.R Part 1068.