



Expert Working Group on the review of Annexes**Fourth meeting**

Geneva (online), 1–3 February 2021*

Report of the fourth meeting of the Expert Working Group on the review of Annexes (supplementary sessions, 1–3 February 2021)¹

1. As referred to in document UNEP/CHW/RA_EWG.4/3 on the report of the fourth meeting of the Expert Working Group on the review of Annexes (Geneva, online, 5–9 October 2020), the Expert Working Group on the review of Annexes to the Basel Convention (hereinafter “EWG”) suspended its meeting at the end of its 5–9 October 2020 sessions and entrusted the co-chairs to make a proposal to the EWG on when to resume its fourth meeting, on the scope of the discussions to be held then and, possibly, during supplementary sessions convened prior to the fifteenth meeting of the Conference of the Parties so as to enable the group to also make progress on the review of Annexes I and III. The EWG also entrusted the co-chairs to make a proposal for deadlines to invite further comments from the group on Annexes I and III.

2. Through an email correspondence procedure subsequent to the suspension of the fourth meeting, the EWG elected, on 9 November 2020, Ms. Mari-Liis Ummik (Estonia) as co-chair in replacement of Ms. Magda Gosk (Poland). In addition, the EWG agreed on 30 November 2020 to the co-chairs’ proposal to hold supplementary online sessions from 1 to 3 February 2021 with the following scope:

(a) Exchange views on the proposed amendments, expected to be transmitted to the Secretariat by 4 December 2020, from the European Union on Annex IV, and from Switzerland and Ghana on the e-waste entries;

(b) Review a selection of issues in the recommendations and findings regarding the review of Annex IV and the e-waste entries where progress could be made, in particular on issues that individual members needed more time to consult on following the October sessions. This includes: references to pyrolysis/gasification, the reference to “reducing energy requirements” in R1; which operations not currently captured by existing operations would fall under “catch all” operations; the reference to “non-recovery” operations as opposed to “final disposal” operations; the deletion of the reference to “pumpable discards” in D3; and the deletion of the status quo for operation D11. In addition, the co-chairs advised further discussions on the use of certain terminologies, namely “reclamation”, “recovery” and “recycling” as well as terminologies used in relation to “land treatment” in operation D2 and D10;

(c) Complete the consideration of the recommendations and findings on the review of Annex IV (see sections I to III and appendix I, paragraphs 1 to 6, of the annex I to document UNEP/CHW/RA_EWG.4/2/Add.1).

* Sessions of the fourth meeting also took place online on 5–9 October 2020. Supplementary sessions may take place as needed.

¹ This document has not been formally edited.

3. The EWG also agreed that additional supplementary sessions would take place prior to the fifteenth meeting of the Conference of the Parties, tentatively in April 2021, with a focus on the review of Annexes I and III, on dates to be decided during the 1–3 February 2021 sessions. Finally, the EWG agreed that in order to assist with the discussions on the review of Annexes I and III, additional comments from the expert working group were called by 26 February 2021 on : the general issues and the detailed proposals on the review of Annex I set out in the annex to document UNEP/CHW/RA_EWG.3/6; the six general issues and the detailed proposals on the review of Annex III set out in the annex to document UNEP/CHW/RA_EWG.3/7; whether any additional constituents or characteristics in relation to plastic waste should be added to Annex I or III; and the thought starter prepared by Canada on the review of Annex III.

4. The present addendum complements the report of the fourth meeting of the EWG (5–9 October 2020 sessions) with respect to the EWG’s consideration of agenda item 3 on review of Annex IV and of entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention, and of agenda item 5 on way forward.

5. The following additional members, who had not attended the 5–9 October 2020 sessions, attended the meeting:

Eastern Europe States

Ms. Maja Colovic Daul (Bosnia and Herzegovina)

Latin American and Caribbean States

Mr. Gilberto Werneck De Capistrano Filho

6. The revised list of participants to the fourth meeting of the EWG is set out in document UNEP/CHW/RA_EWG.4/INF/8/Rev.1.

I. Organizational matters

7. Co-chair Mr. Joost Meijer (Chile) declared the fourth meeting of the EWG resumed, noting that, due to the ongoing COVID-19 extraordinary circumstances, the EWG would continue its meeting through online means. He expressed his renewed appreciation for the great flexibility shown by members and observers to meet online despite the differences in time zones and possible connectivity issues, and acknowledged the governments of Germany, Norway and Switzerland for their financial support. Co-chair Ummik expressed appreciation for the trust placed in her.

8. The EWG considered the tentative schedule of the sessions proposed in document UNEP/CHW/RA_EWG.4/INF/10 and agreed to proceed along the lines proposed therein.

II. Review of Annex IV and of entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention

A. Amendment proposals by the European Union and by Ghana and Switzerland

9. Co-chair Meijer invited the representatives of the European Union and of Switzerland to introduce their respective amendments proposals for consideration by the Conference of the Parties at its fifteenth meeting, as set out in documents UNEP/CHW/RA_EWG.4/INF/11 and UNEP/CHW/RA_EWG.4/INF/12. In his presentation, the representative of Switzerland used a power-point which is available as a background material on the website of the meeting².

10. Following the presentations, the EWG engaged in a question and answer session. Regarding the proposals by the European Union, several members questioned whether the proposed new operation R20: Preparing for reuse (e.g., checking, cleaning, repair, refurbishment), was in line with the technical guidelines on transboundary movements of electrical and electronic waste and used electrical and electronic equipment, in particular regarding the distinction between waste and non-waste under the Basel Convention. In addition, bearing in mind that the disposal operations listed in Annex IV of the Convention were central to define whether a substance or object was a waste pursuant to the Convention, they also sought clarification as to whether it was the intention that any substance or object prepared for reuse would fit the waste definition. Several members expressed concern with the

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<http://www.basel.int/Implementation/LegalMatters/LegalClarity/Meetings/4rdRAEWGmtg/tabid/8522/Default.aspx>.

proposed catch-all operations, with one member saying it would lead to implementation difficulties. One member welcomed the proposed new operation on preparing for reuse. Another member expressed concerns with several elements of the proposal, including the proposal to merge existing operations, while a further member said he looked forward to discussing the proposal.

11. In response, the representative of the European Union said he did not see any conflict between the proposed new operation R20 and the aforementioned technical guidelines. He explained that repair and refurbishment could take place on waste and non-waste, and that only waste prepared for reuse would fall within the scope of the new operation R20. This understanding was in line with proposed introductory text in Annex IV which provided that a recovery operation was an operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. He emphasized that the proposed operation was important from a circular economy perspective. Another member speaking on behalf of the European Union and its Member States said that the issues raised in relation to the new proposed operation R20 were not specific to that operation, and that for example, as already identified in the glossary of terms³, in the case of operation R1: Use as a fuel (other than in direct incineration) or other means to generate energy, both waste - such as waste oil, and non-waste - such as coal, could be used as a fuel in a cement kiln.

12. Co-chair Ummik invited participants to engage in a question and answer session on the amendment proposal by Ghana and Switzerland. One member also speaking on behalf of other members said he would welcome additional data on the amounts of hazardous e-waste and of non-hazardous e-waste moved across borders and on the availability of adequate facilities for the environmentally sound management of e-waste in developing countries. He questioned whether the related proposal to have a list of Parties wishing to apply the prior informed consent procedure to used electrical and electronic equipment was in line with the Basel Convention, since the Convention only applied to transboundary movements of wastes. He added that his country and other Parties would provide additional comments prior to the fifteenth meeting of the Conference of the Parties. Another member sought additional information on the environmental benefits of the proposal for the new entry Y49, noting that the Ban Amendment did not apply to wastes listed in Annex II to the Convention. A further member asked whether the proponents expected the amendment to be adopted during the fifteenth meeting of the Conference of the Parties and whether they had envisioned a transition period prior to its entry into force. One member questioned why the proponents had not proposed to amend Annex I instead of Annexes VIII and IX. Another member expressed doubts that the proposed new entry Y49 would contribute to preventing illegal traffic, noting that the waste covered by the new entry did not currently fall within the scope of the Basel Convention. Several observers also commented on the proposal. Some expressed support, with one observer noting it would be helpful to Parties not wishing to receive electrical and electronic equipment going for repair, and another noting that it would promote recycling in the country generating the e-waste. Other observers expressed concern, with one saying that the proposal may render transboundary movements more difficult for Parties that lacked the capacity to dispose of e-waste in an environmentally sound manner, and another observer saying that, while acknowledging that the proposal did not specifically address this point, her greatest concern was about its impact on transboundary movements of used electrical and electronic equipment going for reuse.

13. In response, the representative of Switzerland said the proponents had, at this time, left open the question of a possible transition period between the adoption of the amendments and their coming into effect. On the need for more data, he acknowledged that it was very difficult to get data on transboundary movements of e-waste, especially on the basis of the national reports transmitted by Parties. He however questioned the need to gather more specific data given that only a fraction of e-waste was documented to be disposed of in an environmentally sound manner. Regarding the proposed voluntary prior informed consent procedure for used electrical and electronic equipment going for repair, he agreed that the Basel Convention only applied to waste. He clarified that the proposed procedure could be a national requirement and said that whether its impact at the international level would be legal or political in nature could be discussed. Regarding the link between the proposed entry Y49 and the Ban Amendment, he confirmed that the former did not fall within the scope of the latter, but that other legal requirements, such as under the Bamako Convention on the Ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, could be relevant. In relation to the question about amending

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<http://www.basel.int/Implementation/LegalMatters/LegalClarity/Glossaryofterms/SmallIntersessionalWorkingGroup/tabid/3622/Default.aspx>.

Annex I rather than Annexes VIII and IX, he said that Annex I was currently under review and that it was possible that, in the future, Annex I would be amended to only include constituents and that waste streams would only be listed in Annexes VIII and IX. Regarding the issue of used electrical and electronic equipment going for repair or refurbishment, he clarified that the amendment proposal did not address the issue of the distinction between waste and non-waste, but that the related proposal to have a list of Parties wishing to apply the prior informed consent procedure to used electrical and electronic equipment could offer a way forward.

B. General issues on Annex IV A and IV B

14. Co-chair Meijer drew the attention of participants to eight issues identified by the co-chairs in the recommendations and findings regarding the review of Annex IV to the Convention and the e-waste entries where progress could be made⁴. He reminded participants that the co-chairs had invited views thereon in advance of the sessions. He invited participants to exchange views on the eight issues and explained that any progress would be subsequently reflected in the EWG recommendations and findings.

1. Terminologies “regeneration”, “reclamation”, “recovery” and “recycling”

15. On the first issue about some terminologies used in Annex IV, namely “regeneration”, “reclamation”, “recovery” and “recycling”, co-chair Meijer reminded participants that “recycling” and “recovery” are terms used in Article 4 of the Convention and defined in the glossary of terms⁵. He added that all four terms were used in section B of Annex IV.

16. Regarding “reclamation”, several members supported deletion of the term, with a number of members explaining that their countries did not use this term, and another member saying that the term was not intended to cover anything that was not already covered by “recycling”. Other members disagreed, saying that reclamation was not equivalent to recycling as it entailed recovering a product in its original form. Regarding “regeneration”, several members noted that the term had a specific technical meaning, for instance in relation to the regeneration of acids and bases, and that they used it at the national level. They supported retaining the term and that the glossary of terms be updated to include a definition thereof. One member said his country and other Parties noted that the term “regeneration” was used in waste-stream specific operations which they were proposing to merge. Regarding “recycling”, he added that the term could perhaps be kept in operations, but not in the general introduction to section B of Annex IV since recycling was a recovery operation.

2. Use of the terms “land treatment”

17. Co-chair Meijer reminded participants that the terms “land treatment” are only used in Annex IV operations D2: Land treatment, (e.g., biodegradation of liquid or sludgy discards in soils, etc.) and R10: Land treatment resulting in benefit to agriculture or ecological improvement. He explained that the description of both operations refers to the deposition of waste on land: in the first case, the terms are used in relation to the effect on the waste (biodegradation), and in the second case, the terms are used in relation to the effect on the land (benefit). Having brought the participants attention to the options recommended by the EWG for both operations, he asked whether there were further views on the meaning of the terms “land treatment” and on retaining the terms “land farming” as in options 1 and 2 of operation D2.

18. One member said his country and other Parties found the term “land farming” unclear and confusing. He added that operation D2 was about the treatment of land in situ, while another member said that operation D2 was about waste being brought to the land for treatment.

3. Use of the term “non-recovery operations” in replacement of “final disposal” operations

19. Co-chair Meijer reminded participants that “final disposal” is used in operation B1110 on electrical and electronic assemblies, whilst “non-recovery” is not mentioned in the Convention. He asked whether there were further views on the proposal to replace the term “final disposal” operations with “non-recovery” operations.

⁴ The co-chairs invitation for comments on eight issues as well as comments received thereon are available as background material on the website of the meeting:
<http://www.basel.int/Implementation/LegalMatters/LegalClarity/Meetings/4rdRAEWGmtg/tabid/8522/Default.aspx>.

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<http://www.basel.int/Implementation/LegalMatters/LegalClarity/Glossaryofterms/SmallIntersessionalWorkingGroup/tabid/3622/Default.aspx>.

20. A number of members supported replacing “final disposal” with “non-recovery” operations, with one member explaining that not all operations listed in section A of Annex IV, for instance the interim operations, were final. One member did not support the proposed change in terminology.

4. Terminologies in operation D10: Incineration on land

21. Co-chair Meijer reminded participants that the option for D10 currently before the EWG was: [Controlled] Thermal treatment [on land] [other than covered by R1 in Section B] [other than covered by [D11 and] D18 [and R1] [and R15]](e.g. incineration [, co-incineration, pyrolysis, [gasification] thermal desorption, [sintering] and vitrification)). He said that, in reviewing this operation, it was clear that all methods required heat, hence thermal treatment might be a correct term to encompass them all. However, some of these methods lead to new materials or heat, others not. He asked participants whether they had further views and information on “pyrolysis” and “gasification”. He also asked whether participants could provide examples of the purpose for which those thermal treatment methods are used and whether they fit in operation D10 or in another D operation or R operation.

22. In relation to pyrolysis and gasification, several members said further information was needed, for instance on which outputs were produced and in what quantities, before considering whether and how to include these examples in Annex IV. Some members provided examples of industries in their countries which undertook gasification and pyrolysis. One member said that if pyrolysis and gasification were listed in Annex IV, technical guidelines may be required, and another member said that even if these technologies were not included in Annex IV, technical guidelines could further elaborate on them. Views were exchanged on their energy efficiency, which would be key to determine whether they would fall under operation D10 or under operation R1: Use as a fuel (other than in direct incineration) or other means to generate energy. One member indicated that pyrolysis and gasification may in certain cases also be an interim operation.

5. The reference to “reducing energy requirements” in operation R1: Use as a fuel (other than in direct incineration) or other means to generate energy.

23. Co-chair Meijer reminded participants of the two options currently before the EWG regarding operation R1, namely:

1. Use as a fuel or other means to generate energy [or to reduce energy requirements]
2. Thermal treatment with the principal result to generate energy [except where covered by R15] [or to reduce energy requirements] (e.g. incineration [with energy recovery])

24. He noted that the issue of referencing “reducing energy requirements” was specific to one operation and the EWG agreed to therefore discuss it when further considering the EWG recommendations.

6. The proposals for “catch all” operations

25. Co-chair Meijer referred to the proposals to include “catch all” operations in sections A and B of Annex IV, as set out in the new proposed operations D20, D21, R17 and R12quater under R12 option 2. He asked whether there were further views on which operations not currently captured by existing operations would fall under “catch all” operations. In response, one member said he and other Parties had identified several examples of operations that occur in practice but are not yet listed in Annex IV or proposed amendments thereto, for instance: release into sewage - which may not be covered by D6; release to space; thermal treatment prior to submission to any of the operations in section A; underground stowage - where waste is serving a useful purpose by replacing other materials; utilization as building material for road construction or for engineered landfills - where waste is serving a useful purpose by replacing other materials; utilization for purposes of reclamation in excavated areas or for engineering purposes in landscaping - where waste is serving a useful purpose by replacing other materials; and thermal treatment prior to submission to any of the operations in section B.

7. Reference to “pumpable discards” in operation D3: Deep injection, (e.g., injection of pumpable discards into wells, salt domes of naturally occurring repositories, etc.)

26. Co-chair Meijer referred to the reference to “pumpable discards” in operation D3: Deep injection, (e.g., injection of pumpable discards into wells, salt domes of naturally occurring repositories, etc.). He reminded participants that during the 5–9 October 2020 sessions of the fourth meeting of the EWG, one member said she would consult during the intersessional period on the possible deletion of the status quo option for operation D3. He noted that the issue was specific to one operation and the EWG agreed to therefore discuss it when further considering the EWG recommendations.

8. Status quo for operation D11: Incineration at sea

27. Co-chair Meijer reminded participants that during the 5–9 October 2020 sessions of the fourth meeting of the EWG, one member said she would consult during the intersessional period on the possible deletion of the status quo option for operation D11: Incineration at sea. In response to his query, the member said she no longer supported the status quo.

C. Annex IV A and Annex IV B operations

28. Co-chair Ummik invited participants to turn their attention to the recommendations by the EWG for possible amendment proposals to Annex IV and to entries A1180 and B1110 in Annexes VIII and IX to the Convention, and findings on the consequential implications of the review of Annex IV to the Convention (status 9 October 2020) set out in annex I to document UNEP/CHW/RA_EWG.4/2/Add.1. She proposed to proceed with section I on general introduction for Annex IV, then section II on captions and introductory texts for sections A and B of Annex IV, then section III on options for possible amendment proposals to Section A of Annex IV, and finally section IV on options for possible amendment proposals to Section B of Annex IV. She said the objective was to lift brackets and reduce the number of options on the table wherever possible and invited participants to focus their interventions on new developments since the 5–9 October 2020 sessions of the fourth meeting of the EWG.

1. General introduction for Annex IV

29. Participants considered the general introduction for Annex IV. Co-chair Ummik noted from the discussion on the eight issues identified by the co-chairs that members had diverging views regarding the proposal to replace “final disposal” with “non-recovery” operations. She invited participants to focus on the other set of brackets in the general introduction, namely around the terms “and recycling”, and inquired as to whether any member supported retaining those terms. As no member supported the retention of those terms, the EWG agreed to their deletion.

2. Captions and introductory texts for sections A and B of Annex IV

30. Co-chair Ummik noted that the caption and introductory text for section A of Annex IV also reflected the proposal to replace “final disposal” with “non-recovery” operations. She therefore invited participants to focus on the other set of brackets, namely around the terms “or recycling”, and inquired as to whether any member supported retaining them. Two members supported the retention of those terms.

31. Regarding the caption and introductory text for section B of Annex IV, co-chair Ummik noted that both included references to “recycling”, as supported by some members.

3. Annex IV A operations

32. Co-chair Ummik invited participants to consider in turn all operations in section A of Annex IV. The paragraphs below focus on changes that were brought by the EWG to its recommended options for possible amendment proposals to those operations.

33. Regarding operation D3: Deep injection, (e.g., injection of pumpable discards into wells, salt domes of naturally occurring repositories, etc.), co-chair Ummik queried whether any member supported the status quo. As no member supported it, the EWG agreed to delete it from the options. In conclusion, two options were recommended for revision of operation D3:

1. *Delete and merge with D1*
2. Deep injection (e.g. injection into wells, salt domes of naturally occurring repositories)

34. Regarding operation D4: Surface impoundment, (e.g., placement of liquid or sludge discards into pits, ponds or lagoons, etc.), participants discussed the examples listed in the recommended option for revision of the operation. They agreed to delete the reference to storage, to add brackets around “ponds” and to adjust the ordering of the examples. In conclusion, one option is recommended for revision of operation D4:

1. Surface impoundment (e.g. placement of liquids or sludge into pits, [basins,] [ponds,] [or] tailing[s] dams [or lagoons]).

35. Regarding operation D5: Specially engineered landfill, (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.), one member said his Party and other countries supported the removal of brackets around the term “engineered” in option 1. In conclusion, two options were recommended for revision of operation D5:

1. Deposit in an [aboveground] engineered landfill isolated from the environment.
 2. Deposit in an engineered landfill isolated from the environment
36. Regarding operation D8: Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations in Section A, participants discussed the recommended option for revision of the operation with one member saying his country and other Parties proposed that the terms “[not specified elsewhere in section A,]” be replaced by the more precise “[other than covered by ...]”, while other members preferred retaining the original terms. In relation to the listed examples, one member said his country and other Parties proposed deleting the reference to activated sludge treatment, aerated lagoons and stabilisation ponds. In conclusion, the recommended option for revision of operation D8 reads:
1. Biological treatment [not specified elsewhere in section A,] [other than covered by ...] prior to submission to any of the operations in Section A [(e.g. aerobic or anaerobic processes [such as activated sludge treatment, aerated lagoons and stabilisation ponds])].
37. Regarding operation D9: Physico chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations in Section A, (e.g., evaporation, drying, calcination, neutralization, precipitation, etc.), participants discussed the recommended option 1 for revision of the operation with one member saying his country and other Parties proposed to lift the brackets around the term “chemical” before “precipitation” and to add brackets around “oxidation, reduction”. In conclusion, three options remain recommended for revision for operation D9, with revised option 1 reading:
1. [Manual treatment (e.g. separation),] Physical/mechanical treatment [other than covered by D13] (e.g. [separation, size reduction,] evaporation, drying, [autoclaving]), physical/chemical treatment (e.g. solvent extraction), chemical treatment (e.g. neutralization, chemical precipitation[, oxidation, reduction]) or immobilization (e.g. stabilization, solidification[, encapsulation]) [not specified elsewhere in section A] prior to submission to any of the operations in section A.
38. Regarding operation D10: Incineration on land, co-chair Ummik recalled the discussions held on the eight issues identified by the co-chairs, more specifically on the list of examples in the recommended option for revision of the operation. The EWG agreed to list all the examples other than incineration in one set of square brackets, and agreed to delete the reference to “controlled” thermal treatment. One member said his country and other Parties considered the operation as non-interim while other members said the operation could be interim. In conclusion, the recommended option for revision of operation D10 reads:
1. Thermal treatment [on land] [other than covered by R1 in Section B] [other than covered by [D11 and] D18 [and R1] [and R15]](e.g. incineration [, co-incineration, pyrolysis, gasification, thermal desorption, sintering and vitrification]).
39. Regarding operation D11: Incineration at sea, co-chair Ummik reminded participants that, during the discussions on the eight issues identified by the co-chairs, the members had agreed to the deletion of the status quo. In conclusion, two options were recommended for revision to operation D11:
1. Delete and merge with D10;
 2. Thermal treatment at sea (e.g. incineration [, pyrolysis and gasification]).
40. Regarding the new proposed operation D17: Treatment of waste by nanomaterials, members agreed to delete “of waste”. In conclusion, the new proposed operation D17 remains in brackets and reads: [Treatment by nanomaterials].
41. Regarding the new proposed operation D19: Sterilization or disinfection of infectious waste (e.g. autoclave, microwave-radio waves, physical sterilization, chemicals sterilization) prior to submission to any of the operations in section A, one member proposed the addition of “steam treatment” among the list of examples. Co-chair Ummik inquired about the possibility to delete the reference to “infectious waste” so as not to make the operation waste-stream specific. One member supported this approach while another preferred retaining the reference. In conclusion, the new proposed operation D19 remains in brackets and reads: [Sterilization or disinfection [of infectious waste] (e.g. autoclave, microwave-radio waves, physical sterilization, chemicals sterilization, steam) prior to submission to any of the operations in section A].

4. Annex IV B operations

42. Co-chair Ummik invited participants to consider in turn all operations in section B of Annex IV. The paragraphs below focus on changes that were brought by the EWG to its recommended options for possible amendment proposals to those operations.

43. Regarding operation R3: Recycling/reclamation of organic substances which are not used as solvents, one member said his country and other Parties preferred lifting the brackets around the example “chemical treatment” in option 1, while some observers noted the possible implications of this change on the plastic waste entries Y48 and B3011 which included references to operation R3 in their respective footnotes. In conclusion, two options are recommended for revision of operation R3:

0. Status quo

1. Recycling of organic substances (e.g. [regeneration,] physical/mechanical treatment, chemical treatment).

44. Regarding operation R7: Recovery of components used for pollution abatement, one member proposed, and the EWG agreed, to delete the reference to “recovery” in option 2. In conclusion, three options are recommended for revision of operation R7:

0. Status quo

1. *Delete R7 and merge with R3 option1, R4 option1 and R5 option1*

2. Recycling of components used for pollution control (e.g. recycling of activated carbon)

45. Regarding operation R12: Exchange of wastes for submission to any of the operations numbered R1-R11, the EWG agreed to mirror in the operation R12 in option 2 the changes made to the option 1 for revision to operation D8, namely to complement “[not specified elsewhere in Section B.]” with the alternative “[other than covered by ...]”.

46. Regarding the proposed new operation R15: Co-processing, one member proposed to add an example mirroring the examples listed in the options for revision of operation R1. In conclusion, the new proposed operation R15 remains in brackets and reads: [Co-processing (e.g. reducing energy requirements)].

D. General issues on Annex IV A and IV B and consequential implications

47. Co-chair Meijer invited the participants to consider the remaining parts of the recommendations by the expert working group on the review of Annexes for possible amendment proposals to Annex IV and to entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention, and findings of the EWG on the consequential implications of the review of Annex IV to the Convention set out in annex I to document UNEP/CHW/RA_EWG.4/2/Add.1, namely sections I, II and III of the introduction to the recommendations and paragraphs 1–6 of the recommended options for possible amendments to Annex IV, bearing in mind the suggestions by the European Union and its Member States as set out in annex II to document UNEP/CHW/RA_EWG.4/2/Add.1.

48. The EWG agreed to proceed on the basis of the suggestions by the European Union and its Members States as set out in annex II to document UNEP/CHW/RA_EWG.4/2/Add.1.

49. Regarding section I on possible amendment proposals to Annex IV of the Basel Convention, the EWG agreed to delete the quotation marks around “interim operations” in paragraph 1 (e) given that these terms are no longer used in the recommended options for revision of Annex IV. With respect to how to deal with the different views as to whether operations not identified as “prior to submission to any of the operations in section A or B” may also be interim operations, the EWG agreed that this matter should be further discussed. Participants also exchanged views on further work that may need to be undertaken as a result of the possible adoption of amendments to Annex IV, with a number of members questioning the proposal to mention the need to update the glossary of terms. In conclusion, the EWG agreed to add a recommendation whereby explanations or guidance should be developed to further clarify the content of the disposal operations in Annex IV. The EWG also agreed to include in the meeting report that such guidance could be provided for instance in the instructions for notification and movement documents, other documents and/or the glossary of terms.

50. Regarding section II on possible amendment proposals to entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention, the EWG agreed to delete the sentence referencing to appendix III to the recommendations in paragraph 4, given that the content of that appendix had been reflected by EWG during its 5–9 October 2020 sessions in its recommendations on the review of entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention set out in appendix II to the

recommendations. The EWG also requested the Secretariat to update the information in subparagraph 5 (e) and its footnote 1 on the adoption of Harmonized System codes for identifying electrical and electronic waste and scrap in the Harmonized System Nomenclature of the World Customs Organization. A member proposed to add a reference to the amendment proposal by Switzerland and Ghana to amend entries A1180, B1110 and to add a new entry Y49 in Annex II. A number of members said the amendment proposal was separate from the work of the EWG and should therefore not be mentioned in the EWG recommendations. Co-chair Meijer noted that the report of the sessions would mention that the amendment proposal by Switzerland and Ghana had been presented to the EWG who had had the opportunity to seek additional information and present views.

51. Regarding section III on findings of the expert working group on the consequential implications of the review of Annex IV to the Convention, participants discussed the consequential implications of amendments to Annex IV for the notification and movement documents, the instructions for completing these as well as for the national reporting format and the manual for completing it, and agreed that any changes to these documents should preferably be considered by the Conference of the Parties concurrently to any proposal to amend Annex IV to the Convention. Participants also exchanged views on possible additional consequential implications and how these differed from the need for further guidance identified in section II. One member explained that “consequential implications” were to be understood as implications that necessarily result from an amendment to Annex IV, while further work on developing or revising technical guidelines, guidance or explanations was something desirable to accompany an amendment to Annex IV. Another member expressed the view that updating technical guidelines in follow up to an amendment to Annex IV fell within the meaning of “consequential implications”. In conclusion, the EWG agreed that the review of Annex IV may have consequential implications on other documents such as technical guidelines and if appropriate the glossary of terms.

52. Regarding paragraphs 1–6 of the recommended options for possible amendments to Annex IV, the EWG agreed to several changes primarily of an editorial nature. With respect to paragraph 6 on developing rationales in relation to the recommendations, one member said such rationales were very important and that they should be developed in time for the fifteenth meeting of the Conference of the Parties.

53. The recommendations by the EWG for possible amendment proposals to Annex IV and to entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention, and findings of the EWG on the consequential implications of the review of Annex IV to the Convention (status 3 February 2021) are set out in the annex to the present report.

III. Way forward

54. Co-chair Ummik noted that the EWG had for now completed its work on the development of recommendations for possible revisions to Annex IV and the e-waste entries A1180 and B1110, and that the EWG could turn its attention to the review of Annexes I and III. She reminded participants that, following its 1–3 February 2021 sessions, the EWG had planned to meet in April 2021 for further sessions focused on the review of Annexes I and III and that, with this in mind, comments had been invited by 26 February 2021 on several issues of relevance to this review. To help the EWG agree on a way forward with its work, she invited the Secretariat to provide an update on the preparations for the fifteenth meeting of the Conference of the Parties, including the outcome of the joint bureaux meeting held on 27–29 January 2021.

55. The Secretariat representative explained that the members of the three bureaux had agreed that the 2021 meetings of the conference of the Parties to the Basel, Rotterdam and Stockholm conventions would not be held as initially planned on 19–30 July 2021. She said that four alternative options had been discussed and that consultations were ongoing within regions on an option which envisioned an online segment during the period 19–30 July 2021 focused on prioritized agenda items followed by a face-to-face segment in 2022. She added that the bureaux were set to resume their meeting on 26 February 2021 at what time a decision would be made on the format and dates of the meetings of the conferences of the Parties.

56. Participants exchanged views on the need for additional work in relation to the review of Annex IV and the e-waste entries, more specifically on the possible development of rationales for the recommended options for possible amendments to Annex IV, including whether to develop these by the time of the fifteenth meeting of the Conference of the Parties and how to proceed concretely. A number of members said a document should be prepared, with one saying that the rationales should be comprehensive and reflect a synthesis of the work of the EWG over the years. One member suggested that the Secretariat prepare a proposal on how to develop rationales, while another proposed that the

task be entrusted to the co-chairs. A further member queried how to develop rationales in instances where several options were recommended by the EWG, and said more thinking was needed on the level of detail that could be provided in rationales. He asked whether the members supporting the development of rationales or the Secretariat could prepare first drafts for the consideration of the EWG. He also noted that rationales were already available in particular in the reports of the meetings of the EWG and in the explanatory note accompanying the amendment proposal for Annex IV put forward by the European Union.

57. Participants also discussed when and how the amendment proposals put forward by the European Union and by Switzerland and Ghana would be further discussed, with several members noting that this was outside the mandate of the EWG and up to the Conference of the Parties to decide.

58. In conclusion, Co-chair Ummik reminded participants of the 26 February 2021 deadline to provide views on: the general issues and detailed proposals on the review of Annex I set out in the annex to document UNEP/CHW/RA_EWG.3/6; the six general issues and the detailed proposals on the review of Annex III set out in the annex to document UNEP/CHW/RA_EWG.3/7; on whether any additional constituents or characteristics in relation to plastic waste should be added to Annex I or III; and on the thought starter prepared by Canada on the review of Annex III.

59. She also noted that the EWG had confirmed its previous agreement for the next sessions of its fourth meeting to focus on the review of Annexes I and III and had entrusted the co-chairs with making a proposal for convening such sessions in light of the agreement to be reached by the bureaux, during their 26 February 2021 joint meeting, on the organizations of the 2021 meetings of the conferences of the Parties.

60. In addition, the EWG entrusted the co-chairs with making a proposal on the way forward with the EWG work on the review of Annex IV and of entries A1180 and B1110, in line with the EWG mandate, and, towards this end, agreed to invite views from members by 26 February 2021 on such further work, notably towards the development of rationales for the recommended options for possible amendment proposals to Annex IV and to entries A1180 and B1110.

61. The meeting was suspended by co-chair Ummik at 7 p.m. on Wednesday, 3 February 2021.

Annex

Recommendations by the expert working group on the review of Annexes for possible amendment proposals to Annex IV and to entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention, and findings of the expert working group on the consequential implications of the review of Annex IV to the Convention (status 3 February 2021)

I. Possible amendment proposals to Annex IV of the Basel Convention

1. The expert working group on the review of Annexes recommends that possible amendment proposals to Annex IV should:

- (a) Be based on one or more of the objectives of the review of the annex, as set out in the annex to decision BC-13/2, which are to:
 - (i) Improve/update the description of disposal operations in Annex IV;
 - (ii) Improve environmental controls by including additional disposal operations that occur in practice or could occur in practice in Annex IV;
 - (iii) Clarify the descriptions in Annex IV and in Annex IX (B1110) to address conflicts or overlaps;
- (b) Add a general introduction for Annex IV;
- (c) Maintain the two sections of Annex IV (section A and section B), with captions and introductions for each section;
- (d) Include new operations;
- (e) Clearly identify disposal operations that occur prior to submission to any of the operations in section A or B, respectively (interim operations);
- (f) Take into account that Annex IV relates to defining wastes and that, accordingly, it encompasses:
 - (i) Both environmentally sound and non-environmentally sound operations;
 - (ii) Operations irrespective of whether they are legal or illegal;
 - (iii) Operations regardless of whether they do not, or only rarely, occur in practice;
 - (iv) Operations regardless of whether they are relevant or not in the context of a transboundary movement;
- (g) Ensure consistency in the way operations are described in both sections of the Annex.

2. Members of the expert working group expressed different views as to whether operations not identified as “prior to submission to any of the operations in section A or B” may also be interim operations, and agreed that this matter should be further discussed.

3. The expert working group on the review of Annexes also recommends that further work on the review of Annex IV be based on the recommended options for possible amendment proposals to Annex IV set out in appendix I to the present recommendations.

3bis. In addition, the expert working group on the review of Annexes recommends that explanations or guidance should be developed to further clarify the content of the disposal operations in Annex IV.

II. Possible amendment proposals to entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention

4. The expert working group on the review of Annexes recommends that possible amendment proposals to entries A1180 and B1110 in Annexes VIII and IX to the Convention should be based on the text set out in appendix II to the present recommendations.

5. The expert group provides the following explanations in relation to appendix II:

- (a) The work on entry A1180 was conceptually based on the text of entry A3210, whereby text on components was added taking into account the current text of entry A1180;
- (b) The work was based on ensuring consistency between the wording of entries A1180 and B1110, which inter alia resulted in the deletion of the first and third bullets of entry B1110;
- (c) In relation to components, two approaches are reflected in square brackets;
- (d) Text of examples appears in square brackets as further work on them was deemed necessary;
- (e) For some terms, e.g. assemblies, further discussion was considered necessary, also in light of the provisional adoption of Harmonized System codes for identifying electrical and electronic waste and scrap in the Harmonized System Nomenclature of the World Customs Organization.¹

III. Findings of the expert working group on the consequential implications of the review of Annex IV to the Convention

- 6. The EWG initiated the review of the possible consequential implications of the review of Annex IV for other Annexes to the Convention and for relevant decisions of the Conference of the Parties, inter alia, for the notification and movement documents and the reporting format.
- 7. In relation to the possible consequential implications of the review of Annex IV for other Annexes, the EWG agreed that the review of Annex IV had consequential implications for entry Y48 in Annex II as well as for entries B1110 and B3011 in Annex IX.
- 8. The EWG also agreed that the review of Annex IV had consequential implications for the notification and movement documents, the instructions for completing these² as well as for the national reporting format³ and the manual for completing it,⁴ and that any changes to these documents should preferably be considered by the Conference of the Parties concurrently to any proposal to amend Annex IV to the Convention. The EWG further agreed that the review of Annex IV may have consequential implications on other documents such as technical guidelines and if appropriate the glossary of terms.
- 9. In addition, the EWG agreed that the notification and movement documents, as well as the instructions for completing these, should reflect the outcome of the discussions on the issue referred to in paragraph 2 of section I above.
- 10. It was furthermore agreed to:
 - (a) Reflect in the notification document that, in case an operation that occurs prior to submission to any of the operations in the respective section (interim operation) is provided in block 11, corresponding information is to be provided on any subsequent interim facilities and the related operations and on the subsequent non-interim facilities and the related operations;
 - (b) Reflect the following in the instructions for completing the notification and movements documents:
 - (i) Indicate that both sections A and B list disposal operations that occur prior to submission to any of the operations in section A or B (interim operations);
 - (ii) Indicate in the instructions on block 11 that, in case an interim operation is provided in block 11, corresponding information is to be provided on the subsequent non-interim facilities and the related operations, and on any other subsequent interim facilities and the related operations, if applicable.

¹ Amendments to the HS pertaining to electrical and electronic waste and scrap as agreed by the Harmonized System Committee at its 63rd session are set out in appendix I of document UNEP/CHW.14/INF/14. The amendments were adopted by the WCO Council in June 2019 and have been accepted by Contracting Parties. They will enter into force on 1 January 2022.

² <http://www.basel.int/Procedures/NotificationMovementDocuments/tabid/1327/Default.aspx>.

³ <http://www.basel.int/Countries/NationalReporting/Guidance/tabid/1498/Default.aspx>.

⁴ *Idem*.

Appendix I to the recommendations by the expert working group

Recommended options for possible amendments to Annex IV

1. The following are recommended options prepared by the expert working group on the review of the Annexes during its fourth meeting (5–9 October 2020, 1–3 February 2021) for possible amendments to Annex IV. The options cover a general introduction, both the captions and introductory texts for Annex IV A and IV B, as well as the R and D operations listed in both sections of Annex IV.
2. Each R and D operation set out in Annex IV has been reviewed by the expert working group. The recommended options do not necessarily reflect the views of all the members.
3. Each option that is recommended was supported by at least one member of the expert working group. The status quo, namely the current drafting of an operation, was supported by at least one member if it is reflected as an option; when the status quo is not reflected as an option, it is because no member supported it. The options either set out modifications to existing operations, a proposed action (e.g. delete, split, merge operations) or the addition of new operations (D16 to D22, and R12quater under R12 option 2 and R14 to R17) which are listed after operations currently listed in Annex IV for ease of reference. The expert working group agreed that the ordering of the operations could be further considered.
4. The expert working group agreed that, in those cases where the status quo is retained as an option, references to “etc.” should be deleted. The group also agreed to not use “etc.” in any of the options.
5. More information on the fourth meeting of the expert working group on the review of the Annexes, including meeting documents, is available at the Basel Convention website¹.
6. The expert working group agreed that developing rationales in relation to the recommendations would be useful and could be further considered by the group. In the meantime, rationales for options put forward by members and observers can be found in the documents for the four meetings of the group and in particular the reports of the meetings as well as submissions from Parties and others contained or compiled in information documents.²

¹ See

<http://www.basel.int/Implementation/LegalMatters/LegalClarity/Meetings/4rdRAEWGmtg/tabid/8522/Default.aspx>.

² For the first meeting of the EWG, see the working documents, meeting report and information documents UNEP/CHW/RA_EWG.1/INF/2, UNEP/CHW/RA_EWG.1/INF/3 and UNEP/CHW/RA_EWG.1/INF/4 available at:

<http://www.basel.int/Implementation/LegalMatters/LegalClarity/Meetings/1stRAEWGmtg/tabid/6237/Default.aspx>.

For the second meeting of the EWG, see the working documents, meeting report and information documents UNEP/CHW/RA_EWG.2/INF/3, UNEP/CHW/RA_EWG.2/INF/5/rev.1 and UNEP/CHW/RA_EWG.2/INF/6/Rev.1 available at:

<http://www.basel.int/Implementation/LegalMatters/LegalClarity/Meetings/2ndRAEWGmtg/tabid/7690/Default.aspx>.

For the third meeting of the EWG, see the working documents, meeting report and information documents UNEP/CHW/RA_EWG.3/INF/2, UNEP/CHW/RA_EWG.3/INF/3, UNEP/CHW/RA_EWG.3/INF/4 available at: <http://www.basel.int/Implementation/LegalMatters/LegalClarity/Meetings/3rdRAEWGmtg/tabid/8108/Default.aspx>.

For the fourth meeting, see the working documents, meeting report and information documents UNEP/CHW/RA_EWG.4/INF/3, UNEP/CHW/RA_EWG.4/INF/4/rev.2, UNEP/CHW/RA_EWG.4/INF/6/rev.1 and UNEP/CHW/RA_EWG.4/INF/11 available at <http://www.basel.int/Implementation/LegalMatters/LegalClarity/Meetings/4rdRAEWGmtg/tabid/8522/Default.aspx>.

I. General introduction for Annex IV

Annex IV Disposal operations

There are two categories of disposal operations, namely [final disposal] [non-recovery] operations and recovery operations. Section A encompasses [final disposal] [non-recovery] operations and Section B recovery operations.

This Annex also covers in both sections A and B disposal operations that occur prior to submission to any of the operations in the respective section.¹

This Annex covers all disposal operations, regardless of their legal status and regardless of whether they are considered to be environmentally sound.

II. Captions and introductory texts for sections A and B of Annex IV

A. [FINAL DISPOSAL] [NON RECOVERY] OPERATIONS

A [final disposal] [non-recovery] operation is an operation which is not a recovery [or recycling] operation even where the operation has as a secondary consequence the reclamation of substances or energy.

B. RECOVERY [AND RECYCLING] OPERATIONS

A recovery [or recycling] operation is an operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.

III. Options for possible amendment proposals to Section A of Annex IV

D1 Deposit into or onto land, (e.g., landfill, etc.)

1. Deposit into or onto land, (e.g. non engineered landfill, dumpsites) other than by any operations D2 to D5, D12 or D12bis
2. *Split in 2:*
D1: Deposit onto land other than covered by D4 and D5 (e.g. permanent aboveground storage)
D1bis: Deposit into land other than covered by D12 (e.g. injection into wells, salt domes of naturally occurring repositories)

D2 Land treatment, (e.g., biodegradation of liquid or sludgy discards in soils, etc.)

0. Status quo
1. [Treatment of land [in situ] [or through interaction with land] [other than covered by R10 in Section B] (e.g. [biodegradation or biological or chemical treatment], [landfarming])]
2. [Treatment through interaction with land [other than covered by R10 in Section B] (e.g. biodegradation of liquids or sludges in soil [, or landfarming])]

D3 Deep injection, (e.g., injection of pumpable discards into wells, salt domes of naturally occurring repositories, etc.)

1. *Delete and merge with D1*
2. Deep injection (e.g. injection into wells, salt domes of naturally occurring repositories)

¹ See operations D8, D9, D13, D14, D15, D19 and D21 in section A, and operations R12, R13 and R16 in Section B.

D4 Surface impoundment, (e.g., placement of liquid or sludge discards into pits, ponds or lagoons, etc.)

1. Surface impoundment (e.g. placement of liquids or sludge into pits, [basins,] [ponds,] [or] tailing[s] dams [or lagoons])

D5 Specially engineered landfill, (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)

1. Deposit in an [aboveground] engineered landfill isolated from the environment
2. Deposit in an engineered landfill isolated from the environment

D6 Release into a water body except seas/oceans

0. Status quo

D7 Release into seas/oceans including sea-bed insertion

0. Status quo

D8 Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations in Section A

1. Biological treatment [not specified elsewhere in section A,] [other than covered by ...,] prior to submission to any of the operations in Section A [(e.g. aerobic or anaerobic processes [such as activated sludge treatment, aerated lagoons and stabilisation ponds])]

D9 Physico chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations in Section A, (e.g., evaporation, drying, calcination, neutralization, precipitation, etc.)

1. [Manual treatment (e.g. separation),] Physical/mechanical treatment [other than covered by D13] (e.g. [separation, size reduction,]evaporation, drying, [autoclaving]), physical/chemical treatment (e.g. solvent extraction), chemical treatment (e.g. neutralization, chemical precipitation[, oxidation, reduction]) or immobilization (e.g. stabilization, solidification[, encapsulation]) [not specified elsewhere in section A] prior to submission to any of the operations in section A.
2. *Split in 3*
 [D9 Manual or mechanical [operations] [treatment] other than covered by D13 (e.g. dismantling, sorting, crushing, compacting, shredding, separating) prior to submission to any of the operations in section A.
 D9bis Physical treatment (e.g., evaporation, filtration, encapsulation) or mechanical treatment (e.g., crushing) not specified elsewhere in section A, prior to submission to any of the operations in Section A.
 D9ter Chemical treatment (e.g., neutralization, precipitation, immobilization) not specified elsewhere in section A, prior to submission to any of the operations in section A].
3. *Split in 5:*
 D9 [Manual treatment (e.g. separation), prior to submission to any of the operations in Section A.
 D9bis Physical/mechanical treatment [other than covered by D13] (e.g. size reduction, physical sorting, air classification, flotation, evaporation, distillation, soil flushing, [microwave irradiation, sterilization], evaporation, drying, [autoclaving]), [not specified elsewhere in section A], prior to submission to any of the operations in section A.
 D9ter Physical/chemical treatment (e.g. solvent extraction, desorption, leaching, ion exchange) [not specified elsewhere in section A,] prior to submission to any of the operations in Section A.
 D9quarter Chemical treatment (e.g. neutralization, [chemical] precipitation, dechlorination, reduction/oxidation, flocculation,), [other than covered by D17] [not specified elsewhere in this section A,] prior to submission to any of the operations in section A.
 D9quinties: Immobilization techniques (e.g. stabilization, solidification [, encapsulation]) [not specified elsewhere in section A,] prior to submission to any of the operations in Section A.]

D10 Incineration on land

1. Thermal treatment [on land] [other than covered by R1 in Section B] [other than covered by [D11 and] D18 [and R1] [and R15]](e.g. incineration [, co-incineration, pyrolysis, gasification, thermal desorption, sintering and vitrification]).

D11 Incineration at sea

1. Delete and merge with D10
2. Thermal treatment at sea (e.g. incineration [, pyrolysis and gasification])

D12 Permanent storage (e.g., emplacement of containers in a mine, etc.)

1. *Split in 2:*
D12 Permanent underground storage (e.g. placement of containers in a mine)
D12bis
[Permanent aboveground storage (e.g. placement of containers in a warehouse)]
[Merge with D1]

D13 Blending or mixing prior to submission to any of the operations in Section A

0. Status quo
1. [Mixing, including blending, prior to the submission to any operation in Section A]

D14 Repackaging prior to submission to any of the operations in Section A

0. Status quo

D15 Storage pending any of the operations in Section A

1. [Temporary] storage prior to submission to any of the operations in section A

NEW OPERATIONS**D16 Release to the atmosphere (e.g. venting of compressed or liquefied gases)**

[D17 Treatment by nanomaterials]

[D18 Open burning]

[D19 Sterilization or disinfection [of infectious waste] (e.g. autoclave, microwave-radio waves, physical sterilization, chemicals sterilization, steam) prior to submission to any of the operations in section A]

[D20 Other treatment than covered by D1 option 3, D2 option1, D3 option1, D5 option1, D6, D7, D10 option1, D12 and D16 above]

[D21 Other treatment than covered by D8 option 2, D9 option1, D13 option 1, and D14 above prior to submission to any of the operations in Section A]

[D22 Co-processing]

IV. Options for possible amendment proposals to Section B of Annex IV**R1 Use as a fuel (other than in direct incineration) or other means to generate energy**

1. Use as a fuel or other means to generate energy [or to reduce energy requirements]
2. Thermal treatment with the principal result to generate energy [except where covered by R15] [or to reduce energy requirements] (e.g. incineration [with energy recovery])

R2 Solvent reclamation/regeneration

0. Status quo
1. Delete and merge with R3 option1 and R5 option1
2. [Recycling[/reclamation] of solvents (e.g., distillation, filtration, centrifugation) other than covered by R9]

- R3 Recycling/reclamation of organic substances which are not used as solvents**
0. Status quo
 1. Recycling of organic substances (e.g. [regeneration,] physical/mechanical treatment, chemical treatment)
- R4 Recycling/reclamation of metals and metal compounds**
0. Status quo
 1. Recycling of metals and metal compounds (e.g. smelting, hydrometallurgy, physical/mechanical treatment [, precipitation, pyrometallurgy, distillation, metal casting])
- R5 Recycling/reclamation of other inorganic materials**
0. Status quo
 1. Recycling of inorganic materials other than covered by R4 [, ... R6, R7, R8...] (e.g. [regeneration,] physical/mechanical treatment, chemical treatment)
- R6 Regeneration of acids or bases**
0. Status quo
 1. *Delete R6 and merge with R3 option1 and R5 option1*
- R7 Recovery of components used for pollution abatement**
0. Status quo
 1. *Delete R7 and merge with R3 option1, R4 option1 and R5 option1*
 2. Recycling of components used for pollution control (e.g. recycling of activated carbon)
- R8 Recovery of components from catalysts**
0. Status quo
 1. Recycling of [components from or] catalysts (e.g. hydrometallurgy, pyrometallurgy)
 2. *Delete R8 and merge with R3 option1, R4 option1 and R5 option1*
- R9 Used oil re-refining or other reuses of previously used oil**
1. [Recycling of used oil (e.g. [filtering,]) Re-refining [of used oil]
 2. *Delete and merge with R3 option1*
 3. Recycling or re-refining mineral oil [or hydrocarbons-based oils] (e.g. filtering, distillation, other physical/chemical treatment)
- R10 Land treatment resulting in benefit to agriculture or ecological improvement**
1. Land treatment other than in D2 in Section A resulting in benefit to agriculture or ecological improvement [(e.g. valorisation of phosphorus or nitrogen content, preparation or manufacture of amendments or fertilizers, improvement of disaggregated soils without an agronomic purpose)] [(e.g. biological or chemical treatment)] [composting])]
 2. *Delete and merge with R12 quarter under R12 option 2*
 3. Deposition on land resulting in benefit to agriculture or ecological improvement (e.g. application of fertilizer or wetting agent)
- R11 Uses of residual materials obtained from any of the operations numbered R1-R10**
0. Status quo
 1. *Delete*
- R12 Exchange of wastes for submission to any of the operations numbered R1-R11**
0. Status quo
 1. *Keep status quo and add option 2 as new operations*
 2. *Split and replace by four operations mirroring D operations:
R12 (mirroring D8)*

Biological treatment [not specified elsewhere in Section B,] [other than covered by ...] prior to submission to any of the operations in Section B [(e.g. aerobic or anaerobic processes such as activated sludge treatment, aerated lagoons and stabilisation ponds)]

R12bis (*mirroring D9*)

a) [Manual treatment (e.g. separation,)] Physical/mechanical treatment [other than covered by R12ter] (e.g. [separation, size reduction,]evaporation, drying, [autoclaving]), physical/chemical treatment (e.g. solvent extraction) or chemical treatment (e.g. neutralization, chemical precipitation[, oxidation, reduction]) [not specified elsewhere in Section B] prior to submission to any of the operations in Section B

b) *Split in 3*

[R12bis(i) Manual or mechanical [operations] [treatment] other than covered by R12ter (e.g. dismantling, sorting, crushing, compacting, shredding, separating) prior to submission to any of the operations in Section B

R12bis(ii) Physical treatment (e.g., evaporation, filtration) or mechanical treatment (e.g., crushing) not specified elsewhere in Section B, prior to submission to any of the operations in Section B

R12bis(iii) Chemical treatment (e.g., neutralization, precipitation) not specified elsewhere in Section B, prior to submission to any of the operations in Section B]

c) *Split in 4*

[R12bis (i) Manual treatment (e.g. separation), prior to submission to any of the operations in Section B.

R12bis (ii) Physical/mechanical treatment [other than covered by R12ter] (e.g. size reduction, physical sorting, air classification, flotation, evaporation, distillation, soil flushing, [microwave irradiation, sterilization], evaporation, drying, [autoclaving]), [not specified elsewhere in Section B], prior to submission to any of the operations in Section B.

R12bis (iii) Physical/chemical treatment (e.g. solvent extraction, desorption, leaching, ion exchange) [not specified elsewhere in Section B,] prior to submission to any of the operations in Section B.

R12bis (iv) Chemical treatment (e.g. neutralization, [chemical] precipitation, dechlorination, reduction/oxidation, flocculation,), [not specified elsewhere in Section B,] prior to submission to any of the operations in Section B.]

R12ter (*mirroring D13*)

[Mixing, including blending, prior to the submission to any operation in Section B]

R12quater (*mirroring D21*)

[Other treatment than covered by R12, R12bis, R12ter and R16 above prior to submission to any of the operations in Section B.]

R13 Accumulation of material intended for any operation in Section B

1. [Temporary] storage prior to submission to any of the operations in Section B

NEW OPERATIONS

[R14 Preparing for re-use (e.g. checking, cleaning, repair, refurbishment)]

[R15 Co-processing (e.g. reducing energy requirements)]

R16 Repackaging prior to submission to any of the operations in Section B

[R17 Other treatment than covered by R1 option2, R3 option1, R4 option1, R5 option1 and R14 above]

Appendix II to the recommendations by the expert working group

Recommended option for possible amendments to A1180 and B1110

A1180: Waste electrical and electronic equipment including scrap [thereof]

- a) containing [an Annex VIII entry or] components included on list A or components [(e.g. circuit boards, display devices)] containing Annex I constituents to an extent that the waste exhibits an Annex III characteristic (e.g. mercury switches, [lamps containing mercury,] capacitors containing PCBs) or
- b) containing or contaminated with Annex I constituents (e.g. cadmium, lead, mercury) to an extent that the waste exhibits an Annex III characteristic;

or waste electrical and electronic components containing or contaminated with Annex I constituents to an extent that the waste exhibits an Annex III characteristic (note the related entry on list B B1110).¹⁰

¹⁰ PCBs are at a concentration level of 50 mg/kg or more in equipment including scrap [thereof] or in a component.

B1110: Waste electrical and electronic equipment including scrap [thereof]

- a) not containing [an Annex VIII entry or] components included on list A or components [(e.g. circuit boards, display devices)] containing Annex I constituents to an extent that the waste exhibits an Annex III characteristic (e.g. mercury switches, [lamps containing mercury,] capacitors containing PCBs) and
- b) not containing or contaminated with Annex I constituents (e.g. cadmium, lead, mercury) to an extent that the waste exhibits an Annex III characteristic;

or waste electrical and electronic components not containing and not contaminated with Annex I constituents to an extent that the waste exhibits an Annex III characteristic (note the related entry on list A A1180).¹⁰

¹⁰ PCBs are at a concentration level of 50 mg/kg or more in equipment including scrap [thereof] or in a component.
