



Expert Working Group on the review of Annexes
Third meeting
Bratislava, 5–8 November 2019

Report of the third meeting of the Expert Working Group on the review of Annexes (Bratislava, Slovakia, 5–8 November 2019)¹

I. Opening of the meeting

1. The third meeting of the Expert Working Group on the review of Annexes (hereinafter “EWG”) was held from 5 to 8 November 2019 in Bratislava, Slovakia. The meeting was opened by the co-chairs of the EWG, Mr. Joost Meijer (Chile) and Ms. Magda Gosk (Poland) at 9 a.m, who expressed appreciation to the Basel Convention Regional Centre for Training and Technology Transfer for Central Europe (BCRC-Slovakia) for its support in organizing the meeting, and to the governments of Germany, Norway and Switzerland whose generous financial support had enabled the meeting to be organized. Welcoming remarks were delivered on behalf of Ms. Dana Lapesova, Director of the BCRC-Slovakia.

2. The meeting was attended by the following members of the EWG:

African States

Mr Alick Makasa (Zambia), on behalf of Mr. Webby Simwayi
Mr. Abderrazak Marzouki (Tunisia)
Ms. Sharon Mogomotsi (South Africa)
Mr. Roger Mpan (Congo)

Asia and Pacific States

Mr. Haitham Abdel Kareem Aladaileh (Jordan)
Mr. Maher Al-Jabari (State of Palestine)
Mr. Qingyin Dong (China)
Ms. Roxana Maleki (Iran, Islamic Republic of)
Ms. Seika Sanno (Japan)

Central and Eastern European States

Ms. Magda Gosk (co-chair) (Poland)
Ms. Irma Gurguliani (Georgia)
Ms. Aylin Isaki Muharemi (North Macedonia)
Ms. Sanja Grubačić (Bosnia and Herzegovina), on behalf of Ms. Maja Daul Colovic
Ms. Mari-Liis Ummik (Estonia)

* Reissued for technical reasons on 6 March 2020.

¹ This document has not been formally edited.

Latin American and Caribbean States

Ms. Alejandra Acosta (Argentina)
Mr. Joost Meijer (co-chair) (Chile)
Mr. Eddy Pazmino (Ecuador)

Western European and other States

Mr. Khokan Bagchi (Australia)
Ms. Isabelle Baudin (Switzerland)
Ms. Julie Croteau (Canada)
Mr. Michael Ernst (Germany)
Ms. Yael Oren (Israel)
Mr. Peter Wessman (European Union).

3. The following countries and organizations were represented at the meeting as observers: Canada, Japan, United States of America, BCRC-Slovakia, Association Européenne du Ciment (CEMBUREAU), Basel Action Network, Bureau of International Recycling, Circular Economy Research (CER) GMBH, Confederation of European Waste-to-Energy Plants (CEWEP), Digitaleurope, European Federation of Waste Management and Environmental Services (FEAD), European Recycling Industries' Confederation (EuRIC), European Union for the Responsible Incineration and Treatment of Special wastes (EURITS), Hazardous Waste Europe (HWE), Information Technology Industry Council, Institute of Scrap Recycling Industries, Organizatia Patronala din Industria Cimentului din Romania (CIROM) and Sims Recycling Solutions, The list of participants to the third meeting of the EWG is set out in document UNEP/CHW/RA_EWG.3/ INF/9.

II. Organizational matters

A. Adoption of the agenda

4. The expert working group adopted the following agenda on the basis of the provisional agenda proposed in document UNEP/CHW/RA_EWG.3/1:

1. Opening of the meeting.
2. Organizational matters:
 - (a) Adoption of the agenda;
 - (b) Organization of work.
3. Review of Annex IV and of entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention:
 - (a) General issues on Annex IVA and IVB;
 - (b) Annex IV A operations;
 - (c) Annex IV B operations;
 - (d) Consequential implications;
 - (e) Entries A1180 and B1110.
4. Review of Annexes I and III to the Basel Convention:
 - (a) General issues on Annexes I and III;
 - (b) Annex I;
 - (c) Annex III;
 - (d) Constituents and characteristics in relation to plastic waste;
 - (e) Consequential implications.
5. Way forward.
6. Closure of the meeting.

B. Organization of work

5. The EWG considered the tentative schedule of the meeting proposed in document UNEP/CHW/RA_EWG.3/INF/1 and agreed to proceed along the lines proposed therein. Co-chair

Gosk reminded participants of the rules applying to the conduct of the meeting, namely that members would be invited to speak first and observers second, and that proposals made by observers would be retained if supported by at least one member. One member representing a regional integration organization explained that he and the two other members from member States of that organization would be presenting positions on behalf of that organization and its Member States.

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

6. The Secretariat introduced relevant background information on the work of the EWG since its second meeting (Buenos Aires, Argentina, 10-13 December 2018) as set out in document UNEP/CHW/RA_EWG.3/2. She referred to the recommendations for revisions to Annex IV and Annex IX (B1110) developed by the EWG during its second meeting, set out in document UNEP/CHW/RA_EWG.3/3, the comments thereon received from the EWG as well as from Parties, set out in document UNEP/CHW/RA_EWG.3/INF/2, the additional information and explanations received from the proponents of the first operation for operation D13 and new operations D20, D21, R14 and R17 as well as the proponent of new operations D17 and D18 set out in document UNEP/CHW/RA_EWG.3/INF/3, and the work of the EWG on entry B1110 thus far set out in document UNEP/CHW/RA_EWG.3/4.

7. She reminded the EWG of the extended scope of the mandate of the group as decided by the Conference of the Parties in its decision BC-14/16, whereby the EWG was: to also review entry B1110 in Annex IX as well as the mirror entry A1180 in Annex VIII; and to review the consequential implications of the review of Annexes I, III and IV for other Annexes to the Convention and for relevant decisions of the Conference of the Parties, inter alia, for the notification and movement documents² and the reporting format.³ She also referred to the request by the Conference of the Parties that the EWG proceed with its work on the basis of the way forward set out in the annex to decision BC-14/16 whereby amendment proposals with respect to Annex IV, entry A1180 and entry B1110 were to be presented and discussed during the twelfth meeting of the Open-ended Working Group (OEWG) and negotiated and possibly adopted by the Conference of the Parties during its fifteenth meeting. In this regard, she explained that any amendment proposal by a Party to be considered by the fifteenth meeting of the Conference of the Parties would need to be made available to the Secretariat by 16 October 2020.

8. The representative of the Secretariat also provided information on other developments that took place since the fourteenth meeting of the Conference of the Parties, namely the comments received from the EWG on the review of entry A1180, set out in document UNEP/CHW/RA_EWG.3/INF/4, and the development by the Secretariat under the guidance of the co-chairs of an analysis of the possible consequential implications of the review of Annexes I, III and 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, set out in document UNEP/CHW/RA_EWG.3/INF/5.

9. Participants exchanged general views on the objectives of the meeting and its expected outcomes. One member supported by several others emphasized the need for the EWG to provide Parties with the rationale behind its recommendations, saying this would be key to achieving the adoption of possible amendments. Another member, noting that this was an important point, said the reports and documents of the meetings of the EWG provided such explanations. Co-chair Gosk reminded participants that decision BC-13/2, whereby the EWG had been established and its terms of reference adopted, provided some relevant guidance in this regard as the Conference of the Parties had decided that the mandate of the review of Annex IV was with a view to: improve/update the description of disposal operations in Annex IV; improve environmental controls by including additional disposal operations that occur in practice or could occur in practice in Annex IV; and clarify the descriptions in Annex IV and in Annex IX (B1110) to address conflicts or overlaps. She invited the EWG to discuss further the matter later during the meeting under agenda item 5 on the way forward.

² The notification and movement documents for the control of transboundary movement of hazardous wastes and instructions for completing these documents are available at: <http://www.basel.int/Procedures/NotificationMovementDocuments/tabid/1327/Default.aspx>.

³ The format for national reporting is available at: <http://www.basel.int/Countries/NationalReporting/Guidance/tabid/1498/Default.aspx>.

A. General issues on Annex IVA and IVB

10. Co-chair Gosk introduced the recommendations by the EWG for revisions to Annex IV and Annex IX (B1110) developed by the EWG during its second meeting for consideration by the Conference of the Parties at its fourteenth meeting, set out in the annex to document UNEP/CHW/RA_EWG.3/3. She reminded participants that the recommendations included some general explanations and assumptions, recommended options for revisions to Annex IV, and a textual proposal for a general introduction for Annex IV which had been presented but not agreed during the second meeting of the EWG. Members agreed that they would work on the basis of, and not reopen, the explanations and assumptions laid down in the recommendations, including that Annex IV would encompass both environmentally sound and non-environmentally sound operations. She then invited general comments on the review of Annex IVA and IVB.

11. One member introduced a revised proposal by his organization and other Parties for the review of Annex IV which, among other things, included a general introduction, text to clarify what was meant by “final disposal” operations and “recovery” operations, text to clarify what was meant by “interim operation”, and proposals for catch-all entries to ensure the full coverage of all possible disposal operations. He said the main purposes of the proposal were to improve legal clarity and improve environmental controls. Also speaking about the same proposal, another member explained that careful consideration had been given in the proposal to list the operations in a meaningful order, with non-interim operations in section A per media (namely land, water and air) and in section B per the waste hierarchy, followed by interim operations in both sections, including catch-all operations in both sections, both for non-interim operations and for interim operations. Several members welcomed the comprehensiveness of the proposal, with one saying it would be important to develop guidance documents with explanations on the various technologies for each entry and on the interconnections between all entries. Some other members said they did not support at this time a discussion on a reordering of the operations saying that this was premature as the extent of possible amendments to the Annex IV was unknown, and that a reordering would lead to implementation challenges and to the need to adjust legislation, which was not necessarily required. As they had done during their second meeting, members agreed that the matter of ordering of the operations will be considered by the EWG in due course.⁴

12. One member said she looked for environmental improvements in the amendment proposals coming forward. She was supported by another member who emphasized the importance of legal clarity and of a cost-benefit analysis of the proposals and said that implementation challenges resulting from amendments to Annex IV were a concern and called for surgical proposals that would help implement the Convention.

13. One member said her country saw legal clarity and environmental improvements as the main objectives of the review of Annex IV. She said that the current lack of legal clarity led to implementation challenges, in particular in the context of the use of the notification document and with respect to interim operations. She explained that her country’s detailed proposals for revisions to Annex IV aimed at overcoming these challenges by ensuring that Parties have clarity on what happens to the wastes proposed for export, including that they will ultimately be disposed of through an operation that is conducted in an environmentally sound manner. In response, a member agreed that developing definitions of the terms used in Annex IV would be helpful but that the level of detail that was being sought should be made available in guidance documents, for instance through an updated version of the glossary of terms.⁵ He also said that block 11 of the notification document required that information be provided on the D or R-code and on the technology employed. In the case of an interim operation, namely an R12/R13 or D13-D15 operation, the notification document required that corresponding information on any subsequent R12/R13 or D13-D15 facilities and on the subsequent R1-R11 or D1-D12 facilities when required be attached to the notification document. Another member expressed the view that technical guidelines or revisions to the notification and movement documents and to the instructions to complete them could bring the level of clarity sought.

14. Co-chair Gosk reminded participants of the textual proposal for a general introduction for Annex IV⁶ and invited an exchange of views thereon. Regarding the second paragraph which read “This Annex covers disposal operations including interim operations.”, several members expressed

⁴ See paragraph 3 of the appendix I to the annex to the present report.

⁵ The glossary of terms was adopted by decision BC-13/2. Its main focus is to provide guidance for further legal clarity in relation to the distinction between wastes and non-wastes, and it includes definitions of terms and further explanations, including in order to explain how certain terms relate to each other. The glossary of terms is available at: <http://www.basel.int/Implementation/Publications/GuidanceManuals/tabid/2364/Default.aspx#>.

⁶ See appendix II to the annex to document UNEP/CHW/RA_EWG.3/3.

the need to clarify what was meant by “interim operations”. Members agreed that, in the case of a proposed movement of wastes involving an interim operation, a D or R operation is required in addition to that operation. They amended the paragraph to clarify that interim operations are operations “that occur prior to submission to any of the operations in the respective section” of Annex IV and agreed to list in a footnote the operations falling within this category, namely operations D8, D9, D13, D14, D15, D19, D21, D22 and D23 in section A, and operations R12, R13 and R16 in section B. Members also agreed that the notification and movement documents would need to be adjusted as a consequence.

15. Regarding the third paragraph of the proposed general introduction which read “This Annex covers all operations, regardless of their legal status and, as such, regardless of whether they are considered to be environmentally sound.”, members agreed to clarify that the legal status of an operation could be assessed both with respect to national or international law, and to delink the legal status of an operation from its environmental soundness.

16. Regarding the fourth paragraph of the proposed general introduction which read “The principal purpose of a treatment determines the selection of an operation.”, several members said this was unclear to them. Members agreed to delete the paragraph from the general introduction for Annex IV and that the rationale behind it would be introduced elsewhere, for instance in the notification and movement documents and the instructions for completing them.

B. Annex IV A operations

17. Participants based their review of the Annex IV A operations on the recommendations of the EWG on the review of Annex IV set out in the annex to document UNEP/CHW/RA_EWG.3/3, on the comments thereon received from the EWG and Parties set out in document UNEP/CHW/RA_EWG.3/INF/2, and on the additional information and explanations received from the proponents of the first operation for operation D13 and new operations D20, D21, as well as the proponent of new operations D17 and D18, set out in document UNEP/CHW/RA_EWG.3/INF/3.

18. Participants went through the five options for captions and introductory texts for Annex IV A. No support was expressed for option 5 which is the status quo without the reference to “direct” reuse. Regarding option 1, which was the status quo, several members said that the reference to “direct reuse” was problematic since this did not constitute a disposal operation, as clarified in the glossary of terms. Members therefore agreed to delete that option and to try to reconcile options 2, 3 and 4 which had the same caption, namely “final disposal operations”, and similarities between their respective introductory texts. They decided to first agree on the introductory text for Annex IV B and to then mirror it in the introductory text for Annex IV A. Subsequently, in light of the outcome of those discussions,⁷ members agreed to retain in brackets the term “recycling”, to mirror the terms “the principal result of which” with the terms “as a secondary consequence” and to make editorial changes based on option 2. The recommended text for the caption and introduction to Annex IV A reads: “A. FINAL DISPOSAL OPERATIONS. A final disposal operation is an operation which is not a recovery [or recycling] operation even where the operation reclaims substances or energy as a secondary consequence.”

19. Participants did a run through of all the options for revisions to the operations listed in Annex IV A and deleted those that were not supported by at least one member. Co-chair Gosk then invited participants to consider one by one the options for revisions to each D operation. Answering a request from a member that participants first discuss the possible reordering and recoding of operations, she said the matter would be considered once the group had finalized its consideration of the options for revisions. One member said it was important to ensure that, where relevant, each entry in Annex IVA has a mirror entry in Annex IVB, including for new proposed operations.

20. With respect to D1: deposit into or onto land, (e.g., landfill, etc.), one member noted links to other operations, namely D3: deep injection, (e.g., injection of pumpable discards into wells, salt domes of naturally occurring repositories, etc.), D4: Surface impoundment, (e.g., placement of liquid or sludge discards into pits, ponds or lagoons, etc.), D5: specially engineered landfill, (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.), and D12: permanent storage (e.g., emplacement of containers in a mine, etc.). Upon his suggestion, the group agreed to consider those operations and to then come back to operation D1.

21. With respect to D3: deep injection, (e.g., injection of pumpable discards into wells, salt domes of naturally occurring repositories, etc.), one member suggested deleting the entry based on the fact that the operation was seldom used in practice. He explained that, should the operation be used, it

⁷ See paragraph 42 of the present report.

could fall within the catch all operation that his country and other Parties were proposing. Several members said the operation was used in their countries and asked for retention of the operation as currently drafted, namely status quo. One member also emphasized that operations D3 and D1 should be kept separate as they are distinct operations with different technical requirements. In conclusion, the option of deleting the entry and merging it with operation D1 was recommended for revision to the D3 operation in addition to retaining the status quo.

22. With respect to D4: Surface impoundment, (e.g., placement of liquid or sludge discards into pits, ponds or lagoons, etc.), one member said his country and other Parties had proposed a new option to replace option 2 which read “Surface impoundment (e.g. placement of liquids or sludge ~~discards~~ into pits, tailing ponds, tailing dams [or lagoons])”. Several members questioned the need for the operation, as proposed in options 1 and 2, to refer to “tailings” as a waste category. The proponent of option 1 explained that the intention was to clarify that the operation was specific to the mining industry. In conclusion, following some redrafting of options 1 and 2, one option was recommended for revision to the D4 operation in addition to the option of retaining the status quo.

23. With respect to D5: specially engineered landfill, (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.), co-chair Gosk reminded participants that the option of retaining the status quo had been deleted and invited comments on options 1 and 2. The proponent of option 1, namely “landfilling”, revised the proposal to read “Deposit in an aboveground landfill isolated from the environment”. The members from Parties leading the process for updating the technical guidelines on specially engineered landfill (D5) questioned the meaning of the reference to an “aboveground” landfill, explaining that the updating exercise was not going in that direction. Following a comment by an observer that the terminology “engineered landfill” was very commonly used and that the options would benefit from being phrased as operations, the proponent of option 1 redrafted the proposal of his country and other Parties to read “Deposit in an engineered landfill isolated from the environment”. In option 2, square brackets were added to reflect details of the discussion. In conclusion, two options were recommended for revision to the D5 operation.

24. With respect to D12: Permanent storage (e.g., emplacement of containers in a mine, etc.), participants discussed the two options proposed in addition to retaining the status quo. One member, supported by several others, explained that permanent storage aboveground and underground should be distinct operations, given that the technical conditions, and therefore the legal requirements, for aboveground and underground storage were different. One member suggested the addition of an example of permanent aboveground storage. In conclusion, the option of the status quo was deleted and the group recommended one option for revision to the D12 operation, namely that it be split in two: permanent storage underground and permanent storage aboveground, both with an example.

25. Participants then resumed their consideration of the two options for revisions to operation D1. One member expressed the view that operation D1 could be environmentally sound or non-environmentally sound, while other members said operation D1, as opposed to operation D5, was intended to only cover non-environmentally sound disposal. The proponent of option 1 agreed to refer to both deposit “into” and “onto” land. Participants discussed the examples listed in both options, with one member suggesting their deletion while another expressed preference for retaining “dumpsites” as one example among other examples of non-environmentally sound disposal. In conclusion, two options were recommended for revision to operation D1. Both options list different examples, and option 2 reflects the option whereby operation D3 would be deleted and merged with operation D1.

26. With respect to D2: Land treatment, (e.g., biodegradation of liquid or sludgy discards in soils, etc.), participants considered the two options for revisions proposed in addition to retaining the status quo. Participants engaged in discussions with a view to clarifying the term “land treatment” and its relationship to “landfarming”, whether the operations referred to treatment “of land” or “on land”, whether the treatment was “in situ” or “ex situ”, and the relationship between the operation D2, 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, and 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.). One member clarified that for her country “landfarming” is akin to remediating contaminated land; it could take place in situ and ex situ, it could be an R or a D operation and it could be an interim and a non-interim operation. Several members expressed difficulties with using the term “landfarming” which could be misleading and would not be used in their countries. They expressed the view that if soil reclaimed as a result of landfarming or land treatment was reused, then it was an R operation which fell outside D2; and that if soil reclaimed as a result of “landfarming” or land treatment was still contaminated and was disposed

of, then the treatment was an interim operation that could not fall under D2. Another member questioned the need for a separate D2 operation saying that the treatment falling within its scope was covered, more generally, by the D8 and D9 operations, while another member said that a specific D2 entry for land treatment was required because of the different legal requirements applying to the different types of treatment. She reminded participants that the Basel Convention Technical Guidelines on Hazardous Waste Physico-Chemical Treatment (D9) / Biological Treatment (D8) refer to landfarming⁸ and cautioned against using the same terminology in two entries. One member said D2 operations are about ex situ treatment, another said it is about in situ treatment, while another said D2 operations can take place both in situ and ex situ. Co-Chair Gosk invited members to further discuss the matter in the margins of the meeting and to come back with a proposal. Later during the meeting, one member, after consultation with other members, introduced a revised option 1 which clarified the term land treatment by using “Treatment of land or through interaction with land” which could cover both in situ and ex situ treatment, and introduced the terminology “biological or chemical treatment” in an example as an alternative to the term “landfarming”. Another member said that it should be made clear that operation D2 was a non-interim operation and that it should be mirrored by an interim operation. Another member said her country’s preference remained for the status quo. In conclusion, one option was recommended for revision to operation D2 in addition to the status quo. Also, a new entry D23 was proposed as the interim version of operation D2.

27. Co-chair Gosk invited consideration of the related entries D8 and D9. With respect to operation D8, participants discussed the two options in addition to the retention of the status quo. The proponent of option 2, which splits the D8 operation into an interim and a non-interim operation and provides details of various biological treatments, said its objective was to provide clarity as to whether the waste was destined for environmentally sound disposal. One member, supported by other members, replied that the operation, given the existence of D2, should be confined to an interim operation. She said that the level of detail provided in the operation was not in itself sufficient to make a determination as to whether it was environmentally sound or not. In conclusion, members agreed to list the proposed non-interim operation option of D8 reading “Biological treatment as a non-interim operation not covered by D2” as a new operation D24. In addition, three options were recommended for revision to operation D8: all three are interim operations and one lists subcategories of biological treatments.

28. With respect to operation D9, participants discussed the two options in addition to the retention of the status quo. The proponent of option 2, which splits the D9 operation into an interim and non-interim operation and provides details of various physico-chemical treatments, said its objective was the same as that proposed under D8, to which one member, supported by another, replied that the operation D9 was an interim one. In conclusion, members agreed to list the proposed non-interim operation option of D9 reading “Physico chemical treatment as a non-interim operation (e.g. neutralization)” as a new operation D25. In addition, two options were recommended for revision to the D9 operation: both are interim operations, one provides examples of physico-chemical treatments and the other lists subcategories of physico-chemical treatments.

29. Co-chair Gosk proposed that participants consider together operations D10: Incineration on land, D11: Incineration at sea, and the proposed new D18: Open burning. With respect to operation D10, co-chair Gosk reminded participants that the option of retaining the status quo had been deleted earlier in the meeting and invited comments on options 1 and 2. Several members supported the provision of examples of thermal treatment processes while others said such information was available in technical guidelines where it fit better. In conclusion, two options were recommended for revision to the D10 operation: both use the terminology “thermal treatment”, both clarify that the operation excludes thermal treatment under other operations, one provides examples of the thermal treatments covered by the operation D10 and the other lists subcategories of such thermal treatments.

30. With respect to operation D11, participants considered the two options in addition to the status quo. One member, supported by another, said the status quo was important to clarify that such operations are within the scope of the Convention, and preserve the link with Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972). She also said that a specific operation for incineration at sea is needed to facilitate the assessment of permit requests. Another member, with the support of another member, supported deletion, while another member proposed deletion and merging with option 1 of operation D10. In conclusion, one option was recommended for revision to the D11 operation in addition to the status quo.

⁸ See page 51 of the technical guidelines, available at <file:///C:/Users/jkohler/AppData/Local/Microsoft/Windows/INetCache/IE/OC9SWXEK/UNEP-CHW-WAST-GUID-D9-D8-TreatmentsHW.English.pdf>, which refer to “Land Application/Treatment/Farming”.

31. With respect to the proposed new operation D18, several members proposed its deletion. Other members said it was important include a specific entry for open burning. Some expressed the view that open burning was or could be covered by “thermal treatment”, and one member added his country and other Parties could not accept such a specific stand-alone entry for non-environmentally sound disposal.

32. Co-chair Gosk invited participants to turn their attention to the other interim operations. With respect to operation D13: Blending or mixing prior to submission to any of the operations in Section A, participants discussed the three recommended options in addition to retaining the status quo. The proponent of option 1 adjusted the proposal of his country and of other Parties to: separate blending and mixing with the text “Mixing, including blending, ...” and add a reference to “manual” treatment in addition to mechanical treatment. Several members agreed with separating blending and mixing. One member supporting the status quo said that “mechanical or manual treatment” as proposed in the adjusted option 1 was a new operation and should be treated as such. She also said it was unclear how much this new operation extended the scope of the Convention and requested that brackets be put around it. Following further exchanges on the option, the proponent agreed to delete references to repackaging⁹ (see discussion on operation D14), pelletizing and conditioning. In conclusion, retaining the status quo was recommended for operation D13. Regarding the new proposed mechanical or manual operation, it subsequently was presented as a new operation D22: [D22: Mechanical or manual [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].

33. With respect to operation D14: Repackaging prior to submission to any of the operations in Section A, participants discussed the two recommended options in addition to retaining the status quo. Participant expressed differing views as to whether the operation was used in practice. In conclusion, retaining the status quo was recommended for operation D14.

34. With respect to operation D15: Storage pending any of the operations in Section A, participants discussed the two options which use the same terminology to describe the operation, but with option 2 listing subcategories. The proponent of option 2 withdrew her proposal. One member questioned the addition of the term “temporary” when it was clear that the operation was an interim operation, to which a member replied that it was for clarification purposes. Participants emphasized the need to ensure consistency in the way interim operations were drafted in the annex. They agreed to use “prior to submission to” instead of “pending”, to be consistent with the general introduction for Annex IV, and inserted brackets around “as an interim operation” pending agreement on how to refer to interim operations throughout the operations in the annex. In conclusion, one option was recommended for operation D15.

35. Participants turned their attention to the other new proposed operations and agreed to recommend the D16 operation: Release to the atmosphere (e.g. venting of compressed or liquefied gases).

36. With respect to the new proposed operations D17: Treatment of waste by nanomaterials, and D18: Open burning, several members asked that they be put in brackets. Some members argued that treatment of waste by nanomaterials would be covered by other operations and had limited practical relevance.

37. With respect to the new proposed operation D19: Treatment of sterilization or decontamination of biopathological waste, with a list of subcategories, one member said the operation could fall under D9 or “thermal treatment” or an R operation, and therefore suggested deletion, while another suggested that the entry, if retained, not list subcategories. Following exchanges, the proponent agreed to some redrafting proposals including to specify the interim nature of the operation. In conclusion, the new proposed operation D19 was put in brackets.

38. With respect to the new proposed operation D20: Final disposal operations other than covered by D1 option1, D2 option1, D3 option1, D5 option1, D6, D7, D10 option1, D12 option1 and D16 above, one member said that the proposal by his country and other Parties was to have a catch all for all non-interim final disposal operations, to be read together with the introduction of section A. Several members expressed the view that the proposal was not helpful in terms of ensuring the traceability of the disposal operations. It was also mentioned that this proposal lacked legal clarity as it would enlarge the scope of the Convention and could have unintended effects. As disposal is defined under the Convention by Annex IV operations, this proposal could potentially capture unintended products outside the scope of the Convention. Another member highlighted that Annex IV draws the line between waste and non-waste and as such, this new proposal would be difficult to

⁹ See paragraph 33 of the present report.

implement. In conclusion, the new proposed operation D20 was put in brackets. For the same reasons, the catch all for all interim final disposal operations, namely the new proposed operation D21: Other treatment than covered by D8 option1, D9 option1 and D13 option1 above prior to submission to any of the operations in Section A, was also put in brackets.

39. With respect to the new proposed operation D22 with two options: 1. Operations addressing stabilization and solidification; 2. Immobilization (e.g. stabilization, solidification) prior to submission to any of the operations in section A, one member sought deletion as it was covered by operation D9. One member queried whether encapsulation was a subset of stabilization, while another member said it was about isolation. One member highlighting that the Basel Convention Technical Guidelines on Hazardous Waste Physico-Chemical Treatment (D9) / Biological Treatment (D8)¹⁰ presented encapsulation as a separate immobilization technique, while another member said that, in general, the technical guidelines on mercury wastes and persistent organic pollutants wastes¹¹ only refer to “stabilization” and “solidification”. Members agreed to look further into the use of the term encapsulation and, in the meantime, to bracket the term as one of the examples in option 1 of the D9 operation and to delete the new proposed operation D22.

40. Co-chair Gosk reminded participants that during their review of the D operations, members had identified the following additional new operations: [D22: Mechanical or manual [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];¹² [D23: Treatment of land or through interaction with land (e.g. [biological or chemical treatment], [landfarming]) as an interim operation prior to submission to any of the operations in Section A.];¹³ [D24. Biological treatment as a non-interim operation not covered by D2: D24.01: aeration lagoons, D24.02: bioventilation (bioventing) and D24.03: UASB reactors];¹⁴ and [D25. Physico chemical treatment as a non-interim operation (e.g. neutralization)].¹⁵

C. Annex IV B operations

41. Participants based their review of the Annex IV B operations on the recommendations of the EWG on the review of Annex IV set out in the annex to document UNEP/CHW/RA_EWG.3/3, on the comments thereon received from the EWG as well as from Parties set out in document UNEP/CHW/RA_EWG.3/INF/2, and on the additional information and explanations received from the proponents of the new operations R14 and R17 set out in document UNEP/CHW/RA_EWG.3/INF/3.

42. Participants went through the four options for captions and introductory texts for Annex IV B. As no support was expressed for options 1 and 4, they were deleted. With respect to the captions proposed as options 2 and 3, several members said that, as reflected in the glossary of terms,¹⁶ recycling is part of recovery, while other members said that recovery is different from recycling. Upon a proposal by co-chair Gosk, members agreed to delete option 2 and to bracket the term “recycling” in option 3. The recommended text for the caption and introduction to Annex IV B reads: “B. RECOVERY [AND RECYCLING] OPERATIONS. A recovery 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.”

43. Participants did a run through of all the options for revisions to the operations listed in Annex IV B and deleted those that were not supported by at least one member. Co-chair Gosk then invited participants to consider one by one the options for revisions to each R operation.

44. With respect to operation R1: Use as a fuel (other than in direct incineration) or other means to generate energy, participants discussed the two options in addition to retaining the status quo. Participants exchanged views on the retention or not of “co-processing” as one example listed in option 2 or as a distinct operation. Members noted that co-processing was an operation that could be

¹⁰ Available at <http://www.basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/TechnicalGuidelines/tabid/8025/Default.aspx>.

¹¹ Idem.

¹² See paragraph 32 of the present report.

¹³ See paragraph 26 of the present report.

¹⁴ See paragraph 27 of the present report.

¹⁵ See paragraph 28 of the present report.

¹⁶ See above footnote 5 of the present report.

considered to combine various R operations and that it had enough practical relevance to constitute a stand-alone operation. One member said that operation R1 could not only cover the generation of energy but that it could the reduction of energy requirements, he therefore suggested to adjust the drafting of both options accordingly. In conclusion, members agreed to remove the reference to “co-processing” in option 2 for operation R1 and to recommend a new entry R15: Co-processing. In addition, two options were recommended for revision to operation R1 in addition to the status quo.

45. With respect to operation R2: Solvent reclamation/regeneration, participants discussed the two options in addition to retaining the status quo. In relation to the difference between reclamation and regeneration in the case of solvents, some members argued that both terms had the same meaning. One member said that the operation was specific to a waste stream and said his country and other Parties preferred generic operations. He said that the operation in question was already covered by R3 or R5. In response, another member said her country preferred retaining the status quo. Another member said operation R2 could be an interim operation. In conclusion, two options were recommended for revision to operation R2 in addition to the status quo. Later during the meeting, members agreed to add a footnote to the entry.¹⁷

46. With respect to operation R3: Recycling/reclamation of organic substances which are not used as solvents, participants discussed the two options in addition to retaining the status quo. During the discussion, the proponent of option 1 added examples to the proposal of his country and other Parties. He raised doubts as to whether “reclamation” and “recycling” were synonymous. Supported by another member, he expressed preference for operations that are not waste stream specific, and explained that the reference to “organic substances” was not a waste stream and e.g. covered oils, plastics or solvents. Another member said operation R3 could be an interim operation. In conclusion, two options were recommended for revision to operation R3 in addition to the status quo. Later during the meeting, members agreed to add a footnote to the entry.¹⁸

47. With respect to operation R4: Recycling/reclamation of metals and metal compounds, participants discussed the two options in addition to retaining the status quo. During the discussion, the proponent of option 1 added examples to the proposal of his country and other Parties. One member said the current wording of R4 worked well in practice, while several members expressed difficulty with the retention of the term “reclamation” which was unclear to them. Referring to option 2, one member said the term “recovery” should not be used in the text of operations since this term was a generic term that covers all operations in Annex IV B. Participants then had an exchange of views on whether the operation was or included interim operations. One member said his country and other Parties considered the R4 operation as a non-interim operation since it did not specifically mention that it took place “prior to submission to” another operation. Other members said they also considered operations that did not use such specific wording as interim operations. Another member said that such important differences in practice needed to be addressed and that the revised Annex IV should clearly distinguish between interim and non-interim operations so that Parties, when authorizing or consenting to a proposed movement, had clarity as to whether the outcome of the disposal operation would be or not a waste. She therefore proposed to split R4 in two operations, one interim operation, and one non-interim operation. Another member said that, since his country and other Parties’ understanding was that R4 was not an interim operation, the proposal for R4 as an interim operation was a new proposed operation, and that the approach would need to be applied consistently to other D and R operations which is something he opposed. In conclusion, two options were recommended for revision to operation R4 in addition to the status quo. Later during the meeting, members agreed to add a footnote to the entry.¹⁹

48. With respect to operation R5: Recycling/reclamation of other inorganic materials, participants discussed the two options in addition to retaining the status quo. During the discussion, the proponent of option 1 added examples to the proposal of his country and other Parties. He reiterated his view whereby the term “recovery” should not be used in the text of operations since this term was a generic term that covered all operations in Annex IV B. One member suggested that the options clarify that the inorganic materials be “other than that covered by R4”. In conclusion, two options were recommended for revision to operation R5 in addition to the status quo. Later during the meeting, members agreed to add a footnote to the entry.²⁰

49. With respect to operation R6: Regeneration of acids or bases, participants discussed the two options in addition to retaining the status quo. Members exchanged views on and agreed to delete

¹⁷ See paragraph 79 of the present report.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

option 1. In conclusion, the option to “delete R6 and merge with R3 option1 and R5 option 1” was recommended for revision to the R6 operation in addition to the status quo. Later during the meeting, members agreed to add a footnote to the entry.²¹

50. With respect to operation R7: Recovery of components used for pollution abatement, co-chair Gosk reminded participants that option 1 “Recycling of pollution abatement equipment” had been deleted during the run through all the options for revisions to Annex IV B. The options were not discussed further and in conclusion, two options were recommended for revision to the R7 operation in addition to the status quo. Later during the meeting, members agreed to add a footnote to the entry.²²

51. With respect to operation R8: Recovery of components from catalysts, one member said that recycling was the proper operation for this entry. Participants did not discuss the options and, in conclusion, three options were recommended for revision to operation R8 in addition to retaining the status quo. Later during the meeting, members agreed to add a footnote to the entry.²³

52. With respect to operation R9: Used oil re-refining or other reuses of previously used oil, co-chair Gosk reminded participants that option 2 “Refining of used oils and other reusable fluids” had been deleted during the run through of all the options for revisions to Annex IV B. The options were not discussed further and in conclusion, three options were recommended for revision to the R9 operation in addition to retaining the status quo.

53. With respect to operation R10: Land treatment resulting in benefit to agriculture or ecological improvement, members considered the four options in addition to retaining the status quo. It was agreed to ensure consistency between the options for that entry and those for operation D2 and decided to defer discussions on operation R10 pending the outcome of the discussions on operation D2. Later during the meeting, one member presented the outcome of the discussions that had taken place in margins of the meeting saying the status quo was no longer supported and that three options were now before the group. He explained that, in option 2, the proposal was to replace the term “land treatment” by “Treatment of land or through interaction with land”, as already reflected in option 1 for the D2 operation. Unclear about the benefit of retaining the wording “resulting in benefit to agriculture or ecological improvement”, he proposed to bracket it. In conclusion, three options were recommended for revision to operation R10.

54. With respect to operation R11: Uses of residual materials obtained from any of the operations numbered R1-R10, participants discussed the two options, namely retaining the status quo or deletion. One member, supported by others, explained that the proposal of his country and of other Parties to delete the entry was based on the fact that “use” was not a disposal operation. Another member supported the status quo and explained that permits were issued for this disposal operation in her country and said that a residue could be hazardous and that something else could happen to it. Another member explained that residues could be other wastes or non-wastes based on what happened to them: if they were disposed of, then they were wastes, if they were not disposed of, then they were not wastes. The proponent of the status quo sought more time to reflect on the options and volunteered to share with the members further information on the national use of this operation after the meeting. In conclusion, the option to delete the entry was recommended for revision to operation R11 in addition to retaining the status quo.

55. With respect to operation R12: Exchange of wastes for submission to any of the operations numbered R1-R11, participants discussed the three options in addition to retaining the status quo. One member said option 3 could be aligned with the relevant D operations and the co-chairs were entrusted with making a proposal. One member said that all options presented, apart from the status quo, were new operations and should be reflected as such in the section on new operations in the document. Later during the meeting, the members agreed recommend two options for revision to operation R12 in addition to retaining the status quo. Within those two options, option 1 is to split the operation and to replacing it by five operations mirroring relevant D operations, namely operations D8, D9, D13, D21 and D22, while option 2 specifies that the operations covered by option 1 are considered as new operations.

56. With respect to operation R13: Accumulation of material intended for any operation in Section B co-chair Gosk reminded participants that option 2 had been withdrawn during the run through of all the options for revisions to Annex IV B which meant only one option remained. In the light of the discussion on operation D15, the option was not discussed further and in conclusion, the option

²¹ Ibid.

²² Ibid.

²³ Ibid.

reading “Temporary storage [as an interim operation] prior to submission to any of the operations in section B” was recommended for revision to operation 13.

57. Participants turned their attention to the new proposed operations. With respect to new operation R14: Preparing for re-use (e.g., checking, cleaning, repair, refurbishment), several participants expressed concerns with the proposal saying it contradicted 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 (technical guidelines on e-waste)²⁴ and that it included operations which were not, as a general rule, disposal operations. The proponent explained that the proposed operation was to support efforts towards a circular economy by bringing wastes back into the economy, and that it would only apply to wastes, not substances or objects that are not wastes, which would be clarified via the suggested introduction for Annex IV B. In reaction to this explanation, one member indicated that this new operation could enlarge the scope of the Convention to products, since wastes are defined under the Convention through the definition of disposal, and disposal is defined using the operations in Annex IV and that, therefore, adding an operation that is usually also used on articles or substances not currently defined as wastes under the Convention could have the effect of newly defining them as wastes, even if this was not the intent. Another member expressed support for the concept but said the entry had to make clear that it only applied to wastes. In conclusion, the new proposed operation R14 was put in brackets.

58. With respect to new operation R15: co-processing, members confirmed their agreement with it, with one member expressing the view that some examples could be added.

59. With respect to new operation R16: Repackaging prior to submission to any of the operations in Section B, the new proposal was recommended with the addition of “as an interim operation” in brackets.

60. With respect to new operation R17: Recovery other than covered by R1 option2, R3 option1, R4 option1, R5 option1 and R14, , the proposal was put in brackets for the same reasons as for the new proposed operation D20, which is also a catch all operation.

D. Consequential implications

61. The Secretariat introduced its analysis of the possible consequential implications of the review of Annexes I, III and 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, set out in document UNEP/CHW/RA_EWG.3/INF/5. Co-chair Meijer reminded participants that the EWG had been requested by the Conference of the Parties to report to OEWG-12 its findings on the 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.

62. Members exchanged views on the matter with some highlighting the importance for any changes to the notification and movement documents and to the reporting format, as a consequence of possible amendments to Annex IV, to be considered by the Conference of the Parties at the time of its consideration of the amendments. The EWG requested the Secretariat to prepare versions of the notification document, the movement document, the instructions for completing both documents, the national reporting format and the manual for completing the format for national reporting, using colours to show where adjustments may need to be made as a consequence of possible amendments to Annex IV. These would be submitted to the EWG for consultation and subsequently to the OEWG-12 in an information document.

63. Several members said the notification and movement documents as well as the instructions for completing these would need to be adjusted to address an issue related to interim operations, namely to make clear that if a movement of wastes is destined for an interim operation, it must be complemented by a non-interim operation. Other members mentioned that this was not the case and that the notification document already requested that such information be provided in box 11. Members also had 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 to further discuss this matter. Members therefore agreed to reflect in the EWG findings on the consequential

²⁴ Available at <http://www.basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/TechnicalGuidelines/tabid/8025/Default.aspx>.

implications of the review of Annex IV²⁵ that the notification and movement documents, as well as the instructions for completing these, will reflect the outcome of the discussions on that issue. They also agreed to:

- (a) Reflect in the notification document that, in case an 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.

64. 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 on plastic waste in Annex II as well as for entry B1110 on waste electrical and electronic equipment and for entry B3011 on plastic waste in Annex IX.

E. Entries A1180 and B1110

65. Participants based their review of entries A1180 and B1110 on documents UNEP/CHW/RA_EWG.3/4 and UNEP/CHW/RA_EWG.3/INF/4. Co-chair Meijer invited general comments. One member said his country and other Parties were of the view that some terms in entry A1180 were unclear and that this issue needed to be addressed. Noting the link between that entry and entry B1110, he proposed that entry A1180 could be modelled on the approach embedded in entry A3210 on plastic waste so as to make the connection with the Annex I constituents and the Annex III characteristics. Finally, he said it was unclear how to deal with components, which are referred to in entry A1180. Although he saw no difficulty with the concept that if a specific component of the waste is hazardous then the whole waste is hazardous, there still needed to be clarity about which component was relevant to make the determination. He said he would welcome further discussion on these issues. Another member said that the reference to “waste” in the entries was unclear since it was the disposal operation that made the substance or object a waste. He therefore proposed for the entries to refer to “used electronic and electrical equipment”. In response, one member noted that the term “waste” was used in many entries of Annexes VIII and IX, and that the distinction between waste and non-waste in the case of e-waste was clarified in the technical guidelines on e-waste.

66. Participants then exchanged views on the review of entry A1180. One member proposed introducing the term “equipment” and deleting the term “assembly” in order to be in line with the definition of e-waste set out in the technical guidelines on e-waste. Participants exchanged views on the meaning of the terms “assemblies”, “equipment” and “components”, with one member saying that equipment is a subset of assembly. Differing views were expressed about the need to list what fell within the scope of “equipment” and about which equipment, for instance equipment containing printed circuit boards and display devices, was considered hazardous. One observer expressed concern with the approach whereby if a component is hazardous then the entire waste is considered hazardous. With respect to the use of the term “assembly”, the Secretariat confirmed that the Harmonized System (HS) codes for identifying electrical and electronic waste and scrap in the Harmonized System Nomenclature of the World Customs Organization (WCO) as agreed by the Harmonized System Committee did refer to this term. She explained that the amendments to the HS pertaining to electrical and electronic waste and scrap had been adopted by the WCO Council in June 2019. Barring objections by a Contracting Party to the HS Convention by 5 January 2019, the amendments will be included in the 2022 edition of the HS and enter into force on 1 January 2022. One observer noted that the proposal to model the drafting of entry A1180 on entry A3210 reversed the burden of proof about the requirement of hazardousness and said this contradicted Article 1.1 (a) and the chapeau of Annex VIII.

²⁵ See section III 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 expert working group on the consequential implications of the review of Annex IV to the Convention set out in the annex to the report.

67. Participants turned their attention to entry B1110. One member suggested it should mirror entry A1180 and, accordingly, to delete the first and third bullets in the current entry. Answering a concern raised by observers about deleting the third bullet, he explained that the proposed operation R14 would only apply to wastes.

68. Members agreed to reflect the outcome of their discussion on both entries in appendix II to their recommendations to Open-ended Working Group of the Basel Convention (OEWG) for consideration its twelfth meeting (OEWG-12), and co-chair Meijer invited two observers that had expressed the wish to do so, to send their proposal to the Secretariat for the information of all participants. Later during the meeting, co-chair Meijer noted that one member had also put forward a new proposal for both entries, which was subsequently revised with in consultation with another member and presented as another. Members exchanged views on how to present the three options, with one member saying that members had closed the discussions on the matter with only one option, to be presented in appendix II, and that the two other options therefore should not brought to the attention of OEWG-12. Following exchanges, members agreed to place the two additional options in an appendix III, as options 2 and 1, respectively, with a footnote specifying that they were presented during the third meeting of the EWG but were not discussed, and that some examples in these options were not retained merely for presentation purposes.

IV. Review of Annexes I and III to the Basel Convention

A. General issues on Annexes I and III

69. The Secretariat introduced relevant background information on the work of the EWG since its second meeting as set out in document UNEP/CHW/RA_EWG.3/5. She reminded participants of the request by the Conference of the Parties that the EWG proceed with its work on the basis of the way forward set out in the annex to decision BC-14/16 whereby amendment proposals with respect to Annexes I and III were to be presented and discussed during the fifteenth meeting of the OEWG and negotiated and possibly adopted by the Conference of the Parties during its sixteenth meeting. She also reminded participants of decision BC-14/13 on further actions to address plastic waste under the Basel Convention whereby the Conference of the Parties, among other things, had requested the EWG to consider, as part of its mandate, whether any additional constituents or characteristics in relation to plastic waste should be added to Annex I or III, respectively.

B. Annex I

70. Participants based their review of Annex I on documents UNEP/CHW/RA_EWG.3/5, UNEP/CHW/RA_EWG.3/6, UNEP/CHW/RA_EWG.3/INF/6 and UNEP/CHW/RA_EWG.2/INF/7. One member said that the review of Annex I aimed at ensuring that the Convention caught whatever is waste and hazardous. Members agreed to invite, by a deadline yet to be agreed, comments from the EWG members and observers 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. These would provide a basis for further discussions at the next meeting of the EWG.

C. Annex III

71. Participants based their review of Annex III on documents UNEP/CHW/RA_EWG.3/5, UNEP/CHW/RA_EWG.3/7, UNEP/CHW/RA_EWG.3/INF/7 and UNEP/CHW/RA_EWG.2/INF/8. One member referred to the proposal to align Annex III with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)²⁶ and said that the approach was perhaps helpful in some cases but that the current approach, namely the use of the United Nations Recommendations on the Transport of Dangerous Goods (UN class),²⁷ remained quite relevant in most cases for the purpose of transboundary movements. He added that with respect to the UN class 9 on miscellaneous dangerous goods, work was needed to determine thresholds of toxicity regarding transport and disposal and suggested that this analysis be undertaken by a consultant.

72. Another member agreed that the GHS was helpful, but not for all hazardous characteristics, and that it would need to be adjusted to the purpose of the Convention. He said he therefore remained open to keeping a link to the UN class for some hazardous characteristics when this was useful, and to use GHS for the other characteristics. Another member suggested retaining the use of the UN class and to set thresholds for each class. He said that some were set in guidelines concerning the

²⁶ For the eighth revised edition of the GHS (2019), see https://www.unece.org/trans/danger/publi/ghs/ghs_rev08/08files_e.html.

²⁷ ST/SG/AC.10/1Rev.5.

international transport of dangerous goods,²⁸ but that with respect to others, for instance toxicity, one would need to look at the final fate of the wastes based on the most conservative approach (e.g., landfill). He explained that toxicity thresholds would vary for each Annex I constituent and that the thresholds could be included either in Annex I or in Annex III. One member supported the establishment of thresholds under the Convention as her country did not have the capacity at the domestic level to establish them, while another member said the thresholds in the GHS were too low for the purposes of the Basel Convention. Several members expressed concern with the establishment of thresholds as their countries would not have the capacity to demonstrate whether they would be reached or not. They preferred the current approach which provided more flexibility.

73. One member expressed support for some of the proposals by several Parties to add characteristics such as cancerogenous, and proposed to add “persistent organic pollutants” (POP) as a new hazardous characteristic. Members expressed differing views on whether the use of the low POP content value was suitable to demonstrate the hazardous nature of a POP. Answering the concern by an observer that setting thresholds for each hazardous characteristic seemed to be a massive undertaking, one member said that members would need to agree on the specific characteristics, for instance POPs or mutagenic, for which the exercise made sense. Members agreed that further discussion was needed on the testing methods to determine that a specific threshold was met. In addition, one member argued that, in addition to the four general issues on Annex III referred to in document UNEP/CHW/RA_EWG.3/7, testing and the structure of Annex III should also be discussed as general issues.

74. The member from Canada volunteered to prepare by 24 January 2020 an information paper on the review of Annex III which would be discussed by the EWG through online consultations on 11 March 2020. She said that a consultant could then be hired to advance work, on the basis of terms of reference discussed with the EWG, and that a report prepared by the consultant would inform discussions at a meeting of the EWG. One member said he supported the development of the information paper and consultations of the EWG thereon, and that the proposed further steps benefitted from being considered in due course. Accordingly, the hiring of a consultant was just a possibility and it would need to be seen whether the usual approach in such cases, namely for a consultant to be hired by the Secretariat rather than by a Party, would be followed. Another member said it would be important for the terms of reference of a consultant to be agreed by the EWG. Members also agreed to invite, by a deadline yet to be agreed, comments from the EWG members and observers on the six general issues referred to in the previous paragraph and the detailed proposals on the review of Annex III set out in the annex to document UNEP/CHW/RA_EWG.3/7.

D. Constituents and characteristics in relation to plastic waste

75. One member said his country and other Parties had done some thinking on whether any additional constituents or characteristics in relation to plastic waste should be added to Annex I or III, respectively. Members agreed to invite, by a deadline yet to be agreed, comments from the EWG members and observers on the matter.

E. Consequential implications

76. Members had before them the analysis by the Secretariat of the possible consequential implications of the review of Annexes I, III and 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 set out in document UNEP/CHW/RA_EWG.3/INF/5. Members agreed to invite, by a deadline yet to be agreed, comments from the EWG members and observers on the possible consequential implications of the review of Annexes I and III 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.

V. Way forward

77. Before concluding their review of Annex IV, participants revisited outstanding issues, including the development of rationales for each option for possible amendments to Annex IV recommended by the EWG,²⁹ and how to address the different views as to whether operations not

²⁸ See https://www.unece.org/trans/danger/publi/adr/adr_guidelines.htm.

²⁹ See paragraph 9 of the present report.

identified as “prior to submission to any of the operations in section A or B” may also be interim operations.³⁰

78. Regarding the need for rationales, the EWG 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 three 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. This agreement is reflected in paragraph 6 of the recommended options for possible amendments to Annex IV set out in appendix I to 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 expert working group on the consequential implications of the review of Annex IV to the Convention” developed during the third meeting of the EWG and set out in the annex to the present meeting report.

79. Regarding the issue of interim and non-interim operations, members agreed to further discuss this matter following the third meeting of the EWG. Should the EWG reach the conclusion that operations not identified as “prior to submission to any of the operations in section A or B” may also be interim operations, it would consider the option of formulating operations R2 to R9 following the illustrative example below based on the current formulation of R4:

Split R4 in two:

R4: Recycling/reclamation of metals and metal compounds as an interim operation prior to submission to any of the operations in section B;

R4 bis: Recycling/reclamation of metals and metal compounds as a non interim operation.

This agreement is reflected in paragraph 2 of the annex to the present report and in a footnote to entries R2 to R9 in the EWG recommended options for possible amendments to Annex IV set out in the appendix I to that annex.

80. Regarding the way forward until OEWG-12, one member sought clarification as to whether any amendment proposal to entries A1180 and B1110 needed to comply with decision BC-VIII/15 entitled “Revisions to the procedure for the review or adjustment of the lists of wastes contained in Annexes VIII and IX and the status of decision VII/21” which, among other things, sets out a procedure for changes to the text of Annexes VIII and IX. Another member said that the context was different and that the Conference of the Parties had entrusted the EWG with the development of options for possible amendment proposals for both entries. He highlighted that those options would be made available to Parties and observers with an invitation to provide comments thereon in advance of OEWG-12, and that they would be considered and reviewed by OEWG-12, both of which ensured an open and transparent process. Members agreed therefore that there was no requirement to follow the specific procedure set out in decision BC-VIII/15.

81. Regarding the way forward until the fifteenth meeting of the Conference of the Parties, the Secretariat reminded participants that any proposal to amend Annex IV as well as entries A1180 and B1110 for consideration at that meeting would need to be submitted by a Party to the Secretariat, pursuant to paragraph 1 of Article 17 of the Convention. Given that any amendment proposal was to be communicated by the Secretariat to the Parties at least six months before the meeting at which it was proposed for adoption, pursuant to paragraph 2 of Article 17 of the Convention, and the need for such text to be made available in the six languages of the United Nations, any proposal to amend Annex IV as well as entries A1180 and B1110 would need to reach the Secretariat by 16 October 2020. Members invited the co-chairs to consult with members with a view to determining which Party or Parties intended to make any such proposal and to report on the outcome of these consultations to the EWG. Members agreed that, should one or more amendment proposals be made, the EWG-recommended options for possible amendment proposals to Annex IV and to entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention would also be part of the discussions of the Conference of the Parties.

82. Participants exchanged views on what the expectations could be for the OEWG-12. One member said that she expected a contact group to be set up and the options for possible amendment proposals to Annex IV as well as entries A1180 and B1110 to be negotiated. She emphasized the importance of being transparent as provided in Decision BC-VIII/15 and for that, suggested that OEWG-12 considers and reviews the amendment proposals. One member, supported by another, expressed the wish that OEWG-12 focus its discussions on specific conceptual issues that still needed

³⁰ See paragraph 47 of the present report.

resolution, such as the interim / non-interim operations and having subcategories of operations. Another member said that it was up to the OEWG to decide what it wished to discuss and how. There was general agreement that OEWG-12 should provide the EWG with directions on how to go forward. Another member said a side event could also provide an opportunity for the EWG to present and explain its recommended options.

83. Participants also exchanged views on the possible date for the fourth meeting of the EWG, noting that there was merit in further reducing alternatives and clearing some issues in advance of the fifteenth meeting of the Conference of the Parties. One member sought clarification on the purpose of the meeting and suggested to gather information on the submission of amendment proposals before making a decision. Members agreed to plan for a fourth meeting to take place back-to-back to and after OEWG-12, but that if this option came to not be adequate or possible, it would be postponed to September-November 2020.

84. The EWG agreed that comments by Parties and observers should be invited, by 15 April 2020, on its recommendations 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 on its findings on the consequential implications of the review of Annex IV to the Convention. The EWG requested the Secretariat to communicate this invitation in due course after the meeting and to compile the comments received in an information document for OEWG-12.

85. Co-chair Meijer reminded participants that, as reflected in paragraph 62 above, the EWG had requested the Secretariat to prepare versions of the notification document, the movement document, the instructions for completing both documents, the national reporting format and the manual for completing the format for national reporting, using colours to show where adjustments may need to be made as a consequence of possible amendments to Annex IV. These would be submitted to the EWG for consultation and subsequently to the OEWG-12 in an information document.

86. Co-chair Meijer also reminded participants that, as reflected in paragraphs 70, 74, 75 and 76 above, the EWG had agreed to invite comments from its members and observers by a deadline yet to be agreed 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 on possible consequential implications of the review of Annexes I and III 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.

87. With respect to the review of Annex III, members agreed for the member that had volunteered to do so to prepare by 24 January 2020 an information paper on the review of Annex III which would be discussed by the EWG through online consultations around 11 March 2020, and to discuss further steps at that time.

VI. Closure of the meeting

88. Members agreed that the report of the meeting would be prepared by the Secretariat under the guidance of the co-chairs and circulated to participating members for comments and endorsement. The meeting was closed by co-chair Meijer at 7 p.m. on Friday, 8 November 2019.

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

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 to further discuss this matter. Should the expert working group reach the conclusion that operations not identified as “prior to submission to any of the operations in section A or B” may also be interim operations, it would consider the option of formulating operations R2 to R9 following the illustrative example below based on the current formulation of R4:

Split R4 in two:

R4: Recycling/reclamation of metals and metal compounds as an interim operation prior to submission to any of the operations in section B;

R4 bis: Recycling/reclamation of metals and metal compounds as a non interim operation.

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.

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, taking into account further submissions received on that text and the text presented in appendix III 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 expert working group on the review of Annexes 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 expert working group 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 expert working group 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 be considered by the Conference of the Parties concurrently to any proposal to amend Annex IV to the Convention. It therefore requested the Secretariat to undertake preliminary work to identify, by colouring relevant parts of these documents, those parts that may require revisions, for the information of the Open-ended Working group during its twelfth meeting and consideration by the expert working group at its fourth meeting.

9. In addition, the expert working group 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 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:

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. Barring objections by a Contracting Party to the HS Convention by 5 January 2019, the amendments will be included in the 2022 edition of the HS and 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.

- (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.

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 third meeting (Bratislava, Slovakia, 5-8 November 2019) 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 for most operations; 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 D25, and R12 option 3 and R14 to R17) which are listed after operations currently listed in Annex IV for ease of reference. The ordering of the operations will be further considered by the expert working group.
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 third meeting of the expert working group on the review of the Annexes, including meeting documents, is available at:
<http://www.basel.int/Implementation/LegalMatters/LegalClarity/Meetings/3rdRAEWGmtg/tabid/8108/Default.aspx>
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 three 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.¹

I. General introduction for Annex IV

Annex IV Disposal operations

There are two categories of disposal operations, namely final disposal operations and recovery operations. Section A encompasses final disposal operations and section B recovery operations.

Both sections A and B also list disposal operations that occur prior to submission to any of the operations in the respective section (“interim operations”).²

This Annex covers all operations, regardless of their legal status at the national and/or international level and regardless of whether they are considered to be environmentally sound.

¹ 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>.

² See operations D8, D9, D13, D14, D15, D19, D21, D22 and D23 in section A, and operations R12, R13 and R16 in section B.

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

A. FINAL DISPOSAL OPERATIONS

A final disposal operation is an operation which is not a recovery [or recycling] operation even where the operation reclaims substances or energy as a secondary consequence.

B. RECOVERY [AND RECYCLING] OPERATIONS

A recovery 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 Annex IV A

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. Deposit into or onto land, [(e.g. dumpsites, [placement into wells, salt domes or naturally occurring repositories])] other than covered by D2, [D3], D4, D5, D12 or D12bis.

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

0. Status quo
1. [Treatment of land or through interaction with land (e.g. [biological or chemical treatment], [landfarming]) [as a non-interim operation]]

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

0. Status quo
1. *Delete and merge with D1*

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

0. Status quo
1. Surface impoundment (e.g. placement of liquids or sludge into pits, tailings ponds, tailings dams or tailings 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 engineered landfill isolated from the environment
2. [Deposit in an] Engineered landfill ([i.e.] [e.g.] placement isolated from the environment with[, if needed,] venting systems, leachate collection and draining systems)

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 this Annex, prior to submission to any of the operations in Section A
2. Biological treatment prior to submission to any of the operations in Section A
3. Biological treatment as an interim operation prior to any of operations in section A

D8.01: aeration lagoons

D8.02: bioventilation (bioventing)

D8.03: activated sludge

D8.04: biopiles with added nutrients (composting)

D8.05: UASB reactors

D8.06: full mix digesters
 D8.07: another aerobic treatment
 D8.08: another anaerobic treatment

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. Physical/mechanical treatment (e.g. evaporation, drying, [autoclaving]), physical/chemical treatment (e.g. solvent extraction), chemical treatment (e.g. neutralization, precipitation) or immobilization (e.g. stabilization, solidification[, encapsulation]) prior to submission to any of the operations in Section A
2. Physico chemical treatment as an interim operation prior to any of operations in section A
 - D9.01: evaporation, drying, dehydration
 - D9.02: precipitation, flotation, flocculation, coagulation, decantation
 - D9.03: phase separation, adsorption, desorption, absorption
 - D9.04: neutralization
 - D9.05: treatment by adsorption / desorption of activated carbon
 - D9.06: dechlorination
 - D9.07: decomposition by oxidation and / or reduction
 - D9.08: centrifugation, filtering and other selective separation media
 - D9.09: steam air treatment, condensation
 - D9.10: autoclave or other similar technology that uses pressure and temperature as process variables, for decontamination of contaminated solids
 - D9.11: Washing or decontamination
 - D9.12: Microencapsulated
 - D9.13: Macroencapsulation
 - D9.14: Chemical stabilization
 - D9.15: Physical stabilization
 - D9.16: Another waste conditioning operation for further treatment or final disposal

D10: Incineration on land

1. Thermal treatment [other than covered by R1 in Section B] [other than covered by D11 and D18](e.g. incineration)
2. Thermal treatments other than covered by D11 and D18
 - D10.01: incineration, thermic oxidation or pyrolysis
 - D10.02: co-incineration
 - D10.03: gasification
 - D10.04: thermal desorption
 - D10.05: vitrification
 - D10.06: other D10

D11: Incineration at sea

0. Status quo
1. Delete and merge with D10 option1

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

Split in 2:

D12: Permanent underground storage (e.g. emplacement of containers in a mine)
 D12bis: Permanent aboveground storage (e.g. emplacement of containers in a warehouse)

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

0. Status quo

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

Temporary storage [as an interim operation] 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 of waste by nanomaterials]****[D18: Open burning]****[D19: Sterilization or disinfection of [biopathological] [infectious] waste as an interim operation prior to submission to any of the operations in section A**

D19.01: autoclave

D19.02: microwave - radio waves.

D19.03: physical sterilization

D19.04: chemical sterilization

D19.05: other method or technology not specified]

[D20: Other treatment than covered by D1 option 2, D2 option1, D3 option1, D5 option1, D6, D7, D10 option1, D12, D12bis and D16 above]**[D21: Other treatment than covered by D8 option 2, D9 option1, D13, D14 and D22 above prior to submission to any of the operations in Section A]****[D22: Mechanical or manual [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]****[D23 Treatment of land or through interaction with land (e.g. [biological or chemical treatment], [landfarming]) as an interim operation prior to submission to any of the operations in Section A.]****[D24. Biological treatment as a non-interim operation not covered by D2**

D24.01: aeration lagoons

D24.02: bioventilation (bioventing)

D24.03: UASB reactors]

[D25. Physico chemical treatment as a non-interim operation (e.g. neutralization)]**IV. Options for possible amendment proposals Annex IV B****R1: Use as a fuel (other than in direct incineration) or other means to generate energy**

0. Status quo

1. Use as a fuel or other means to generate energy [or to reduce energy requirements]

2. Thermal treatment with the principal purpose to generate energy [except where covered by R15] [or to reduce energy requirements] (e.g. incineration)

R2: Solvent reclamation/regeneration³

0. Status quo

1. Delete and merge with R3 option1 and R5 option1

2. Solvent reclamation/regeneration.

R2.01: distillation / rectification

R2.02: filtered

R2.03: other R2

R3: Recycling/reclamation of organic substances which are not used as solvents⁴

0. Status quo

1. Recycling of organic substances (e.g. regeneration, mechanical treatment)

³ Should the expert working group reach the conclusion that operations not identified as “prior to submission to any of the operations in section A or B” may also be interim operations, it would consider the option of formulating operations R2 to R9 following the example in paragraph 2 of section II of the recommendations.

⁴ Idem.

-
2. Recovery of organic substances which are not used as solvents
- R4: Recycling/reclamation of metals and metal compounds⁵**
0. Status quo
 1. Recycling of metals and metal compounds (e.g. smelting, hydrometallurgy, mechanical treatment)
 2. Recovery of metals and metal compounds
 - R4.01: precipitation
 - R4.02: pyrometallurgy
 - R4.03: hydrometallurgy
 - R4.05: unspecified metallurgical processes
 - R4.05: distillation
 - R4.06: decontamination
 - R4.07: metal casting
- R5: Recycling/reclamation of other inorganic materials⁶**
0. Status quo
 1. Recycling of [other]inorganic materials [other than covered by R4] (e.g. regeneration, mechanical treatment)
 2. Recovery of [other] inorganic materials [other than covered by R4]
- R6: Regeneration of acids or bases⁷**
0. Status quo
 1. *Delete R6 and merge with R3 option1 and R5 option1*
- R7: Recovery of components used for pollution abatement⁸**
0. Status quo
 1. *Delete R7 and merge with R3 option1, R4 option1 and R5 option1*
 2. Recovery of components used for pollution control
 - R7.01: Recovery or regeneration of activated carbon
 - R7.02: another treatment applied to used components
- R8: Recovery of components from catalysts⁹**
0. Status quo
 1. Recycling/reclamation of catalysts
 2. *Delete R8 and merge with R3 option1, R4 option1 and R5 option1*
 3. Recovery of components from catalysts
 - R8.01: hydrometallurgy
 - R8.02: pyrometallurgy
 - R8.03: other R8
- R9: Used oil re-refining or other reuses of previously used oil¹⁰**
0. Status quo
 1. Re-refining of used oil
 2. *Delete and merge with R3 option1*
 3. Recovery of used oil and hydrocarbons

⁵ Idem.

⁶ Idem.

⁷ Idem.

⁸ Idem.

⁹ Idem.

¹⁰ Idem.

- R9.01: filtering or rectification
- R9.02: distillation of natural or synthetic hydrocarbon-based waste
- R9.03: use without the need of any further operation from this Annex

R10: Land treatment resulting in benefit to agriculture or ecological improvement

1. Land treatment other than in D2 resulting in benefit to agriculture or ecological improvement
2. Treatment of land or through interaction with land [resulting in benefit to agriculture or ecological improvement] (e.g. biological or chemical treatment)
3. Land treatment resulting in benefit to agriculture or ecological improvement:

- R10.01: valorization of phosphorus or nitrogen content
- R10.02: preparation or manufacture of amendments or fertilizers
- R10.03: improvement of disaggregated soils without an agronomic purpose

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. *Split and replace by five operations mirroring D operations:*

R12 (mirroring D8)

1. Biological treatment not specified elsewhere in this Annex, prior to submission to any of the operations in Section B
2. Biological treatment prior to submission to any of the operations in Section B
3. Biological treatment as an interim operation prior to any of operations in section B

- R12.01: aeration lagoons
- R12.02: bioventilation (bioventing)
- R12.03: activated sludge
- R12.04: biopiles with added nutrients (composting)
- R12.05: UASB reactors
- R12.06: full mix digesters
- R12.07: another aerobic treatment
- R12.08: another anaerobic treatment

R12bis (mirroring D9)

1. Physical/mechanical treatment (e.g. evaporation, drying, [autoclaving]), physical/chemical treatment (e.g. solvent extraction), or chemical treatment (e.g. neutralization, precipitation) prior to submission to any of the operations in Section B
2. Physico chemical treatment as an interim operation prior to any of operations in section B

- R12bis.01: evaporation, drying, dehydration
- R12bis.02: precipitation, flotation, flocculation, coagulation, decantation
- R12bis.03: phase separation, adsorption, desorption, absorption
- R12bis.04: neutralization
- R12bis.05: dechlorination
- R12bis.06: decomposition by oxidation and / or reduction
- R12bis.07: centrifugation, filtering and other selective separation media
- R12bis.08: steam air treatment, condensation
- R12bis.09: autoclave or other similar technology that uses pressure and temperature as process variables, for decontamination of contaminated solids
- R12bis.10: Washing
- R12bis.11: Chemical stabilization
- R12bis.12: Physical stabilization
- R12bis.13: other R12

R12ter (mirroring D13)

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

R12quater (*mirroring D22*)

Mechanical or manual [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

R12quintis (*mirroring D21*)

[Other treatment than covered by R12, R12bis, R12ter, R12quater and R16 above prior to submission to any of the operations in section B]

2. *Keep status quo and add option 1 as new operations*

R13: Accumulation of material intended for any operation in Section B

Temporary storage [as an interim operation] 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

R16: Repackaging [as an interim operation] 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, R14 and R15 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, [assemblies], [components] [(e.g. circuit boards and display devices),] or scrap [containing [components] [waste] [such as accumulators and other batteries] included on list A, [mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors,] or] containing or contaminated with Annex I constituents [(e.g., cadmium, mercury, lead, polychlorinated biphenyl)] to an extent [that they possess any of the] [that [it] [they] exhibit[s] an Annex III] characteristic[s] [contained in Annex III] [or waste electrical and electronic equipment, [assemblies] or scrap containing [components] [waste] included on list A] (note the related entry on list B B1110)¹⁰.

¹⁰ PCBs are at a concentration level of 50 mg/kg or more.

B1110: Waste electrical and electronic equipment, [assemblies], [components] [(e.g. circuit boards and display devices),] or scrap [not containing [components] [waste] [such as accumulators and other batteries] included on list A, [mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors,] and] not containing or contaminated with Annex I constituents [(e.g., cadmium, mercury, lead, polychlorinated biphenyl)] to an extent [that they possess any of the] [that [it] [they] exhibit[s] an Annex III] characteristic[s] [contained in Annex III] [and waste electrical and electronic equipment, [assemblies] or scrap not containing [components] [waste] included on list A] (note the related entry on list A A1180)¹⁰.

¹⁰ PCBs are at a concentration level of 50 mg/kg or more.

Appendix III to the recommendations by the expert working group

Additional options for possible amendments to A1180 and B1110¹

Option 1

A1180: Waste electrical and electronic equipment, [assemblies] or scrap a) containing components included on list A or b) containing or contaminated with Annex I constituents 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)

B1110: Waste electrical and electronic equipment, [assemblies] or scrap a) not containing components included on list A and b) not containing or contaminated with Annex I constituents 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 B B1110)

Option 2

A1180: Waste electrical and electronic equipment, assemblies, components (e.g. circuit boards and display devices), or scrap, that:

- a) contain waste(s) included on list A; or
- b) contain or are contaminated with Annex I constituents to an extent that the waste exhibits an Annex III characteristic

(note the related entry on list B B1110)

B1110: Waste electrical and electronic equipment, assemblies, components (e.g. circuit boards and display devices), or scrap, that:

- a) do not contain waste(s) included on list A; and
- b) do not contain and are 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)

¹ These proposals in options 1 and 2 were presented during the third meeting of the expert working group but were not discussed. Some examples in these options were not retained merely for presentation purposes.