



**Conference of the Parties to the Basel Convention
on the Control of Transboundary Movements
of Hazardous Wastes and Their Disposal
Sixteenth meeting**

Geneva, 1–12 May 2023

Agenda item 4 (c) (ii)

**Matters related to the implementation of the
Convention: legal, compliance and governance
matters: providing further legal clarity**

Review of Annex IV

Note by the Secretariat

1. During the sixteenth meeting of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Parties and observers provided oral comments on 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 (status 13 January 2022). Those comments are captured in the annex II to the present document.
2. The present note also includes in its annex I the proposals by the European Union to amend Annex IV and certain entries in Annexes II and IX to the Basel Convention and annex II sets out 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 (status 13 January 2022), as submitted to the sixteenth meeting of the Conference of the Parties.
3. The present note, including its annexes, has not been formally edited.

Annex I

Proposal by the European Union to amend Annex IV, two footnotes of entry Y48 in Annex II, and two footnotes of entry B3011 in Annex IX to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

Proposals, on behalf of the European Union, to amend Annex IV and certain entries in Annexes II and IX to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal for consideration by the Conference of the Parties at its fifteenth meeting

Part I

Proposal on behalf of the European Union for amendments to Annex IV to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (proposal for new text for Annex IV)

Annex IV¹

Disposal operations

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

This Annex also covers in both sections A and B disposal operations that occur prior to submission to any of the operations in the respective section².

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

¹ The amendments to this Annex become effective as of [date occurring [three][four] years after adoption by the Conference of the Parties].

² See operations D31 to D36 in section A and operations R26 to R31 in section B.

A. Non-recovery operations

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

- D20 Deposit in an aboveground engineered landfill isolated from the environment
- D21 Surface impoundment (e.g. placement of liquids or sludge into pits, basins or tailing dams)
- D22 Deposit onto land other than covered by D20 and D21 (e.g. permanent aboveground storage)
- D23 Permanent underground storage (e.g. placement of containers in a mine)
- D24 Deposit into land other than covered by D23 (e.g. injection into wells, salt domes of naturally occurring repositories)
- D25 Treatment of land in situ (e.g. biodegradation or biological or chemical treatment)
- D26 Release into a water body except seas/oceans
- D27 Release into seas/oceans including sea-bed insertion
- D28 Release to the atmosphere (e.g. venting of compressed or liquefied gases)
- D29 Thermal treatment other than covered by R24 in section B (e.g. incineration)
- D30 Non-recovery other than covered by D20 to D29
- D31 Biological treatment prior to submission to any of the operations in section A
- D32 Mixing, including blending, prior to submission to any of the operations in section A
- D33 Manual treatment (e.g. separation), physical/mechanical treatment other than covered by D32 (e.g. separation, size reduction, evaporation, drying, autoclaving), physical/chemical treatment (e.g. solvent extraction), chemical treatment (e.g. neutralization, chemical precipitation) or immobilization (e.g. stabilization, solidification) prior to submission to any of the operations in section A
- D34 Repackaging prior to submission to any of the operations in section A
- D35 Other treatment than covered by D31 to D34 prior to submission to any of the operations in section A
- D36 Temporary storage prior to submission to any of the operations in section A

B. Recovery 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.

- R20 Preparing for reuse (e.g. checking, cleaning, repair, refurbishment)
- R21 Recycling of organic substances (e.g. physical/mechanical treatment, chemical treatment)
- R22 Recycling of metals and metal compounds (e.g. smelting, hydrometallurgy, physical/mechanical treatment)
- R23 Recycling of inorganic materials other than covered by R22 (e.g. physical/mechanical treatment, chemical treatment)
- R24 Thermal treatment with the principal result to generate energy (e.g. incineration)
- R25 Recovery other than covered by R20 to R24
- R26 Biological treatment prior to submission to any of the operations in section B
- R27 Mixing, including blending, prior to submission to any of the operations in section B
- R28 Manual treatment (e.g. separation), physical/mechanical treatment other than covered by R27 (e.g. separation, size reduction, 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
- R29 Repackaging prior to submission to any of the operations in section B
- R30 Other treatment than covered by R26 to R29 prior to submission to any of the operations in section B
- R31 Temporary storage prior to submission to any of the operations in section B

Part II

Proposals on behalf of the European Union for amendments to Annexes II and IX to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

In two footnotes of entry Y48 in Annex II to the Convention and in two footnotes of entry B3011 in Annex IX to the Convention, the text “Recycling/reclamation of organic substances that are not used as solvents (R21 in Annex IV, sect. B)” shall be replaced by “Recycling of organic substances (e.g. physical/mechanical treatment, chemical treatment) (R21 in Annex IV, sect. B)” and the text “operation R3” shall be replaced by “operation R21”.

Those changes shall become effective when the amendments to Annex IV to the Convention become effective.

Annex II

Recommendations by the expert working group on the review of Annexes for possible amendment proposals to Annex IV and to entries A1180 and B1110 in Annexes VIII and IX to the Basel Convention, and findings of the expert working group on the consequential implications of the review of Annex IV to the Convention (status 13 January 2022)

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

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

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

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

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

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

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

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

5. The expert group provides the following explanations in relation to appendix II:
 - (a) The work on entry A1180 was conceptually based on the text of entry A3210, clarifying that whole equipment and components are covered [and adding fractions from pre-treatment];
 - (b) The work was based on ensuring consistency between the wording of entries A1180 and B1110 making them mirror entries, which inter alia resulted in the deletion of the first and third bullets of entry B1110;
 - (c) In relation to the presence of hazardous and potentially hazardous components in equipment, two alternatives are reflected;
 - (d) To include clarifying examples;
 - (e) For the term “scrap”, further discussion was considered necessary, also in light of the adoption of Harmonized System codes for identifying electrical and electronic waste and scrap in the Harmonized System Nomenclature of the World Customs Organization;¹
 - (f) To clarify that the entries do not cover wastes covered by other entries;
 - (g) Further discussion was considered necessary on how to reflect that components which are always hazardous and components which are not always hazardous are covered;
 - (h) To adjust the footnote to make reference to polybrominated biphenyls (PBBs) in addition to **polychlorinated biphenyls** (PCBs).

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

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

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 entered 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.

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

¹ See

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

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

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

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

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

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

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

I. General introduction for Annex IV

Annex IV Disposal operations

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

This Annex also covers in both sections A and B disposal operations that occur prior to submission to any of the operations in the respective section.³

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

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

A. [FINAL DISPOSAL] [NON RECOVERY] OPERATIONS

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

B. RECOVERY [AND RECYCLING] OPERATIONS

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

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

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

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

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

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

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

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

³ See operations D8, D9, D13, D14, D15, D19 and D21 in section A, and operations R12, R13 and R16 in Section B.

Commented [JK1]: Views from Parties (not agreed proposals):

- Introduction is useful; should cover interim and final operations; operations regardless their ESM status.
- Should be reader-friendly and understandable. To clarify difference between disposal and other operations.
- To consider elements contained in the Glossary of terms on the definition of wastes (e.g. it is not always possible to determine if something is waste or not only based on what happens to it).
- Most interim operations are covered in the new R operations. Interim operations can be seen in the light of final disposal operations.
- Would interim operations be indeed the new operations? E.g. Current annex IV A, I see D8, D9, D13, D14, D15 are being interim operations.
- Some of these operations signifies a step.
- Regarding TBM, it is difficult to confirm the "destiny" of wastes using interim operations (e.g. "repackaging" operation). For all interim operations there should be mirror entries in both Sections A and B. Interim operations should be combined with final operations.
- EWG is to use well-known terminology in sections A and B (e.g. glossary of terms, national legislation).
- EWG is to clarify when a proposal is considered as a step or regression (e.g. detailed technical explanation on new entries) 3. To keep a register of entries to facilitate the revision work (to provide better technical justification).
- Regarding the TBM for interim operations, the related final operations should be clarified. This would support the implementation of the PIC procedure.
- For each operation we could identify which is interim and which is not. "Final disposal" in Spanish is different from "disposal". EWG needs to provide explanation on the "final disposal".
- Can the same term can be used differently across Parties (e.g. "recycling").

Commented [JK2]: Views from Parties (not agreed proposals):

- Consider whether the definitions would be captured in Annex IV or guidance documents.
- Clarify in the section B whether materials have been previously defined as wastes. EWG should consider "waste" definition during its discussions.
- Annexes can include explanation on the definition on "waste" but it is the Convention that defines "wastes".
- EWG should carefully review the issue of the "waste definition" from the technical but mostly legal angle.
- Check the structure of section A and B. To see where interim, prevention and other operations would be captured.
- Need to clarify the number of terms, which led to the adoption of the Glossary of terms. The exercise of Annex IV provides an opportunity to provide further explanations.
- Language on when goods become waste is critical and should be included in the Annex IV.
- Recovery operation: "waste being preparing to fulfil that function" needs further considered. Section A "where the operation has a secondary consequence..." to ensure that there is no overlap with the recovery operations.
- Making the distinction on waste vs non-wastes would not be the EWG mandate.
- If an A operation is described as recovery, this could lead to confusion. Current description of section A focuses only on final operations. If such operations are re-defined as it is proposed, this would change the structure and the logic of the annex IV.
- There are certain operations which have been included in both sections A and B ("before submission:"). Such operations should be stand-alone operations and not included in the sections A and B. This could be placed in a new section C or another annex.
- The structure of the annex cannot be changed as it is included in the body of the BC (Article 4A).
- Similar operations could result in different outcomes (so that could be placed in difference sections).
- Objective is to seek to make "surgical" changes to the Annex IV in order to gain environmental benefits (and not to rewrite annex).

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

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

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

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

D6 Release into a water body except seas/oceans

0. Status quo

D7 Release into seas/oceans including sea-bed insertion

0. Status quo

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

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

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

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

D10 Incineration on land

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

D11 Incineration at sea

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

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

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

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

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

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

0. Status quo

D15 Storage pending any of the operations in Section A

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

NEW OPERATIONS

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

[D17 Treatment by nanomaterials]

[D18 Open burning]

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

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

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

[D22 Co-processing]

IV. Options for possible amendment proposals to Section B of Annex IV

R1 Use as a fuel (other than in direct incineration) or other means to generate energy

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

R2 Solvent reclamation/regeneration

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

Commented [JK3]: Views from Parties (not agreed proposals):

- Support by some Parties in light of environmental gains
- Clarifications sought on the gases captured or excluded by this operation (e.g. exhaust gases, industrial emissions, gases compressed in a cylinder?) and its impact on the scope of the Convention
- Some Parties raised financial, economical and technological capacity issues associated with managing such releases
- Some Parties opposed the proposed new entry pending further clarifications and explanations

Commented [JK4]: Views from Parties (not agreed proposals):

- Provide examples of such technologies and their risks
- Provide clarification on the necessity of new entry D17 if covered by D9

Commented [JK5]: Views from Parties (not agreed proposals):

- EWG to clarify need to have distinct operation instead of covered within more general operations on burning or combustion.
- Clarify link with D10 and D11.
- Look into existing wording when considering the new entry e.g. B1115

Commented [JK6]: Views from Parties (not agreed proposals):

- EWG to review retention of "prior to submission to any of the operations in section A" and whether it is possible to go to a recovery (B) operation as outcome of the D19 operation would be waste that is not hazardous
- EWG to clarify the need to have a distinct operation and whether there are environmental gains in having it; clarify link with D9.
- EWG to consider removing brackets around "infectious waste", deleting the reference to "infectious waste", or using "medical waste" instead
- EWG to discuss examples of D19 operations

Commented [JK7]: Views from Parties (not agreed proposals):

- EWG to explore the impact on the BC of an entry where the disposal operations are not defined (e.g. on scope of wastes covered, on national reporting, on PIC procedure)
- EWG to explore the environmental gains and benefits in terms of legal clarity brought by this proposal
- EWG to provide more examples of D20 operations

Commented [JK8]: Views from Parties (not agreed proposals):

- EWG to explore the impact on the BC of an entry where the disposal operations are not defined (e.g. on scope of wastes covered, on national reporting, on PIC procedure)
- EWG to explore the environmental gains and benefits in terms of legal clarity brought by this proposal
- EWG to review the structure of Annex IV, whether interim operations fit in sections A and B of Annex IV
- EWG to provide more examples of D21 operations

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

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

R12bis (*mirroring D9*)

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

b) *Split in 3*

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

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

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

c) *Split in 4*

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

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

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

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

R12ter (*mirroring D13*)

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

R12quater (*mirroring D21*)

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

R13 Accumulation of material intended for any operation in Section B

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

NEW OPERATIONS

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

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

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

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

Commented [JK9]: Views expressed by Parties (not agreed text):

- Seek more information from Parties which are implementing the concept "preparing for re-use" on what types of wastes are exported/imported for cleaning, repairing, refurbishing.
- What are the environmental gains and challenges for applying the concept of "preparing for re-use" (e.g. checking, cleaning, repair, refurbishment).
- Clarify whether R14 would be linked to the PIC procedure; goods based on their functionality test would lead to disposal.
- Clarify how to establish the eligibility criteria for the possibility of recovery operations.
- "Preparing for re-use" cannot be used to define waste; in the context of TBM, an import country doesn't have information whether exported goods have been discarded or not.
- To clarify how the operation R14 could be controlled by customs during the TBM
- Activity of a holder (e.g. bringing the good to collection points, repair facilities, etc.) could determine whether it is good or waste.
- Operations that lead to "direct use".
- Need to consider environmental benefits (e.g. wastes being transported under disguise of being repairable).
- Clarify if R14 would apply to e-waste only or all wastes.
- R14 would control all objects and substances, not only substances that become waste.
- Need to define the application of R14 operation. Re-use operations should be done within the country.
- Data collected in relation to the R14 operations provides information on TBM of wastes on the global level.
- To seek experience on how Parties address the preparing for re-use in their countries.
- See how the entry R14 could be re-worded or re-structured to lead to a constructive solution.

Commented [JK10]: Views expressed by Parties (not agreed text):

- Co-processing technologies can lead to different results which are already captured in the other operations.
- This entry should be clarified by adding "in cement kilns". This operation should be distinguished from co-incineration. This entry covered operations already captured by R1 and R4.
- This entry is linked to the fact whether one or several operations could be used in the PIC
- See if there is any evidence /environmental benefits for using a stand-alone entry instead of two entries.
- Co-processing is covered R1, R4 and R5. Consider whether the use of facilities that are not dedicated to waste treatment provide justification. If the operation doesn't produce energy, then it is covered D10.
- Include a stand-alone on co-incineration as a mirror operation to D10 in section A
- Consider reviewing the example of "reducing energy requirements".
- Clarify whether waste would be intended to be added as an example in cement kilns to fit under the category of final disposal.

Appendix II to the recommendations by the expert working group

Recommended option for possible amendments to A1180 and B1110

A1180

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

- a) containing or contaminated with Annex I constituents (e.g. cadmium, lead, mercury, organohalogen compounds) to an extent that the waste exhibits an Annex III characteristic, or
- b) containing components included on list A or components (e.g. circuit boards, display devices) containing Annex I constituents to an extent that the waste exhibits an Annex III characteristic (e.g. mercury switches, lamps containing mercury, capacitors containing PCBs) [or]
- b) ALT with a component [included on list A or components (e.g. circuit boards, display devices)] containing Annex I constituents [so] [to an extent] that [it] [the waste] exhibits an Annex III characteristic (e.g. with glass from cathode ray tubes or a battery included on list A, a mercury switch, a lamp containing mercury, a fluorescent tube containing mercury, a capacitor containing PCBs or a component containing asbestos) or with a component (e.g. a circuit board, a display device or a plastic component containing a brominated flame retardant) containing or contaminated with Annex I constituents to an extent that [it] [the waste] exhibits an Annex III characteristic; [or]

Waste components of electrical and electronic equipment containing or contaminated with Annex I constituents to an extent that the waste exhibits an Annex III characteristic, unless covered by another entry on list A; or

Fractions from the [pre-treatment] of waste electrical and electronic equipment or waste components of electrical and electronic equipment containing or contaminated with Annex I constituents to an extent that the waste exhibits an Annex III characteristic, unless covered by another entry on list A) (note the related entry on list B B1110).¹⁰

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

B1110

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

- a) not containing and not contaminated with Annex I constituents (e.g. cadmium, lead, mercury, organohalogen compounds) to an extent that the waste exhibits an Annex III characteristic and
- b) not containing components included on list A or components (e.g. circuit boards, display devices) containing Annex I constituents to an extent that the waste exhibits an Annex III characteristic (e.g. mercury switches, lamps containing mercury, capacitors containing PCBs) [or]
- b) ALT without any component [included on list A or components (e.g. circuit boards, display devices)] containing Annex I constituents [so] [to an extent] that [it] [the waste] exhibits an Annex III characteristic (e.g. without glass from cathode ray tubes or a battery included on list A, a mercury switch, a lamp containing mercury, a fluorescent tube containing mercury, a capacitor containing PCBs or a component containing asbestos) and without any component (e.g. a circuit board, a display device or a plastic component containing a brominated flame retardant) containing or contaminated with Annex I constituents to an extent that [it] [the waste] exhibits an Annex III characteristic; [or]

Waste components of electrical and electronic equipment not containing and not contaminated with Annex I constituents to an extent that the waste exhibits an Annex III characteristic, unless covered by another entry on list B; or

Fractions from the [pre-treatment] of waste electrical and electronic equipment or waste components of electrical and electronic equipment not containing and not contaminated with Annex I constituents

to an extent that the waste exhibits an Annex III characteristic, unless covered by another entry on list B] (note the related entry on list A A1180).¹⁰

¹⁰ PCBs or PBBs are at a concentration level of less than 50 mg/kg in equipment[,] [including scrap [thereof] or] in a component [or in a fraction].
