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

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Item 3 (b) of the provisional agenda*

**Review of Annex IV and related aspects of Annex IX
to the Basel Convention: Annex IV B operations**

Compilation of comments on Annex IV B

Note by the Secretariat

As referred to in the note by the Secretariat on the Review of Annex IV and related aspects of Annex IX to the Basel Convention (UNEP/CHW/RA_EWG.1/2), the annex to the present note sets out the compilation of comments received on the working document for Annex IV B prepared by the co-chairs of the expert working group on the review of the Annexes. The compilation was prepared by the co-chairs of the group and includes comments received from Argentina, Australia, Bosnia and Herzegovina, Canada, Chile, Colombia, Egypt, the European Union and its member States, the Islamic Republic of Iran, Israel, New Zealand, the State of Palestine, South Africa, Switzerland, the United States of America, Basel Action Network and Information Technology Industry. The comments are available on the website of the Convention at:

<http://www.basel.int/Implementation/LegalMatters/LegalClarity/ReviewofAnnexes/AnnexesI,III,IVandrelatedaspectsofAnnexIX/Activities20182019/tabid/6125/Default.aspx>. The present note, including its annex, has not been formally edited.

* UNEP/CHW/RA_EWG.1/1.

Annex

Co-chairs' compilation of comments on Annex IV B

Decision BC-13/2: Mandate for the review of Annex IV

- (i) Improve/update the description of disposal operations in Annex IV; and,
- (ii) Improve environmental controls by including additional disposal operations that occur in practice or could occur in practice in Annex IV.

How to use this document: Please complete the table with your comments, including 'problem statement', 'proposed change' and 'rationale'. Leave blank if no change is required. **Bold and underline** for additions and ~~strikethrough~~ (e.g., ~~strikethrough~~) for deletion of text.

A	B	C	D	E
Annex IV.B	Problem statement	Proposed change	Rationale	General comments
Caption text B. OPERATIONS WHICH MAY LEAD TO RESOURCE RECOVERY, RECYCLING RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES	ARG: "direct re-use" AUS: (1) The major headings do not identify the two principal class of disposal: Recovery. BAN: -Direct Re-use is not a disposal operation. -"May lead" is too vague. CAN: The caption text needs to be changed because it is factually incorrect. Reclamation and alternative use are not listed in Annex IV.B as actual operations. Referring to direct re-use is misleading as operations in Annex IV.B do not lead to the direct re-use of the waste. CHE: Delete "Direct reuse" Direct reuse is not a waste.	ARG: b. Operations which may lead to resource recovery, recycling reclamation, direct re- or alternative uses AUS: <u>RECOVERY OPERATIONS:</u> OPERATIONS WHICH MAY LEAD TO RESOURCE RECOVERY, RECYCLING RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES BAN: -Remove reference to Direct Re-use: -Change to: Operations <u>that are intended to</u> lead to resource recovery, recycling, reclamation, direct re-use or alternative uses. BIH: <u>Activities</u> WHICH MAY LEAD TO RESOURCE	ARG: No-waste status of materials destined to direct reuse AUS: Addition of the sub-heading "Recovery operations" succinctly conveys key information about the general nature of the operations that are included in this category. BAN: We have defined direct re-use in the glossary as being something that need not be disposed or recycled. BIH: If they only may lead than there will some that do not lead, which is then under IV.A. What is direct re-use, without any handling? Than its not part of IV.B	AUS: None of the disposal operations appear to fall under direct re-use. CAN: -Some operations in Annex IV.B can lead to reuse such as used oil that was re-refined. But reuse is not an operation by itself and reuse is for products, objects or substances that are not a waste. -If the title of Annex IV.B is changed to <i>Recovery operations</i> we consider that language for operations R7 and R8 should be changed as they are both referred to as recovery operations. COL: The definition of the term "Recovery" may be

	<p>CHL: Large text. Incorrect text, as no reference to re-use or use should be made</p> <p>COL: The caption at present does not help explain the key distinction between Annex IVA and IVB operations.</p> <p>EU: The caption is complicated. In line with the glossary of terms, the reference to "direct re-use" is misleading since this only occurs when no recovery operations are necessary and it cannot be the result of any recovery operation.</p> <p>ISR: The text is not clear and precise:</p> <ol style="list-style-type: none"> 1. "Direct re-use" is not an operation as it is only occurs if no operations are necessary. 2. The words "may lead" add uncertainty to the definition. <p>ITI: Caption text is ambiguous and gives rise to some legal uncertainty with regard to covered operations. The text should be clarified with a reference to "recovery" operations to facilitate consistent implementation.</p> <p>In addition, "direct reuse" is not a waste</p>	<p>RECOVERY, RECYCLING RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES</p> <p>CAN: Delete the caption text OPERATIONS WHICH MAY LEAD TO THE POSSIBILITY OF RESOURCE RECOVERY, RECYCLING, RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES</p> <p>Replace with <u>Recovery operations</u></p> <p>CHE: B. OPERATIONS WHICH MAY LEAD TO RESOURCE RECOVERY, RECYCLING RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES New title: <u>Recycling and recovery operations (pre-treatment operations leading for recycling and recovery)</u></p> <p>CHL: <u>RECOVERY OPERATIONS</u> B. OPERATIONS WHICH MAY LEAD TO RESOURCE RECOVERY, RECYCLING RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES</p>	<p>CAN: -Simplify the caption text. -A simplified caption text is needed to clearly differentiate between the categories of operations, in particular if new list of categorization (e.g. interim operations) are created.</p> <p>CHE: Direct reuse is not a waste.</p> <p>CHL: -Simplifying -Correction: elimination of "direct re-use or alternative uses"</p> <p>COL: A clear distinction should be made between the operations in sections A and B.</p> <p>EU: -Simplification. A clear caption text like this would it make easier to understand what the section should contain. -Omission of the term "direct re-use". -A clearer distinction should be made between the operations in sections A and B. The suggested headings would clarify the description</p>	<p>provided as a footnote with explanatory notes. Glossary of terms (UNEP/CHW/OEWG.10/INF/10).</p> <p>EU: -Annex IV includes two different types of operation in sections A and B under the same heading "Disposal operations". This shared heading is a consequence of the definition of "disposal" in Article 2(4) of the Convention: "any operation specified in Annex IV to this Convention." -“Reclamation” should be deleted as it is not defined in the Glossary of terms.</p> <p>ITI: Reference to "recovery" would further consistent implementation.</p> <p>NZL: The choice between the two options depends on whether items/material for re-use (ie direct re-use) is waste or not.</p> <p>PSE: Similar to comments on Annex IV.A</p>
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	<p>recovery operation and should be removed from the caption</p> <p>NZL: The reference to direct re-use or alternative use is not matched by an R code (apart from R9 for used oil).</p> <p>The list here also does not mention all of the operations listed (regeneration for example).</p> <p>PSE: Are they really "disposal operations" Coming under the annex title...? "DIRECT RE-USE" contradicts the definition of waste which is based on the phrase "disposed of"...</p> <p>USA: The caption implies that material sent for direct reuse is waste, which it is not.</p>	<p>COL: <u>Recovery Operations</u></p> <p>EU: Delete the current caption text and replace it by: <u>"A. Recovery operations"</u></p> <p>ISR: <u>RECOVERY OPERATIONS</u> OPERATIONS WHICH MAY LEAD TO RESOURCE RECOVERY, RECYCLING RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES</p> <p>ITI: <u>RECOVERY OPERATIONS WHICH MAY LEAD TO RESOURCE RECOVERY, RECYCLING, RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES</u></p> <p>NZL: Either change to: <u>Recovery operations</u> Or: <u>Recovery operations and re-use</u></p> <p>PSE: Delete "Direct RE-USE" We can restate this section as: <u>Recovery operations that utilize waste as a resource.</u></p>	<p>of each type of operations, together with the suggested introductory texts. -The order of the sections A and B should be reversed (see also under General comments below).</p> <p>ISR: The suggestion simplified the caption text, and makes it more compatible to the definitions in the glossary of terms.</p> <p>ITI: No direct re-use operations are listed in Annex IV.B. Also, the Glossary adopted at COP-13 confirms the consensus view that direct reuse is not a waste management activity.</p> <p>NZL: The second of these covers all the operations covered by the current R codes.</p> <p>PSE: Similar to comments on Annex IV.A</p> <p>----- If an object has a direct USE it is not a waste. It shall not be "disposed of", but has a value.</p>	<p>----- ALTERNATIVE USES needs clarification and then decide to keep or eliminate</p> <p>RECLAMATION appears only in this annex – no reference to it in the whole convention...</p>
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		<p>The title of the annex needs modification... see below</p> <p>USA: OPERATIONS WHICH MAY LEAD TO RESOURCE RECOVERY, RECYCLING <u>OR</u> RECLAMATION; DIRECT RE-USE OR ALTERNATIVE USES</p>	<p>USA: By deleting “direct re-use or alternative uses”, the proposed revision avoids the implication that material sent for direct reuse or alternative uses is waste.</p>	
<p>Introductory text Section B encompasses all such operations with respect to materials legally defined as or considered to be hazardous wastes and which otherwise would have been destined for operations included in Section A</p>	<p>BAN: This needs to include "other wastes". Also, to insist that the list is all inclusive is not possible. One can think of many other types of operations under this category. This text is not useful.</p> <p>CHE: what is the goal of this introduction ? this text should give added value to the respected value.</p> <p>EU: Sections A and B do not allow for a clear distinction between Annex IVA operations and Annex IVB operations either in terms of their general nature, or in individual cases, for example D10 „incineration on land“ and R1 „use as a fuel“.</p> <p>ISR: The Introductory text is not clear enough and does not help to define section B</p>	<p>AUS: Section B encompasses covers all such operations with respect to materials legally defined as or considered to be hazardous wastes and which used to recover or recycle wastes which that-otherwise would have been destined for operations included in Section A</p> <p>BAN: Remove this text in its entirety.</p> <p>BIH: Section B encompasses all <u>activities</u> operations with respect to materials legally defined as or considered to be hazardous wastes and which otherwise would have been destined for that does not lead to final handling activities operations included in Section A</p> <p>CHE: Delete the introductory text or harmonize it with a new corresponding introductory text under table IV A.</p>	<p>BAN: This text is simply not needed and raises more questions than it answers.</p> <p>CHL: Not all operations in the list are recovery operations, the list includes preparatory operations</p> <p>COL: The proposed change aims to harmonize the introductory text of Annex IVA and IVB</p> <p>EU: The list of operations should be drafted in a way that they cover all operations, inter alia by introducing catchall elements. The current introductory text does not seem adequate. A clearer distinction should be made between the operations in sections A and B; see also suggested introductory text for (new) section B. Regarding the description for “recovery operation”, the</p>	<p>BIH: In annex IV.a we do not mention that activities refer to HW, meaning that in IV.a materials can be NHW or mentioning of the HW here is unnecessary redundant having in mind purpose of the Convention</p> <p>ITI: Consistent text should be used in both the caption and the introductory text.</p>

	<p>ITI: There is some ambiguity regarding the scope of operations covered. The text should be clarified with a reference to “recovery” operations to facilitate consistent implementation.</p> <p>PSE: This description does not indicate the nature of the R-operations as Recovery Operations. We may delete this whole introductory part after the full modification as below....</p>	<p>Section B encompasses all such operations with respect to materials legally defined as or considered to be hazardous wastes and which otherwise would have been destined for operations included in Section A.</p> <p>CHL: Section B encompasses all such disposal operations <u>which lead to or are recovery operations</u> occur in practice</p> <p>COL: Section B encompasses all such operations with respect to materials legally defined as or considered to be hazardous wastes and which otherwise <u>operations used to recover or recycle wastes</u> which otherwise would have been destined for operations included in Section A.</p> <p>EU: Delete the current introductory text and replace it by "<u>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</u></p>	<p>glossary of terms¹ (p. 6) could be used.</p> <p>ISR: Adding a definition that is compatible with the definition in the glossary of terms and is not already defined in the Convention, makes the content of section B and the classification of the facilities clearer.</p> <p>PSE: When the operations are specified here as recovery, no need to keep reference to section A.</p>	
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¹ UNEP/CHW.13/4/Add.2

		<p><u>fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.”</u></p> <p>ISR: Section B encompasses all such operations with respect to materials legally defined as or considered to be hazardous wastes and which otherwise would have been destined for operations included in Section A</p> <p><u>Any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfill a particular function, or waste being prepared to fulfill that function, in the plant or in the wider economy”</u></p> <p>ITI: Section B encompasses all such <u>recovery</u> operations with respect to materials legally defined as or considered to be hazardous wastes and which otherwise would have been destined for operations included in Section A</p> <p>PSE: The change is as follows: Section B encompasses all such <u>recovery</u> operations with respect to materials legally defined as or considered to be hazardous wastes</p>		
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		and which otherwise would have been destined for operations included in Section A <u>that utilize the waste as a source of materials that have values.</u>		
General comments				
ARG: An issue to discuss is what's about material that may be no longer considered as wastes because they lost their condition after a treatment. See Overarching comments				
BAN: -Anything appearing on Annex IV could be ESM or not. -It is quite acceptable to no longer distinguish between A and B lists as they are treated the same under the Convention and that is prudent.				
CAN: Some operations listed in Annex IV.B are interim operations (e.g. R11-13). We see value in having interim operations listed in Annex IV.B because the recovery of the waste is often carried out in more than one stage. However, the recovery operations versus the interim operations should be listed separately.				
CAN: A good approach to distinguish recovery operations could be to identify in its description when it is distinct from other operations. Canada's regulations use this approach.				
CAN: A key consideration for Annex IV.B operations is at what point some recovery operation change a waste back into a product. When reviewing the operations for Annex IV.B we should keep this consideration in mind, in particular for R9 for the re-refining of used oil.				
CHE: New table C: Operation leading to reuse including repair refurbishment.				
CHL: Annexes I, VIII and IX of the Convention indicate different types of waste. Eventually, it might be recommended not to include in Annex IV.B any reference to any type of waste as this information will be available by the references to the names and codes established by those annexes. Please note that Annex IV.A do not refer to specific wastes.				
CHL: If there is a preference to make a reference to specific waste in Annex IV.B, it might be convenient to evaluate the use of references to wastes which have been identified in Annexes I, VIII or IX of the Convention.				
CHL: Annex IV.B considers various operations which in fact are not recovery operations, as further steps are needed. This should be made clear				
CHL: The same correction should be applied for the caption and introductory text of Annex IV.A				
CHL: Many recycling and recovery operations may generate hazardous waste that require disposal in a specially engineered landfill or specially engineered domes				
EU: General comments on Annex IV: We suggest inserting the following explanatory text before section A: There are two categories of disposal operations, namely recovery operations and final disposal operations. Section A encompasses recovery operations and section B final disposal operations.				
EU: General comment on sections A and B: The order of the sections A and B should be reversed. As our proposed introductory text for section A refers back to the description of "recovery operation", it would make more sense to reverse sections A and B.				
EU: General comments on the list of operations: The list of operations should be drafted in a way that they cover all operations, inter alia by introducing catchall elements.				
EU: In the Basel Convention, the term "disposal" is linked with the definition of waste in Article 2(1): "substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law". Therefore, Annex IV should cover environmentally sound, controlled or legal as well environmentally unsound, uncontrolled or illegal disposal operations (i.e. it should contain technical entries of operations irrespective of the legal status of a particular operation). The latter would not be used in notification and movement documents or be referred to in the waste hierarchy; they are however e.g. relevant in the context of the illegal traffic.				

EU: We also suggest using new codes for the operations in order to avoid confusion.
EU: General comment on merging of R2 and R6-R9 into R3-R5: Whereas “recovery” (R7, R8) seems to be a broad description (see suggested heading and description for “recovery”), “regeneration” (R2, R6) and “re-refining” (R9) appear as rather specific descriptions of recovery operations. However, there seem to exist a lot of other specific descriptions of recovery operations, e.g. biological treatment (e.g. composting) or physical/mechanical, physical/chemical, chemical or mechanical treatment the (main) output of which is non-waste. Also, the wastes covered by R2 and R6-R9 might be rather specific; there are a lot other wastes for which specific operations are not provided. Therefore it could be discussed if a simplification of the otherwise long list of specific operations in connection with certain wastes would be preferable.
EU: General comment on introducing a new operation for preparing for reuse: Such an operation is needed because it is substantially different from recycling.
PSE: <ol style="list-style-type: none"> 1. <i>ARTICLE 2 / 4 refers to “Disposal” means any operation specified in Annex IV to this Convention” - here in this section we have recovery operations not disposal. In future an additional point in Article 4 is required for recovery operation (beyond our mandate here).</i> 2. <i>The general title of the annex need to be change to reflect that it lists recovery, treatment, handling and final disposal operations</i> 3. <i>Upon such a change, the reference in ARTICLE 2 / 4 shall be revisited in the future (beyond this mandate...)</i> 4. <i>Similar to the general comments on Annex IV.A: add footnote to this annex stating the definitions these operations:</i> <i>‘RESOURCE RECOVERY, RECYCLING, RECLAMATION, ALTERNATIVE USES’</i>

A		B	C	D	E
Disposal operation		Problem statement	Proposed change	Rationale	General comments
R1	Use as a fuel (other than in direct incineration) or other means to generate energy	BIH: There is a need to list in footnote what kind of facilities do use HW as a fuel CAN: -The distinction between R1 and D10 should be clarified as they can be interchangeable. -R1 uses waste as raw material with the purpose of generating energy. D10 incinerate waste that may provide some energy but it’s not the original intent. -The terms " <i>other than in direct incineration</i> " should be clarified. CHE:	CHE: Use as a fuel (other than in direct incineration) or other means to generate energy Use as a <u>fuel in a cement kiln</u> Addition of “R” entry: <u>R* incineration with energy recovery or heat recovery or both</u> CHL: Use as a fuel (other than in direct incineration) or other means to generate energy <u>Energy recovery of wastes not specified elsewhere in Annex IV.B</u> COL: Use as a fuel (other than in direct incineration) or other means to generate energy (eg.co-	CAN: -Canada’s regulations specify the necessary heating values of the material (12 780 kj/kg) to qualify the waste for operation R1. -We also removed the term "other than in direct incineration" to generally refer to an energy recovery system. CHE: If a differentiation is made between cement kiln, incinerator for urban waste, we have more information about the final disposal of the hazardous waste.	ARG: (See Overarching Comments) CAN: Canada’s regulations refer to R1 as follow: -R1: Use as a fuel in an energy recovery system, where the net heating value of the material is at least 12780kj/kg. CHL: -Different energy recovery operations should be considered, using the same rationale as recycling (separate reference to solvents, organic acids and

		<p>Differentiation between cement kiln and incineration is needed.</p> <p>EGY: It is not clear if co-processing of HW in cement kiln is included</p> <p>EU: “other than in direct incineration” seems unclear.</p> <p>ISR: This definition creates conflicts and may overlap with R9. What is direct incineration? And why is this not included in recovery of energy (if it in fact uses the energy for useful purposes by replacing other fuels)?</p> <p>PSE: This description is confusing and may overlap with D10 and D11 ...</p>	<p><u>processing of hazardous waste as alternative fuels and/or raw materials.)</u></p> <p>EGY: Use as a <u>direct fuel or alternative fuel in high temperature kilns</u> or other means to generate energy</p> <p>EU: Use as a fuel (other than in direct incineration) or other means to generate energy</p> <p>ISR: Use as a fuel (other than in direct incineration) or other means to generate energy.</p> <p>PSE: Clarify and eliminate overlaps...</p>	<p>EU: Deletion of unclear text.</p> <p>ISR: This "use as a fuel" describes the use of waste as a substitute for energy rather than the treatment itself. This corresponds to other recovery operations such as recycling metal (R4) or plastic (R3) that do not refer to the process but to the recycled material. The recovery process in R1 is the use of the energy contained in the waste for a useful purpose. Any further detail may contribute to unnecessary complication and confusion.</p>	<p>bases or organic catalysts. Therefore, new R operations are proposed -A reference / explaining the difference to D10 (incineration on land) might be useful</p> <p>COL: According to the Technical guidelines on the environmentally sound co-processing of hazardous wastes in cement kilns, co-processing is the use of alternative fuel and/or raw materials for the purpose of energy and/or resource recovery. This differs from co-incineration, the production of materials while using wastes as fuel or the plant in which waste is thermally treated for the purpose of disposal.</p> <p>EU: This operation should be placed after the operations dealing with material recovery.</p> <p>PSE: <i>Cleaner production usually implies utilizing heat from incineration. Or using waste in high temperature operations as source of heat... Thus, there</i></p>
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					<i>is an overlap between this R1 and D10 and D11</i>
R2	Solvent reclamation/regeneration	<p>EU: It is unclear why a separate code is necessary.</p> <p>PSE: OK</p>	<p>CHL: <u>Recycling of solvents reclamation/regeneration</u></p> <p>EU: <u>Solvent reclamation/regeneration</u></p>	<p>CHL: Unification of terms, according to the glossary</p> <p>EU: Simplification; merging with R3/R5 (solvents can be organic or inorganic); see also the general comments on R2 and R6-R9</p>	<p>PSE: Define the technical terms reclamation/regeneration</p>
R3	Recycling/reclamation of organic substances which are not used as solvents	<p>CHE: Clarify the text.</p> <p>CHL: These organic substances might include organic acids or bases as well as catalysts and oils</p> <p>EU: “reclamation” seems unclear; this term is not addressed in the Glossary of terms.</p> <p>PSE: OK</p>	<p>CHL: <u>Recycling/reclamation of wastes containing principally organic constituents not specified elsewhere in Annex IV.B</u> organic substances which are not used as solvents</p> <p>EU: <u>Recycling/reclamation of organic substances</u> which are not used as solvents</p>	<p>CHL: -The same rationale used in Annex IV.A (D8 and D9)</p> <p>-Unification of terms, according to Annex VIII, list A2</p> <p>EU: Simplification</p>	<p>ARG: (See Overarching Comments)</p> <p>CAN: R3 is a catchall operation for many organic substances including oil also captured under R9.</p> <p>PSE: Define terms...</p>
R4	Recycling/reclamation of metals and metal compounds	<p>CHE: Reclamation is not used.</p> <p>EU: “reclamation” seems unclear; this term is not addressed in the Glossary of terms</p> <p>PSE: Ok</p>	<p>CHE: <u>Recycling/reclamation recovery</u> of metals and metal compounds</p> <p>CHL: <u>Recycling/reclamation Recycling</u> of metals and <u>waste containing</u> metals compounds</p> <p>EU: <u>Recycling/reclamation of metals and metal compounds</u></p>	<p>BIH: Unclear why metals when in title we refer only to HW, are these metals within the HW? Clarification</p> <p>CHL: Unification of terms, according to Annex VIII, list A1</p> <p>EU: Simplification</p>	<p>ARG: (See Overarching Comments)</p> <p>PSE: Define terms...</p>
R5	Recycling/reclamation of other inorganic materials	<p>CHE: Explanation needed: what is meant here? Give an example.</p> <p>CHL: These organic substances might include inorganic acids or</p>	<p>CHL: <u>Recycling/reclamation of other inorganic materials of wastes containing principally inorganic constituents not specified elsewhere in Annex IV.B</u></p>	<p>BIH: Clarification needed, other than which, those in R4?</p>	<p>ARG: (See Overarching Comments)</p> <p>CHL: A modification of the lists of Annex VIII and IX might be considered.</p>

		<p>bases as well as catalysts and oils, which are mentioned in R6, R8 and R9</p> <p>EU: "reclamation" seems unclear; this term is not addressed in the Glossary of terms</p> <p>PSE: "other" refers to what?</p>	<p>EU: Recycling/reclamation of other inorganic materials</p> <p>PSE: Better: Recycling/reclamation of other inorganic materials <u>other than those in R4</u></p>	<p>CHL: -The same rationale used in Annex IV.A (D8 and D9) -Unification of terms, according to Annex VIII, list A2</p> <p>EU: Simplification</p>	<p>E.g. A1 wastes containing principally in metals and wastes containing metal compounds A2 wastes containing principally inorganic constituents, which may contain metals and organic materials A3 wastes containing principally organic constituents, which may contain metals and inorganic materials A4 wastes which may contain either inorganic or organic constituents</p> <p>PSE: Define terms...</p>
R6	Regeneration of acids or bases	<p>EU: It is unclear why a separate code is necessary.</p> <p>PSE: Does not refer to acid base neutralization If we do not add neutralization here, it is recommended below as a new operation</p>	<p>CHL: Regeneration <u>Recycling</u> of acids or bases</p> <p>EU: Regeneration of acids or bases</p>	<p>CHL: Unification of terms, according to the glossary</p> <p>EU: Simplification; merging with R3/R5 (acids and bases can be organic or inorganic); see also the general comments on R2 and R6-R9</p>	<p>CHL: It is not clear if it is useful to maintain a direct reference to acids or bases, as they might be included in R3 and R5</p> <p>PSE: Define regeneration</p>
R7	Recovery of components used for pollution abatement	<p>ARG: Need clarification</p> <p>AUS: This requires further explanation</p> <p>BAN: this implies repair, cleaning or replenishing components in order to use them again. Such</p>	<p>BAN: R7 and R8 should be combined and changed to read as follows: <u>Cleaning, replenishing, repair or refurbishment of equipment or components in order to re-use them.</u></p>	<p>ARG: Maybe, an explanatory footnote could be added, clarifying the scope or some examples of technologies under this operation.</p> <p>BAN: This is too limited.</p>	<p>COL: Some examples or technical details of this operation as a footnote would be very useful.</p>

		<p>operations can work for a broad variety of things.</p> <p>CHE: Clarify text and give concrete examples. Pollution abatement is not clear</p> <p>COL: The operation is not clear, confusing redaction.</p> <p>EU: It is unclear why a separate code is necessary.</p> <p>PSE: This is very general Materials referred to in other R operations are used for pollution abatement e.g. catalysts</p>	<p>CHL: Recovery of components used for <u>Recycling of</u> pollution abatement <u>equipment</u></p> <p>EU: Recovery of components used for pollution abatement</p>	<p>CHL: -Separate in two different operations: recycling and energy recovery (creating a new operation) -The term 'components' should be replaced as the operation should apply to the equipment as a whole</p> <p>COL: The description should be more precise.</p> <p>EU: Simplification; merging with R3-R5; see also the general comments on R2 and R6-R9</p>	
R8	Recovery of components from catalysts	<p>BAN: this implies cleaning or replenishing components in order to use them again. Such operations can work for a broad variety of things.</p> <p>CHE: Improve text</p> <p>EU: It is unclear why a separate code is necessary.</p> <p>ISR: There is overlap with R4, R3.</p> <p>PSE: See R7</p>	<p>BAN: R7 and R8 should be combined and changed to read as follows: <u>Cleaning, replenishing, repair or refurbishment of equipment or components in order to re-use them.</u></p> <p>CHL: Recovery of components from <u>Recycling of</u> catalysts</p> <p>EGY: Recovery of components from <u>spent</u> catalysts, <u>exhaust ion exchangers, used activated carbon, pollutant adsorbents and E-waste</u></p> <p>EU: Recovery of components from catalysts</p>	<p>BAN: This is too limited.</p> <p>CHL: Separate in two different operations: recycling and energy recovery (creating a new operation)</p> <p>EU: Simplification; merging with R3-R5; see also the general comments on R2 and R6-R9</p> <p>ISR: The proposed change describes the recycled material or object (catalysts) itself, that in many cases can be reused after treatment and not the "components from</p>	<p>ARG: (See Overarching Comments)</p> <p>CHL: It is not clear if it is useful to maintain a direct reference to catalysts, as they might be included in R3 and R5</p>

			ISR: Recovery Recycling/reclamation of components from catalysts	catalysts" that are included under R3 or R4.	
R9	Used oil re-refining or other reuses of previously used oil	<p>BAN: this can take place with lots of different liquids such as anti-freeze etc.</p> <p>CAN: -The term reuse is not consistent with the definition of the glossary of term. -The term other reuses can be interpreted broadly.</p> <p>CHE: Clarify second part of the text: "reuse of previously used oil". Which reuse?</p> <p>EU: It is unclear why a separate code is necessary. The term "reuses" conflicts with the understanding of "reuse" in the Glossary of terms.</p> <p>IRN: Some kinds of oil regarding the containing additives are not reusable. The word "re-refining" is not adequate word for treatment of waste oils and it is necessary to add "regeneration" to R9</p> <p>ISR: Potential overlap/conflict between "other reuses of previously used oil" in R9 and R1 "use as a fuel".</p>	<p>BAN: Change to: <u>Refining of used oils and other reusable fluids.</u></p> <p>BIH: Used oil re-refining or other reuses of previously used oil</p> <p>CAN: Adjust language as follow: Used oil Re-refining or other reuses of previously used oil</p> <p>CHL: Used oil re-refining or other reuses of previously used oil</p> <p>COL: Used oil re-refining or other reuses of previously used oil. <u>Recovery of used oil.</u></p> <p>EU: Used oil re-refining or other reuses of previously used oil</p> <p>IRN: "<u>Reusable and regeneration</u>" is suggested to replace instead of the current explanation for R9</p> <p>ISR: Used oil re-refining or other reuses of previously used oil</p>	<p>BAN: This is too limited.</p> <p>CAN: -The operation in R9 should focus on the re-refining of used oil. -If other operations are applicable to used oil they should be clearly listed.</p> <p>CHL: All waste is previously used, so these terms should not be part of the name of the operation, or should be considered in the names of all operations</p> <p>EU: Simplification; merging with R3; see also the general comments on R2 and R6-R9</p> <p>IRN: Oils contaminated to high concentration of PCBs should be considered for final disposal and using "reusable oil" for separation of above-mentioned oil from oil that can be reusable may be helpful.</p> <p>ISR: Other uses of used oil can be defined by other operations as in the case of R1.</p>	<p>CAN: Re-refining of used oil is an operation that must be controlled. However, once the re-refining of the used oil is completed, the used oil should no longer be considered a waste but rather a product.</p> <p>COL: This operation is maybe overlapping with R1.</p> <p>PSE: Needs further clarifications It is based on the waste type not the operation type</p> <p>USA: Parties may want to consider revising the technical guidelines for R9. Some of the examples of reuses for used oil, such as reuse in pesticide carrier and in road oil are not examples of environmentally sound management. Revised guidelines should reflect activities that constitute environmentally sound reuse options.</p>

		PSE: The description refers to objects "used oil..." not to an operation. Also it is based on USE concept which contradicts the definition of waste		PSE: Distinguishing between materials/waste and their operations. Having a practical use for an object means that it is not a waste	
R10	Land treatment resulting in benefit to agriculture or ecological improvement	<p>ARG: No clarity about what is intended as "benefit to agriculture or ecological improvement", wastes allowed for this operation and technologies involved</p> <p>BAN: It is doubtful that there is any hazardous waste that can be a benefit to agriculture. And the notion of Alternative Daily Cover which uses the density of waste to hold landfills from blowing in the wind, in my view is not to be considered a legitimate form of alternative use of hazardous waste. However it is important that these are listed as some people will want to consider these non-waste and yet these uses will need the controls of the Basel Convention.</p> <p>CHE: Clarify text. What is "land" ?</p> <p>CHL: It is doubtful if there is any specific land treatment of hazardous waste resulting in benefit to agriculture or ecological improvement. A review of the registers, or questionnaire to the</p>	<p>ARG: Add a footnote regarding its interpretation or delete.</p> <p>BAN: Change to: Land treatment <u>intending to benefit</u> agriculture or ecological <u>or aesthetic</u> improvement <u>including daily cover of landfills, filling holes etc.</u></p> <p>BIH: <u>Treatment other than in D2</u>, should be included</p> <p>EGY: Land treatment resulting in benefit to agriculture or ecological improvement <u>or as construction material (e.g. by-pass dust of cement kilns)</u></p> <p>EU: Land treatment resulting in benefit to agriculture or ecological improvement</p> <p>ISR: Land treatment resulting in benefit to agriculture or ecological improvement</p> <p><u>Use of waste for soil, agriculture or other ecological improvement</u></p> <p>PSE: Combine this with D2 and decide on what section it ends up in.</p>	<p>BAN: this category needs to be more encompassing so we can control these uses. Also the notion of intent is more important here than "result".</p> <p>EU: Merging with a catchall element on material recovery (see new operation suggested below).</p> <p>ISR: If the intent is to use waste to lead to ecological or agricultural improvement (e.g. Improving the quality of acidic or basic soil, fertilization). , then the following wording can be proposed: <u>Use of waste for soil, agriculture or other</u> ecological improvement.</p> <p>It should be clarified whether treatment of contaminated soil for reuse is here or under R5</p> <p>PSE: Having a practical use for an object means that it is not a waste</p>	<p>COL: This operation should be merge with operation D2 in Annex IVA or further details should be provided as a footnote or explanatory note.</p> <p>PSE: Overlap with D2</p>

		<p>SIWG members, might be useful to make this clear</p> <p>COL: This operation is overlapping with D2.</p> <p>EU: It is unclear why a separate code is necessary. There is a potential overlap between R10 and D2.</p> <p>ISR: Potential overlap/conflict between R10 and R5. the definition is not clear enough</p> <p>PSE: Specific case of D2 "disposal operation".</p>			
R11	Uses of residual materials obtained from any of the operations numbered R1-R10	<p>CHE: Is this entry necessary? Clarification is needed what example exists.</p> <p>CHL: This is part of the recycling/reclamation operation itself</p> <p>EU: It is unclear why this operation has been listed.</p> <p>ISR: There is uncertainty about the meaning and when a specific treatment is to be used and when R11.</p> <p>PSE: It is based on USE concept which contradicts the definition of waste</p>	<p>CHL: Uses of residual materials obtained from any of the operations numbered R1-R10</p> <p>EU: Uses of residual materials obtained from any of the operations numbered R1-R10</p> <p>ISR: Delete</p> <p>PSE: Uses Recovery of residual materials obtained from any of the operations numbered R1-R10</p>	<p>EU: The ordinary use of a material may not be seen as a recovery operation, in line with the Glossary of terms</p> <p>ISR: Any uses of residual material must accord with one of the R's above, so we don't see there is a need for R 11.</p>	<p>ARG: (See Overarching Comments)</p> <p>COL: Further details could be introduced in a explanatory note or as a footnote in order to clarify the type of operations involve in this operation.</p> <p>PSE: Still wonder if it is really needed, since operations R1-R10 releases their own wastes that must be controlled...</p>

<p>R12</p>	<p>Exchange of wastes for submission to any of the operations numbered R1-R11</p>	<p>ARG: Term “exchange”.</p> <p>AUS: This requires further explanation</p> <p>CHE: Is unclear. Overlap with R13.</p> <p>EU: The term “exchange” is unclear.</p> <p>ISR: There is uncertainty about the meaning of "Exchange of wastes". Potential overlap/conflict between R12 and R13</p> <p>NZL: This code could be used for any or all of codes R1 to 11. It doesn't cover anything outside of these.</p> <p>PSE: This is a "handling operation" not final disposal. See also similar comments on Annex IV.A</p> <p>USA: It is unclear what is meant by “exchange of wastes.”</p>	<p>ARG: Replace: “<u>Blending or mixing</u>” instead “exchange”.</p> <p>AUS: Delete, or explain further what this operation entails</p> <p>CHL: <u>Blending or mixing prior to Exchange of wastes for submission to any of the operations in Annex IV.B</u> numbered R1-R11</p> <p>EU: <u>Mechanical treatment (e.g. dismantling, sorting, crushing, compacting, pelletizing, shredding, conditioning, repackaging, separating, blending, mixing) prior to submission to any of the operations in section A</u> numbered R1-R11</p> <p>ISR: Exchange of wastes for submission to any of the operations numbered R1-R11.</p> <p>Preparatory operations such as <u>Blending, mixing, washing or shredding prior to submission to any of the operations in Section B</u></p> <p>NZL: Delete the code. (Exchange of wastes for submission to any of the operations numbered R1-R11)</p> <p>PSE: Move from this section.... To a new proposed section.. see below...</p>	<p>ARG: What's the meaning of “exchange” literally? Is similar to “blending” or “mixing” or “sorting”? We suggest to add a new Section “C” (see general comments)</p> <p>AUS: This seems to be covered by R13.</p> <p>CHL: Unification of terms</p> <p>EU: Consistency with the suggested D13. Repackaging seems also relevant for recovery.</p> <p>ISR: The proposed text resembles to the corresponding text in Section A (D13), describing the activity of mixing waste before submission to any of the operations.</p> <p>NZL: In permitting transboundary movement of hazardous wastes the obligation is to ensure that the waste will be managed in an environmentally sound way. To do this a country must know which of codes R1 to 11 apply and hence, they should use these.</p>	<p>CHL: The same drafting as Annex IV.A</p> <p>COL: Further details could be introduced in a explanatory note or as a footnote in order to clarify the type of operations involve in this operation (for the term exchange).</p> <p>NZL: Also duplicates R13 (which should only be used if the wastes are to be re-exported.)</p>
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			<p>USA: Exchange <u>Pre-processing</u> of wastes for submission to any of the operations numbered R1-R11</p>	<p>PSE: Distinguishing between recovery operation that results in materials with values and intermediate/handling operations...</p> <p>USA: This entry is unclear and confusing. By replacing “exchange of wastes” with “pre-processing of wastes”, the text more clearly indicates the type of operations understood to be covered by R12.</p>	
R13	Accumulation of material intended for any operation in Section B	<p>BAN: we need to exclude any of the D operations as a means to store material. "Accumulation" implies collection rather than storage. So we should add the word "storage" for clarity and inclusiveness.</p> <p>CHE: This is an interim storage. Do we want this ? or should not the final disposal recycling operation be mentioned ? one possibility could be to use R13 only with combination to R1 to R10</p> <p>COL: This operation needs clarification for the terms “storage” and “accumulation” in relation to its mirror entry D15.</p>	<p>BAN: Change to: Accumulation <u>or storage</u> of material intended for any operation in Section B <u>so long as the accumulation does not involve A list operations such as landfilling.</u></p> <p>CHL: Accumulation of material intended for <u>Storage pending any of the operations</u> in Section <u>Annex IV.B</u></p> <p>COL: Accumulation of material intended for <u>Storage pending any operation in Section B</u></p> <p>EU: <u>Temporary storage pending any of the operations in section AB, excluding temporary storage, pending collection, on the site where the waste is generated</u></p>	<p>BAN: In the B list we don't want to allow people to use landfills or minable cells of landfills and call this recycling. Add the word "storage" for greater clarity and inclusiveness.</p> <p>CHL: Unification of terms</p> <p>COL: It is important to harmonize the terminology.</p> <p>EU: Consistency with D15. Addition of “temporary” for clarification. Clarification that temporary storage, pending collection, on the site where the waste is generated, is not covered.</p>	<p>CHL: The same drafting as Annex IV.A</p> <p>NZL: We use this mainly for imports – New Zealand receives wastes from countries in the Pacific for consolidation with wastes in New Zealand which is sent (under an export permit) to other countries for specific recover operations</p> <p>PSE: Overlap with D15</p> <p>ZAF: <i>Remove from list</i></p>

	<p>EU: The term “accumulation” is unclear.</p> <p>ISR: Potential overlap/conflict between R12 and R13.</p> <p>There is lack of uniformity compared to the corresponding Disposal operation description in Section A (D14, D15).</p> <p>PSE: This is a "handling operation" not final disposal. See comments on Annex IV.A It overlaps with D15 (when considered as a "handling operation")</p> <p>ZAF: This operation does not meet “cradle-to-grave” principle</p>	<p>ISR: Accumulation of material Repackaging intended for any operation in Section B. <u>Repackaging, including baling prior to submission to any of the operations in Section B</u></p> <p>PSE: Move from this section.... To a new proposed section.. see below</p> <p>ZAF: Remove from list</p>	<p>ISR: The proposed text is resembles to the corresponding text in Section A (D14). For this change be completed we need to add a new operation for storage, as described in D15- Storage pending any of the operations in Section A</p> <p>PSE: As above in R12: Distinguishing between recovery operation that results in materials with values and intermediate/handling operations...</p> <p>ZAF: It can lead to double counting as one will report on the final operation as well</p>	
General comments				
AUS: There is scope to classify some operations under more than one Disposal operation for some materials, e.g., R8/R4, R6/R5 and R9/R3. However, it may be best to retain these overlapping operations and leave it to competent authorities to ensure that, where there are multiple options, the most relevant (specific) one is chosen.				
CHE: <i>Use recovery instead of reclamation.</i>				
CHL: <i>R3 and R5 are operations of a general set of waste, which may include other operations, like R6, R7, R8 and R9. It is considered useful to maintain general operations in the list, as these operations will include all new types of waste that might be generated in the future.</i>				
CHL: <i>The term reclamation is not used in the Convention neither in the glossary, therefore we propose to eliminate this term.</i>				
CHL: <i>Recycling and energy recovery are different operations, so if a waste can be operated by recycling and energy recovery (waste consisting principally in organic components) these operations should be presented separately, except in the case of co-processing</i>				
IRN: <i>Each code should be checked completely and upgraded based on new technologies and the effects of the method of treatment on environment.</i>				
ISR: We think that a clear and closed list is preferable, without the possibility of classifying as "other treatment" that not classified elsewhere.				
ISR: If possible, we suggest matching the numbering of the classifications of List A and B so that the description will be consistent and create less confusion. e.g. <u>Preparatory operations such as blending ,mixing, washing or shredding prior to submission to any of the operations in Section B</u> - R12 and <u>Preparatory operations such as blending, mixing, washing or shredding, prior to submission to any of the operations in Section A</u> - D12				

PSE:

- 1) These operations include the recovery of materials as well as handling operations. Distinguish here between "recovery" and "handling" (and in all the two sections A and B distinguish also with "disposal" and treatment) .
- 2) *In line with the general comment (2) on Annex IV.A: Consider adding new section: **Handling and Treatment operation**.... Then move handling operations from here to the new section and combine with those moved from section A, as per the proposed changes on D-operations/ Annex IV.A working document.*
- 3) There is a need for footnotes to clarify/ define some of the operations terms here: e.g. reclamation and regeneration and exchange of wastes

A		B	C
New R operation		Rationale	General comments
	ARG: Co-processing or use of suitable waste materials in manufacturing processes for the purpose of energy and/or resource recovery and resultant reduction in the use of conventional fuels and/or raw materials through substitution, not included in R01.	ARG: In some countries, wastes are allowed to be used directly as raw materials (and, if occurs, "end of wastes status" maybe occurs). That's why we suggest to include an operation that referred this status. For example, it can occur in wastes classified under Y18, obtained from blending process goes to this operation. Definition was extracted from relative guideline of co-processing in cement kilns.	ARG: Is critical to assume a definition of this kind of materials in order to clarify their status in traceability and reporting. Materials that are obtained or come from waste transformation processes (as recovery of materials) should be considered.
	ARG: Dismantling, selection, sorting or preparation treatments for recycling, reuse / use intended, totally or a part of waste's components.	ARG: In a global or integral view of waste disposal, intermediate treatments are often necessary to allow further operation/s downstream.	
	ARG: Physical chemical treatment not specified elsewhere in this annex that lead materials recovery	ARG: As well as in Section A (D09) is needed to reflect an operation that's not include in present annex.	ARG: For example, precipitation; calcination to obtain metals alloys, that will need further treatment in order to refine; drying, as well as other unit processes.
	CAN: Recycling of used electrical and electronic equipment	CAN: A separate recovery operation should be added for the recycling of used and electronic equipment.	
	CAN: Blending or mixing prior to submission to any of the operations in Section B		CAN: Mirror operation of D13
	CAN: Repackaging prior the submission to any operations in Section B		CAN: Mirror operation of D14
	CHL: Co-processing in cement kilns	CHL: Co-processing is a combination of recycling and energy recovery.	CHL: A technical guideline on co-processing in cement kilns has been approved by COP X
	CHL: Energy recovery of catalysts	CHL: As energy recovery is an operation different from recycling, it should be mentioned in a separate code (complementary to R8)	

	CHL: Energy recovery of pollution abatement equipment	CHL: As energy recovery is an operation different from recycling, it should be mentioned in a separate code (complementary to R7)	
	CHL: Energy recovery of solvents	CHL: Complementary to R2	
	CHL: Recycling of e-waste	CHL: Being an important new waste stream	
	CHL: Recycling of vehicle waste	CHL: Another possible waste stream which might require specific reference	
	CHL: Repackaging prior to submission to any of the operations in Annex IV.B	CHL: The same operation is considered in Annex IV.A	
	EGY: Separation of waste oil/water emulsion		
	EGY: Precipitation of impurities and residues for reuse		
	EU: <u>Preparing for reuse (e.g. checking, cleaning, repair, refurbishment)</u>	EU: Currently there are no suitable codes for preparing for reuse.	EU: This operation could be placed at the beginning of the list.
	EU: <u>Recovery other than covered by ... (insert the relevant codes) above</u>	EU: All operations should be covered; therefore a catchall element should be inserted, also to overcome possible terminological or other shortcomings.	EU: This operation should be placed before the preliminary operations, i.e. before the current R12.
	EU: <u>Biological treatment prior to submission to any of the operations in section A</u>	EU: An interim operation on biological treatment seems also relevant for recovery; see also comments on the current D8	EU: This interim operation should be placed before the current R12.
	EU: <u>Physical/mechanical treatment (e.g. evaporation, drying), physical/chemical treatment (e.g. solvent extraction) and chemical treatment (e.g. neutralization, precipitation) prior to submission to any of the operations in section A</u>	EU: An interim operation on physical/mechanical treatment, physical/chemical treatment and chemical treatment seems also relevant for recovery; see also comments on the current D9	EU: This interim operation should be placed before the current R12 and after “Biological treatment ...”.
	EU: <u>Other treatment than covered by ... (insert the relevant codes) prior to submission to any of the operations in section A</u>	EU: All interim operations should be covered; therefore a catchall element should be inserted.	EU: This operation should be placed after the current R12
	ISR: Prepare for reuse	ISR: There are operations that prepare waste for reuse, for example: reuse of packages, e- waste. For these and maybe for others there is no suitable definition in the current Annex.	
	ISR: Prepare for Reuse of e-waste including repair and refurbishment.	ISR: As there are a lot of comments about the need for new operation that describe the recovery of e-waste, it	

		may be advisable to make a specific R for Prepare for Reuse and/or repair and/or refurbishment of e-waste.	
	ISR: Preparatory operations such as washing, shredding or baling	ISR: There is no suitable definition in the current Annex. Baling may be considered as type of Repackaging, as described in R13 (new suggestion). Washing and shredding can be part of R12 (new suggestion).	ISR: It can be part of R12 or R13 as mention above.
	ISR: Storage pending any of the operations in Section B	ISR: The proposed text resembles the corresponding text in Section A (D15). It creates uniformity with Section A	
	ISR: Recovery of components not covered by other operations (e.g. Separation of materials for recovery from used vehicles and e-waste)	ISR: There are waste streams that are composed of different materials and therefore it is difficult to classify the recovery under the existing options that are limited to the recycling or recovery of a specific material.	
	NZL: Re-use of components in manufactured items.	NZL: Re-use of components in manufactured items is not really captured at present. (With used items some components may be reused and other subject to recycling or final disposal). R7 and R8 cover some components, but in manufactured items, and R4 and R5 cover so recovery of materials (metal and other inorganic materials) but not re-use of components.	NZL: Would need to be used in conjunction with a D code. Would cover use of parts from one item to refurbish/repair others.
	PSE: Recovery of adsorbents by physicochemical operations	PSE: R8 refers to catalysts that are used in heterogeneous reactions. Here, adsorbent are used in other chemical and physical processes.	
	PSE: Neutralization of acids and bases	PSE: Different than R6 as this operation results in neutral waste without acidity or basicity. While R6 results in useful acid or base solutions.	
	PSE: Treating waste by waste	PSE: This operation utilizes one of the wastes as a treating material to the other one. For example utilizing waste materials from aluminum industry as flocculants in wastewater treatment, and utilizing mineral powder waste as an adsorbent to other pollutants (e.g. heavy metal) from liquid waste....	
	PSE: Other recovery operation that will be proven to be environmentally sound (other than all R1-R... in this section)	PSE: Open the door to classify operations that become in practice in future...	PSE: Science will lead to new recovery operations before reviewing this annex again.

Overarching comments

ARG: As already stated in UNEP/CHW.13/INF/10, we understand that it's important to clarify under which circumstances and operations are waste, hazardous or not, to be used directly, without any kind of treatment. Likewise, it's important to know under which circumstances or operations can be granted to them the condition of "raw material or input in a process", recognizing its condition as such. In this regard, it is vital to ensure procedures and controls in accordance to international quality standards and certifications, to be adopted by the Parties, which guarantee traceability and a proper and accurate tariff classification.

Establishing a recycling society and the circularization of materials requires the redefinition of the conceptual framework on which the integral management of waste is based, that has been in place for more than thirty years.

It's vital to discuss the prevailing need to create the "loss of waste condition", in order to encourage the application of the hierarchy of waste treatment, and the minimization of generation. Today there are various technologies and treatments that may transform waste into an input, something that we should not only take into consideration but also encourage, given that both waste generation and use of raw materials decrease. However, we must guarantee that the operation that "removes waste condition" must comply with several conditions, among them, the material obtained should be "certifiable" under standards, have and specific use, have demand, etc. All which guarantee the country of destination that it will be receiving an input, and not a waste. We consider that the inclusion of this new categorization, with its respective control mechanisms, under the Basel Convention will lead to the need of modifying the operations listed in these Annexes, since that "raw material from waste" should not be subject of control and management as hazard waste, as long as the result of the operation, generates a product comparable to a market commodity, that is, that meets technical and legal quality standards.

It is highly relevant in this sense to analyze the necessary update of the tariff positions in order to classify the merchandise as an input / raw material, in accordance with the end of the condition of waste mentioned before. Again, ensuring procedures and controls in accordance to international quality standards and certifications, to be adopted by the Parties, which guarantee traceability.

According to convention text, Disposal operations include all items in Annex IV. Looking at Annex IV, operations can be identified as those that involve:

- Operations leading to consumption or reuse of wastes (R1, R2, R3, R4, R5, R6, R8, R9, R10, R11, R12, R13)
- Operations for waste final disposal (the "grave" or "final" destination: D1, D2, D3, D4, D5, D6, D7, D12)
- Operation for preparation of waste to be submitted to operations other than recycling or reuse
- Operations of temporal storage or other operation (no transformation involved) (D14, D15, R13, where D15 and R13 should be combined if this category is created)

Taking into account the prior list, and having in mind Mandate I.A.ii, we also stress the need to debate if adding a new section/subsection would be convenient, where operations that doesn't involve intrinsic transformation of waste could be included. In this section, all waste preparation operations could be included: storage, dismantling, sorting, blending, mixing, etc. with the purpose of improving its environmentally sound management, according to the stage of "prevention of generation" exposed hierarchically. We believe that this would contribute to the minimization of generation and favor recycling, as long as these operations are done according to procedures and controls in accordance to international quality standards and certifications, to be adopted by the Parties, which guarantee traceability and a proper and accurate tariff classification.

CAN: We consider that rechargeable and non-rechargeable batteries subject to a transboundary movement for final disposal and recycling operation should be captured under the scope of the Convention.

CHL: *Eventually other new waste streams might be included (as in the case of e-waste and vehicles)*

CHL: *If operation D.14 is maintained in Annex IV.A, a complementary operation should be included in Annex IV.B: Repackaging prior to submission to any of the operations in Annex IV.B*

PSE:

- 1) Similar overarching comments on Annex IV.A: Divide this annex into 3 sections in the following sequence: A-" recovery operations", B-" handling and treatment operations ", and C- "Final disposal operations"
- 2) Similar overarching comments on Annex IV.A: consider to re-structure the annex into 3 sections with new sequences as follows
 A – Recovery Operations that result in useful (non-waste) materials that have a value.
 B – Handling and Treatment Operations that results in waste (non-useful materials) for final disposal (part of the current D operations and new proposed ones (like importing waste for subsequent exporting as New Zealand practice...)).
 C – Final Disposal Operations for disposal types among the current D- Operations
- 3) Eliminate overlaps of these R-operations with D-operations in section A (e.g. R10 and R13.....)
- 4) This review task must not be finalized until we review "CATEGORIES OF WASTES TO BE CONTROLLED"/ annex I, since new waste may require new recover operations e.g. nanomaterials
- 5) Re-edit the Arabic translation – It is misleading in some places and it is not technically valid or totally wrong with some terms. E.g. R2 is translated to a term focusing on the solvents (materials) not on its recovery as an operation.
 It needs to be translated by a technical person knowing Arabic not just a translator knowing the languages. ... etc. (I have sent a comment on the translation of the convention itself...in the first report...).
- 6) The title of the annex (ANNEX IV) - DISPOSAL OPERATIONS is required to be modified to include the three types of operations...
- 7) Beyond this mandate: Upon such changes of operations sections, additional point(s) in Article 4 of the convention is/are required for recovery operation and treatment and handling operations.

Additional submission by the European Union and its member States

The European Union and its Member States would like to illustrate the consequences of our suggestions contained in the tables on Annex IV.A and IV.B. Taking into account the suggestions on existing operations and the suggestions on adding new operations, Annex IV would read as follows:

Annex IV Disposal operations

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

A. 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.

- A1² Preparing for reuse (e.g. checking, cleaning, repair, refurbishment)
- A2 Recycling of organic substances
- A3 Recycling of metals and metal compounds
- A4 Recycling of other inorganic materials
- A5 Use as a fuel or other means to generate energy
- A6 Recovery other than covered by A1 to A5 above
- A7 Biological treatment prior to submission to any of the operations in section A
- A8 Physical/mechanical treatment (e.g. evaporation, drying), physical/chemical treatment (e.g. solvent extraction), chemical treatment (e.g. neutralization, precipitation) prior to submission to any of the operations in section A
- A9 Mechanical treatment (e.g. dismantling, sorting, crushing, compacting, pelletizing, shredding, conditioning, repackaging, separating, blending, mixing) prior to submission to any of the operations in section A
- A10 Other treatment than covered by A7 to A9 above prior to submission to any of the operations in section A
- A11 Temporary storage pending any of the operations in section A, excluding temporary storage, pending collection, on the site where the waste is generated

B. Final disposal operations

A final disposal 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.

- B1 Engineered landfills
- B2 Deposit onto land other than covered by B1 (e.g. landfill, placement of solids, liquids or sludges into pits)
- B3 Permanent underground storage (e.g. emplacement of containers in a mine)
- B4 Deposit into land other than covered by B3, including e.g. injection into wells, salt domes of naturally occurring repositories
- B5 Land treatment in situ (e.g. biodegradation in soils)
- B6 Release into a water body except seas/oceans
- B7 Release into seas/oceans including sea-bed insertion
- B8 Release to the atmosphere, including the venting of compressed or liquefied gases
- B9 Incineration

² The codes A and B have been introduced for illustration only

- B10 Final disposal operations other than covered by B1 to B9 above
- B11 Biological treatment prior to submission to any of the operations in section B
- B12 Physical/mechanical treatment (e.g. evaporation, drying), physical/chemical treatment (e.g. solvent extraction), chemical treatment (e.g. neutralization, precipitation) prior to submission to any of the operations in section B
- B13 Mechanical treatment (e.g. dismantling, sorting, crushing, compacting, pelletizing, shredding, conditioning, repackaging, separating, blending, mixing) prior to submission to any of the operations in section B
- B14 Other treatment than covered by B11 to B13 above prior to submission to any of the operations in section B
- B15 Temporary storage pending any of the operations in section B, excluding temporary storage, pending collection, on the site where the waste is generated
