

Technical guidelines on the identification and environmentally sound management of plastic wastes and for their disposal

Informal meeting of the SIWG - 21 October 2020

Discussion regarding the revision of the draft of the technical guidelines from June 2012 (OEWG-12 meeting – UNEP/CHW/OEWG.12/INF/14) and comments provided during and following the OEWG-12 online segment, with a deadline of 15 September 2020

Summary: comments from 26 entities

• Parties

- Argentina, Australia
- Canada, Colombia
- EU and its Member States
- Equatorial Guinea
- Indonesia
- Iran
- Jamaica
- Peru
- Nigeria, Norway, New Zealand
- Singapore, Switzerland
- United Kingdom of Great Britain and Northern Ireland

• Observers

- American Chemistry Council
- Confederation of European Waste-to-Energy Plants (CEWEP)
- GAIA
- HWE
- ISRI
- IPEN
- Plastic Recycling
- Plastic Europe
- USA
- World Plastic Council

Outline of the overview

- General feedback/critics
- General conceptual comments
- Contradictory comments
- Gaps
- Next steps

General feedback/critics

- The document is too long, with too complicated structure (Ch. III)
- Avoid duplications with other guidelines (e.g., suggestions for cuts)
- There is no need to go beyond the scope of the Convention
- The TGs give insufficient priority to environmental hazards and related human health hazards arising from plastic waste

General conceptual comments (scope: I)

1. Shall the main purpose of the guidelines be to help facilitate **implementation of the Convention's Plastic Waste Amendments**. Explain the terms: "almost free from contamination," "almost exclusively single polymer", and "separate recycling".
2. Shall the guidelines provide the recommendations of **contamination limits** for plastic waste shipments?
3. What **plastic and plastic waste should be included** ? Shall information about **cured resins or condensation products, and fluorinated polymers (Annex II, Y48)** be added?
4. Provide more information on **textiles and agricultural waste** (pesticide containers)? Delete **WEEE, plastic waste from vehicles**? Delete industrial and commercial waste streams?
5. Shall we add more specific information that helps with the **identification of hazardous and non-hazardous plastic wastes**?
6. Shall the guidelines include the **end-of-waste criteria of plastics**?

General conceptual comments (scope: II)

1. Shall the guidelines emphasize on **Best Available Technology** and **Best Environmental Practice**?
2. Shall the guidelines facilitate sharing experience on **plastic waste legislation and regulation**?
3. Shall the guidelines provide “**globally standardized waste treatment and disposal facilities from which recycling facilities should obtain approval to operate**”?
4. Shall we **prioritize ESM plastic waste treatment/disposal technologies**? (e.g. mechanical recycling -> solvent aided dissolution-> depolymerization ->pyrolysis ->energy recovery ->controlled incineration without energy recovery ->landfill ->uncontrolled incineration)
5. Shall the TGs **elaborate** on different **end-of-life technologies**? (Incineration without energy recovery and landfilling aligned with Basel TGs on D10. R1 and Basel TGs D5 respectively)

General conceptual comments (scope III)

- Target geography is medium- to high-income countries (especially about end-of-life options)
- Some cost elements of plastic waste treatment options are missing
- Indicate some investment required for various waste management facilities

Comments to be defined contradictory

The guidelines should also **focus on upstream of waste hierarchy** e.g., waste prevention and minimization (Subchapter III).
Include a full range of measures. Measures to reduce waste generation in the production phase, distribution phase, use phase and end-of-life phase.

The best practice should **focus on end-of-life** of plastics. Other issues, such as policy options for addressing plastic products (e.g., product design), are outside the scope of the technical guidelines.

EPR schemes: further analyzing and highlighting components of the EPR programs in developing countries

EPR schemes: Delete paragraphs 117-122. Manuals on EPR have been adopted at COP14. Reference to such manuals is important in order to avoid duplication.

Advanced plastic waste treatment methods under **chemical recycling** e.g. pyrolysis to be **removed or cut in explanation**.
Opposed to present chemical recycling as mature in the market.
Also chemical recycling shall not be provided under recycling.

Encourage chemical recycling.
Chemical recycling projects/investment have already been publicly announced with more to follow. It will not take more than 10 years to get to a maturity level.

PS, PP and PE chemical depolymerization to be added

Text for environmental impacts of chemical depolymerization to be added

We shall not leave the **editing** for the last moment.

Editing shall be left for later.

Deletion of text

209	Industrial and commercial waste streams
211 and 212	Plastic from electronic waste
213 and 214	Plastic from vehicles
8 229 to 232	Propose delete all "Shipping"
241	The efficiency of the mechanical recycling varies based on input material characteristic and technology applied.
277	Recycled PVC plastic companies should use environmentally friendly additives such as calcium / zinc compound stabilizers to reduce the use of lead salt stabilizers.
Chemical recycling	<p>Comment</p> <p>Section III.G.1 should provide guidance on environmentally sound recycling. In line with the approach taken in the General technical guidelines on POPs, guidance should only be provided on commercially available technologies; chemical recycling does not yet seem to be commercially available. Therefore, the text should be considerably shortened and references could be provided.</p> <p>If chemical recycling has become commercially available, the TGs should be updated.</p> <p>This document is not a scientific report.</p>
Chemical recycling 280 to 305	
321 to 322	HDPE recycling
ii) Recycling of PP 327	Pyrolysis of waste polyethylene is divided into gas production
332. Recycling PVC	Polyvinyl chloride (PVC) is one of the most commonly used thermoplastic polymers in the world
339 Recycling PET	Polyethylene terephthalate (PET) is a clear, strong and impact resistant plastic, commonly found in packaging applications such as beverage bottles
343 and 344	Recycling ABC
348	Recycling PC
352	Recycling PA
Energy recovery from plastic waste 368 to 371	While some plastics waste can be recycled resulting in environmental benefits, a lot of plastics waste consists of small items dispersed among other waste materials.
373 to 375	
Final disposal of plastic waste	<p>a) Incineration without energy recovery</p> <p>b) Landfill</p>

Existing gaps in TGs

- Waste plans (Ch III, add a sub-chapter)
- Types of polymers in textiles
- Average polymers composition of WEEE
- Collection Costs according to the system used
- Methods and guidance on performing **analysis of samples** taken from plastic waste and other locations in order to define a number of pollutants (e.g. macro and microplastics, bisphenols and phalates etc.)
- More information on manual sorting
- Environmental impacts of advanced recycling
- Identification of hazardous and non-hazardous plastic wastes