

# Basel Plastic Scrap Amendments

ISRI Spotlight on Plastics & Briefing on Basel Convention

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## Background

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

- A legally binding international treaty establishing prior informed consent for transboundary shipments of waste within its scope.
- Entered into force in 1992; 187 Parties.
- U.S. is a Signatory, but not a Party.
- The U.S. has participated as an Observer in Basel since the Convention's initiation.



**BASEL CONVENTION**

*the world environmental  
agreement on wastes*

## Objectives:

- Control and ensure environmentally sound management of primarily hazardous wastes subject to transboundary movement.
- Prevent or control export of primarily hazardous wastes to countries without capacity to manage it in an environmentally sound manner.
- Strengthen capacity of countries, esp. developing countries, to soundly manage waste.

# Prior informed consent process

1. Exporter submits notice to exporting country government
2. Exporting country government forwards notice to proposed importing country government
3. Importing country government reviews notice and consents, objects or conditionally consents to export notice and informs exporting country government
4. Exporting country government informs exporter of decision
5. If consent received, exporter generally has approval to export for one year under the conditions of the consent and/or import permit

# Required items for Basel export

- Export notice (or import notice in some cases)
- Movement document – international manifest
- Contract - between the exporter and the recycler specifying environmentally sound management
- Confirmation of receipt - the recycler must inform both the exporter and the Competent Authority of the state of export of receipt
- Confirmation of recovery - the recycler must inform both the exporter and the Competent Authority of the completion of recycling

Keep in mind, that EPA will not require the above for U.S. plastic scrap exports that are not RCRA hazardous waste

# Standardized Basel forms

- There is a standard Basel export notice form
- There is a standard Basel movement document form
- Link to obtain the forms:  
<http://www.basel.int/Procedures/NotificationMovementDocuments/tabid/1327/Default.aspx>

## Importing country considers scrap Basel-covered

- What if the importing country says the plastic scrap is a Basel-covered waste and the exporting country doesn't?
- The Basel Convention *mutatis mutandis* provision applies.
- This means that the importer (rather than the exporter) must prepare an import notice (rather than an export notice) and submit the import notice to the importing country government for consent, etc.

# Basel online resources

## **Export and Import Control Tool – Country-level requirements, etc.:**

<http://www.basel.int/Implementation/Controllingtransboundarymovements/ExportandImportControlTool/tabid/4284/Default.aspx>

## **Guide to the Control System:**

<http://www.basel.int/Implementation/LegalMatters/Compliance/GeneralIssuesActivities/Activities201213/GuidetotheControlSystem/tabid/3193/Default.aspx>

## **Notification and Movement documents + Instructions:**

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

# Basel Party/non-Party prohibition

- Basel Convention has a provision that prohibits Basel Parties from exporting and importing Basel-covered waste with non-Parties
- The U.S. has not ratified the treaty, thus we are a non-Party
- As of January 1, 2021, the 187 Basel Parties would not be allowed to export and import Basel-covered plastic scrap with the US unless there is a Basel Article 11 agreement or arrangement in place. Without such an agreement, these shipments would be considered illegal traffic under the Convention.



## Adopted amendments on plastic waste

- During May 2019, Parties adopted amendments to the Basel Convention making certain plastic scrap and waste subject to Basel prior informed consent (PIC) requirements as of January 1, 2021.
- The amendments changed the following Basel Convention Annexes:
  - **Annex VIII** lists wastes considered hazardous so they fall under the Convention requirements
  - **Annex II** covers wastes requiring “special consideration”. Annex II waste is subject to Convention requirements.
    - Annex II wastes include “household waste” (or MSW) and residues from the incineration of MSW.
  - **Annex IX** lists waste and scrap considered non-hazardous which are not subject to Convention requirements.

## Adopted amendments on plastic waste (cont'd)

- **Annex II, new entry Y48**
  - Most mixed plastic waste, with the exception of mixtures consisting of polyethylene (PE), polypropylene (PP), and polyethylene terephthalate (PET).
  - Plastic scrap or waste mixed with other scrap or waste.
  - Subject to prior informed consent and other Basel requirements.
- **Annex VIII, new entry A3210**
  - Plastic waste containing or contaminated with hazardous constituents in Basel Annex I to an extent that they exhibit a hazardous characteristic in Basel Annex III.
  - Subject to prior informed consent and other Basel requirements.
- **Annex IX, revisions to existing listing (B3010) designated as B3011**
  - Plastic waste must “almost exclusively” consist of a single non-halogenated polymer or resin.
  - Certain unmixed fluorinated polymer wastes are also allowed based on the existing Basel entry.
  - Plastic waste must be “almost free” from contamination and from other types of waste and be destined for environmentally sound recycling.
  - Mixtures of plastic wastes consisting of polyethylene (PE), polypropylene (PP), and polyethylene terephthalate (PET) are allowed if destined for “separate recycling” of each material.
  - Plastic waste must be sent for “recycling/reclamation of organic substances” (Basel code, R3).

Amendments enter into force on **January 1, 2021**.

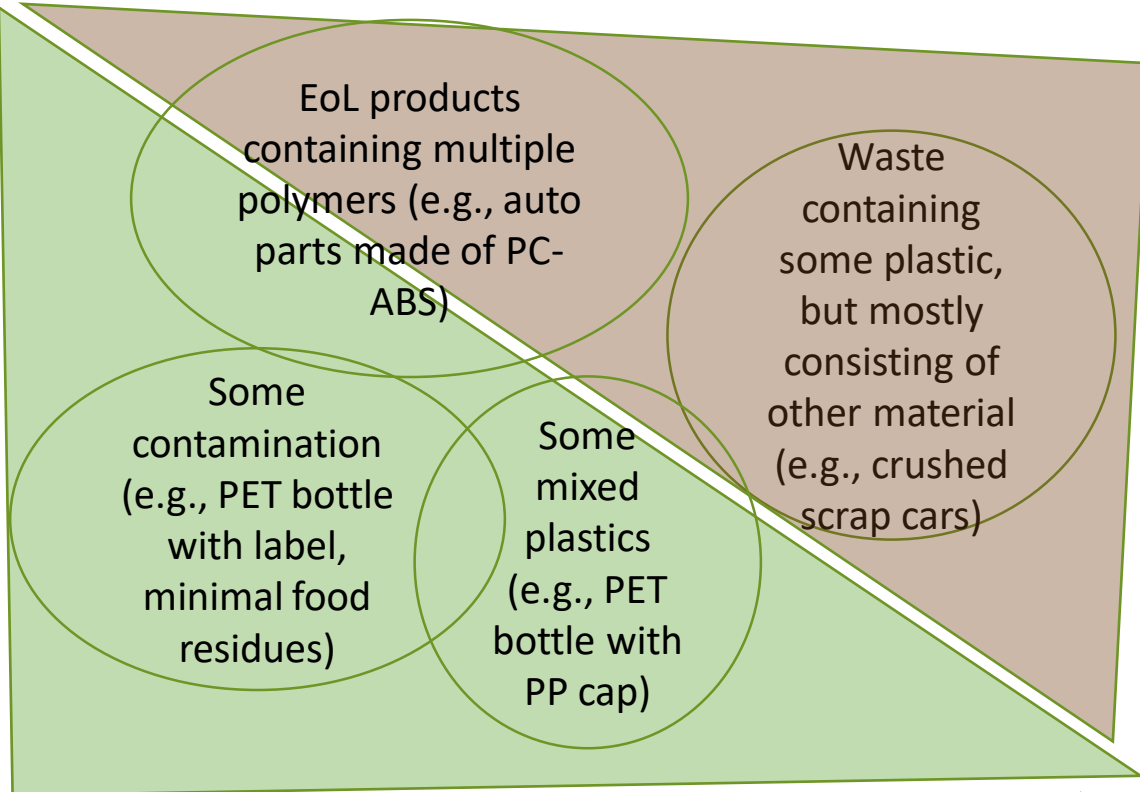
# Unresolved questions

*Ambiguity remains...*

## Annex IX

“Clean” plastic waste consisting of a single non-halogenated polymer, resin or certain fluorinated polymers

Mixed PP, PE and PET allowed in certain cases



## Annex II

Highly mixed and/or contaminated plastic waste, most halogenated polymers (e.g., PVC)

## Annex VIII

Plastic waste contaminated with Basel hazardous constituents\* to an extent it exhibits a Basel hazardous characteristic\*\*

Basel PIC procedure will not apply



Will Basel PIC procedures apply?

Basel PIC procedure will apply



# Key terms and questions

## Key terms

- To be “exempt” from Basel requirements, plastic waste must be “**almost exclusively**” of one non-halogenated polymer or resin, be “**almost free**” from contamination and from other types of waste, and be destined for **environmentally sound recycling**.
- Mixtures of PE, PP, and PET are allowed if destined for “**separate recycling**” of each material.

# Key terms and questions

## Key technical questions include:

- What level of contamination or mixing will be considered acceptable?
  - How will “almost exclusively” and “almost free” be defined – by weight or volume, etc.?
- To what extent is some mixing of polymers or resins allowed?
  - Will all end-of-life (EoL) products consisting of different polymers be controlled?
  - Will EoL products containing some plastic, but consisting predominantly of non-plastic material be controlled?
- What is considered environmentally sound recycling and how will “separate recycling” be defined?
- The Basel working group revising the plastic waste environmentally sound management (ESM) technical guidelines is expected to define terms.

## Potential impacts for the U.S.

- Would effectively stop U.S. trade in plastic scrap to Basel Parties with rare exceptions.
  - Most US exports of plastic scrap are to Basel Party countries, primarily in Southeast Asia.
- Anticipate confusion by U.S. exporters and importers on technical issues and procedural requirements; need to develop outreach materials.
- Anticipate varied implementation by Basel Parties.
- Although the Basel amendments do not change U.S. export and import waste requirements, we anticipate receiving export notifications from countries.

# Appendices

- Slide 16: Existing listing for plastic waste and scrap, B3010 in Basel Annex IX
- Slide 17: Plastic waste and scrap amendments to Basel Annexes II and VIII (new listings)
- Slide 18: Plastic waste and scrap amendments to Basel Annex IX (changes to existing listing – B3010 dropped and replaced by B3011)

**B3 WASTES CONTAINING PRINCIPALLY ORGANIC CONSTITUENTS,  
WHICH MAY CONTAIN METALS AND INORGANIC MATERIALS**

Existing  
plastic waste  
and scrap  
entry, B3010  
in Annex IX

*Effective until  
Dec. 31, 2020*

<b>B3010</b>	<p>Solid plastic waste: The following plastic or mixed plastic materials, provided they are not mixed with other wastes and are prepared to a specification:</p> <ul style="list-style-type: none"> <li>• Scrap plastic of non-halogenated polymers and co-polymers, including but not limited to the following<sup>23</sup> <ul style="list-style-type: none"> <li>- ethylene</li> <li>- styrene</li> <li>- polypropylene</li> <li>- polyethylene terephthalate</li> <li>- acrylonitrile</li> <li>- butadiene</li> <li>- polyacetals</li> <li>- polyamides</li> <li>- polybutylene terephthalate</li> <li>- polycarbonates</li> <li>- polyethers</li> <li>- polyphenylene sulphides</li> <li>- acrylic polymers</li> <li>- alkanes C10-C13 (plasticiser)</li> <li>- polyurethane (not containing CFCs)</li> <li>- polysiloxanes</li> <li>- polymethyl methacrylate</li> <li>- polyvinyl alcohol</li> <li>- polyvinyl butyral</li> <li>- polyvinyl acetate</li> </ul> </li> </ul>
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<b>B3010</b>	<ul style="list-style-type: none"> <li>• Cured waste resins or condensation products including the following: <ul style="list-style-type: none"> <li>- urea formaldehyde resins</li> <li>- phenol formaldehyde resins</li> <li>- melamine formaldehyde resins</li> <li>- epoxy resins</li> <li>- alkyd resins</li> <li>- polyamides</li> </ul> </li> <li>• The following fluorinated polymer wastes<sup>24</sup> <ul style="list-style-type: none"> <li>- perfluoroethylene/propylene (FEP)</li> <li>- perfluoro alkoxyl alkane</li> <li>- tetrafluoroethylene/per fluoro vinyl ether (PFA)</li> <li>- tetrafluoroethylene/per fluoro methylvinyl ether (MFA)</li> <li>- polyvinylfluoride (PVF)</li> <li>- polyvinylidene fluoride (PVDF)</li> </ul> </li> </ul>
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- <sup>24</sup> Post-consumer wastes are excluded from this entry:
- Wastes shall not be mixed
  - Problems arising from open-burning practices to be considered

<sup>23</sup> It is understood that such scraps are completely polymerized.



# New Basel Annex II and VIII plastic waste (subject to Basel PIC procedure)

## Annex II plastic waste

Y 48 <sup>1,2</sup>	<p>Plastic wastes, including mixtures of such wastes, with the exception of the following:</p> <ul style="list-style-type: none"> <li>• Plastic waste which is hazardous waste pursuant to paragraph 1 (a) of Article 1<sup>3</sup></li> <li>• Plastic waste listed below, provided it is destined for recycling<sup>4</sup> in an environmentally sound manner and almost free from contamination and other types of wastes:<sup>5</sup> <ul style="list-style-type: none"> <li>- Plastic waste almost exclusively consisting of one non-halogenated polymer, including but not limited to the following polymers:           <ul style="list-style-type: none"> <li>○ Polyethylene (PE)</li> <li>○ Polypropylene (PP)</li> <li>○ Polystyrene (PS)</li> <li>○ Acrylonitrile butadiene styrene (ABS)</li> <li>○ Polyethylene terephthalate (PET)</li> <li>○ Polycarbonates (PC)</li> <li>○ Polyethers</li> </ul> </li> <li>- Plastic waste almost exclusively<sup>6</sup> consisting of one cured resin or condensation product including but not limited to the following:           <ul style="list-style-type: none"> <li>○ Urea formaldehyde resins</li> <li>○ Phenol formaldehyde resins</li> <li>○ Melamine formaldehyde resins</li> <li>○ Epoxy resins</li> <li>○ Alkyd resins</li> </ul> </li> <li>- Plastic waste almost exclusively consisting of one of the following fluorinated polymer wastes:<sup>7</sup> <ul style="list-style-type: none"> <li>○ Perfluoroethylene/propylene (FEP)</li> <li>○ Perfluoro alkoxyl alkane</li> <li>○ Tetrafluoroethylene/per fluoro vinyl ether (PFA)</li> <li>○ Tetrafluoroethylene/per fluoro methylvinyl ether (MFA)</li> <li>○ Polyvinylfluoride (PVF)</li> <li>○ Polyvinylidene fluoride (PVDF)</li> </ul> </li> <li>- Mixtures of plastic wastes, consisting of polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET), provided they are destined for separate recycling<sup>8</sup> of each material and in an environmentally sound manner, and almost free from contamination and other types of wastes.<sup>9</sup></li> </ul> </li> </ul>
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## Annex II plastic waste (footnotes)

<sup>1</sup> This entry becomes effective as of 1 January 2021.

<sup>2</sup> Parties can impose stricter requirements in relation to this entry.

<sup>3</sup> Note the related entry on list A A3210 in Annex VIII.

<sup>4</sup> Recycling/reclamation of organic substances which are not used as solvents (R3 in Annex IV B) or if needed, temporary storage limited to one operation provided that it is followed by operation R3, and evidenced by contractual or relevant official documentation.

<sup>5</sup> In this respect, international and national specifications may offer a point of reference.

<sup>6</sup> In this respect, international and national specifications may offer a point of reference.

<sup>7</sup> Post-consumer wastes are excluded from this entry.

<sup>8</sup> Recycling/reclamation of organic substances which are not used as solvents (R3 in Annex IV B) with prior sorting, and if needed, temporary storage limited to one instance provided that it is followed by operation R3, and evidenced by contractual or relevant official documentation.

<sup>9</sup> In this respect, international and national specifications may offer a point of reference.

## Annex VIII plastic waste

A3210 <sup>10</sup>	Plastic waste, including mixtures of such wastes, containing or contaminated with Annex I constituents, to an extent that it exhibits an Annex III characteristic (note the related entry on list B B3011)
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<sup>10</sup> This entry becomes effective as of 1 January 2021.

**B3011**<sup>11</sup>

Plastic waste listed below, provided it is destined for recycling<sup>12</sup> in an environmentally sound manner and almost free from contamination and other types of wastes (note the related entries on list A A3210 and Y48 in Annex II):<sup>13</sup>

- Plastic waste almost exclusively consisting of one non-halogenated polymer, including but not limited to the following polymers:
  - o Polyethylene (PE)
  - o Polypropylene (PP)
  - o Polystyrene (PS)
  - o Acrylonitrile butadiene styrene (ABS)
  - o Polyethylene terephthalate (PET)
  - o Polycarbonates (PC)
- Plastic waste almost exclusively<sup>14</sup> consisting of one cured resin or condensation product including the following:
  - o Urea formaldehyde resins
  - o Phenol formaldehyde resins
  - o Melamine formaldehyde resins
  - o Epoxy resins
  - o Alkyd resins
- Plastic waste almost exclusively consisting of one of the following fluorinated polymer wastes:<sup>15</sup>
  - o Perfluoroethylene/propylene (FEP)
  - o Perfluoro alkoxy alkane
  - o Tetrafluoroethylene/per fluoro vinyl ether (PFA)
  - o Tetrafluoroethylene/per fluoro methylvinyl ether (MFA)
  - o Polyvinylfluoride (PVF)
  - o Polyvinylidene fluoride (PVDF)
- Mixtures of plastic wastes, consisting of polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET), provided they are destined for separate recycling<sup>16</sup> of each material and in an environmentally sound manner, and almost free from contamination and other types of wastes.<sup>17</sup>

## Revised Basel Annex IX plastic waste listing, B3011

Replaces existing Annex IX plastic waste listing, B3010. These wastes are not subject to Basel PIC procedures.

<sup>11</sup> This entry becomes effective as of 1 January 2021. Entry B3010 is effective until 31 December 2020.

<sup>12</sup> Recycling/reclamation of organic substances which are not used as solvents (R3 in Annex IV B) or if needed, temporary storage limited to one operation provided that it is followed by operation R3, and evidenced by contractual or relevant official documentation.

<sup>13</sup> In this respect, international and national specifications may offer a point of reference.

<sup>14</sup> In this respect, international and national specifications may offer a point of reference.

<sup>15</sup> Post-consumer wastes are excluded from this entry.

<sup>16</sup> Recycling/reclamation of organic substances which are not used as solvents (R3 in Annex IV B) with prior sorting, and if needed, temporary storage limited to one instance provided that it is followed by operation R3, and evidenced by contractual or relevant official documentation.

<sup>17</sup> In this respect, international and national specifications may offer a point of reference.