

Japan's implementation of the plastic amendment of the Basel Convention Annexes

November 19th, 2020 Ms. Seika SANNO

Industrial and Hazardous Waste Management Division, Environment Regeneration and Resource Circulation Bureau, Ministry of the Environment Japan



Criteria for distinguishing plastic wastes subject to control from other wastes not subject to control

- The criteria aims to define the scope of plastic wastes covered by B3011 in order to clarify the scope of plastic wastes covered by Y48.
- Since B3011 in Annex IX has separate provisions on plastic waste exclusively consisting of a single resin and mixtures of plastic waste consisting of different resins (PE, PP and PET), two different criteria are developed as the following:
 (1) Criteria applicable to plastic wastes without a mixture of different plastic resins
 (2) Criteria applicable to plastic wastes with a mixture of different plastic resins

B3011 Plastic wastes

- Plastic waste listed below, provided it is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes: Plastic waste almost exclusively consisting of one non-halogenated polymer, including but not limited to the following polymers:
 - Polyethylene (PE)
 - Polypropylene (PP)
 - Polystyrene (PS)
 - Acrylonitrile butadiene styrene (ABS)
 - Polyethylene terephthalate (PET)
 - Polycarbonates (PC)
 - Polyethers

Plastic waste almost exclusively consisting of one cured resin or condensation product, including but not limited to the following resins:

- Urea formaldehyde resins
- Phenol formaldehyde resins
- Melamine formaldehyde resins
- Epoxy resins
- Alkyd resins

Plastic waste almost exclusively consisting of one of the following fluorinated polymers:

- Perfluoroethylene/propylene (FEP)
- Perfluoroalkoxy alkanes:

Tetrafluoroethylene/perfluoroalkyl vinyl ether (PFA)

Tetrafluoroethylene/perfluoromethyl vinyl ether (MFA)

- Polyvinylfluoride (PVF)
- Polyvinylidenefluoride (PVDF)

Mixtures of plastic waste, consisting of polyethylene (PE), polypropylene (PP) and/or polyethylene terephthalate (PET), provided they are destined for separate recycling of each material and in an environmentally sound manner, and almost free from contamination and other types of wastes.

(1) Criteria applicable to plastic without a mixture of different plastic resins

- Plastic wastes that fulfill all criteria A to D below are out of the scope of the control and therefore categorized as B3011 as a general principle.
- Criteria A, B and C are elements deemed necessary when literally interpreting "almost free from contamination and other types of wastes" under the new Annex of the Basel Convention.
- Criterion D is developed since plastic wastes which are processed or arranged for recycling are less likely to cause environmental pollution in importing countries.

Criteria to be exempted from the Basel Act

- A Free of contamination from food and drink, dirt, oils and other substances
- B Not mixed with substances other than plastic
- C Consisting of a single type of plastic resin
- D Processed or arranged for recycling

Examples of the types of plastic that will be out of the scope of control

(i) Pelletized plastics

(ii) Transparent or single colored plastic flakes or fluff*

*Note: The plastic waste must be transparent or of a single color in order to be out of the scope of control. The reason for this is that mixed color plastic flakes or fluff are indistinguishable from a mixture of other materials or contamination. The exceptions are only when mixed color plastics are discharged as a byproduct from the manufacturing process or when they have a minimal amount of color mixing after undergoing a sorting process.

- Pellets, flakes and fluff satisfy all criteria A to D since they are washed, sorted and procured as recycled materials in the course of processing.
- If plastics (i) and (ii) have contamination or are mixed with other materials for any reason, they are not considered to be out of the scope of control.

(i) Pelletized plastics





(ii) Transparent or single colored plastic flakes or fluff





Examples of the types of plastic that will be out of the scope of control

(iii) Plastic wastes in the form of sheets, rolls, or bales* that were discharged as a byproduct from the manufacturing process (i) Debug (190) is the form of t

(iv) Polystyrene foam (PS) in the form of ingots

*Note: Plastic wastes in the form of bales are limited to those consisting of a homogenous plastic and packaged by a transparent film to prevent stains.

- Surplus or unused plastics generated in the process of manufacturing products shown in (iii) below satisfy all Criteria A to D since the contamination or mixing with substances other than plastic are less likely to occur, they consist of a single type of plastic resin, and therefore are considered as equivalent to those arranged as recycled materials.
- Plastic wastes (iv) satisfy all Criteria A to D since contaminants or substances other than plastics are removed in the process of volume reduction, they consist of a single type of plastic resin, and therefore are considered as equivalent to those arranged as recycled materials.
- If plastics (iii) or (iv) have contamination or are mixed with other materials for any reason, they are not considered to be out of the scope of control.







(iv) Polystyrene foam (PS) in the form of ingots



Examples of the scope of control per source of plastic wastes

The following examples show the scope of control on industrial wastes and used electrical and electronic equipment or E-waste.

Not controlled

Plastic wastes as industrial wastes

Controlled



Plastic wastes derived from used electrical and electronic equipment or E-waste





(2) Criteria applicable to plastic wastes with a mixture of different plastic resins

- Plastic wastes with a mixture of polyethylene (PE), polypropylene (PP) and/or polyethylene terephthalate (PET) are assumed as PET bottles with labels and caps.
 Plastic bottle waste that fulfills all criteria A to C below are out of the scope of control and are therefore categorized as category B3011 as a general principle.
- Criterion C is a necessary requirement for B, since plastic wastes cannot be deemed washed unless otherwise shredded.
- PET bottle labels produced in Japan <u>often consist of polystyrene (PS</u>) which is not covered by this specific provision. <u>Hence, all labels need to be removed to be exempted from control.</u>
- Only plastic waste with a small amount of labels or caps after undergoing a sorting process becomes exempt from regulation.

Criteria to be exempted from the Basel Act

- A Sorted, and excludes other materials or plastic resins other than bottles, caps, and labels
- B Washed, and free of contamination from drinks, dirt, and other substances
- C Shredded and in the form of flakes

Examples of PET bottle wastes that are subject to control under the Basel Act

> The following examples show the scope of control on PET bottle wastes.

Wastes that are shredded and in the form of flakes which has undergone a sorting process are exempted from the Basel Act.

