

National Standards of the People's Republic of China

GB 16487.10—2017

Replace GB 16487.10-2005

Environmental Protection Control Standard for Imported Solid Wastes as Raw Materials—Metal and Electrical Appliance Scraps

(Version for Release)

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Foreword

In order to implement the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes, the Law of the People's Republic of China on the Prevention and Control of Radioactive Pollution and other applicable laws and regulations, and control the environmental pollution caused by imported metal and electrical appliance scraps as raw materials, this standard is hereby formulated.

This standard specifies the environmental protection control requirements for imported metal and electrical appliance scraps.

As one of a series of environmental protection control standards for imported solid wastes, this standard shall be applicable to the administration of import of the metal and electrical appliance scraps included in the Catalogue of Imported Solid Wastes as Raw Materials.

This standard was first issued in 1996 and first amended in 2005, and it is hereby amended for a second time.

It is hereby amended mainly in the following aspects:

- Requirement on external exposure penetrating radiation dose for imported metal and electrical appliance scraps was added;
- Control requirement for hazardous wastes was adjusted;
- Control requirement for regular carried-wastes was tightened;
- Content requirement for recyclable metal in metal and electrical appliance scraps was raised; and
- Requirements on inspection were revised.

Environmental Protection Control Standard for Imported Solid Wastes as Raw Materials – Metal and Electrical Appliance Scraps (GB 16487.10-2005) shall be abolished as of the effective date of this standard.

This standard was amended under the direction of the Department of Soil Environment Management and the Department of Science, Technology and Standards of the Ministry of Environmental Protection.

Primary drafting organization for this standard: Chinese Research Academy of Environmental Sciences.

This standard was approved by the Ministry of Environmental Protection on December 29, 2017.

This standard shall come into full force and effect on March 1, 2018.

This standard shall be interpreted by the Ministry of Environmental Protection.

Environmental Protection Control Standard for Imported Solid Wastes as Raw Materials – Metal and Electrical Appliance Scraps

1. Scope of Application

This standard hereby sets forth the environmental protection control requirements for imported metal and electrical appliance scraps.

This standard shall be applicable to the administration of import of the metal and electrical appliance scraps described below, including leftover materials, inferior products and non-conforming products produced in the processing of metal and electrical appliances.

HS Code	Name of Solid Waste	
7204490020	Metal and electrical appliance scraps mainly for the recovery of iron and steel	
740400010	Metal and electrical appliance scraps mainly for the recovery of copper	
7602000010	Metal and electrical appliance scraps mainly for the recovery of aluminum	

2. Cited Normative Documents

The provisions of the following documents are cited in this standard. In case of any undated citation, the effective version of such cited normative document shall be applicable to this standard.

GB 5085.1	Identification Standards for Hazardous Wastes	Identification of corrosivity		
GB 5085.2	Identification Standards for Hazardous Wastes	Screening test for acute toxicity		
GB 5085.3	Identification Standards for Hazardous Wastes	Identification of leaching toxicity		
GB 5085.4	Identification Standards for Hazardous Wastes	Identification of flammability		
GB 5085.5	Identification Standards for Hazardous Wastes	Identification of reactivity		
GB 5085.6	Identification Standards for Hazardous Wastes	Identification for toxic substance		
		content		
SN/T 0570	Inspection Procedures for Radioactive Contamination of Imported Wastes as Raw			
	Materials			
SN/T 1791.6	Inspection and Quarantine Procedures for Imported Wastes as Raw Materials –			
	Part 6: Metal and Electrical Appliance Scraps			

National Catalogue of Hazardous Wastes (Order No. 39 issued by Ministry of Environmental Protection, National Development and Reform Commission, and Ministry of Public Security)

3. Terms and Definitions

For purpose of this standard, the following terms and definitions shall apply.

3.1 Carried-waste

Foreign substances introduced into imported metal and electrical appliance scraps during production, collection, packaging and transportation (excluding packing materials for the imported metal and electrical appliance scraps and other substances that need to be used during the transportation process).

4 Control Standards and Requirements

4.1 To control radioactive contamination induced by imported metal and electrical appliance scraps, the

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following requirements shall be met:

- a) The metal and electrical appliance scraps shall not contain any radioactive wastes;
- b) The external exposure penetrating radiation dose rate for the metal and electrical appliance scraps (including packing material) shall be no more than $+0.25\mu$ Gy/h greater than the normal natural background radiation level at the place where the port of import is located;
- c) α -ray and β -ray radioactive contamination levels on the surface of the metal and electrical appliance scraps shall be as follows: the average value of maximum detected level in any portion of 300cm^2 on the surface shall not exceed 0.04Bq/cm^2 for α -ray and 0.4Bq/cm^2 for β -ray; and
- d) The specific activity of radioactive nuclide in the metal and electrical appliance scraps shall be less than the threshold values specified in Table 1 below.

Nuclide	Specific Activity (Bq/g)
⁵⁹ Ni	$3x10^{3}$
⁶³ Ni	$3x10^3$
⁵⁴ Mn	0.3
⁶⁰ Co	0.3
⁶⁵ Zn	0.3
⁵⁵ Fe	300
⁹⁰ Sr	3
¹³⁴ Cs	0.3
¹³⁷ Cs	0.3
²³⁵ U	0.3
238U	0.3
²³⁹ Pu	0.1
²⁴¹ Am	0.3
¹⁵² Eu	0.3
¹⁵⁴ Eu	0.3
⁹⁴ Nb	0.3
β-γ mixture with unknown components	0.3
α mixture with unknown components	0.1

Table 1 Threshold Values of Specific Activity of Radioactive Nuclide

- 4.2 Metal and electrical appliance scraps shall not contain any explosive arms or ammunitions, such as discarded bombs and shells.
- 4.3 The total weight of the following carried-wastes in metal and electrical appliance scraps shall be strictly restricted to a level not greater than 0.01% of the weight of the imported metal and electrical appliance scraps.
 - a) Transformers, ballasts and compressors on which the insulating oil materials are not removed;
 - b) Sealed container;
 - c) Wastes listed in the National Catalogue of Hazardous Wastes; and
 - d) Other hazardous wastes with one or more hazardous characteristics including corrosivity, toxicity, flammability and reactivity as identified according to the identification standards of GB5085.1-GB5085.6.

- 4.4 In addition to the wastes listed above, the total weight of other carried-wastes (including wood waste, waste paper, waste plastic, waste rubber, waste glass, and waste and scrap mechanical and electrical products banned from import by the government) in metal and electrical appliance scraps shall be restricted to a level not greater than 0.5% of the weight of the imported metal and electrical appliance scraps.
- 4.5 The content of recyclable metal in imported metal and electrical appliance scraps shall not be less than 80% of the total weight of the metal and electrical appliance scraps.

5 Inspection

- 5.1 Inspection under this standard shall be carried out by random sampling, where opening, devanning, unpacking/unbaling and sorting shall be carried out for the inspection of imported wastes shipped in containers, open-cabin inspection and arrival inspection shall be carried out for the inspection of imported wastes shipped in bulk by sea, and open-box inspection and arrival inspection shall be carried out for the inspection of imported wastes shipped in bulk by land, which shall be sent to labs for tests when necessary (including specific activity of radioactive nuclide and hazardous characteristics). The results of inspection by random sampling shall serve as the results of the inspection of the whole shipment.
- 5.2 Inspection under Section 4.1 hereof shall be performed in accordance with the provisions of SN/T 0570.
- 5.3 Inspection under Section 4.3(d) hereof shall be performed according to the methodologies provided in GB 5085.1-GB 5085.6.
- 5.4 Inspection under other sections hereof shall be performed in accordance with the provisions of SN/T 1791.6.