

National Standards of the People's Republic of China

GB 16487.6—2017

Replace GB 16487.6-2005

Environmental Protection Control Standard for Imported Solid Wastes as Raw Materials—Waste and Scrap of Iron and Steel

(Version for Release)

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Table of Contents

| For | Foreword | | |
|-----|------------------------------------|----|--|
| | | | |
| 1. | Scope of Application | .1 | |
| 2. | Cited Normative Documents | .1 | |
| 3. | Terms and Definitions | .1 | |
| 4 | Control Standards and Requirements | .2 | |
| 5 | Inspection | .3 | |

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 waste and scrap of iron and steel as raw material, this standard is hereby formulated.

This standard specifies the environmental protection control requirements for imported waste and scrap of iron and steel.

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 waste and scrap of iron and steel 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 waste and scrap of iron and steel was added;
- Control requirement for hazardous wastes was adjusted;
- Control requirement for regular carried-wastes and powdery substance contained therein was tightened; and
- Requirements on inspection were revised.

Environmental Protection Control Standard for Imported Solid Wastes as Raw Materials – Waste and Scrap of Iron and Steel (GB 16487.6-2005) 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 – Waste and Scrap of Iron and Steel

1. Scope of Application

This standard hereby sets forth the environmental protection control requirements for imported waste and scrap of iron and steel.

This standard shall be applicable to the administration of import of the waste and scrap of iron and steel described below.

| HS Code | Name of Solid Waste |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7204100000 | Waste and scrap of cast iron |
| 7204210000 | Waste and scrap of stainless steel |
| 7204290000 | Waste and scrap of other alloy steel |
| 7204300000 | Waste and scrap of tinned iron or steel |
| 7204410000 | Iron and steel waste generated during mechanical processing (mechanical processing refers to lathing, planning, milling, grinding, sawing, filing, shearing and punching) |
| 7204490090 | Waste and scrap of unlisted iron and steel |
| 7204500000 | Scrap ingot of iron or steel for re-smelting |

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 1791.4 | Inspection and Quarantine Procedures for Imported Wastes as Raw Materials - | | | |
| | Part 4: Waste and Scrap of Iron and Steel | | | |

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 waste and scrap of iron and steel during production, collection, packaging and transportation (excluding packaging for the imported waste and scrap of iron and steel 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 waste and scrap of iron and steel, the following requirements shall be met:
 - a) The waste and scrap of iron and steel shall not contain any radioactive wastes;
 - b) The external exposure penetrating radiation dose rate for the waste and scrap of iron and steel (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 waste and scrap of iron and steel shall be as follows: the average value of maximum detected level in any portion of 300cm² on the surface shall not exceed 0.04Bq/cm² for α -ray and 0.4Bq/cm² for β -ray; and
 - d) The specific activity of radioactive nuclide in the waste and scrap of iron and steel 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 |
| ²³⁸ U | 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 Waste and scrap of iron and steel 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 waste and scrap of iron and steel shall be strictly restricted to a level not greater than 0.01% of the weight of the imported waste and scrap of iron and steel.
 - a) Sealed container;
 - b) Wastes listed in the National Catalogue of Hazardous Wastes; and
 - c) 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 glass, waste plastic, waste rubber, waste textile, powdery substance with a particle size of not more than 2 mm, and stripped rust) in waste and scrap of iron and steel shall be restricted to a level not greater than 0.5% of the weight of the imported waste and scrap of iron and steel, out of which the total weight of the carried and contaminated powdery substance (such as dedusting ash, dust, sludge, and metal oxide) with a particle size of not more than 2 mm shall not exceed 0.1% of the total weight of the imported waste and scrap of iron and steel.

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 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(c) 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 1791.4.