

# National Standard of the People's Republic of China

GB 34330-2017

## Identification standards for solid wastes General rules

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#### **Preface**

This standard is formulated to enforce the *Environmental Protection* Law of the People's Republic of China and the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes, strengthen solid waste management, protect the environment and safeguard human health.

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

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

This standard was approved by the Ministry of Environmental Protection on May 27, 2017.

This standard shall take effect on Oct 01, 2017.

This standard shall be interpreted by Ministry of Environmental Protection.

#### **Identification standards for solid wastes** General rules

#### 1. Scope of application

This standard specifies the identification criteria for solid wastes according to their sources, identification criteria for solid wastes obtained during utilization and handling, substances not regulated as solid wastes, substances not regulated as liquid wastes, and relevant supervision and management requirements.

This standard applies to solid waste identification for substances (or materials) and items (including products, commodities) (hereinafter referred to as "Substances").

This standard applies to the identification of liquid wastes.

This standard does not apply to the identification of radioactive wastes.

This standard does not apply to the classification of solid wastes.

This standard does not apply to the solid waste identification for substances subject to special solid waste identification standards.

#### 2. Normative references

The provisions in the following documents are cited in this standard. For undated references, the latest edition of the normative document applies to this standard.

GB 18599 Standard for pollution control on the storage and disposal site of general industrial solid wastes

#### 3. Terms and definitions

The following terms and definitions apply to this standard.

#### 3.1 Solid wastes

Refers to solid, semi-solid and contained gaseous items and substances that are generated during production activities, household activities and other activities and have lost their original values, or haven't lost their original values but are discarded or abandoned, as well as items and substances regulated as solid wastes according to laws and administrative regulations.

#### 3.2 Solid waste identification

Refers to activities conducted to determine whether a substance is regarded as solid waste.

#### 3.3 Recycle

Refers to activities conducted to extract substances for use as raw material or fuel from solid wastes.

#### 3.4 Treatment

Refers to activities conducted to transform solid wastes into forms suitable for transportation, storage, use and disposal through physical, chemical and biological methods.

#### 3.5 Disposal

Refers to activities conducted to reduce the types and volumes of solid wastes generated, and reduce or remove hazardous components through solid waste incineration and other methods that change the physical, chemical and biological properties of the solid wastes, or placement of solid wastes in a landfill site that meets environmental protection requirements.

#### 3.6 Target products

Refers to one or more products that are intended to be obtained in process design, establishment and operation, including by-products.

#### 3.7 By-products

Refers to substances generated along with the target products.

#### 4. Identification of solid wastes by sources

The following substances belong to solid wastes (excluding substances listed in Section 6).

#### 4.1 Substances that have lost their original values, including the following types:

- a) Substances generated in production process that cannot be marketed, circulated or utilized as per original use due to non-compliance with national, local or general industrial product standards (specifications), or quality problems, such as unqualified products, defective products, scraps, etc. However, substances that meet off-grade requirements specified in national, local or general industry product standards and that are reprocessed (reworked) by the manufacturers are excluded.
- b) Substances that cannot be marketed, circulated or utilized as per original use due to expiration of warranty period.
- c) Substances that cannot be marketed, circulated, or utilized as per original use due to non-compliance with requirements as a result of contamination, doping and introduction of useless or hazardous substances.
- d) Substances generated during consumption or use that cannot be utilized as per original use due to expiration of shelf life.
- e) Substances confiscated by law enforcement authorities that are required to be scrapped, destructed or decontaminated, including (but not limited to) prohibited products, such as fake and defective products, products that infringe intellectual property rights, narcotic drugs.
- f) Substances produced for the purpose of waste disposal that contain no market demand or cannot be marketed and circulated;
- g) substances that cannot be utilized as per original use due to damage caused by natural disasters, force majeure and human disasters.
- h) Substances that cannot be used due to loss of original functions.
- i) Substances that cannot be marketed, circulated or utilized as per original use due to other reasons.

#### 4.2 By-products generated during production process, including the following types:

- a) Tailings, cuttings and residual substances generated during product processing manufacturing;
- b) Residual substances generated during substance extraction, purification, electrolysis, electrodeposition, cleaning, modification, surface treatment, including (but not limited to) the following substances:
- 1) Blast furnace slag, steel slag, oxide scale from steer rolling, iron alloy slag and manganese slag generated from smelting or processing of ferrous metals;
- 2) Pyrometallurgical slags generated during smelting or processing of non-ferrous metals, such as copper slag, lead slag, tin slag, zinc slag, aluminum ash (slag), and hydrometallurgical slags, such as red mud, anode mud in electrolysis, carbon anode scrap in aluminum electrolysis, residue in electrodeposition cell, acid (alkaline) leaching residue, purification residue;
- 3) electroplating cell residue and polishing dust generated during metal surface treatment.
- c) Residual substance generated during substance synthesis, degradation, fractionation, distillation, dissolution, precipitation and other processes, including (but not limited to) the following substances:
- 1) waste acid solution, waste alkaline solution, spent clay, oil shale residue during petroleum refining;
- 2) acid sludge, spent mother liquid, bottom residue of distillation tank, carbide slag generated during organic chemical manufacturing process.
- 3) phosphogypsum, white mud in ammonia-soda process, chromium slag, pyrite slag, salt mud generated during inorganic chemical manufacturing process.
- d) barren rocks, tailings, coal gangue generated during mining and beneficiation of metal ores, non-metal ores and coal;

- e) drilling mud, spent fracturing fluid, oil sludge or sand, oil sediment, and oilfield spills generated during exploitation of petroleum, natural gas and geothermal energy;
- f) residual substances, such as cal furnace cinder, generated from thermal power generation or combustion facilities, such as boilers in thermal power plant, other industrial and civil boilers, and industrial kilns;
- g) residual substances and damaged substances obtained from kilns, reactors, reaction tanks, pipelines, containers and other facilities and devices during facility and equipment maintenance and repair;
- h) recycled dusts and powders that are generated during various processes, such as crushing, size reduction, sieving, grinding, cutting and packaging, and that cannot be used as products, raw materials or reused materials:
- i) construction wastes, such as scraps and defective substances generated during construction and operation processes;
- j) animal manure and corpses of diseased animals generated during livestock cultivation and aquaculture;
- k) agricultural wastes generated during agricultural production, such as crop stalks, and plat branches and leaves;
- l) laboratory wastes generated during experiments for the purpose of teaching, research, production and medical treatment, such as animal corpses;
- m) by-products generated during other production processes.

## 4.3 Substances generated during environmental remediation and pollution control, including the following types:

- a) dust collected during the cleaning and dust removal process for flue gas and exhaust gas, including coal dust:
- b) desulfurized gypsum generated in flue gas desulfurization, and spent denitration catalyst for flue gas denitration;
- c) coal tar generated during coal gas cleaning;
- d) by-product sulfuric acid or hydrochloric acid generated during flue gas cleaning;
- e) sludge and other wastes generated during water purification and wastewater treatment;
- f) concentrated solution generated during the treatment of wastewater or waste liquid (including leachate generated from landfill site of solid wastes);
- g) sludge of septic tank, toilet manure;
- h) ash and slag generated in incinerator for solid wastes, such as fly ash, bottom residue;
- i) residual substances generated during composting production;
- j) plant branches and leaves generated during cleaning for urban landscape management;
- k) floating objects and dredged mud from water bodies, such as rivers, ditches, lakes, channels, and swimming pools;
- l) waste filtration medium generated during cleaning of flue gas, smelly gas and wastewater, such as spent activated carbon, and filtration membrane for filter.
- m) contaminated soil disposed of or used by means of any of the following manners during restoration and treatment of contaminated land:
- 1) landfill;
- 2) incineration;
- 3) co-processing in cement kiln;
- 4) production of other construction materials, such as bricks, tiles, and road construction materials.
- n) various substances generated during other environmental remediation and contamination remediation activities.

#### 4.4 Others:

- a) substances prohibited from use by law;
- b) substances regarded as solid wastes by the administrative authority for environmental protection of National Council.

#### 5. Identification of solid wastes obtained from use and disposal

## 5.1 Under any circumstances, solid wastes used or disposed of in any of the following manners are still regulated as solid wastes (exclude those covered in section 6.2):

- a) Direct use in land for land improvement, land modification, land remediation and other method of land use, or use for producing materials to be used in land (including composting), and for producing road construction materials;
- b) incineration disposal (including incineration for obtaining thermal energy, and incineration using refuse-derived fuel), or use for fuel production, or inclusion in fuel;
- c) landfill disposal;
- d) dumping, and piling up;
- e) other disposal methods approved by the administrative authority for environmental protection of National Council.

## 5.2 Products generated from solid wastes that meet the following requirements are not regulated as solid wastes and shall be controlled according to corresponding products (exclude those used or disposed of according to section 5.1):

- a) the product meets the national, local and general industry quality standards for the product produced by replaced raw materials;
- b) the product meets the requirements of relevant national standards or technical specifications for pollutant discharge (control), including the limit of hazardous substances discharged to the environment during the production process for the product and the content limits of hazardous substances in the product;

In the event that there is no national standard or technical specification for pollution control, the contents of the hazardous components in the product shall not be greater than those in the product manufactured by the replaced raw material, and the concentrations of the hazardous substances discharged to the environment during production process for the product shall not be greater than those for the product using replaced raw material. If there is no replaced raw material, this requirement is inapplicable;

c) there is steady and reasonable market demand.

#### 6. Substances not regulated as solid wastes

#### 6.1. The following substances are not regulated as solid wastes:

- a) any substance that may be utilized as per its original use without repairing and processing, or any substance that can meet national, local and general industry product quality standards after repairing and processing and can be utilized as per its original use.
- b) substances that are directly returned to the original production process or its generation process without storage or piling up.
- c) contaminated soil that is used as soil after remediation;
- d) solid waste samples for laboratory tests and analysis or scientific research.

#### 6.2 Substances that are disposed of in the following manners are not regulated as solid wastes:

- a) barren rocks, tailings, coal gangue that are left in or returned to goaf area during mining and beneficiation of metal ores, non-metal ores and coal, and meet the requirements of Class I general industrial solid wastes specified in GB18599. However, introduced pollutants other than barren rocks, tailings, coal gangue are excluded;
- b) Substances generated during a construction project that are required to be disposed of in situ by laws, regulations and national standards.

## 6.3 Substances regarded as not regulated as solid wastes by administrative authority for environmental protection of National Council.

#### 7. Substances not regulated as liquid wastes

- 7.1 Wastewater and sewage that are permitted to be discharged into environmental water bodies or civil sewer network and treatment facilities by relevant laws, regulations and discharge standards.
- 7.2 Wastewater and sewage that can meet relevant laws, regulations and discharge standards concerning discharge to environmental water bodies or civil sewer network and treatment facilities after being treated by wastewater treatment process, such as physical treatment, chemical treatment, physical-chemical treatment and biological treatment.
- 7.3 wastewater that meets section 7.1 or 7.2 after neutralized with waste acid and waste alkaline.

#### 8. Enforcement and supervision

Administrative authorities for environmental protection at country level or above shall be responsible for the supervision of the enforcement of the standard.