

HJ

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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Technical specifications on identification for hazardous waste (English Translation)

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Table of Contents

Announcement of State Administration for Environmental Protection...	3
Foreword...	4
1 Scope...	5
2 Normative References...	5
3 Terms and Definitions...	5
4 Sample Collection...	5
5 Sample Preparation, Storage and Pre-treatment...	9
6 Sample Testing...	10
7 Judgment of Testing Result...	11
8 Implementation of Standard...	12

1 Scope

This Standard stipulates the technical requirements of processes like sample collection and testing, and judgment of testing result in the identification of hazardous characteristics of solid waste.

In this Standard, solid waste includes solid, semi-solid waste and liquid waste (excluding waste water that is discharged into water body).

This Standard is applicable to the identification of hazardous characteristics of solid waste. This Standard is not applicable to emergency identification of hazardous wastes which are generated in sudden environmental pollution accident.

2 Normative References

Through the reference in this Standard, the clauses in the following documents become clauses of this Standard and shall have equivalent effectiveness as this

Standard. In terms of references without a specified date, the latest version is applicable to this Standard.

HJ/T 20 Technical Specifications on Sampling and Sample Preparation from Industry
Solid Waste;

GB 5085 Identification Standards for Hazardous Wastes

3 Terms and Definitions

In this Standard, the definition of sample, sample quantity and sampling size shall take the stipulations in HJ/T 20 as a reference. The following definition is applicable to this Standard.

Solid waste generation amount. solid waste generation amount refers to the amount of solid waste generated by solid waste generation device, which is put into full-load operation in accordance with the designed generation capacity.

4.1 Determination of Sampling Object

(2) Storage tank (slot) with discharge port

If possible, sampling should be conducted during the process of discharging waste. In accordance with the characters of solid waste, respectively use long-shovel sampler, sleeve-type sampler or probe for sampling.

When sampling can only be conducted at the discharge port, clean the discharge port in advance; properly discharge waste, then, take samples.

During the sampling, use a cloth bag (bucket) to hold the port, then, in accordance with the needed sampling size, in equal time intervals, discharge waste. Each holding of the waste shall be considered as a sample.

(3) Plate-and-frame filter press

Number the various plates and frames of filter press in accordance with a sequence. Use the random number table method in HJ/T 20 to take N plates and frames as the unit of sampling. During the sampling, after pressure filtration dehydration, take down the plates and frames; scrape the waste.

Sample taken from each plate and frame shall be considered as a sample.

(4) Bulk accumulation

In terms of solid waste and semi-solid waste in bulk accumulation with the accumulation height of less than, or equals to 0.5 m, horizontally tile the waste heap into a rectangle with the thickness of 10 ~ 15 cm; divide it into 5 N (N signifies sample quantity; the same below) grids with an equal area; number them in accordance with a sequence. Use the random number table method in HJ/T 20 to take N grids as the unit of sampling. In the central position of the grids, use a sampling shovel or spade to vertically take samples of full-thickness waste. The waste taken from each grid shall be considered as a sample.

In terms of several solid wastes in bulk accumulation with the accumulation height of less than, or equals to 0.5 m, select a waste heap with the most recent accumulation; take

samples in accordance with the sampling method of solid waste in bulk accumulation.

In terms of solid waste and semi-solid waste in bulk accumulation with the accumulation height of more than 0.5 m, take samples in layers. The number of layering for sampling shall be not less than 2 layers. In accordance with the accumulation height of the solid waste and semi-solid waste, place the layers in equal intervals. The quantity of sample taken from each layer shall be equal.

Layered sampling may adopt sampling drill or the mode of mechanical drilling.

(5) Storage pool

Divide storage pool (including storage pool built above ground, underground

6 Sample Testing

6.1

Testing items of the identification of characteristics of solid waste shall be determined in accordance with characteristics of the generating source of solid waste.

In accordance with the generation process of solid waste, characteristic items that do not exist, or, toxic substances that do not exist and are not generated can be determined. Thus, the testing of them can be avoided. The identification of characteristics of solid waste adopts corresponding methods and indicator limits stipulated in GB 5085.

6.2 When it cannot be determined whether hazardous characteristics or toxic

substances stipulated in GB 5085 exist in solid waste, conduct the testing in accordance with the following sequence.

- (1) Testing of reactivity, flammability and corrosivity;
- (2) Testing of inorganic substance items in leaching toxicity;
- (3) Testing of organic substance items in leaching toxicity;
- (4) Testing of inorganic substance items in toxic substance content identification item;
- (5) Testing of organic substance items in toxic substance content identification item;
- (6) Testing of acute toxicity identification item.

During the above-mentioned testing, when it is determined that a certain characteristic does not exist in accordance with the stipulation in 6.1, the testing of that item shall be avoided, then, in accordance with the above-mentioned sequence, conduct the testing of the subsequent characteristic.

6.3 During the testing process, if the result of a testing exceeds the corresponding standard value in GB 5085, then, it can be determined that the solid waste is hazardous waste that

has the hazardous characteristic. Whether the testing of other characteristics or other components shall be conducted shall be decided in accordance with the actual demands.

6.4 During the testing of leaching toxicity and toxic substance content, in accordance

with the characteristics of the generating source of solid waste, firstly, conduct testing of corresponding items on possible main toxic components.

6.5 During the testing of toxic substance content, when the same toxic component

exists in more than one toxic substances, calculate and judge the result in accordance with the toxic substance with the highest molecular mass.

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