

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HJ 519-2020

Replacing HJ 519-2009

Technical specification of pollution control for treatment of waste lead-acid battery

废铅蓄电池处理污染控制技术规范

(English Translation)

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Foreword

To implement 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 Waste" and other laws and regulations to prevent and control pollution, protect the ecological environment, and regulate pollution control during the collection, storage, transportation, utilization and disposal of waste lead storage batteries, this standard is formulated.

This standard specifies the pollution control requirements for the collection, storage, transportation, utilization and disposal of waste lead batteries.

Appendix A to Appendix C of this standard are informative appendices.

This standard was first published in 2009, and this is the first revision.

The main content of this revision.

--Modified the name of the standard;

- Adjusted the scope of application of the standard;

- Adjusted the collection, transportation and storage requirements of waste lead batteries;

- Refinement of the requirements for the construction and clean production of secondary lead enterprises;
- Refinement of pollution control requirements for secondary lead enterprises;
- Refinement of environmental management requirements for the operation of recycled lead enterprises;
- Increased the monitoring requirements for the main pollutants emission of the pyrometallurgical process and the hydrometallurgical process of recycled lead enterprises;
- Increased the requirements for groundwater environmental monitoring of recycled lead enterprises.

From the date of implementation of this standard, the "Technical Specification for Pollution Control in the Treatment of Waste Lead-acid Battery" (HJ 519-2009) shall be abolished.

This standard is organized and formulated by the Solid Waste and Chemicals Department and the Laws and Standards Department of the Ministry of Ecology and Environment.

The main drafting organizations of this standard. Solid Waste and Chemical Management Technology Center of Ministry of Ecology and Environment, Beijing University of Technology.

This standard was approved by the Ministry of Ecology and Environment on March 26, 2020.

This standard shall be implemented from the date of issuance.

This standard is interpreted by the Ministry of Ecology and Environment.

Technical specification for pollution control of waste lead battery treatment

1 Scope of application

This standard specifies the pollution control requirements for the collection, storage, transportation, utilization and disposal of waste lead batteries.

This standard applies to pollution control in the collection, storage, transportation, utilization and disposal of waste lead batteries, and can be used to guide recycled lead enterprises Site selection, engineering construction, and pollution control management after construction of the industry.

2 Normative references

The content of this standard refers to the terms in the following documents. For undated reference documents, their valid versions are applicable to this standard.

GB 190 Dangerous Goods Packaging Mark GB 3095 Ambient Air Quality Standard GB

12348 Environmental Noise Emission Standard at the Boundary of Industrial Enterprises
GB 13392 Road Transport Vehicle Signs for Dangerous Goods GB 15562.2 Environmental
Protection Graphic Sign Solid Waste Storage (Disposal) Site GB 15618 Soil Environmental
Quality Agricultural Land Soil Pollution Risk Control Standard (for Trial Implementation) GB
18597 Pollution Control Standard for Hazardous Waste Storage GB 31574 Pollutant
Emission Standard for Secondary Copper, Aluminum, Lead and Zinc Industry GB/T 14848
Groundwater Quality Standard HJ 863.4 Technical Specification for Application and
Issuance of Pollution Discharge Permit Non-ferrous Metal Industry-Recycled Metal
"Guidelines for the Preparation of Emergency Plan for Hazardous Waste Management
Units" (State Environmental Protection Administration Announcement No. 48, 2007)
"Assessment Index System for Cleaner Production in the Secondary Lead Industry"
(National Development and Reform Commission Announcement No. 36, 2015) "Industrial
Structure Adjustment Guidance Catalog (2019)" (Order No. 29 of the National Development
and Reform Commission of the People's Republic of China)

3 Terms and definitions

The following terms and definitions apply to this standard.

Lead-acid battery

The finger electrode is mainly made of lead and its oxide, and the electrolyte is a kind of storage battery with sulfuric acid solution or colloidal substance.

Waste lead-acid battery Refers to production, life and other activities that have lost their original use value or have been abandoned or abandoned although they have not lost their use value Lead-acid batteries do not include lead-acid batteries returned to the factory for fault detection, repair and refurbishment within the warranty period.

Electrode plate

Refers to the positive and negative poles in the battery. The grid is made of lead. The surface of the positive electrode is coated with lead dioxide and the surface of the negative electrode is coated with porous and permeable gold.

Belongs to lead. It usually contains chemicals such as antimony, arsenic, bismuth, cadmium, copper, calcium and tin, as well as expanding materials such as barium sulfate, carbon black and lignin.

Electrolyte

Refers to a liquid or colloidal substance with ionic conductivity based on sulfuric acid.

Collection

Refers to the centralized activities of scattered lead-acid batteries.

Temporary storage

Refers to the activity of temporarily placing scattered lead-acid batteries at a collection point.

Storage

Refers to the activities of placing centralized collection of waste lead storage batteries at centralized transfer points and recycling lead enterprises.

Collect network

Refers to a place that meets the requirements of temporary storage facilities for waste lead storage batteries and is mainly used for collecting waste lead storage batteries generated in daily life.

3.10

Centralized transport spot Refers to a place for storing waste lead storage batteries of a certain scale that meets the requirements for storage facilities for waste lead storage batteries.

3.11

Lead recovery

Refers to the use of various methods, technologies and processes to extract lead from waste lead batteries for easy utilization.

3.12

Recovery rate of lead Refers to the ratio of the lead content in the product to the lead content in the raw material within a certain measurement time.

3.13

Pyrometallurgy

Refers to the science and technology of extracting and refining metals from ore, concentrate or other materials at high temperatures.

3.14

Hydrometallurgy

Refers to the science and technology of dissolving certain metal components in ore, concentrate, calcine or other materials in an aqueous solution to extract metals from it.

3.15

Secondary lead enterprise Refers to an enterprise that uses waste lead storage batteries as raw materials, has the ability to smelt recycled lead, and holds a hazardous waste