

ICS 13.040.40

CCS Z60



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 31574-2015

**Emission standard of pollutants for secondary copper,
aluminium, lead and zinc industry**

再生铜、铝、铅、锌工业污染物排放标准

Issued on: April 16, 2015

Implemented on: July 1, 2015

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

- 1 Scope of application
- 2 Normative reference documents
- 3 Terms and definitions
- 4 Pollutant Emission Control Requirements
- 5 Monitoring requirements for pollutants 9
- 6 Implementation and supervision

1 Scope of application

GB 31574 is the Chinese emission standard for the secondary non-ferrous industry: the plants that recover copper, aluminium, lead and zinc from scrap. It is a mandatory standard and an important one, because secondary smelting is where the environmental case for recycling is either made or lost. Melting scrap that carries paint, plastic, oil and residues produces dioxins, heavy metal fume and acid gases that primary smelting does not, and a badly run secondary lead plant is one of the worst point sources of lead contamination there is. The standard sets the air pollutant emission limits for the organised and the fugitive releases, including particulate, sulfur dioxide, nitrogen oxides, hydrogen chloride, hydrogen fluoride, dioxins and the metals themselves, the water pollutant discharge limits, the monitoring requirements and the requirements for implementation and supervision, and it applies to existing plants as well as to the environmental assessment, the abatement design and the completion acceptance of new ones. This is the clear-print edition. For a recycler, an equipment supplier or an environmental authority in China, this is the governing text.

This standard specifies the limits for the emission of pollutants and air pollutants from recycled industrial non-ferrous metals (copper, aluminum, lead and zinc) Value, monitoring and monitoring requirements, as well as the implementation of standards and supervision and other relevant provisions. This standard applies to the production of non-ferrous metals (copper, aluminum, lead, zinc) industrial enterprises of water pollutants and air pollutant emissions Management, and recycling of non-ferrous metals (copper, aluminum, lead, zinc) industrial enterprises construction project environmental impact assessment, environmental protection Facilities design, completion of environmental protection and acceptance of water pollution and air pollutant discharge management. The production of raw non-ferrous metals industrial enterprises in the implementation of the corresponding non-ferrous metals to the implementation of the corresponding non-ferrous metal industrial pollutant emissions standard. This standard does not apply to the discharge of water pollutants and air

pollutants from industrial enterprises such as primary non-ferrous metal smelting and calendering Management; nor does it apply to non-characteristic production processes and equipment attached to renewable non-ferrous metals industrial enterprises of water pollutants and atmospheric Pollutant Discharge Management. This standard applies to pollutant discharge permitted by law. The establishment of new sources of pollution sources and special protection areas of pollution The management of the source, in addition to the implementation of this standard, but also in line with the "People's Republic of China Air Pollution Control Law", "People's Republic of China National Water Pollution Prevention Law", "the People's Republic of China Marine Environmental Protection Law", "People's Republic of solid waste pollution of the environment The Law of the People's Republic of China on Environmental Impact Assessment Law, and other laws, regulations and rules. The water pollutant emission control requirements stipulated in this standard apply to enterprises that directly or indirectly discharge water pollution outside their statutory borders The behavior of things.

2 Normative reference documents

The contents of this standard refer to the following documents or their terms. Those who do not specify the date of the reference file, the effective version of the appropriate For this standard. Basic standard for ionizing radiation protection and radiation source safety GB/T

GB/T 6920 Determination of water quality pH - Glass electrode method

GB/T 7466 Determination of total chromium in water quality

GB/T 7469 Determination of total mercury in water - Potassium permanganate - Potassium persulfate digestion method Dithizone spectrophotometric method

GB/T 7470 Water quality - Determination of lead - Dithizone spectrophotometric method

GB/T 7471 Water quality - Determination of cadmium - Dithizone spectrophotometric method

GB/T 7472 Determination of water quality - Dithizone spectrophotometric method

GB/T 7475 Water quality - Determination of copper, zinc, lead and cadmium - Atomic absorption spectrophotometric method

GB/T 7485 Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method Water quality - Determination of total phosphorus - Ammonium molybdate spectrophotometric method GB/T Water quality - Determination of suspended solids - Gravimetric method GB/T

GB/T 11910 Determination of water quality - Determination of butanedione oxime spectrophotometric method Water quality - Determination of nickel - Flame atomic absorption spectrophotometric method GB/T Water quality - Determination of chemical

oxygen demand - Dichromate method GB/T Ambient air - Determination of lead - Flame atomic absorption spectrophotometric method GB/T Determination of particulate matter and sampling method of gaseous pollutants in exhaust gas of fixed pollution sources

GB/T 16157 Water quality - Determination of sulfide - Methylene blue spectrophotometric method GB/T 16489 HJ

77.2 Ambient air and exhaust dioxins Determination of isotope dilution High resolution gas chromatography - High resolution mass spectrometry

HJ 480 ambient air - Determination of fluoride - Filtration - Fluoride ion selective electrode method Environmental air - Determination of fluoride - Lime filter paper sampling - Fluoride ion selective electrode method Determination of copper in water - Determination of copper - Diethyl dithiocarbamate spectrophotometric method Determination of copper in water

HJ 486 Determination of copper in water 2,9 - Dimethyl - 1, 10 - phenanthroline spectrophotometric method Technical specification for preservation and management of samples of water quality sampling Technical Guidance for Water Quality Sampling Technical specification for water quality sampling scheme design of HJ 495

3 Terms and definitions

The following terms and definitions apply to this standard.

3.1 Renewable nonferrous metal industry To waste miscellaneous non-ferrous metals as raw materials, the production of non-ferrous metals and alloys of the industry. A non - ferrous metal refers to the scrap of a metal Materials, excluding "copper-containing sludge", "containing alumina dust", "lead leaching residue", "zinc-containing steel smelting" and other non-ferrous metals Secondary resources.

3.2 Renewable copper industry To waste copper as raw material, the production of anode copper and cathode copper industry.

3.3 Renewable aluminum industry To waste aluminum as raw material, the production of aluminum and aluminum alloy industry.

3.4 Secondary lead industry To waste miscellaneous lead (mainly waste lead-acid batteries) as raw materials, the production of crude lead, refined lead and lead alloy industry.

3.5 Renewable zinc industry Zinc or zinc dross as raw materials, the production of zinc and zinc alloy industry.

3.6 Characteristic production technology and equipment Production processes such as pretreatment, melting, electrolysis and the like associated with the production of recycled nonferrous metals.

3.7 Existing enterprise existing facility The implementation of this standard has been completed before the production or environmental impact assessment documents have been approved by the recycling of non-ferrous metal industry enterprises Or production facilities.

3.8 New enterprise new facility The environmental impact assessment documents from the date of implementation of this standard through the approval of the new, alteration and expansion of renewable non-ferrous metals industry Construction project.

3.9 Public wastewater treatment system Collect waste water through pipelines, etc. Provide waste water treatment services for two or more sewage units and drain To the relevant emission standards require enterprises or institutions, including all sizes and types of urban sewage treatment plants, parks (including the Industrial parks, development zones, industrial aggregates, etc.) sewage treatment plants, the degree of wastewater treatment should reach two or two to on.

3.10 Direct discharge The discharge unit discharges water pollutants directly to the environment.

3.11 Indirect discharge Discharge of sewage to the public sewage treatment system of water pollutant behavior.

3.12 Displacement effluent volume The amount of wastewater discharged from a production facility or enterprise outside the legal boundary of the enterprise, including the direct or indirect relationship with the production A variety of effluent (such as factory sewage, cooling wastewater, washing wastewater, filtration wastewater, plant boilers and power plant drainage, etc.).

3.13 Unit benchmark base effluent benchmark effluent volume per unit product The upper limit of the amount of waste water discharged from the production unit of nonferrous metal products for the determination of the concentration of water pollutants.