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

GB/T 32151.44-2024

**Requirements of the greenhouse gas emissions accounting
and reporting - Part 44: Zinc smelting enterprise**

温室气体排放核算与报告要求 第44部分：锌冶炼企业

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document is part 44 of GB/T 32151. GB/T 32151 has been published in the following parts.

--- Greenhouse gas emissions accounting and reporting requirements Part

1. Power generation enterprises;

--- Greenhouse gas emissions accounting and reporting requirements Part

2. Power grid enterprises;

--- Greenhouse gas emissions accounting and reporting requirements Part

3. Magnesium smelting enterprises;

--- Greenhouse gas emissions accounting and reporting requirements Part

4. Aluminum smelting enterprises;

--- Greenhouse gas emissions accounting and reporting requirements Part

5. Iron and steel production enterprises;

--- Greenhouse gas emissions accounting and reporting requirements Part

6. Civil aviation enterprises;

1 Scope

GB/T 32151.44-2024 is the zinc smelting part of the Chinese greenhouse gas accounting and reporting series. Zinc is produced in China by both the hydrometallurgical roast-leach-electrowinning route, whose emissions are dominated by the very large electricity consumption of the cellhouse, and the pyrometallurgical route, where carbonaceous reduction produces direct process emissions; a standard that did not distinguish them would produce figures that could not be compared. The document sets the accounting boundary of a zinc smelting enterprise, the measurement, monitoring and testing requirements, and the calculation steps and methods for fuel combustion, process emissions and purchased electricity and heat, followed by the data quality management and the content and format of the report. Informative annexes give the reporting format template for zinc smelting enterprises, the default parameter values and the data quality guidance. For a smelter reporting under the Chinese system, or for a customer requiring an emissions figure for Chinese zinc, this is the governing method. It takes effect on 1 April 2025.

This document specifies the calculation boundary, measurement and monitoring/detection requirements, calculation steps and methods of greenhouse gas emissions of zinc smelting enterprises. Data quality management and report content and format. This document applies to the greenhouse gas emissions of zinc smelting enterprises using zinc concentrate, lead-zinc mixed concentrate and zinc-containing secondary resources as raw materials. Zinc smelting enterprises include mineral zinc smelting enterprises and zinc-containing secondary resource smelting enterprises.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 210 Industrial Sodium Carbonate

GB/T 213 Method for determination of calorific value of coal

GB/T 384 Determination of calorific value of petroleum products

GB/T 1606 Industrial Sodium Bicarbonate

GB/T 6422 Guidelines for energy testing of energy-consuming equipment

GB/T 11062 Calculation method for calorific value, density, relative density and Wobbe index of natural gas

GB/T 15316 General technical rules for energy conservation monitoring

GB 17167 General rules for the allocation and management of energy metering instruments in energy-consuming units

GB/T 20902 Requirements for the equipment and management of energy metering instruments in non-ferrous metal smelting enterprises

GB/T 22723 Determination of energy of natural gas

GB/T 23111 Non-automatic weighing instruments

GB/T 32151.14 Carbon emission accounting and reporting requirements Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Greenhouse gas The natural and human-caused gases in the atmosphere that absorb and emit radiation from the Earth's surface, atmosphere, and clouds. The gaseous component of radiation with wavelengths in the infrared spectrum.

Note. The greenhouse gases referred to in this document include only carbon dioxide (CO₂). [Source: GB/T 32150-2015, 3.1, modified]

14 Other non-ferrous metal smelting and rolling processing enterprises

GB/T 32151.43 Greenhouse gas emissions accounting and reporting requirements Part

43. Lead smelting enterprises