ICS 13.020.10
CCS Z04

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 32151.42-2024

Requirements of the greenhouse gas emissions accounting and reporting - Part 42: Copper smelting enterprise

温室气体排放核算与报告要求 第42部分：铜冶炼企业

Issued on: September 29, 2024 **Implemented on: April 1, 2025**

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

Table of Contents

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 42 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 32151.42-2024 is the copper smelting part of the Chinese greenhouse gas accounting and reporting series. China smelts around half the world's copper, and the sector's emissions have a shape of their own: flash and bath smelting are autogenous, so the sulfide feed itself supplies much of the heat and the direct combustion term is smaller than it would be in another metallurgy, while the electricity for the electrolytic refining and for the oxygen plant is very large, and the carbonaceous reductants and fluxes give a process term. The secondary route from scrap has a different profile again. The standard sets the accounting boundary of a copper smelting enterprise, the measurement, monitoring and testing requirements, the calculation steps and methods for the fuel combustion, process and purchased energy emissions, the data quality management, and the content and format of the report, with informative annexes giving the reporting template, the default parameter values and the data quality guidance. It takes effect on 1 April 2025.

This document specifies the accounting boundaries, measurement and monitoring/detection requirements, accounting steps and methods of greenhouse gas emissions from copper smelting enterprises. Data quality management and report content and format. This document applies to the accounting and reporting of greenhouse gas emissions from copper pyrometallurgical smelting enterprises that use copper concentrate or crude and miscellaneous copper as raw materials. This document is not applicable to the accounting and reporting of greenhouse gas emissions from copper hydrometallurgical smelting enterprises that use copper ore as raw material.

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 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 Natural and human-caused atmospheric particles 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 (CO_2). [Source: GB/T 32150-2015, 3.1, modified]

3.2 reporting entity A legal entity that emits greenhouse gases or an independent accounting unit that is deemed to be a legal entity. [Source: GB/T 32150-2015, 3.2]