ICS 13.020.10
CCS Z 04

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 32151.11-2026

Replacing GB/T 32151.11-2018

Requirements for greenhouse gas emission accounting and reporting - Part 11: Coal production enterprises

温室气体排放核算与报告要求 第11部分：煤炭生产企业

Issued on: March 31, 2026 **Implemented on: October 1, 2026**

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

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1 Scope

GB/T 32151.11-2026 is the Chinese national standard covering the emissions of a coal mine - chiefly the methane released or drained from the seam, which is a far larger term than the fuel burned on site and which is the reason mine gas capture is worth doing. The GB/T 32151 series is the basis of China's corporate greenhouse gas reporting and, through it, of the national emissions trading scheme. Coal mine methane is one of the largest single reduction opportunities available in China. The standard fixes the boundary, the emission sources, the activity data and factors, the calculation and the report. It replaces GB/T 32151.11-2018 and has been in force since 1 October 2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, replacing GB/T 32151.11-2018. The document is under the responsibility of the Ministry of Ecology and Environment. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the accounting boundaries, measurement and monitoring requirements, accounting procedures, and accounting methods for greenhouse gas emissions from coal production enterprises. Law, data quality management, report content and format. This document applies to the accounting and reporting of greenhouse gas emissions by coal production enterprises, and can be used as a reference by independent coal washing enterprises.

4 Accounting Boundaries

4.1 General Rules The reporting entity should be a corporate entity or an independently accounting unit deemed as a legal entity, and should account for and report the greenhouse gases generated by its production system. Emissions. The production system includes the main production system, auxiliary production systems, and ancillary production systems that directly serve production, among which auxiliary production... The production system includes transportation, hoisting, and drainage systems, as well as power, electricity, heating, refrigeration, machine repair, and warehousing facilities within the plant area. Ancillary production systems include... This includes the production command and management system (factory headquarters) and departments and units within the factory area that provide services for production (such as staff canteens, staff dormitories, workshop bathrooms, and health care facilities). (Sites, etc.) and emergency safety ancillary production facilities. Greenhouse gas emissions and accounting boundaries for coal production enterprises are detailed in Appendix A. Coal production enterprises should refer to the format in Appendix B to account for and report the following greenhouse gas sources. emissions from fossil fuel combustion, recovery, utilization, and disposal. Greenhouse gas emissions, methane emissions, carbon dioxide emissions, carbon dioxide emissions from purchased electricity, and carbon dioxide emissions from exported electricity. Carbon dioxide emissions, carbon dioxide emissions corresponding to purchased heat, and carbon dioxide emissions corresponding to exported heat.

4.2 Scope of Accounting and Reporting

4.2.1 Emissions from fossil fuel combustion Carbon dioxide emissions are generated from the complete combustion of fossil fuels with oxygen in various types of stationary or mobile combustion equipment.

4.2.2 Methane Emissions This includes methane emissions from underground coal mining, open-pit mining, and post-mining activities.

4.2.3 Carbon dioxide fugitive emissions Carbon dioxide emissions from underground coal mining.

4.2.4 Recycling, Utilization and Disposal This includes the recovery and utilization of coalbed methane (coal mine gas) through gas power generation, gas heating, gas enrichment, other conversion methods, and external sales. The greenhouse gas emissions from methods such as flare combustion and methane destruction (flameless oxidation, etc.) are calculated, deducting the amount of methane recovered and utilized. Alkane destruction amount.

4.2.5 Emissions from purchased electricity and heat Carbon dioxide emissions generated during the production process corresponding to the electricity and heat purchased by the enterprise.

4.2.6 Emissions generated from the output of electricity and heat Carbon dioxide emissions generated during the production process corresponding to the electricity and heat output by enterprises.

5 Metrological and Monitoring Requirements

5.1 Parameter Recognition Table 1 shows the types and methods of greenhouse gas emission measurement and monitoring parameters for coal production enterprises.

5.2 Measurement and Monitoring of Emissions from Fossil Fuel Combustion

5.2.1 Measurement and monitoring of fossil fuel consumption Coal production enterprises should be equipped with fossil fuel metering instruments in accordance with the provisions of GB 17167.

5.2.2 Low heating value detection Enterprises should determine total moisture according to GB/T 211, and determine air-dried basis moisture according to GB/T 212 or GB/T 30732. GB/T 213 determines the calorific value of the bomb cartridge; GB/T 476 or GB/T 30733 determines the hydrogen content, and the lower heating value is calculated accordingly. Each batch The monthly carbon content and lower heating value of the coal delivered to the plant were calculated by weighting the test data of each batch, with the weight being the amount of coal in each batch, and then compared with the corresponding... The consumption status should remain consistent. The lower heating value of fuel oil and natural gas should comply with GB/T 384, GB/T 11062, and GB/T 12206. Tested according to GB/T 22723 and GB/T 12208.

5.3 Measurement and Monitoring of Methane Emissions Methane emissions should be calculated using the measured method first. If measured data is unavailable, the emission factor method can be used. Emission factor method. Methane emissions should be based on coal production multiplied by an emission factor. Coal production should be based on statistical data or ledger records. The selection of emission factors should be based on typical sample testing reports and gas level identification reports conducted by the reporting entity, or refer to the default values recommended in this document. Calculations and reports must be performed, and emission factor monitoring methods must comply with relevant standards. Coal production should be calculated using methods conforming to GB/T 23111. Weighing instruments. Actual measurement method. Methane emissions include the total methane emissions from extraction and ventilation systems. This includes underground mining operations (extraction and ventilation systems). The measuring instruments for the flow rate of methane emissions shall comply with the requirements of GB 17167, and the measuring instruments for the gas components shall comply with the requirements of GB 17167. The provisions of AQ6204, NB/T 10182, or JJG1138 shall apply.

5.4 Measurement and Monitoring of Carbon Dioxide Emissions Carbon dioxide emissions should be based on coal production output of coal-producing enterprises multiplied by the

emission factor, and coal production output should be based on statistical data or ledgers. Records and emission factor selection should be based on calculations using typical sample carbon dioxide testing reports or gas level assessment reports conducted by the reporting entity. The report also states that the methods for monitoring carbon dioxide emission factors should comply with relevant standards. Coal production should be measured using methods that meet the requirements of GB/T 23111. Weighing instruments.

5.5 Measurement of Recycling, Utilization and Disposal

5.5.1 Methane recycling and disposal generate carbon dioxide emissions. Coalbed methane (coal mine gas) can be recovered and utilized (e.g., for gas power generation, gas heating), as well as through flare combustion and methane destruction (flameless oxygen combustion). Measuring instruments for measuring the volume of carbon dioxide emissions generated by methane destruction methods (such as chemical combustion) shall comply with the requirements of GB 17167 and GB/T 32201. The measuring instruments for gas components shall comply with the requirements of AQ6204, NB/T 10182, JJG1138 or GB/T 30431. Detection of lower heating value of coalbed methane (coal mine gas). Enterprises should conduct tests on each source in accordance with GB/T 384, GB/T 11062, and GB/T 12206. The low calorific value was detected.

5.5.2 Methane recovery, utilization, and disposal volume Measuring instruments for the amount of methane recovered, utilized, and destroyed shall comply with the provisions of GB 17167.

5.6 Metering and monitoring of purchased and exported electricity and heat Enterprises should equip themselves with electricity meters and heat metering instruments in accordance with the requirements of GB 17167.

5.7 Metrology and Monitoring Management Enterprises should strengthen the management of metrological monitoring and testing related to greenhouse gas emissions, including but not limited to the following provisions.

a) Designate personnel to be responsible for the management of energy metering instruments, including their allocation, use, verification (calibration), maintenance, and disposal. Management work, etc.

b) Enterprise greenhouse gas emission measurement management personnel, verification, calibration, maintenance and related management of greenhouse gas emission-related measuring instruments. The personnel possess the corresponding abilities.

c) Establish a list of measuring instruments. List the name, specifications, accuracy class, manufacturer, serial number, and other details of each measuring instrument. Unit management number, installation and usage location, status (i.e., qualified, approved, or discontinued).