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**General principles for assessment of green mine**

绿色矿山评价通则

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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. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document is proposed by the Ministry of Natural Resources of the People's Republic of China. This document is under the jurisdiction of the National Technical Committee for Standardization of Natural Resources and Land Space Planning (SAC/TC93). This document was drafted by: Zhengzhou Institute of Comprehensive Utilization of Mineral Resources, Chinese Academy of Geological Sciences, China Academy of Natural Resources Economics, Natural Resources Ministry of Mineral Resources Reserve Evaluation Center. The main drafters of this document are. Cao Jincheng, Yang Fan, Qiang Haiyang, Zhang Haiqi, Chen Lixin, Lü Zhenfu, Sun Yingxiang, Ding Guofeng, Guo Dongyan, Ju Jianhua, Wang Feng, Li Xianhai, Sun Yongchao, Wu Qiujie, Huang Jie, Zhao Tuofei, Wu Shangkun, Meng Xuguang, Zhang Liang, Zhao Junwei, Guo Min, Qiu Man, Shi Jinling, and Dai Xiaoyang.

Building green mines is an inevitable requirement for the implementation of ecological civilization construction and high-quality development in the mining industry. The development concept runs through the entire process of mineral resource utilization and protection, guiding mining enterprises to adopt environmentally friendly, resource-efficient, low-energy-consuming and The use of less technology, processes and equipment will minimize the ecological disturbance of the mining area and surrounding environment caused by resource development, and focus on building a scientific and technological A new model of green development in the mining industry with high output, low resource consumption and less environmental pollution. This document is based on the requirements of ecological civilization construction, green development and "dual carbon" action, combined with the production rules of mines, and based on comprehensive and systematic principles. Therefore, general requirements for green mine evaluation that meet the needs of mining development should be established. General Rules for Green Mine Evaluation

## 1 Scope

GB/T 44823-2024 sets the general principles for assessing a green mine. China has run a green mine programme for over a decade with sector-specific rules issued by different ministries and provinces, and this standard is the common frame beneath them, so that a coal mine, a metal mine and a quarry are scored against the same structure even where the thresholds differ. The standard sets the general principles and general requirements, then the assessment of the mining itself, of resource utilisation covering ore dressing recovery and comprehensive utilisation, of the green and low carbon performance covering intensive land use, energy saving, carbon reduction, source prevention and waste disposal and discharge, of ecological restoration, and of the technological innovation, digitalisation and community relations expected of a mine, together with the scoring and grading and the form of the assessment report. It takes effect on 1 February 2025.

This document stipulates the overall principles and general requirements for green mine evaluation, as well as the principles of mining, resource utilization, green and low-carbon, and ecological restoration. Requirements in terms of restoration, scientific and technological innovation and standardized management, mine appearance and evaluation. This document is applicable to mines that have been put into operation and serves as an overall guide for the industry, local governments or mines to formulate green mine evaluation standards or implementation details. Require.

## 2 Normative references

The contents of the following documents constitute the 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 2589 General rules for calculation of comprehensive energy consumption

GB 8978 Comprehensive Wastewater Discharge Standard

GB 12348 Industrial Enterprise Boundary Ambient Noise Emission Standard

GB 15618 Soil Environmental Quality Agricultural Land Soil Pollution Risk Management Standard (Trial Implementation)

GB 16297 Comprehensive Emission Standard of Air Pollutants

GB 18597 Hazardous Waste Storage Pollution Control Standard

GB 18599 Pollution Control Standard for Storage and Landfill of General Industrial Solid Waste

GB/T 23331 Energy Management System Requirements and Usage Guide

GB/T 25953 Non-ferrous metal beneficiation - recovery of iron concentrate

GB/T 32150 General Rules for Accounting and Reporting of Greenhouse Gas Emissions by Industrial Enterprises

GB 36600 Soil Environmental Quality - Construction Land Soil Pollution Risk Control Standard (Trial Implementation)

GB 50187 Specification for General Layout Design of Industrial Enterprises

GB 50197 Code for Design of Open-Pit Mines in the Coal Industry