

ICS 13.100
CCS D09



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

GB 41022-2021

Basic index of coal mine gas drainage and exploitation

煤矿瓦斯抽采基本指标

Issued on: December 1, 2021

Implemented on: June 1, 2022

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

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Coal mine gas drainage conditions	1
5 Basic index requirements for coal mine gas drainage	2
6 Measurement and calculation methods of indicators	3

Foreword

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

1. Standardized Structure Documents and Drafting Rules" Drafting. Please note that some of the contents of this document may involve patents. The issuing agency of this document is not responsible for identifying patents. This document was proposed and managed by the National Mine Safety Supervision Bureau.

Gas drainage is a fundamental measure to prevent coal mine gas accidents. There are a large number of coal mines in my country, and the severity of gas disasters varies greatly. There are different methods of gas management. It is important to determine the coal mines that must drain gas and the minimum standard for the gas extraction effect to curb coal mines. Important management requirements for gas accidents. In 2006, my country promulgated the compulsory industry standard "Basic Indicators of Coal Mine Gas Drainage" (AQ1026-2006), which stipulates the mine conditions that must be used for gas drainage, the minimum index requirements that the gas drainage effect should meet, and the measurement and Calculation method. AQ1026-2006 has been implemented for more than ten years. With the development of new technologies and equipment for gas extraction, the "Coal Mine Safety Regulations" and The "Regulations on Prevention of Coal and Gas Outburst" have been revised, and related technologies and requirements have changed. Standardized by the State Council in January 2017 The Office of Coordinating and Promoting the Inter-ministerial Joint Conference issued a conclusion on the "compulsory standard integration and streamlining", and determined to upgrade AQ1026-2006 to Mandatory national standards. This document upgrades AQ1026-2006 "Basic Indicators of Coal Mine Gas Drainage" to a mandatory national standard, which is similar to AQ1026-2006 In addition to structural adjustments and editorial changes, the main technical changes are as follows:

a) The "scope" was re-expressed based on the content of the document (see Chapter 1,

Chapter 1 of AQ1026-2006);

b) Added terms and definitions (see Chapter 3);

c) Added the index requirements for the pre-drainage rate of surface wells in the first mining area of the prominent mine (see 5.1);

d) The expression content of the control range is changed (see 5.2, 4.1 of AQ1026-2006);

e) Deleted the expression that the wind speed of the mining face should not exceed 4m/s (see 5.4, 4.3 of AQ1026-2006);

f) The calculation formula for coal seam gas pressure is changed (see 6.1, 5.1 of AQ1026-2006);

g) Changed the expression content of the amount of gas drawn down in the mine gas drainage rate (see 6.5, 5.5 of AQ1026-2006);

1 Scope

GB 41022-2021 is the Chinese national standard on basic index of coal mine gas drainage and exploitation, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 1 December 2021 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 June 2022. Classification: ICS 13.100, CCS D09. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document stipulates the conditions for coal mine gas drainage, the index requirements and index calculation methods that should be met by gas drainage. This document applies to mines and coal mines.

2 Normative references

The content of the following documents constitutes an indispensable clause of this document through normative references in the text. Among them, dated quotations Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to This document.

GB/T 212 Coal Industrial Analysis Method

GB/T 6949 Method for determination of apparent relative density of coal

GB/T 23250 Direct measurement method of coal seam gas content underground

GB/T 23561.4 Method for determination of physical and mechanical properties of coal and rock Part

3 Terms and definitions

GB/T 212, GB/T 23561.4, GB/T 31537, GB/T 6949 and AQ/T 1047, and the following terms and definitions are applicable Used in this document.

3.1 Residual gas content At 1 standard atmosphere pressure and temperature of 30°C, the amount of gas remaining in the coal sample after desorption.

3.2 Ground well Drilling holes constructed on the ground to extract gas from coal seams.

4 Coal mine gas drainage conditions

Coal mines that meet one of the following conditions should conduct gas drainage.

a) The gas emission of any coal mining face is greater than 5m³/min or the gas emission of any driving face is greater than 3m³/min, When the ventilation method is used to solve the gas problem unreasonably;

b) The absolute gas emission of the mine meets the following conditions. 1) Not less than 40m³/min;