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

GB/T 20475.3-2012

**Classification of the content of harmful elements in coal - Part
3: Arsenic**

煤中有害元素含量分级 第3部分：砷

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**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. The standard proposed by China Coal Industry Association. This standard coal by the National Standardization Technical Committee (SAC/TC42) centralized. This standard was drafted. Coal Research Institute Beijing Coal Chemical Research Branch. The main drafters of this standard. even Beijing, Bai Xiangfei, Jiang Ying, Fu Cong, Shao many have suggested. The content of harmful elements in coal classification - Part 3. Arsenic

1 Scope

China's national classification of coal by arsenic content. It is Part 3 of GB/T 20475 and specifies the ranges, names and codes into which coal is classified by its dry-basis arsenic content, together with the arsenic requirements for the production, processing and utilisation of coal, and it applies to coal exploration, production, processing, marketing and utilisation. Arsenic is the harmful element in coal with the clearest human cost. It volatilises during combustion and condenses on the fine ash particles as the gas cools, which concentrates it precisely in the fraction that escapes the coarse collection and reaches the lungs, and it is emitted in the flue gas as well. Where high-arsenic coal is burned in unvented domestic stoves the consequence is endemic arsenic poisoning, and the outbreaks in southwest China caused by such coal - used both for heating and for drying food indoors - are among the best-documented cases of coal-borne arsenicosis anywhere. In industrial use it is a different problem: arsenic poisons the vanadium catalyst of a sulfuric acid plant and the SCR catalyst of a nitrogen oxide control system, both of which are expensive and both of which fail slowly and irreversibly. Classifying the resource by arsenic content lets high-arsenic coal be identified before it is mined and directed away from the uses where it does harm, which is more effective than any downstream control. The standard fixes the class boundaries, the name and code of each, and refers the determination and the sampling to the coal analysis standards, so that the class assigned during exploration and the class assigned on a cargo mean the same thing. Issued on 31 December 2012 and in force since 1 October 2013.

This standard specifies the coal by dry basis arsenic content w (Asd) range classification,

name and code, as well as coal production, processing and utilization of Arsenic content requirements. This standard applies to coal exploration, production, processing, marketing and utilization.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 474 coal sample preparation

GB 475 commercial coal artificial method adopted

GB/T 482 Seam coal sampling method

GB/T 3058 Determination of Arsenic in Coal

GB/T 19494.1 coal mechanization sampling - Part 1. Sampling GB part/T 19494.2 coal mechanization sampling 2. Preparation of coal sample MT/T 988 production of coal sampling method 3 coal arsenic content classification, nomenclature and code Arsenic content in coal classification, nomenclature and the code shown in Table 1. Table

1 Classification of arsenic in coal Level Name Code arsenic content in the range w (Asd)/(μg/g) Special low-arsenic coal As-1 ≤

4 Low-arsenic coal As-2 > 4 ~

25 Arsenic in coal As-3 > 25 ~

80 High arsenic coal As-4 > 80 4 coal production, processing and use of arsenic content requirements

4.1 of arsenic in coal power requirements Power coal arsenic content w (Asd) should not exceed 80μg/g.

4.2 coking coal arsenic content requirements Coking coal arsenic content w (Asd) should not exceed 35μg/g.