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

GB/T 20475.4-2012

**Classification of the content of harmful elements in coal - Part
4: Mercury**

煤中有害元素含量分级 第4部分：汞

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Quarantine;
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Foreword

This standard rule according to GB/T 1.1-2009 given draft. 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. Bai Xiangfei, even Beijing, Luo Yun-Fei, Jiang Ying, Shao many have suggested. The content of harmful elements in coal classification - Part 4. Mercury

1 Scope

China's national classification of coal by mercury content. It is Part 4 of GB/T 20475 and specifies the ranges, names and codes into which coal is classified by its dry-basis mercury content, together with the mercury requirements for the production, processing and utilisation of coal, and it applies to coal exploration, production, processing, marketing and utilisation. Coal combustion is the largest single anthropogenic source of mercury emissions in the world, and China burns more coal than anywhere else, which makes this a short document with consequences far beyond its length. Mercury is different from the other harmful elements in coal in one decisive respect: it does not stay where it is emitted. It volatilises completely during combustion and leaves as elemental vapour, which is not captured by particulate control, is not scrubbed by conventional flue gas desulfurisation, and has an atmospheric residence time of about a year - long enough to circulate globally before deposition. Once deposited it is methylated by bacteria in sediments and enters the aquatic food chain, where it biomagnifies to concentrations in predatory fish thousands of times that of the water. The Minamata Convention exists because of this pathway, and coal is the principal input to it. Controlling mercury at the point of emission is expensive and only partly effective, so knowing the mercury content of the coal in advance is the first and cheapest step: a high-mercury deposit identified during exploration can be directed to uses where capture is feasible, or blended down. The standard fixes the class boundaries, the

name and code of each class, and refers the determination and the sampling to the coal analysis standards. Issued on 31 December 2012 and in force since 1 October 2013.

This standard specifies the mercury content of the coal by dry basis $w(\text{Hg})$ range classification, name and code, as well as coal production, processing and utilization of Mercury 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 edition applies to this article 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 16659 Determination of mercury in coal

GB/T 19494.1 coal mechanization sampling - Part 1. Sampling Part 2

GB/T 19494.2 Mechanical sampling of coal. coal sample preparation MT/T988 production of coal sampling method 3 mercury concentrations in coal classification, nomenclature and code Mercury concentrations in coal classification, nomenclature and the code shown in Table 1. Table 1 mercury concentrations in coal grade Level Name Code of mercury content in the range $w(\text{Hg})/(\mu\text{g/g})$ Laid low mercury coal Hg-1 $\leq$

0.150 Low mercury coal Hg-2 $> 0.150 \sim$

0.250 Mercury in coal Hg-3 $> 0.250 \sim$

0.600 High mercury coal Hg-4 > 0.600

4 the use of coal in coal mercury content requirements

4.1 power coal mercury content requirements Power coal mercury content $w(\text{Hg})$ not more than $0.600\mu\text{g/g}$.

4.2 coking coal mercury content requirements Coking coal mercury content $w(\text{Hg})$ not more than $0.250\mu\text{g/g}$.