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

GB 4284-2018

Replacing GB 4284-1984

Control standards of pollutants in sludge for agricultural use

农用污泥污染物控制标准

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Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Mud quality requirements
 - 4.1 Pollutant indicator
 - 4.2 Hygienic indicators
 - 4.3 Physical and chemical indicators
 - 4.4 Other requirements
- 5 Sampling and testing
 - 5.1 Sampling method
 - 5.2 Detection and analysis method
 - 5.3 Particle size
- 6 Monitoring and sampling methods

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB 4284-1984 "Control Standard for Pollutants of Agricultural Sludge". Major technical changes compared to GB 4284-1984 as follows:

- Revised the scope of application (see Chapter 1);
- Added normative references (see Chapter 2);
- Increased the definition of sludge and agricultural sludge from urban sewage treatment plants (see Chapter 3);
- Increase the limits of polycyclic aromatic hydrocarbons (see 4.1);
- Increased the types and regulations of agricultural land that allow the use of sludge products (see 4.1);
- Revised the contaminant concentration limit for sludge products (see 4.1, version 1.1 of the 1984 edition);
- Increased hygiene requirements (see 4.2);
- Increased the requirements of physical and chemical indicators (see 4.3);

- Revised the amount of application per acre per year (see 4.4, 1984 version 2.1);
- Revised the number of years of continuous use in the same plot (see 4.4, 1984 version 2.1);
- Increased detection and analysis methods (see Chapter 5);
- Increased requirements for monitoring and sampling methods (see Chapter 6). This standard is proposed and managed by the Ministry of Housing and Urban-Rural Development of the People's Republic of China. This standard is drafted by: Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, Agricultural Resources and Agricultural Region of the Chinese Academy of Agricultural Sciences Institute, National Sludge Treatment and Disposal Promotion Association, China National Institute of Standardization, China Academy of Environmental Sciences. Participated in the drafting of this standard. South China Agricultural University, China Agricultural University, Guangxi University, Northwest A&F University, Southwest University, Beijing Municipal Engineering Design and Research Institute Co., Ltd., Shanghai Urban Construction Design and Research Institute (Group) Co., Ltd., Beijing Zhongke Bolian Environment Engineering Co., Ltd., Beijing Municipal Environmental Protection Research Institute, Tsinghua University, Harbin Institute of Technology, Zhengzhou Institute of Light Industry, Guilin Institute of Technology the University. The main drafters of this standard. Chen Tongbin, Zheng Guozhen, Zhang Jianfeng, Yang Xiangping, Huang Jin, Huang Qifei, Wu Qitang, Li Ji, Gu Minghua, Zhang Zeng, Chen Yucheng, Li Yi, Tang Jianguo, Peng Shuzhen, Yu Jie, Liu Jianguo, Chen Zhiqiang, Ma Wei, Zhang Jun, Zheng Haixia, Wang Xiuteng. The previous versions of the standards replaced by this standard are.

1 Scope

GB 4284-2018 is the Chinese national standard on control standards of pollutants in sludge for agricultural use, in the field of civil engineering. 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 14 May 2018 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 June 2019. Classification: ICS 93.030, CCS P41. 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 standard specifies the pollutant control indicators, sampling, detection, monitoring and sampling methods for sludge treatment in urban sewage treatment plants. This standard applies to the control of pollutants in urban sewage treatment plant sludge in cultivated land, garden land and pasture.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article. Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB 5009.27 Determination of benzo(a)pyrene in foods

GB/T 6679 Solid Chemical Products Sampling General

GB 7959 fecal harmless hygiene standard

GB/T 17136 Determination of total mercury in soil mass - Cold atomic absorption spectrophotometric method

GB/T 17137 Determination of total chromium in soil quality - Flame atomic absorption spectrophotometric method

GB/T 17138 Determination of copper and zinc - Flame atomic absorption spectrophotometric method

GB/T 17139 Determination of nickel in soil quality - Flame atomic absorption spectrophotometric method

GB/T 17141 Determination of lead and cadmium content by graphite furnace atomic absorption spectrophotometric method CJ/T 147 Determination of Polycyclic Aromatic Hydrocarbons in City Water - Liquid Chromatography CJ/T 221 Urban Wastewater Treatment Plant Sludge Inspection Method NY525 Organic Fertilizer

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Municipal sewage treatment plant sludge

sludgefrommunicipalwastewatertreatmentplant Semi-solid and solid materials with different water content in the sewage treatment plant in the sewage treatment plant, excluding grid slag and scum And grit chamber gravel.

3.2 Agricultural sludge sludgeforagriculturaluse After being harmlessly treated, it can be used for sludge products of urban sewage treatment plants such as cultivated land, gardens and pastures.

4 Mud quality requirements

4.1 Pollutant indicators When the sludge product is used in agriculture, it is divided into Grade A and Grade B sludge products according to the concentration of its pollutants, and its pollutant concentration limit should be satisfied.