

ICS 13.060
CCS Z50



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

GB/T 14848-2017

Replacing GB/T 14848-1993

Standard for groundwater quality

地下水质量标准

Issued on: October 14, 2017

Implemented on: May 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This Standard is drafted in accordance with the rules given in GB/T 1.1-2009. This Standard replaces GB/T 14848-1993 "Quality standard for ground water". As compared with GB/T 14848-1993, in addition to editorial changes, the main technical changes are as follows: - The water quality index is increased from 39 items of GB/T 14848-1993 to 93 items, an increase of 54 items; - With reference to GB 5749-2006 "Standards for drinking water quality", groundwater quality indices are classified into regular and non-regular indices; - The sensory traits and general chemical indices are increased from 17 items to 20 items, increasing the 3 indices of aluminum, sulfide, and sodium. USE oxygen consumption to replace permanganate index. REVISE the 4 indices of total hardness, iron, manganese, and ammonia nitrogen; - The index of inorganic compounds in toxicological indices is increased from 16 items to 20 items, increasing the 4 indices of boron, antimony, silver, and thallium. REVISE the 11 indices of nitrite, iodide, mercury, arsenic, cadmium, lead, beryllium, barium, nickel, cobalt, and molybdenum; - The index of organic compounds in toxicological indices is increased from 2 items to 49 items, adding trichloromethane, carbon tetrachloride, 1,1,1-trichloroethane, trichloroethylene, tetrachloroethylene, dichloromethane, 1,2-dichloroethane, 1,1,2-trichloroethane, 1,2-dichloropropane, tribromomethane, vinyl chloride, 1,1-dichloroethylene, 1,2-dichloroethylene, chlorine benzene, o-dichlorobenzene, p-dichlorobenzene, trichlorobenzene (total), benzene, toluene, ethylbenzene, xylene, styrene, 2,4-dinitrotoluene, 2,6-dinitrotoluene, naphthalene, anthracene, fluoranthene, benzo (b) fluoranthene, benzo (a) pyrene, polychlorinated biphenyl (total), gamma-hexachlorocyclohexane (Lindan), hexachlorobenzene, heptachlor, atrazine, pentachlorophenol, 2,4,6-trichlorophenol, di (2-ethylhexyl) phthalate, carbofuran, aldicarb, dichlorvos, methyl parathion, malathion, dimethoate, chlorothalonil, 2,4-D, chlorpyrifos and glyphosate. DDT and hexachlorocyclohexane are replaced by DDT (total) and hexachlorocyclohexane (total), respectively, and revised; - The total alpha radioactivity in the radioactive index is revised; - REVISE the relevant provisions of the comprehensive

assessment of groundwater quality. This Standard was jointly proposed by Ministry of Natural Resources and Ministry of Water Resources of the PRC. This Standard shall be under the jurisdiction of National Technical Committee 93 on Land Resource of Standardization Administration of China (SAC/TC 93). Main drafting organizations of this Standard. China Geological Survey; Department of Hydrology of the Ministry of Water Resources; Institute of Hydrogeology & Environmental Geology of Chinese Academy of Geological Sciences; China University of Geosciences (Beijing); National Geological Experimental Testing Center; China Geological Environment Monitoring Institute; China Institute of Water Resources and Hydropower Research; The Huaihe River Water Environment Monitoring Center; The Haihe River Water Resources Protection Bureau; Center for Hydrogeology and Environmental Geology of China Geological Survey; Shenyang Center, China Geological Survey; Nanjing Center, China Geological Survey; Tsinghua University; China Agricultural University. Main drafters of this Standard. Wen Dongguang, Sun Jichao, He Jiangtao, Mao Xuewen, Lin Liangjun, Wang Suming, Liu Fei, Rao Zhu, Jing Jihong, Qi Jixiang, Zhou Huaidong, Wu Peiren, Tang Kewang, Luo Yang, Yuan Hao, Wang Shan, Chen Honghan, Li Guanghe, Wu Aimin, Li Chongjiu, Zhang Eryong, Wang Huang, Cai Wutian, Liu Jingtao, Xu Huizhen, Zhu Xueqin, Ye Nianjun, Wang Xiaoguang. The previous editions of the standard replaced by this Standard were released as follows: - GB/T 14848-1993.

1 Scope

GB/T 14848-2017 is the Chinese national standard on standard for groundwater quality, in the field of environment and health protection, safety. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 14 October 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2018. Classification: ICS 13.060, CCS Z50. 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 classification, indices, and limits of groundwater quality, groundwater quality survey and monitoring, and groundwater quality assessment, etc. This Standard applies to groundwater quality survey, monitoring, assessment, and management.

2 Normative references

The following documents are indispensable for the application of this document. For the dated references, only the editions with the dates indicated are applicable to this document.

For the undated references, the latest edition (including all the amendments) are applicable to this document.

GB 5749-2006 Standards for drinking water quality

GB/T 27025-2008 General requirements for the competence of testing and calibration laboratories

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Groundwater quality A general term for the physical, chemical, and biological properties of groundwater.

3.2 Regular indices Indices which reflect the basic conditions of groundwater quality, including sensory traits, general chemical indices, microbiological indices, common toxicological indices, and radioactive indices.

4 Groundwater quality classification and indices

4.1 Groundwater quality classification According to China's groundwater quality status and human health risk, with reference to drinking water, industrial, agricultural, and other water quality requirements, according to the content level of each constituent (except pH), it is classified into five classes.

4.2 Groundwater quality classification indices The groundwater quality indices are classified into regular indices and non- regular indices. The classification and limits are shown in Table 1 and Table 2 respectively.

5 Groundwater quality survey and monitoring

5.1 Groundwater quality shall be monitored regularly.

5.2 According to the dynamic changes of groundwater quality, regional groundwater quality survey and assessment shall be carried out regularly.

5.3 Groundwater quality survey and monitoring indices are based on regular indices.

5.4 The collection of groundwater samples shall be carried out in accordance with relevant standards. The preservation and submission-for-inspection of groundwater samples shall be carried out in accordance with Appendix A.

6 Groundwater quality assessment

6.1 Groundwater quality assessment shall be based on groundwater quality testing data.

6.2 For the single-index assessment of groundwater quality, according to the limit value of

the index value, the groundwater quality class is determined. When the index limits are the same, the superior shall prevail.

Note 1. 2. **Search (Optional).** Enter the keyword **'GB/T 14848-2017'** in the search bar, if it is not already shown. 3.

Note 2. 9.

Note 3. 10. **Verification (USD**

Notes and Explanations

Note 1:**[GB/T 14848-2017](https://**

Note 3:**If you are unable to redirect back to our Return Page, do not worry. Additionally and independently, our automated system will still deliver your PDF and Invoice via email (the second mechanism to ensure the delivery), typically within 3 minutes. Once your payment is complete, you have two instant ways to access your PDF and invoice: you may stay on the Return Page for download in 3 minutes typically, or simply check your email inbox where a copy is automatically delivered in 3 minutes typically.**