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

GB/T 46951-2025

**Management specification for water conservation by building
construction contractors**

建筑施工单位节水管理规范

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Water Conservation Standardization (SAC/TC442). This document was drafted by: China Construction First Bureau (Group) Co., Ltd., China Construction First Bureau Group Construction and Development Co., Ltd., and China Standardization Research Institute. Research Institute, China Construction Third Engineering Bureau Group (Shenzhen) Co., Ltd., China Construction First Engineering Bureau Group South China Construction Co., Ltd., China Construction First Engineering Bureau Group Second Construction Co., Ltd. Company, China Construction First Group Fifth Construction Co., Ltd., China Construction First Group Third Construction Co., Ltd., Beijing Municipal Construction Group Co., Ltd. Company, China Construction Municipal Engineering Co., Ltd., Beijing China Construction Science and Technology Research Institute Co., Ltd., China Construction Second Engineering Bureau Third Construction Engineering Co., Ltd., Guangzhou China Railway Construction Corporation Limited, China Energy Construction Group Corporation Limited, China Communications Second Harbor Engineering Bureau Co., Ltd., China Railway Investment and Construction Corporation Limited Group Co., Ltd., China Construction Sixth Engineering Bureau Fourth Construction Co., Ltd., China Construction Seventh Engineering Bureau First Construction Co., Ltd., China Twenty-Second Metallurgical Construction Group Co., Ltd. The company, China Construction Sixth Engineering Bureau Construction and Development Co., Ltd., Zhejiang Second Construction Group Co., Ltd., China Railway Bridge Engineering Bureau Group Co., Ltd. Shandong Provincial Hydrological Measurement Verification Center, Shanghai Municipal Water Supply Management Affairs Center, China Railway Seventh Group Co., Ltd., and China Power Construction Railway Construction Investment Group Group Co., Ltd., China Construction

Yangtze Jiacheng (Sichuan) Water Conservancy Engineering Co., Ltd., Guangdong Dayu Water Conservancy Construction Co., Ltd., Xinjiang Hongyuan Construction Group Limited Liability Company, Shandong E Fund Construction Management Group Co., Ltd., China Construction Science & Industry Group Wuhan Co., Ltd., China Railway 22nd Bureau Group Track Engineering Cheng Co., Ltd., Henan Shengding Construction Group Co., Ltd., Heilongjiang Provincial Water Resources and Hydropower Survey and Design Institute, China Nuclear Industry Zhongyuan Construction Co., Ltd. Limited Company, China Railway Shanghai Engineering Bureau Group Municipal and Environmental Protection Engineering Co., Ltd., China Railway No.

2 Engineering Group Construction Co., Ltd., China Construction No.

8 Engineering Bureau Second Construction Co., Ltd. Limited Liability Company, China Railway Fourth Bureau Group Third Construction Company, South China Agricultural University. The main drafters of this document are. Li Hao, Wang Changjun, Bai Yan, Hao Jianbing, Zhang Jun, Zhou Yuqi, Liu Weiwei, Zhang Huili, Chen Changyuan, and Peng Linxuan. Zhang Lan, Sun Chaoyan, Liu Dongchao, Jiang Guohua, Li Guobing, Li Xin, Wang Wenzheng, Zhang Yanqiu, Meng Fanguang, Lu Lijian, Yang Meng, Zhang Zhanfeng, Zhang Minglei Li Zongping, Gu Lixiang, Wan Chao, Li Yang, Zhang Mingzhan, Zhao Ying, Zhang Liwei, Lang Chengjie, Ma Weiwei, Wang Yandong, Chen Xu, Bai Ning, Zhu Guifu, Gao Wei Diao Rongmei, Zhu Ruitao, Dou Yingwei, Jin Lian, Li Peiyuan, Zhou Guangtao, Lu Yang, Li Panshan, Zhang Tianxing, Fu Dongliang, Wu Yaomin, Wang Xiaozhao, Chen Pengfei Qin Youjun, Wang Haomin, Cao Zhenyu, Li Jun, Zhang Xin, Liu Zhaorui, Shen Guobin, He Jiang, Qu Zhen, Qin Lin, Weng Zhenyue, Chen Deyang, He Lingbo, Li Guangzhi Deng Liting, Xia Tao, Liu Yingdang, Zhang Junjie, and Lu Xiaohua. Water Conservation Management Standards for Construction Units

1 Scope

GB/T 46951-2025 is the Chinese national standard covering water on a building site - the concrete curing, the dust suppression, the wheel washing and the site accommodation, with the metering, the targets, the reuse of rainwater and groundwater pumped from excavations, and the management that makes it happen. First edition. It was issued on 31 December 2025 and has been in force since 1 July 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2025 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document stipulates the basic requirements for water conservation management and the management requirements for key areas for construction companies. This document applies to water conservation management in building and municipal engineering construction.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 24789-2022 General Rules for the Configuration and Management of Water Metering Instruments in Water-Using Units JGJ111 Technical Specification for Groundwater Control in Building and Municipal Engineering

3 Terms and Definitions

The terms and definitions defined in GB/T 24789 and JGJ111 apply to this document.

4 Basic Requirements

4.1 A project water conservation management organization system should be established with the project manager as the primary person responsible, and water conservation rules and regulations should be established and improved.

4.2 A water-saving construction plan should be prepared before construction. The plan is detailed in Appendix A.

4.3 Water-saving appliances such as faucets, showers, squat (sitting) toilets, and urinals should be used, and the equipment rate should reach 100%.

4.4 Metering instruments should be installed in the production area, office area, living area, and major water-using equipment with a water consumption of not less than 1 m³/h at the construction site. Water volume; smart water meters are recommended, and the water meter configuration should comply with the requirements of Appendix B. Wastewater collection devices should be installed at the construction site; when the recoverable water volume reaches... For discharges exceeding 100 m³/d, a treatment and reuse device may be installed; when discharging into urban drainage facilities, a permit for discharging urban sewage into the drainage network must be obtained. A discharge permit is required when discharging pollutants directly into rivers, underground water bodies, or other surface and groundwater environments.

4.5 A rainwater harvesting and utilization system should be installed at the construction site. Depending on local conditions, methods such as rainwater infiltration collection, collection and reuse, or storage and discharge can be adopted. Rainwater utilization measures that combine one or more systems.

4.6 The timing and frequency of water spraying for dust suppression should be adjusted

according to weather forecasts and construction plans. Inspections of the water spraying situation should be conducted and records kept. There should be no standing water at the work site.

4.7 Construction water equipment and facilities shall be maintained quarterly by professional technicians, and maintenance records shall be kept; drainage shall not overflow or blockage; in case of problems... Problems should be repaired or replaced promptly.

4.8 Water conservation training should be provided to on-site management personnel and operators, and records should be kept.

4.9 The management of water meters at the construction site shall meet the following requirements.

- a) Establish water meter files, including water meter ledgers, water meter configuration diagrams, water meter user manuals, water meter factory certificates of conformity, and the most recent water meter information. Calibration certificates for two consecutive cycles, and records of water meter repairs or replacements. See Appendix C for the specific format of the water meter ledger.
- b) Affix a label corresponding to the water meter record in a prominent location on the water meter for inspection and management purposes.
- c) Record water meter data monthly, see Appendix C for specific format.