

HJ

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Technical guideline for the environmental protection status assessment of the centralized drinking water sources

集中式饮用水水源地环境保护状况评估技术规范

(English Translation)

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Appendix B (informative appendix) Production instructions for centralized drinking water sources

Foreword

In order to implement the Environmental Protection Law of the People's Republic of China and the Law of the People's Republic of China on the Prevention and Control of Water Pollution, Drinking water source of environmental protection assessment of technical methods, and constantly improve the standardization of drinking water sources and environmental management of water Flat, to ensure water quality and safety, the development of this standard.

This standard specifies the centralized drinking water source water and water quality, water source environmental management status and change the trend of the technical methods.

This standard is the first release.

Appendix A and B of this standard are informative.

This standard is organized by the Ministry of Environmental Protection Science and Technology Standards Division.

The main drafting of this standard. China Environmental Science Research Institute.

This standard is approved by the Ministry of Environmental Protection on December 4, 2015.

This standard has been implemented since March 1, 2016.

This standard is explained by the Ministry of Environmental Protection.

Technical specification for environmental assessment of centralized drinking water source

1 Scope of application this standard specifies the centralized drinking water source water and water quality, water source environmental management status and change the trend of the technical methods.

This standard applies to a single centralized drinking water source environmental protection and administrative areas (such as cities, towns or towns Etc.) assessment of the overall environmental protection of multiple centralized drinking water sources.

2 normative reference documents this standard refers to the terms of the following documents. For undated references, the latest edition of this document applies to this standard.

List of dangerous goods General rules for classification of chemicals and hazards Technical specification for division of drinking water source protection area Technical Requirements for Signs of Drinking Water Source Protection Area HJ/T 433 Specification for Centralized Drinking Water Source Code for HJ 747 Technical Requirements for Environmental Protection of Standardized Construction of Centralized Drinking Water Source 3 terms and definitions the following terms and definitions apply to this standard.

3.1 centralized drinking water source Into the water pipe network to the user and have a certain size of the water (water supply population is generally greater than 1000 people) in use, spare and planning water sources. Depending on the water intake area, the centralized drinking water source can be divided into surface water drinking water source and underground Water drinking water source; depending on the type of water body where the water intake is different from the surface water drinking water source can be divided into river drinking water Water source and lake, reservoir type drinking water source.

3.2 standard water source water reaching the standard According to the provisions of the national environmental protection departments, water quality assessment results to meet the relevant national standards of centralized drinking water sources.

3.3 water rate compliance rate of the source water quantity reaching the standard Water quality standards of centralized drinking water source and the total amount of water to assess the percentage.

3.4 rate of the water yield reaching the standard Water quality standards of centralized drinking water source water intake and assessment of the total amount of water intake

percentage.

3.5 early warning monitoring in the specific monitoring section, select the specific indicators, the use of automatic (online) monitoring, water quality changes and the trend of risk prevention and control to provide a means of decision-making information.

3.6 video surveillance video monitoring the use of video (camera, monitor) and other facilities, sensitive or key areas of real-time monitoring of a measure.

3.7 decentralized domestic sewage not included in the sewage collection pipe network collection and processing of townships, rural residents living sewage.

3.8 risk source risk may release toxic and hazardous substances to drinking water sources, resulting in deterioration of the water quality of drinking water sources, including but not limited to industrial and mining enterprises, institutions and transportation of petrochemical, chemical products, such as pipeline sources; transport of dangerous chemicals, hazardous waste and other sources of vehicles, ships and other sources that affect the safety of drinking water sources; and may have an impact on the water quality of the water source no fixed pollution of the discharge point of livestock and poultry, aquaculture sewage and other non-point source.

3.9 Emergency protection facilities Emergency materials reserves, emergency pool, control gate, barge dam, diversion canal, water ditch and other emergency protection projects and equipment collectively.

4 Evaluation method

4.1 water quality assurance status Single water source. water quality assurance status (WG) with water withdrawal assurance rate WGR_i said. Groundwater drinking water source, real when the water intake is less than or equal to the designed water intake, WGR_i is 100%; otherwise, WGR_i is 0. Surface water drinking water, when the water level is not less than the design level, WGR_i is 100%; otherwise, WGR_i is 0.

The water supply in the administrative area. the rate assurance rate ($WGRS$) is the mean value of the assessment rate of water intake. The formula is.

Where. N is the total number of water resources involved in the assessment in the administrative area.

4.2 water quality standards Water quality standards with SQ said. The assessment is water compliance rate (WSR) and water quality compliance rate (WQR).

4.2.1 Water compliance rate Single water source. Water compliance rate (WSR_i) is calculated as.

$OWSR_i = \frac{\text{Total water intake Water source compliance (2) the water source in the administrative area. the water quality compliance rate (WSRs) is calculated as.}}{\text{Total water intake Water source compliance (2) the water source in the administrative area. the water quality compliance rate (WSRs) is calculated as.}}$

OWSRS x= The sum of the total water intake Water quality compliance (3) 4.2.2 water quality compliance rate Single water source. WQRi is 100% when water is reached; otherwise, WQRi is 0.

Water quality in the administrative area. WQRS is the percentage of the total number of water sources and the total number of drinking water sources Ratio, the formula is.

OWQRs x=

Total number of drinking water sources the sum of the quantities of water (4)

4.3 Environmental management status the environmental management status is represented by MS. The contents of the assessment are protected area construction, protected area renovation, monitoring ability, risk prevention and control Emergency response capability, management measures and so on.

4.3.1 Construction of protected areas

4.3.1.1 Division of protected areas the division of the protected area is expressed by the division rate completion rate of the protected area.

Individual water source. refer to HJ/T 338, divide the protected area and be approved, then PDi is 100%; otherwise, PDi is 0.

Administrative area water source. protected area division completion rate (PDS) is calculated as.

Where. N is the total number of water sources involved in the assessment in the administrative area.

4.3.1.2 Protected area flag setting Protected area flag setting status is indicated by flag setting completion rate PS.

Single water source. 100% based on HJ/T 433 completion flag set; not set according to HJ/T 433, PSi is 60%; not set, PSi is 0.

Administrative area water source. protected area flag set completion rate (PSS) formula is.

Where. N is the total number of water sources involved in the assessment in the administrative area.

4.3.1.3 Isolation of primary protected areas the first-class protected area isolation condition is expressed by the isolation protection completion rate PF1.

Single water source. a protected area isolation protection project completion rate PF1i formula is.

OPF1i x = should be completed isolation protection works the amount of actual completion of the isolation protection workers the amount of isolation work to be completed shall be determined according to the requirements of HJ 773, and the actual amount of isolation