

ICS 13.060.25

CCS G 76



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

GB/T 44325-2024

**Technical specification for zero discharge of industrial
circulating cooling water**

工业循环冷却水零排污技术规范

Issued on: August 23, 2024

Implemented on: March 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

3.1 Zero discharge of industrial circulating cooling water

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Chemical Standardization (SAC/TC 63).

This document was drafted by: CNOOC Tianjin Chemical Research and Design Institute Co., Ltd., Anhui Jinggao Water Treatment Co., Ltd., Hebei Xietong Water Treatment Co., Ltd.

Technology Co., Ltd., China National Energy Group Ningxia Coal Industry Co., Ltd., Tianjin Kunpeng Chemical Technology Co., Ltd., Sinochem Engineering Cangzhou Refrigeration Que Technology Co., Ltd., Shaanxi Chemical Research Institute Co., Ltd., Guangdong Brunp Recycling Technology Co., Ltd., Tianjin Zhengda Technology Co., Ltd.

Nanjing High-Tech Environmental Technology Co., Ltd., Shijiazhuang Geyuan Environmental Technology Co., Ltd., Changzhou Zhongnan Chemical Co., Ltd., Hebei Liyuan Environmental Technology Co., Ltd.

Bao Technology Co., Ltd., Shandong Taihe Technology Co., Ltd., Jiangsu Special Equipment Safety Supervision and Inspection Institute, Zhejiang Zhongchang Water Treatment Technology Co., Ltd., Shanghai Light Industry Research Institute Co., Ltd., Jiaying Watertech Environmental Protection Technology Co., Ltd., Sichuan Runxing Environmental Protection Technology Co., Ltd., China National Petroleum Corporation Jilin Petrochemical Branch, CNOOC Huizhou Petrochemical Co., Ltd., Tianjin Xinkunpeng Chemical Co., Ltd., Shandong Ludong Environmental Protection Technology Co., Ltd.,

Ningxia Hongyuanxiang Technology Co., Ltd., SDIC Xinjiang Lop Nur Potash Co., Ltd.

Co., Ltd., Handan Iron and Steel Nengjia Iron and Steel Co., Ltd.

The main drafters of this document are: Chen Aimin, Xu Qun, Wang Chongpu, Nai Guoxing, Zhou Guangbin, Pang Cuicui, Wang Lili, Yu Haijun, Nie Ming, Chen Mengxue, Bai Ying, Li Yongguang, Zhang Hongming, Zhao Xinli, Yao Ya, Pu Jiang, Jia Yanwen, Ma Yanrong, Zhou Weihua, Ma Tengxiao, Liu Jun, Gong Chaobing, Yang Ye, Pan Xingcan, Xue Lijuan, Yao Mobai, Han Xianghong, Yan Hongmei, Ming Yunfeng, Ju Panpan, Dai Haitao.

Technical Specifications for Zero Waste Discharge of Industrial Circulating Cooling Water

1 Scope

This document specifies the general requirements, process flow, process unit control requirements, water quality and System control requirements, safety and environmental protection requirements.

This document applies to zero-discharge treatment of indirect cooling open-circulation cooling water systems.

This document is not applicable to circulating cooling water systems using seawater as make-up water.

2 Normative references

GB 5085.7

GB/T 14427

GB/T 15451

GB/T 15452

GB/T 15453

GB/T 15456

GB/T 15893.1

GB 18597

GB 18599

GB/T 21534

GB/T 22592

GB/T 23838

GB/T 39296

GB/T 50050

3 Terms and definitions

The terms and definitions defined in GB/T 21534, GB/T 50050 and the following apply to this document.

3.1 Zero discharge of industrial circulating cooling water

The process in which all external wastewater in the industrial circulating cooling water system is treated and reused in the circulating cooling water system.