

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

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**Technical specifications for soft drink production wastewater
treatment**

饮料制造废水治理工程技术规范

(English Translation)

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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, Management of the construction and operation of the management, prevention and control of environmental pollution, environmental protection and human health, the development of this standard.

This standard specifies the technical requirements for the design, construction, acceptance and maintenance of beverage manufacturing wastewater treatment engineering.

This standard is a guiding standard.

This standard is the first release.

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

The main drafting of this standard. Jinan City Environmental Protection Planning and Design Institute, Shandong Province Environmental Protection Science Research and Design Institute.

The Environmental Protection Department of this standard approves on November 20, 2015.

This standard has been implemented since January 1, 2016.

This standard is explained by the Ministry of Environmental Protection.

Technical specification for wastewater treatment of beverage manufacturing

1 Scope of application

This standard specifies the technical requirements for the design, construction, acceptance, operation and maintenance of the beverage waste treatment project.

This standard applies to the beverage manufacturing wastewater treatment project, as environmental impact assessment, feasibility study, design, construction, Installation, commissioning, acceptance, operation and maintenance management of the technical basis.

2 Normative reference documents

The contents of this standard refer to the terms of the following documents. For those who do not specify a date, the valid version applies to this standard.

GB 3096 "Acoustic Environmental Quality Standard" GB 4284 "Pollutant Control Standard for Agricultural Sludge" GB 7251 "low-voltage switchgear and control equipment" GB 8978 "Integrated Wastewater Discharge Standard" GB 10789 "Beverage General" GB 12348 "Industrial enterprises boundary environmental noise emission standards" GB 12523 "Environmental noise emission standards for construction sites" GB/T 12801 "production process safety and health requirements of the General Regulations" GB 14554 "Odor Pollutant Discharge Standard" GB 15562.1 "Environmental protection graphic mark - discharge port (source)" GB 18484 "Hazardous Waste Incineration Pollution Control Standard" GB 18597 "Hazardous Waste Storage Pollution Control Standard" GB 18598 "Hazardous Waste Landfill Pollution Control Standard" GB 18599 "General industrial solid waste storage, disposal site pollution control standards" GB/T 18920 "Urban Wastewater Recycling Urban Miscellaneous Water Quality" GB/T 19837 "urban water supply and drainage UV disinfection equipment" GB 50009 "Building Structure Load Specifications" GB 50014 "Outdoor Drainage Design Code" GB 50015 "Building water supply and drainage design specifications" GB 50016 Code for Fire Protection in Building Design GB 50019 "Heating Ventilation and Air Conditioning Design Code" GB/T 50033 "architectural lighting design standards" GB 50034 "architectural lighting design standards" GB 50037 "Building Ground Design Code" GB 50046 "Code for Design of Corrosion Protection for Industrial Buildings" GB 50052 "Design for Power Distribution System" GB 50053 "10KV and below substation design specifications" GB 50054 "Low Voltage Distribution Design Code" GB 50055 "General Electric Equipment Power Distribution Design Code" GB 50057 "Building lightning protection design specifications" GB 50069 "Water supply and drainage engineering structure design specifications" GB 50093 "automatic instrument engineering construction and acceptance of norms" GB 50108 "Underground Engineering Waterproof Technical Specification" GB 50141 "Water supply and drainage structure construction and acceptance of norms" GB 50168 "electrical installation of cable engineering construction and acceptance of norms" GB 50169 "Electrical installation grounding device construction

and acceptance of norms" GB 50187 "General Layout Design for Industrial Enterprises" GB 50204 "concrete structure construction quality acceptance" GB 50208 "Underground waterproofing project quality acceptance" GB 50222 "Building interior decoration design fire safety norms" GB 50231 "General specification for construction and acceptance of mechanical equipment installation works" GB 50236 "field equipment, industrial pipeline welding construction specifications" GB 50243 "ventilation and air conditioning construction quality acceptance norms" GB 50254 "electrical installation of low-voltage electrical construction and acceptance of norms" GB 50257 "Electrical installation works explosion and fire hazard environment electrical installation and acceptance of norms" GB 50268 "water supply and sewer pipeline construction and acceptance of norms" GB 50275 "fan, compressor, pump installation engineering construction and acceptance of norms" GB 50334 "urban sewage treatment plant engineering quality acceptance" GB/T 50335 "Code for design of wastewater reuse project" GB J141 "Code for construction and acceptance of water supply and drainage structures" GB J 22 "Code for Design of Mine Roads" GB J 87 "Noise Control Design Code for Industrial Enterprises" GB Z 1 "Industrial enterprise design health standards" GB Z 2 "Workplace Hazardous Occupational Exposure Limits" CECS 97 "Blasting Aeration System Design Code" CECS 162 "Water supply and drainage instrument automation control engineering construction and acceptance procedures" CJJ 60 "Technical Regulations for Operation, Maintenance and Safety of Urban Wastewater Treatment Plants" CJ/T 388 "General technical conditions for decanter for water supply and drainage" HJ/T 15 "Environmental protection products technical requirements Ultrasonic open channel sewage flow meter" HJ/T 91 "Technical specifications for surface water and wastewater monitoring" HJ/T 92 "Technical Specifications for Monitoring Total Water Pollutants" HJ/T 96 "pH water quality automatic analyzer technical requirements" HJ/T 101 "ammonia nitrogen water quality automatic analyzer technical requirements" HJ/T 242 "Technical requirements for environmental protection products Belt presses for sludge dewatering" HJ/T 245 "Technical requirements for environmental protection products Suspension packing" HJ/T 246 "Environmental Protection Products Technical Requirements Suspension Filler" HJ/T 247 "Environmental protection product technical requirements Vertical axis mechanical surface aeration device" HJ/T 250 "environmental protection products technical requirements rotary fine grille" HJ/T 251 "Environmental protection products technical requirements Roots blower" HJ/T 252 "environmental protection products in the technical requirements, microporous aerator" HJ/T 261 "Technical requirements for environmental protection products Pressure dissolved air flotation device" HJ/T 262 "Technical Requirements for Environmental Protection Products Grid Cleaner" HJ/T 263 "Environmental Protection Products Technical Requirements Jet Aeration" HJ/T 265 "Environmental protection products technical requirements scraper" HJ/T 266 "Environmental protection products technical requirements suction machine" HJ/T 272 "Environmental protection products Technical requirements Chemical method Chlorine dioxide disinfectant generator" HJ/T 277 "Environmental protection products technical requirements Rotary Decanter" HJ/T 278 "environmental protection products technical

requirements single-stage high-speed aeration centrifugal blower" HJ/T 279 "Environmental protection products technical requirements push-flow diving mixer" HJ/T 281 "environmental protection products technical requirements diffuse aerator" HJ/T 282 "Environmental protection products technical requirements shallow pool flotation device" HJ/T 283 "Environmental protection products technical requirements Van filter press and plate and frame filter press" HJ/T 335 "environmental protection products technical requirements sludge concentration belt dehydration machine" HJ/T 336 "environmental protection products technical requirements submersible sewage pump" HJ/T 337 "Environmental protection products technical requirements Biological contact oxidation complete sets of devices" HJ/T 354 "Water pollution source on-line monitoring system acceptance technical specifications (Trial)" HJ/T 369 "Technical requirements for environmental protection products Dosing device for water treatment" HJ/T 377 "environmental protection products technical requirements chemical oxygen demand (COD_{Cr}) water quality on-line automatic monitoring instrument" HJ .2007 "Technical specification for sewage flotation treatment engineering" HJ .2009 "Biological contact oxidation process sewage treatment engineering technical specifications" HJ .2013 "upflow anaerobic sludge bed reactor sewage treatment engineering technical specifications" HJ .2015 "Water Pollution Control Engineering Technical Guidelines" NY/T 1220.1 "Biogas Engineering Technical Specification Part 1. Process Design" NY/T 1220.2 "Biogas Engineering Technical Specification Part 2. Gas Supply Design" Regulations on the Safety Management of Dangerous Chemicals (Decree No. 591 of the State Council of the People's Republic of China) "Construction project (project) completion and acceptance method" (National Planning Commission Construction [1990] No. 1215) "Standardization of sewage outfall technical requirements (Trial)" (State Environmental Protection Agency Environmental Monitoring [1996] No. 470) Measures for the Administration of Acceptance of Environmental Protection for Completion of Construction Projects (State Environmental Protection Administration Decree No. 13) "Administrative Measures for Automatic Monitoring of Pollution Sources" (State Environmental Protection Administration Decree No. 28)

3 Terms and definitions

The terms in the General Principles of Beverages (GB 10789) and the following terms and definitions apply to this standard.

3.1 Beverage

After the quantitative packaging, for direct drinking or water to drink, the ethanol content does not exceed the mass fraction of 0.5% of the system Goods, not including drinking drugs.

Integrated wastewater Refers to the process of beverage manufacturing process waste