

HJ

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Technical specifications of wastewater treatment for fermentative pharmaceutical industry (English Translation)

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Foreword

To implement the "People's Republic of China Environmental Protection Law" and "People's Republic of China Water Pollution Prevention Law" the implementation of "fermentative pharmaceutical industrial water pollutant discharge standards" to regulate the fermentative pharmaceutical wastewater treatment project Construction and operation of facilities, improving environmental quality, the development of this standard.

This standard of fermentative pharmaceutical wastewater treatment project design, construction, inspection and operation management of a skills requirement.

This standard is a guiding standard.

This standard is the first release.

This standard is developed by the Ministry of Environmental Protection Science, Technology organization.

This standard drafting units. China Environmental Science Society, South Jiangsu Environmental Protection Technology Co., river Northern Provincial Academy of Environmental Sciences, Zhejiang Environmental Protection Science Design Institute, Shandong Shengli Biological Engineering Co., the company.

This standard is approved by the Ministry of Environmental Protection October 24, 2014.

This standard since January 1, 2015 implementation.

The standard explanation by the Ministry of Environmental Protection.

Fermentative pharmaceutical Wastewater Treatment Project Technical Specifications

1 Scope

This standard specifies the technical requirements of fermentative pharmaceutical wastewater treatment project design, construction, inspection and operation.

This standard applies to fermented-based pharmaceutical wastewater treatment project, as fermentative pharmaceutical environment projects Impact assessment, environmental protection facilities design and construction, and acceptance of completed construction projects after the completion of operation and management skills Surgery basis.

2 Normative references

This standard refers to the contents of the following documents or the terms. Where undated references, the latest edition of to this standard.

GB 3096 acoustic environment quality standards GB 7251 Low-voltage switchgear and control equipment GB 12348 industrial enterprises of environmental noise emission standard plant boundary GB 12801 General requirements for the production process safety and health GB 14554 standard malodorous emissions GB 18597 Hazardous Waste Storage Pollution Control Standard GB 18598 Hazardous Waste Landfill Pollution Control Standard GB 18599 general industrial solid waste storage and disposal site pollution control standards GB/T 18920 urban recycling urban miscellaneous water quality GB 21903 fermentative pharmaceutical industrial water pollutant discharge standards GB 50009 building structural load specifications GB 50014 outdoor drainage design specifications GB 50016 architectural design code for fire protection GB 50019 Heating, ventilation and air conditioning design GB 50052 power supply and distribution system design specifications GB 50053 10kV substation and below design specifications GB 50054 low voltage power distribution design specifications GB 50055 Universal power distribution equipment design specifications GB 50057 Lightning in design GB 50093 Automation Instrumentation Construction and Quality Acceptance GB 50168 electric equipment installation engineering construction and acceptance of cable lines GB 50169 electric equipment installation engineering construction and acceptance of grounding devices GB 50187 for General graphic design specification GB 50191 Code for seismic design of structures GB 50194 engineering construction site for electrical safety norms GB 50204 Construction Quality Acceptance of Concrete Structure Engineering GB 50208 Underground Waterproof Engineering Quality Acceptance GB 50231 mechanical equipment installation construction and acceptance of universal norms GB 50236 field equipment, industrial pipe welding engineering for construction GB 50243 Construction

Quality Acceptance of Ventilation and Air Conditioning Engineering GB 50254 electrical low-voltage electrical equipment installation engineering construction and acceptance GB 50255 electric equipment installation engineering power converter equipment for construction and acceptance GB 50256 electrical equipment installation engineering construction and acceptance of electric device GB 50257 electrical equipment installation engineering explosion and fire hazard electrical equipment installation and acceptance GB 50268 and drainage in construction and acceptance GB 50275 compressor, fan and pump installation engineering construction and acceptance Building Construction Quality GB 50303 Electrical Projects GB 50335 Code for design of wastewater reclamation and reuse GB 50683-site equipment, industrial pipe welding engineering construction quality acceptance GB J 22 factories and road design specifications GB J 87 Industrial Enterprise Noise Control Design Specification GB J 141 water supply and drainage construction and acceptance of structures CECS 97 aeration system design procedures Cold regions sewage activated sludge process design procedures CECS 111 CECS 112 oxidation ditch design procedures CECS 128 Biological Contact Oxidation Method Design Practice CECS 162 meter water supply and drainage construction and acceptance of automation and control engineering HG 20571 chemical companies with safety and health regulations HJ/T 91 surface water and wastewater monitoring technical specifications HJ/T 92 water pollutant total emissions monitoring technical specifications HJ/T 96 pH water quality automatic analyzer technical requirements HJ/T 101 ammonia water quality automatic analyzer technical requirements HJ/T 212 pollution-line automatic monitoring (monitoring) system data transmission standards HJ/T 242 environmental protection product sludge dewatering with belt filter press HJ/T 245 environmental protection product hanging packing HJ/T 246 environmental protection product filler suspension HJ/T 247 environmental protection product vertical shaft mechanical surface aerator HJ/T 250 environmental protection product Rotary fine grid HJ/T 251 environmental protection product Roots Blower HJ/T 252 environmental protection product, the microporous aerator HJ/T 259 environmental protection product brush aerator HJ/T 260 environmental protection product blast submersible aerator HJ/T 262 environmental protection product Screen Rack HJ/T 263 environmental protection product jet aerator HJ/T 278 environmental protection product - high-speed single-stage centrifugal blower aeration HJ/T 280 environmental protection product carousel aerator HJ/T 281 environmental protection product diffuser aeration HJ/T 283 environmental protection product and Van filter frame filter HJ/T 335 environmental protection product with concentrated sludge dewatering machine HJ/T 354 environmental protection product water sources on-line monitoring system for acceptance of technical specifications HJ/T 355 environmental protection product water sources on-line monitoring and assessment system operation specifications HJ/T 369 environmental protection product used in water treatment dosing device HJ/T 377 environmental protection product chemical oxygen demand (COD_{Cr}) Water Quality Online Automatic Monitoring Instrument HJ 576 Anaerobic - anoxia - aerobic activated sludge wastewater treatment project technical specifications HJ 577 sequencing batch activated sludge wastewater treatment

project technical specifications HJ 578 oxidation ditch activated sludge wastewater treatment project technical specifications HJ 579 membrane separation wastewater treatment engineering technical specifications HJ 2006 sewage coagulation and flocculation process engineering and technical specifications HJ 2007 flotation sewage treatment project technical specifications HJ 2008 sewage treatment filtration engineering technical specifications HJ 2009 biological contact oxidation process of sewage treatment works technical specifications HJ 2010 film biological wastewater treatment engineering technical specifications HJ 2013 upflow anaerobic sludge blanket reactor wastewater treatment engineering technical specifications HJ 2014 biofilter wastewater treatment engineering technical specifications HJ 2023 anaerobic expanded granular sludge bed reactor wastewater treatment project technical specifications HJ 2024 completely mixed anaerobic reaction tank Wastewater Treatment Project Technical Specifications HJ 2025 hazardous waste collection storage and transportation Technical Specifications NY/T 1220 biogas technical specifications "Project (Project) final acceptance approach" (Total construction [1990] No. 1215) "Acceptance of completed construction projects management approach" (SEPA Order No. 13) "Pollution automatic monitoring and management approach" (SEPA Order No. 28) "Dangerous chemical safety regulations" (State Council Decree No. 591) "Outfall standardized remediation technical requirements" (trial) (EM [1996] No. 470) "The pharmaceutical industry pollution control technology policy" (Ministry of Environmental Protection Bulletin No. 18, 2012)

3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 Fermentative pharmaceutical fermentative pharmaceutical

Refers to the production of antibiotics or other ingredients by fermentation method, and then after the separation, purification and refining processes to produce Process the drug, according to product categories are divided into classes of antibiotics, vitamins, amino acids and other classes.

3.2 fermentative pharmaceutical industry wastewater of fermentative pharmaceutical industry it refers to the fermented-based pharmaceutical companies waste generated in the production process, including process water, production of washing drainage, Power system drainage and sewage, which does not include solvent recovery produced high concentrations of bottoms.

3.3 Pretreatment classification treatment

It refers to create favorable conditions for wastewater treatment, biological treatment to reduce the load on the set of biochemical process technology before.