

HJ

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HJ 992-2018

**Technical guidelines of accounting method for pollution source
intensity - Pharmaceuticals industry**
(English Translation)

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Foreword

To implement the Environmental Protection Law of the People's Republic of China, the Environmental Impact Assessment Law of the People's Republic of China Pollution Prevention and Control Law, Law of the People's Republic of China on Prevention and Control of Water Pollution, Law of the People's Republic of China on the Prevention and Control of Environmental Noise Pollution, "The People's Republic of China Laws and regulations on the Prevention and Control of Environmental Pollution by Solid Wastes, etc., improve the system of strong accounting methods for fixed sources of pollution, and guide the sources of pollution in the pharmaceutical industry Strong accounting work, the development of this standard.

This standard specifies the basic principles for the strong accounting of waste gas, wastewater, noise, and solid waste pollution sources in the environmental impact assessment of the pharmaceutical industry.

Content, accounting methods and requirements.

Appendix A of this standard is an informative annex.

This standard is the first release.

This standard is formulated by the Department of Environmental Impact Assessment and Emission Management of the Ministry of Ecology and Environment, and the Department of Regulations and Standards.

This standard is mainly drafted by. Environmental Engineering Evaluation Center of the Ministry of Environmental Protection, Hebei University of Science and Technology, China

Chemical Pharmaceutical Industry Association.

This standard is approved by the Ministry of Ecology and Environment on December 25, 2018.

This standard was implemented on March 1, 2019.

This standard is explained by the Ministry of Ecology and Environment.

1 Pollution source strong accounting technology guide pharmaceutical industry

1 Scope of application this standard stipulates the basic principles, contents, accounting methods and requirements for strong accounting of pollution sources in the pharmaceutical industry.

This standard applies to chemical manufacturing, biological and biochemical products manufacturing, simple drug packaging and compounding, Chinese patent medicine manufacturing, Chinese medicine decoction pieces the source strength calculation of the pollution source of the new (reconstruction, expansion) construction project and the existing engineering pollution source in the environmental impact assessment of industrial construction projects such as processing.

This standard applies to the strong accounting of pollution sources under normal and abnormal conditions in the pharmaceutical industry, and is not applicable to sudden leaks, fires, explosions, etc.

Therefore, the source is strongly accounted for.

This standard applies to sources of waste gas, wastewater, noise, solid waste pollution sources in the main production facilities, public and auxiliary facilities of the pharmaceutical industry.

Strong accounting. The boiler source of GB 13223 is calculated according to HJ 888; the boiler source of GB 13271 is strongly pressed.

Calculated according to HJ 991.

2 Normative references

This standard refers to the terms of the following documents. For undated references, the valid version applies to this standard.

GB 12348 industrial enterprise boundary environmental noise emission standards GB 13223 Standard for emission of atmospheric pollutants from thermal power plants GB 13271 Boiler Air Pollutant Emission Standard GB 14098 gas turbine noise GB 14554 Odor Pollutant Emission Standard GB 16297 Integrated emission standards for atmospheric

pollutants GB 18484 Hazardous Waste Incineration Pollution Control Standard GB 21903
 Fermentation standards for water pollutants in the pharmaceutical industry GB 21904
 Chemical synthesis pharmaceutical industry water pollutant discharge standards GB 21905
 Extraction standards for water pollutants in the pharmaceutical industry GB 21906 Chinese
 medicine pharmaceutical industry water pollutant discharge standards GB 21907
 Bio-engineering pharmaceutical industry water pollutant discharge standards GB 21908
 Mixed preparations for pharmaceutical industry water pollutant discharge standards GB
 34330 General rules for the identification of solid waste GB/T 2888 fan and Roots blower
 noise measurement method GB/T 14675 Determination of air quality odors Three-point
 comparison odor bag method GB/T 29529 pump noise measurement and evaluation
 method HJ 2.1 General Outline of Technical Guidelines for Environmental Impact
 Assessment of Construction Projects HJ 2.2 Technical Guidelines for Environmental Impact
 Assessment Atmospheric Environment HJ 2.3 Environmental Impact Assessment Technical
 Guidelines Surface Water Environment HJ 2.4 Environmental Impact Assessment Technical
 Guidelines Acoustic Environment HJ/T 55 Technical Guidelines for the Monitoring of
 Unorganized Emissions of Air Pollutants 2HJ/T 69 Coal-fired boiler dust and sulfur dioxide
 emissions total verification technical method material balance algorithm HJ 75 Fixed
 Pollution Source Flue Gas (SO₂, NO_x, Particulate Matter) Emissions Continuous
 Monitoring Technical Specification HJ 76 Technical requirements and test methods for
 continuous monitoring system for stationary pollution source flue gas (SO₂, NO_x,
 particulate matter) HJ/T 91 Surface Water and Wastewater Monitoring Technical
 Specifications HJ/T 298 Hazardous Waste Identification Technical Specification HJ/T 353
 Water Pollution Source Online Monitoring System Installation Technical Specification (Trial)
 HJ/T 354 Water Pollution Source Online Monitoring System Acceptance Technical
 Specification (Trial) Technical Specifications for Operation and Assessment of HJ/T 355
 Water Pollution Source Online Monitoring System (Trial) HJ/T 356 Water Pollution Source
 Online Monitoring System Data Validity Discrimination Technical Specification (Trial) HJ/T
 373 Technical Specifications for Quality Assurance and Quality Control of Fixed Pollution
 Source Monitoring (Trial) HJ/T 397 Fixed Source Exhaust Gas Monitoring Technical
 Specification HJ/T 611 Technical Guidelines for Environmental Impact Assessment
 Pharmaceutical Construction Project HJ/T 616 Construction Project Environmental Impact
 Technology Assessment Guidelines HJ/T 792 Construction Project Completion
 Environmental Protection Acceptance Technical Specification Pharmaceutical HJ 858.1
 Application for the issuance of pollutant discharge permits and technical specifications for
 the issuance of the pharmaceutical industry - manufacture of APIs HJ 881 sewage unit
 self-monitoring technical guide extraction pharmaceutical industry HJ 882 Sewage Unit
 Self-Monitoring Technical Guide Fermentation Pharmaceutical Industry HJ 883 Sewage
 Unit Self-Monitoring Technical Guide Chemical Synthesis Pharmaceutical Industry HJ 884
 Guidelines for the Guidelines for Sources of Pollution Sources HJ 888 Pollution Source
 Power Accounting Technical Guide HJ 991 Pollution Source Power Accounting Technical
 Guide Boiler HJ 2044 Fermentation Pharmaceutical Industry Wastewater Treatment

Engineering Technical Specification

3 Terms and definitions

The following terms and definitions defined by HJ 884 apply to this standard.

Pharmaceutical industry waste water Refers to wastewater discharged from pharmaceutical manufacturing enterprises or facilities, including various external wastewaters that are directly or indirectly related to production (including plant waste technology) Water, flushing wastewater, circulating cooling water, sewage, purified water, sewage, waste gas treatment facility wastewater, domestic sewage, initial rainwater, plant District boiler sewage, etc.).

Volatile organic compounds (VOCs) Refers to organic compounds involved in atmospheric photochemical reactions, or organic compounds determined according to relevant regulations.

When characterizing the overall emissions of VOCs, total volatile organic compounds (by TVOC) can be used based on industry characteristics and environmental management requirements.

Indicates) or non-methane total hydrocarbons (expressed as NMHC) as a pollutant control project.

33.3

Abnormal discharge

Refers to the discharge of pollutants under abnormal conditions of production facilities or pollution prevention (control) measures. For example, hazardous waste incinerators start and stop when the flue gas treatment system is abnormally discharged, or other process equipment is abnormally operated, the pollution prevention and control facilities are not able to achieve the efficiency of treatment and synchronization.

Emissions under abnormal conditions such as conversion rates.

4.1 General principles

The strong source accounting procedures include pollution source identification and pollutant determination, accounting methods and parameter selection, source strength accounting, and accounting results.

For details, see HJ 884 for details.

4.2 Identification of pollution sources

The identification of pollution sources in the pharmaceutical industry should cover all sites, equipment or devices that may generate pollutants, waste water, noise, solid waste pollutants, Source strength accounting should cover all pollutants discharged by various