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

HJ 887-2018

**Technical guidelines of accounting method for pollution source
intensity pulp and paper industry**

污染源强核算技术指南 制浆造纸

(English Translation)

Issued on: March 27, 2018

Implemented on: March 27, 2018

Issued by: Ministry of Ecology and Environment

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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, and the People's Republic of China Law on Prevention and Control of National Water Pollution, Law of the People's Republic of China on Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on Prevention and Control of Environmental Noise Pollution Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes, etc., to improve the technical support system for environmental impact assessment of construction projects, to guide and standardize the strong accounting work of pollution sources in the pulp and paper industry, and develop this standard.

This standard specifies wastewater pollutants, exhaust pollutants, noise, solid waste in the environmental impact assessment of the pulp and paper industry construction project.

Procedural strong accounting procedures, methods and selection principles, content and requirements.

Appendix A to Appendix E of this standard are informative annexes.

This standard is the first release.

This standard is formulated by the Environmental Impact Assessment Department and the Science and Technology Standards Department of the Ministry of Environmental Protection (now the Ministry of Ecology and Environment).

This standard is mainly drafted by. Environmental Engineering Assessment Center of the Ministry of Environmental Protection and Light Industry Environmental Protection Research Institute.

This standard is approved by the Ministry of Ecology and Environment on March 27, 2018.

This standard was implemented on March 27, 2018.

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

Technical Guide for Strong Sources of Pollution Sources Pulp and Paper

1 Scope of application

This standard stipulates the procedures, methods and selection principles, contents and requirements for the source and power accounting of the pulp and paper industry.

This standard is applicable to the new (reconstruction, expansion) construction project pollution source and existing project pollution in the environmental impact assessment of the pulp and paper industry construction project.

The source of the source is strongly accounted for.

This standard applies to the source and strong accounting under normal and abnormal working conditions in the pulp and paper industry, and is not suitable for sudden leakage, fire, explosion, etc.

Strong source accounting in the event of an accident.

This standard is applicable to waste gas, waste water, noise, solid waste in the pulping and papermaking production processes and public and auxiliary projects in the pulp and paper industry.

Source strong accounting. The boiler source strength of GB 13223 is calculated according to HJ 888; the boiler source of GB 13271 is executed according to the pollution.

Source Power Accounting Technology Guide Boiler (HJ --) for accounting.

2 Normative references

This standard refers to the following documents or their terms. For undated references, the latest edition applies to this standard.

GB 3544 Water Pollutant Emission Standard for Pulp and Paper Industry GB 9078 industrial furnace kiln air pollutant discharge standards GB 13223 Standard for emission of

atmospheric pollutants from thermal power plants GB 13271 Boiler Air Pollutant Emission Standard GB 14554 Odor Pollutant Emission Standard GB 16297 Integrated emission standards for atmospheric pollutants GB 50015 Building Water Supply and Drainage Design Code GB/T 16157 Determination of particulate matter in fixed pollution source exhaust gas and sampling method of gaseous pollutants 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/T 2.3 Technical Guidelines for Environmental Impact Assessment Surface Water Environment HJ 2.4 Environmental Impact Assessment Technical Guidelines Acoustic Environment HJ 75 fixed pollution source flue gas (SO₂, NO_x, particulate matter) continuous monitoring technical specifications HJ 76 Technical requirements and test methods for continuous monitoring system for fixed pollution source flue gas (SO₂, NO_x, particulate matter) HJ/T 91 Surface Water and Wastewater Monitoring Technical Specifications HJ/T 92 Water Pollutant Total Monitoring 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 630 Environmental Monitoring Quality Management Technical Guidelines HJ 821 sewage unit self-monitoring technical guide paper industry HJ 884 Guidelines for the Guidelines for Sources of Pollution Sources HJ 888 Pollution Source Power Accounting Technical Guide HJ .2011 Technical Specifications for Pulp and Paper Wastewater Treatment Engineering HJ 2302 Technical Guide for Pollution Prevention and Control of Pulp and Paper Industry HJ -- Pollution Sources Strong Accounting Technical Guide Boiler Clean production evaluation index system for pulp and paper industry

3 Terms and definitions

The following terms and definitions apply to this standard.

Pulp and paper mill

It refers to the production of pulp from wood, non-wood or waste paper, and/or the production of paper, cardboard and other products from pulp.

Business or production facility.

Unblocked yield

Refers to the ratio of the amount of crude pulp obtained after cooking (dry or air-dried) to the amount of raw material before cooking (dry or air-dried).

Fine pulp yield

Refers to the amount of fine pulp obtained after washing and screening (dry or air-dried) and the amount of raw materials before cooking (dry or air-dried) the ratio.

Oxygen delignification loss Refers to the amount of fiber loss (dry or air dried) in the oxygen delignification process as a percentage of the oxygen delignification pre-slurry amount (dry or air dried).

Bleaching loss

Refers to the percentage of fiber loss (dry or air dried) in the bleaching process as a percentage of the amount of pulp before bleaching (dry or air dried).

Black liquor extraction rate extraction efficiency of black liquor Refers to the percentage of solids in the black liquor that is sent to evaporation as a percentage of the solids obtained by cooking (oxygen delignification).

Sulfuricity

Refers to the ratio of sodium sulfide to total sodium sulfide and sodium hydroxide in white liquor (both in terms of Na₂O).

Causticity

Refers to the ratio of sodium hydroxide to total sodium hydroxide and sodium carbonate in the caustic solution produced by the caustic chemical section (both in terms of Na₂O).

Glauber's reduction rate Refers to the ratio of sodium sulfide in the melt to the total sodium sulfide and sodium sulfate (both in terms of Na₂O).

4.1 Accounting procedures

The strong source accounting procedures include pollution source identification and pollutant determination, accounting methods and parameter selection, source strength accounting, and accounting for summary, see HJ 884 for details. Identification of pollution sources and determination of pollutants should also comply with HJ 2.1, HJ 2.2, HJ/T 2.3, HJ 2.4 and other technical guidelines and GB 3544, GB 16297, GB 14554, GB 9078 and other emission standards.

The accounting of the source of pollution should include normal and abnormal emissions (alkaline recovery furnace, lime kiln, incinerator start-stop furnace, etc.) Happening.

4.2.1 General principles

Strong source accounting methods include material balance algorithm, analogy method, actual measurement method and pollution coefficient method, accounting method and selection order See Table 1.