

HJ

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Technical guidelines of accounting method for pollution source intensity - Boiler

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(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, and the Chinese People Law of the Republic of China on Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on Prevention and Control of Water Pollution, Environmental Pollution Pollution Law of Prevention and Control, "The Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes" and other laws and regulations, improve the strong nuclear source of fixed pollution sources Calculate the method system, guide and standardize the strong accounting work of boiler pollution sources, and formulate this standard.

This standard stipulates the strong accounting of waste gas, waste water, noise and solid waste pollution sources generated during the use of boilers.

Procedures, content, methods and requirements.

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

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, Guodian Environmental Protection Research Institute Co., Ltd.

China Electric Power Engineering Consulting Group Northeast Electric Power Design Institute Co., Ltd., Tianjin Environmental Protection Science Research Institute, Beijing Labor Institute of Protection Science.

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

This standard has been implemented since March 1, 2019.

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

1 Pollution source strong accounting technology guide boiler

1 Scope of application this standard specifies the process of strong accounting of waste gas, waste water, noise and solid waste pollution sources generated during boiler use.

Preface, content, methods and requirements.

This standard applies to the implementation of GB 13271 boiler new (reform, expansion) construction project pollution sources and existing engineering sources of pollution Accounting.

This standard is applicable to the strong accounting of pollution sources under normal and abnormal conditions of boilers, and is not applicable to sudden leakage, fire, explosion.

Source strength accounting in case of accidents such as bombing.

2 Normative references

This standard refers to the following documents or their terms. The most recent version of the undated reference document (package) all revisions are applicable to this standard.

GB 8978 Integrated Wastewater Discharge Standard GB 13271 Boiler Air Pollutant Emission Standard GB/T 15317 Energy-saving monitoring of coal-fired industrial boilers GB/T 16157 Determination of particulate matter in fixed pollution source exhaust gas and sampling method of gaseous pollutants GB/T 17954 industrial boiler economic operation 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 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 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 820 sewage unit self-monitoring technical guide thermal power generation and boiler HJ 884 Guidelines for the Guidelines for Sources of Pollution Sources 2HJ 953 Sewage permit application and issuance technical specification boiler

3 Terms and definitions

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

Boiler

The boiler uses the heat energy or other heat energy released by the combustion of the fuel to heat the hot water or other working fluid to produce the specified parameters (warm Degree, pressure) and quality of steam, hot water or other working equipment, this standard also includes pollution control facilities and other ancillary facilities Ready.

Abnormal situation

Refers to boiler start-up, shutdown, and other working conditions, as well as pollution prevention facilities caused by faults, etc.

Governance efficiency and other conditions.

4.1 General principles

The strong source accounting procedures include pollution source identification and pollutant determination, accounting methods and parameter selection, source strength accounting, the summary of accounting results, etc., see HJ 884 for details.

4.2 Identification of pollution sources

The source identification should meet the technical guidelines of HJ 2.1, HJ 2.2, HJ 2.3, HJ 2.4, etc., and cover all possible production.

A place, equipment, or device that produces waste gas, wastewater, noise, and solid waste contaminants.

4.3 Determination of pollutants

The determination of pollutants of various pollution sources shall include the mains included in national and local emission standards such as GB 13271 and GB 8978.

Want pollutants. Contaminants that may be produced in the production process but not included in national or local emission standards may be based on environmental quality Volume standards, other industry standards, other national emission standards, local people's governments or environmental protection departments Good demand, based on the analysis of raw and auxiliary materials and fuel use and production process.

4.4.1 General principles

Boiler pollution source and source strong accounting methods include actual measurement method, analog method, material balance algorithm and pollution coefficient method, etc.

The order of selection is shown in Table 1. If the priority method cannot be used, reasonable reasons should be given.

3 Table 1 Source strength accounting method selection order table Environmental factor pollution source accounting factor Accounting method and prioritization New (reform, expansion) Engineering pollution source Existing engineering pollution source a Organized exhaust (normal working condition) Boiler chimney Particulate matter, sulfur dioxide, nitrogen oxidation Matter, mercury and its compounds b Material balance algorithm 2. Analogy 3. Pollution coefficient method Actual measurement method Organized exhaust (non-normal work condition) Boiler chimney Particulate matter, nitrogen oxides Analogy method Actual measurement method 2. Pollution coefficient method Sulfur dioxide Actual measurement method 2. Material balance algorithm Mercury and its compounds b Actual measurement method 2. Analogy Unorganized exhaust Coal yard/oil (gas) tank, Raw materials such as ash slag yard and by-product storage, unloading, Transportation, preparation system Fuel is coal, biomass. particulate matter Fuel is oil, gas. non-methane total hydrocarbon Analogy method Liquid ammonia/ammonia water storage system Waste water c boiler room waste water discharge Chemical oxygen demand, ammonia nitrogen, suspended solids, Petroleum, fluoride, sulfide, Volatile phenol, total phosphorus, etc.

Analogy method

2. Pollution coefficient method Actual measurement method noise Boiler fan, water pump, Mill and other equipment Noise level Solid Waste Boiler and dust removal, desulfurization System, etc.

Ash, desulfurization by-products, etc.

Material balance algorithm 2. Analogy 3. Pollution coefficient method Denitration system waste denitration catalyst 1. Analogy method a Existing project pollution source is not