

HJ

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Self-monitoring technology guidelines for pollution sources - Non-ferrous metal metallurgy industry (English Translation)

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li preface

To implement the Law of the People's Republic of China on Environmental Protection, the Law of the People's Republic of China on Prevention and Control of Atmospheric Pollution, Law of the Republic of China on Prevention and Control of Water Pollution, Measures for the Administration of Pollution Discharge Permits (Trial), to guide and regulate non-ferrous metal industrial pollutant discharge units Self-monitoring work to develop this standard.

This standard proposes the general requirements for the self-monitoring of non-ferrous metal industrial pollutant discharge units, the development of monitoring plans, information records and the basic content and requirements of the report.

This standard is the first release.

This standard was proposed and organized by the Ministry of Ecology and Environment.

This standard is mainly drafted by. China Environmental Monitoring Center, Beijing Mining and Metallurgy Technology Group Co., Ltd., Jiangxi Province Environmental Supervision Test center station.

This standard is approved by the Ministry of Ecology and Environment on December 4, 2018.

This standard has been implemented since March 1, 2019.

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

1Sewage unit self-monitoring technical guide non-ferrous metal industry

1 Scope of application this standard proposes industrial smelting of non-ferrous metals (aluminum, lead, zinc, copper, nickel, cobalt, magnesium, titanium, tin, antimony, mercury).

The general requirements for the self-monitoring of pollution units, the development of monitoring plans, the basic content and requirements of information recording and reporting.

This standard applies to non-ferrous metals (aluminum, lead, zinc, copper, nickel, cobalt, magnesium, titanium, tin, antimony, mercury) industrial smelting platoon Pollution unit, self-monitoring of water, gas pollutants, noise and environmental impact on the surrounding environment during production and operation Measurement. This standard does not apply to the above metal refining smelting and discharging units.

The self-monitoring requirements for self-contained thermal power generating units (plants) and supporting power boilers shall be in accordance with the self-monitoring technology of the sewage disposal units.

Guide to Thermal Power Generation and Boiler (HJ 820) implementation.

2 Normative references the contents of this standard refer to the following documents or their terms. For undated references, the valid version is appropriate.

Used in this standard.

GB 25465 Aluminum Industry Pollutant Emission Standard GB 25466 Lead and zinc industrial pollutant discharge standards GB 25467 Copper, nickel and cobalt industrial pollutant discharge standards GB 25468 Magnesium and titanium industrial pollutant discharge standards GB 30770 tin, antimony and mercury industrial pollutant discharge standards 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/T 91 Surface Water and Wastewater Monitoring Technical Specifications HJ/T 164 Technical Specifications for Groundwater Environmental Monitoring HJ/T 166 Technical Specifications for Soil Environmental Monitoring HJ/T 194 Technical Specifications for Manual Air Quality Monitoring HJ 442 Code for Environmental Monitoring of Coastal Waters HJ 610 Environmental Impact Assessment Technical Guidelines Groundwater Environment HJ 664 Technical Specifications for Environmental Air Quality Monitoring Points (Trial) HJ 819 General Guidelines for Self-Monitoring Technical Units of Sewage Units HJ 820 sewage unit self-monitoring technical guide thermal power generation and boiler National Directory of Hazardous Wastes (Ministry of Environmental Protection, National Development and Reform Commission, Ministry of Public Security Order No. 39)

3 Terms and definitions GB 25465, GB 25466, GB 25467, GB 25468, GB 30770 as defined by the following terms and definitions apply in this standard.

Aluminum smelting pollutant emission unit Refers to the smelting enterprises and

institutions that use alumina ore as raw material to produce alumina or alumina to produce electrolytic aluminum.

2 production operators.

Lead and zinc smelting pollutant emission unit Refers to lead and zinc smelting enterprises and other productions with lead concentrate, zinc concentrate or lead-zinc mixed concentrate as main raw materials.

Operators.

Copper smelting enterprise pollutant emission unit Refers to copper smelting enterprises and other production operators who use primary or copper concentrates as the main raw materials.

Nickel smelting pollutant emission unit Refers to nickel smelting enterprises and other production operators who use nickel concentrate as raw material.

Cobalt smelter pollutant emission unit Refers to cobalt smelting enterprises and other production operators who use cobalt concentrate and cobalt-containing materials as main raw materials.

Magnesium smelting pollutant emission unit Refers to enterprises and institutions and other producers and operators who use dolomite as raw material to produce magnesium metal by silicon thermal smelting process.

Titanium smelting pollutant emission unit Refers to enterprises and other production operators who produce titanium sponge from titanium concentrate or high titanium slag or titanium tetrachloride.

Products include high titanium slag, titanium tetrachloride, titanium sponge.

Tin smelting pollutant emission unit Refers to tin smelting enterprises and other production operators who use tin concentrate as the main raw material.

Smelting pollutant discharge unit antimony smelting pollutant emission unit Means a smelting enterprise that produces bismuth metal with bismuth concentrate as the main raw material or bismuth oxide with bismuth metal as raw material.

Other production operators.

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Mercury smelting pollutant emission unit it refers to smelting enterprises and other production operators who produce mercury metal with mercury-containing minerals as the main raw material.

4 General requirements for self-monitoring the pollutant discharge unit shall check the pollution source, pollutant index and potential environmental impact of the unit, formulate a

monitoring plan, and set up and maintenance monitoring facilities, carry out self-monitoring according to the monitoring plan, do quality assurance and quality control, record and save monitoring

3 Data, publicly monitor the results to the public according to law.

5 Monitoring plan development

5.1 Wastewater discharge monitoring

5.1.1 Monitoring points Sewage discharge units shall set up monitoring points at the total discharge port of the waste water and the discharge port of the rainwater, and the discharge of domestic sewage into the water body separately Set monitoring points at the domestic sewage discharge port.

Where the monitoring location is the wastewater discharge port of the workshop or production facility, the sampling points are always located in the workshop or workshop processing facility.

Drains or outlets that specialize in the handling of such contaminant facilities.

5.1.2 Monitoring indicators and frequency the monitoring points, indicators and minimum monitoring frequency of wastewater discharge units of non-ferrous metal industrial sewage units are implemented in accordance with Table 1.

Table 1 Monitoring points, indicators and minimum monitoring frequency of waste water in non-ferrous metal industrial sewage unit

Industry type	monitoring point	monitoring indicator	monitoring frequency
Aluminum smelting	Wastewater total discharge	Flow rate, pH value, chemical oxygen demand, automatic monitoring of ammonia nitrogen	Total phosphorus day (automatic monitoring a) Total nitrogen day b Fluoride month Suspended matter, petroleum, total cyanide c, sulfide c, Volatile phenol c Quarter Lead and zinc
Lead and zinc smelting	Waste water discharge	Flow rate, pH value, chemical oxygen demand, automatic monitoring of ammonia nitrogen	Total phosphorus day (automatic monitoring a) Total nitrogen day b Total lead, total arsenic, total cadmium, total mercury day Total zinc, total copper, total chromium, total nickel
Workshop or production facility	Waste Water discharge	Suspension, fluoride, sulfide quarter	Total lead, total arsenic, total cadmium, total mercury day Total chromium, total nickel month Copper, nickel, cobalt
Smelting	Waste water discharge	Flow rate, pH value, chemical oxygen demand, automatic monitoring of ammonia nitrogen	Total phosphorus day (automatic monitoring a) Total nitrogen day b Total lead, total arsenic, total cadmium, total mercury day Total zinc, total copper, total nickel, total cobalt
Workshop or production facility	Waste Water discharge	Total lead, total arsenic, total cadmium, total mercury day	Total nickel, total cobalt month
Magnesium and titanium smelting	Waste water discharge	Flow rate, pH value, chemical oxygen demand, automatic monitoring of ammonia nitrogen	Total phosphorus day