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

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**Self-monitoring technology guidelines for pollution sources
Chemical fertilizer industry - nitrogenous fertilizer**

排污单位自行监测技术指南 化肥工业—氮肥

(English Translation)

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Foreword

To implement the "Environmental Protection Law of the People's Republic of China", "Water Pollution Prevention and Control Law of the People's Republic of China" the National Air Pollution Prevention and Control Law, which guides and regulates the self-monitoring work of the nitrogen fertilizer industrial pollutant discharge units, and formulates this standard.

This standard proposes the general requirements for the self-monitoring of nitrogen fertilizer industrial sewage units, the development of monitoring plans, information records and reports.

The basic content and requirements.

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, Chongqing Ecological Environment Monitoring Center.

This standard is approved by the Ministry of Ecology and Environment on July 31, 2018.

This standard has been implemented since October 1, 2018.

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

Sewage unit self-monitoring technology guide fertilizer industry - nitrogen fertilizer

1 Scope of application

This standard proposes the general requirements for the self-monitoring of nitrogen fertilizer industrial sewage units, the development of monitoring plans, information records and reports.

The basic content and requirements.

This standard is applicable to water, gas pollutants, noise and weekly emissions of nitrogen fertilizer industrial sewage disposal units during production and operation.

Monitor the impact of environmental quality.

Self-monitoring requirements for self-contained thermal power generating units (plants) and supporting power boilers shall be carried out in accordance with HJ 820.

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 13458 Synthetic ammonia industrial water pollutant discharge standard 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 194
Technical Specifications for Manual Air Quality Monitoring HJ 442 Code for Environmental
Monitoring of Coastal Waters 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

The following terms and definitions defined in GB 13458 apply to this standard.

Nitrogenous fertilizer industry the nitrogen fertilizer industry includes the production of synthetic ammonia and the production of urea, ammonium nitrate, ammonium hydrogencarbonate and alcohol ammonia from synthetic ammonia.

Production enterprise or production facility.

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

5.1 Wastewater discharge monitoring

All nitrogen fertilizer industrial sewage units must set monitoring points in their wastewater discharge outlets and rainwater discharge ports, monitoring indicators and the minimum monitoring frequency is performed according to Table 1.

Table 1 Monitoring indicators and minimum monitoring frequency of wastewater discharge port

Monitoring point	Monitoring indicator	Frequency of monitoring	Direct emission	indirect emissions
Waste water discharge	Flow rate, pH value, chemical oxygen demand, automatic monitoring of ammonia nitrogen	Total nitrogen day (automatic monitoring a)	Suspended matter, total phosphorus b	weeks
Petroleum, sulfide c, cyanide c, volatile phenol c				
Rainwater discharge	pH, chemical oxygen demand, ammonia nitrogen, suspended matter	day d		

Note. The municipal and above-level environmental protection authorities in the district expressly require the installation of automatic pollutant monitoring equipment pollutant indicators, which must be automatically monitored.

a After the release of the technical specification for automatic nitrogen monitoring, automatic monitoring is required.

b The area where total phosphorus is controlled by total phosphorus, and the minimum monitoring frequency of total phosphorus is performed on a daily basis.

c The monitoring frequency of sulfide, cyanide and volatile phenol in sewage unit with natural gas as raw material is carried out year by year.

d During the discharge period, it is monitored daily.

5.2.1 Organized exhaust emission monitoring

The monitoring points, monitoring indicators and monitoring frequency of organized exhaust emissions in each production process are carried out according to Table 2.

Table 2 Organized exhaust gas discharge monitoring indicators and minimum monitoring frequency

Production process monitoring point monitoring indicators monitoring frequency Taking coal for the original Preparation of coal dusty exhaust gas exhaust particles for half a year fixed Bed often Coal gasification Process raw material Gas system Hair dryer waste heat recovery system or Three waste co-firing system exhaust pipe Automatic monitoring of particulate matter, sulfur dioxide and nitrogen oxides Mercury and its compounds a for half a year Smoke blackness Gasification wastewater sedimentation tank Set processing facility exhaust Ammonia, hydrogen sulfide, non-methane total hydrocarbons, phenols, Hydrogen cyanide Quarter Benzo(a) half a year Gas furnace vent tube Particulate matter, ammonia, hydrogen sulfide, non-methane total hydrocarbons, Benzo(a)pyrene Venting period raw material Gas net Decarbonization stripping tower exhaust ammonia, hydrogen sulfide, non-methane total hydrocarbon quarter Dry coal Powder gas Flow bed gasification Process raw material Gas system Coal and drying system exhaust cylinder particulate matter, nitrogen oxides quarter Pulverized coal conveying and pressurized feed system Powder coal warehouse exhaust Particulate matter quarter Methanol b, hydrogen sulfide b years raw material Gas net Low temperature methanol washing tail gas scrubber Exhaust Methanol, hydrogen sulfide quarter Sulfur recovery exhaust gas exhaust Automatic monitoring of sulfur dioxide Sulfuric acid mist c for half a year Water coal Slurry raw material Gas net Low temperature methanol washing tail gas scrubber Exhaust Methanol, hydrogen sulfide quarter Production process monitoring point monitoring indicators monitoring frequency Flow bed gasification Process Sulfur recovery exhaust gas exhaust Automatic monitoring of sulfur dioxide Sulfuric acid mist c for half a year Crushed coal fixed Bed plus Pressure Chemical industry raw material Gas net Acid gas removal facility exhaust Methanol, non-methane total hydrocarbons, sulfur dioxide, nitrogen Oxide Quarter Sulfur recovery exhaust gas exhaust Automatic monitoring of sulfur dioxide Sulfuric acid mist c for half a year Day Gas for the original steam Conversion raw material Gas system a reformer exhaust pipe particulate matter, NOx quarter Focus Furnace gas for the original section Conversion raw material Gas system Desulfurization regeneration tank exhaust gas exhaust cylinder hydrogen sulfide, ammonia month a reformer exhaust pipe particulate matter, NOx quarter Oil for the original heavy oil section Oxidation raw material Gas net Low temperature methanol washing tail gas scrubber Exhaust Methanol, hydrogen sulfide quarter Sulfur recovery exhaust gas exhaust Automatic monitoring of sulfur dioxide Sulfuric acid mist c for half a year Urea Air scrubber (or absorption) Tower) exhaust pipe Ammonia quarter Pelletizing tower or granulator exhaust cylinder particulate matter, ammonia, formaldehyde d quarter Packaging machine exhaust pipe particulate matter year Ammonium nitrate Pelletizing tower exhaust cylinder particulate matter, ammonia quarter Packaging machine exhaust pipe particulate matter year Sewage treatment and environmental protection facilities Sewage treatment site exhaust collection Equipment exhaust pipe Hydrogen sulfide, ammonia, phenols e for half a year Non-methane total hydrocarbons e quarter Note. Exhaust gas monitoring shall be synchronized to monitor flue gas parameters in accordance with the corresponding standard analytical methods and technical specifications. (Except gas venting tube). Nitrogen fertilizer industry granulation If