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

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**Self-monitoring technology guidelines for pollution
sources--Manufacture of paint and ink**

排污单位自行监测技术指南 涂料油墨制造

(English Translation)

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Foreword

In order to implement the "Environmental Protection Law of the People's Republic of China" the Law on Drainage Prevention and Control, and the Measures for the Administration of Sewage Licensing (Trial), guide and standardize the self-monitoring work of paint and ink manufacturing discharge units, and formulate this standard.

This standard proposes the general requirements for self-monitoring, the formulation of monitoring programs, and the basic information recording and reporting of pollution discharge units of paint and ink manufacturing.

Content and requirements.

This standard is issued for the first time.

This standard is proposed and organized by the Department of Eco-Environment Monitoring, the Department of Regulations and Standards of the Ministry of Ecology and Environment.

1 Scope

This standard proposes the general requirements for self-monitoring, the formulation of monitoring programs, and the basic information recording and reporting of pollution discharge units of paint and ink manufacturing Content and requirements.

This standard applies to water, air pollutants, noise, and environmental pollution caused by paint and ink manufacturing and sewage discharge units during production and operation.

Carry out self-monitoring on environmental quality impacts.

Paint and ink manufacturing sewage discharge unit contains synthetic resin production and

modification equipment self-monitoring requirements in accordance with Guide to the Petrochemical Industry (HJ 947).

The self-monitoring requirements for self-provided thermal power generating units (plants) and supporting power boilers of the pollutant discharge units are in accordance with "South Thermal Power Generation and Boiler" (HJ 820).

2 Normative references

The content of this standard refers to the following documents or clauses therein. For undated references, the valid version (including all (Revision order) Applicable to this standard.

GB 3095 Ambient Air Quality Standard GB 14554 Emission Standard for Odor Pollutants GB/T 14848 Groundwater quality standards GB 25463 Water Pollutant Discharge Standard for Ink Industry GB 36600 Soil Environmental Quality Control Standards for Soil Pollution Risk for Construction Land (Trial) GB 37824 Air Pollutants Emission Standard for Coatings, Inks and Adhesives Industry HJ 2.2 Technical Guidelines for Environmental Impact Assessment, Atmospheric Environment HJ 194 Technical Specifications for Manual Monitoring of Ambient Air Quality HJ 664 Technical Specification for Ambient Air Quality Monitoring Locations (Trial) HJ 819 Technical Guidelines for Self-monitoring of Sewage Units HJ 820 Technical Guideline for Self-monitoring of Sewage Units HJ 947 Technical Guide for Self-monitoring of Sewage Units Petrochemical Industry HJ/T 164 Technical Specifications for Groundwater Environmental Monitoring HJ/T 166 Technical Specifications for Soil Environmental Monitoring National Hazardous Waste List

3 Terms and definitions

The terms and definitions defined in GB 25463 and the following apply to this standard.

Coating of paint

Production activities of adding pigments, solvents and auxiliary materials to natural resins or synthetic resins to produce cover materials after processing, including coating Materials and their thinners, paint removers and other auxiliary materials.

Manufacturing of ink and allied products it is made by mixing, grinding and preparing pigment, binder (vegetable oil, mineral oil, resin, solvent) and filler.

Colored paste-like substances, as well as production activities such as computer printing and ink for copiers.

Volatile organic compounds (VOCs) Organic compounds that participate in atmospheric photochemical reactions, or organic compounds determined according to relevant regulations.

When characterizing the overall emissions of VOCs, according to industry characteristics and environmental management requirements, total volatile organic compounds (as TVOC (Represented)), non-methane total hydrocarbons (represented by NMHC) as pollutant control projects.

Total volatile organic compound (TVOC) the specified monitoring method is used to measure the individual VOCs in the exhaust gas, and the total amount of VOCs is obtained by adding up the Sum of the mass concentration of VOCs. In actual work, according to the expected analysis results, single VOCs substances accounting for more than 90% of the total Take measurements and add up.

Nonmethane hydrocarbons (NMHC) Using the specified monitoring method, the total amount of gaseous organic compounds other than methane that the hydrogen flame ionization detector responds to Mass concentration meter.

Rainwater outlet

Refers to discharge outlets that discharge natural precipitation directly outside the plant boundary, directly or through facilities such as trenches, canals, or pipelines.

4 General requirements for self-monitoring

The pollutant discharge unit shall find out the pollution source, pollutant index and potential environmental impact of the unit, formulate a monitoring plan, set up and maintain monitoring Facilities, carry out self-monitoring in accordance with the monitoring plan, do quality assurance and quality control, record and maintain monitoring data, and make it public Monitoring results.

5.1.1 Monitoring points

The paint and ink manufacturing sewage discharge unit must set monitoring points at the total waste water discharge and rainwater discharge.

Set monitoring points at domestic sewage discharge outlets. Containing heavy metals such as mercury, cadmium, chromium, hexavalent chromium, lead in pigment production or other raw materials, Monitoring points must also be set up at the wastewater discharge outlets of production workshops or production facilities.

5.1.2 Monitoring indicators and frequency

The wastewater discharge monitoring point, monitoring index and minimum monitoring frequency of the sewage unit shall be implemented in accordance with Table 1.

Table 1 Wastewater discharge monitoring points, monitoring indicators and minimum monitoring frequency

Sewage list

Bit level

Monitoring point monitoring index Monitoring frequency Direct emissions indirect emissions
 Key row Dirty unit Total waste water outlet Automatic monitoring of flow rate, pH value,
 COD, ammonia nitrogen Suspended matter, chroma, total phosphorus, total nitrogen,
 five-day biochemical oxygen demand, total organic carbon, Petroleum, animal and
 vegetable oils Month quarter Volatile phenols, anilines a, total copper a, benzene, toluene,
 ethylbenzene, xylene Workshop or production facility Wastewater discharge outlet Total
 mercury, total cadmium, total chromium, hexavalent chromium, total lead month Alkyl
 mercury for half a year Non-focus Sewage list Total waste water outlet pH value, COD,
 ammonia nitrogen, suspended matter, chroma, total phosphorus, total nitrogen, Five-day
 biochemical oxygen demand, total organic carbon, petroleum, animal and vegetable oils
 Quarter half year Volatile phenols, anilines a, total copper a, benzene, toluene,
 ethylbenzene, xylene Workshop or production facility Wastewater discharge outlet Total
 mercury, total cadmium, total chromium, hexavalent chromium, total lead quarterly Alkyl
 mercury year Rainwater discharge outlet pH value, chemical oxygen demand, ammonia
 nitrogen monthb Domestic sewage discharge pH value, COD, ammonia nitrogen,
 suspended matter, total phosphorus, total nitrogen, five-day Oxygen demand, animal and
 vegetable oils month/

Note 1: The municipal and above-level eco-environmental departments with districts explicitly require the installation of automatic monitoring equipment for pollutant indicators, and must adopt automatic monitoring.

Note 2: Key pollutant discharge units are enterprises and institutions included in the water environment key pollutant discharge units list.

a It is suitable for ink manufacturing enterprises that contain pigments and have an annual output of 1000 t or more.

bMonthly monitor for rainwater discharge when there is flowing water discharge. If there is no abnormal situation in the monitoring for one year, it can be relaxed to carry out monitoring once a quarter.

5.2.1 Organized exhaust emission monitoring points, indicators and frequencies

5.2.1.1

Organized waste gas emission monitoring points, monitoring indicators and minimum monitoring frequency of each pollution production link of the pollutant discharge unit of the paint and ink manufacturing are in accordance with the table 2Execute.