

HJ

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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**Guidelines for feasible technologies for pollution prevention
and control in the automobile industry**
(English Translation)

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1 Scope of application

This standard proposes feasible technologies for the prevention and control of exhaust gas, waste water, solid waste and noise pollution in the automobile industry.

This standard can be used as the environmental impact assessment of automobile industry enterprises or production facilities construction projects, the formulation and revision of national pollutant discharge standards, and the A reference for licensing management and pollution prevention technology selection.

This standard does not apply to the pollution prevention and control of casting and electroplating processes in the production of the automobile industry.

2 Normative references

This standard refers to the following documents or clauses thereof. For dated references, only the dated version applies to this standard.

For undated references, the latest edition (including all amendments) applies to this standard.

GB 5085 Hazardous Waste Identification Standard GB 8978 Integrated Wastewater Discharge Standard GB 9078 Industrial Furnace Air Pollutant Emission Standard GB 12348 Industrial Enterprise Boundary Environmental Noise Emission Standard GB 14554 Emission Standard of Odor Pollutants GB 16297 Comprehensive Emission Standard of Air Pollutants GB 18484 Standard for Pollution Control of Hazardous Waste Incineration GB 18597 Hazardous Waste Storage Pollution Control Standard GB 18599 General Industrial Solid Waste Storage and Landfill Pollution Control Standard GB 20952 Gas Station Air Pollutant Emission Standard GB 24409 Limits of Hazardous Substances in Vehicle Coatings GB 33372 Adhesive volatile organic compound limit GB 34330 General Rules for the Identification Standard of Solid Waste GB 37822 Volatile organic compound fugitive emission control standard GB 38508 Cleaning agent volatile organic compound content limit GB 50014 Design Specification for Outdoor Drainage GB 50156 Specification for Design and Construction of Automobile Refueling Station GB/T 3730.1 Terms and Definitions of Types of Automobiles and Trailers GB/T 4754-2017 National Economic Industry Classification GB/T 15089 Classification of Motor Vehicles and Trailers GB/T 16758 Classification and technical conditions of exhaust hoods GB/T 17350 Special Purpose Vehicles and Special Trailers Terminology, Codes and Compilation Methods GB/T 38597 Technical requirements for coating products with low volatile organic compound content GB/T 39198 General Solid Waste Classification and Code GB/T 50934 Technical Specification for Anti-seepage of Petrochemical Engineering 3.4 special purpose vehicle Vehicles equipped with special equipment and special functions, used to undertake special transportation tasks or special operations and other special purposes. Specialize Vehicles are divided into van vehicles, tank vehicles, dump trucks, warehouse grid vehicles, hoisting vehicles, special structure vehicles, etc. special purpose car it is generally manufactured on the basis of automobile chassis.

special purpose trailer Trailers equipped with special equipment and special functions are used to undertake special transportation tasks or special operations and other special purposes. Specialize Trailers are divided into van trailers, tank trailers, dump trailers, warehouse grid trailers, hoisting trailers, special structure trailers, etc. Special Trailer it has the function of a special vehicle only in combination with a tractor.

parts and accessories Including engine parts, trailer parts, auto parts and accessories, etc. From the aspects of structure, material, production process and fouling characteristics, it can be Divided into assembly parts, riveting parts, core parts, brazing parts, resin parts,

powder metallurgy parts and other parts Components.

available techniques of pollution prevention and control According to my country's environmental demand and economic level in a certain period of time, comprehensive use of pollution prevention technology and pollution control technology in the process of pollution prevention and control technology and environmental management measures to stably meet the national pollutant discharge standards and large-scale application of technology.

spray system spray painting system the general term for the combination of the same or dissimilar spray coatings to achieve the intended purpose and effect of spraying, including primers,, and paints Spraying and drying of coatings such as (or natural topcoat) and varnish. Generally expressed in mCnB, where C and B respectively represent spraying operation and drying operations, m and n represent the times of spraying and drying operations, respectively.

volatile organic compounds (VOCs) Organic compounds participating in atmospheric photochemical reactions, or organic compounds determined according to relevant regulations.

When characterizing the overall emission of VOCs, according to industry characteristics and environmental management requirements, total volatile organic compounds (with TVOC) can be used.

expressed), non-methane total hydrocarbons (expressed as NMHC) as pollutant control items.

3.10

total volatile organic compounds (TVOC) the specified monitoring method is used to measure the single VOCs substances in the exhaust gas, and the total amount of the VOCs substances is obtained by adding them up.

The sum of the mass concentrations of VOCs substances. In actual work, according to the expected analysis results, single-item VOCs accounting for more than 90% of the total should be analyzed.

Take the measurements and add up.

3.11

non-methane hydrocarbons (NMHC) Using the specified monitoring method, the sum of the gaseous organic compounds, excluding methane, for which the hydrogen flame ionization detector responds, in terms of carbon mass concentration meter.

3.12

oil mist

In the production process of automobile and engine parts, the volatilization of mineral oil used in wet machining, heat treatment of metal materials, etc.

The product of its thermal decomposition or cracking, its existence forms include vapor, droplet, etc.

3.13

Volatile organic compound emissions per unit coating area specific VOCs emission in the painting process, the primer, putty, glue, solvent scrubbing, spraying, drying, waxing and repairing etc.

The cumulative VOCs emissions in the process and equipment cleaning, in g/m².

3.14

VOCs-containing materials this standard refers to raw and auxiliary materials, products and wastes (slag, liquid) with a mass proportion of VOCs greater than or equal to 10%, as well as organic polymer raw materials.

Auxiliary materials and waste (slag, liquid).

3.15

fugitive emission

Irregular emissions of air pollutants not through exhaust stacks, including open workplaces, and through crevices, vents, open doors and windows and discharges like openings (holes), etc.

3.16

airtight closed/close Contaminants are not in contact with the ambient air, or are isolated from the ambient air by sealing materials, sealing equipment, or operating methods.

3.17

closed space

A closed area or closed building formed by using a complete envelope to block pollutants, workplaces, etc. from the surrounding space.

Except for personnel, vehicles, equipment, and materials entering and leaving the closed area or closed building, as well as the exhaust pipes and vents established according to law, the doors and windows shall be closed.

Windows and other openings (holes) should be kept closed at all times.