

ICS 13.040.40

CCS Z62



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

GB 13223-2011

Emission standard of air pollutants for thermal power plants

火电厂大气污染物排放标准

(English Translation)

Issued on: September 29, 2011

Implemented on: January 1, 2012

Issued by: Ministry of Ecology and Environment

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Foreword

In order to carry out "the Protection Act of the People's Republic of china", "Atmospheric Pollution Prevention Act of the People's Republic of China", and "The state council on implementing the scientific concept of development - to strengthen environmental protection decision" and other laws and regulations; improve the quality of environment; prevent and cure the pollution of the air pollutants from thermal power plants; promote technical progress and sustainable development of thermal power industry, this Standard is formulated for above purposes.

This Standard defines the requirements of concentration limits, supervision and monitor to the emission of air pollutants of thermal power plants.

This Standard's concentrations of pollutants emission are qualitative concentrations.

This Standard was initially published in 1991, first-time revised in 1996 and second-time revised in 2003.

The main contents of this revision are as followed.

- ADJUST the concentration limits of the air pollutants' emission;
- DEFINE the time limits for current thermal power boilers to reach stricter level of concentration limits of emission;
- CANCEL the provision about maximum allowable emission rate of sulfur

dioxide for entire plant;

-ADD concentration limits of emission of gas boilers' air pollutants;

-ADD specific emission limits of air pollutants.

Water pollutants, odor pollutants and environmental noise discharged by thermal power plants are subject to the national emission standard of pollutants. The identification, treatment and disposition of producing solid waste are subject to the national standard of controlling solid waste pollution.

From the date of implementation of this Standard, the emission control of air pollutants for thermal power plants must be enforced according to provisions of this Standard.

And the relevant provisions of national emission standard "Emission standard of air pollutants for thermal power plants" (GB13223-2003) are no longer required.

For those items of air pollutants not yet specified in this Standard, the local provincial government can formulate emission standard of local pollutants; to those items of air pollutants which have been specified in this Standard, the local provincial government level can formulate stricter emission standard of local pollutants.

This Standard was organized and initiated by the Ministry of Environmental Protection Science and Technology Standards Division.

This Standard was drafted by organizations. Chinese Research Academy of Environmental Sciences, and State Power Environmental Protection Research Institute.

This Standard was approved by the Ministry of Environmental Protection on July 18, 2011.

This Standard shall be implemented from January 1, 2012.

This Standard shall be explained by the Ministry of Environmental Protection.

Emission standard of air pollutants for thermal power plants

1 Scope

This Standard defines the requirement of concentration limits, supervision and monitor to the emission of air pollutants for thermal power plants; and related

provisions of implementation and supervision of standard.

This Standard applies to air pollutants emission management for current thermal power plants and for the plant project's environmental influential assessment, environmental engineering, acceptance of environmental protection and after go-into-production.

This Standard applies to the coal-fired power boilers of which output of single-unit is more than 65 t/h, except stoker furnace and layer burner; various coal-powder power boilers with different capacities; oil-fired and gas-fired power boilers of which output of single-unit is more than 65t/h; and various gas turbine power plants with different capacities. For those boilers using fuel of gangue, biomass, oil shale, petroleum coke etc. and of which output of single-unit is more than 65 t/h, the requirement of circulating fluidized bed-boilers' pollutants emission control in this Standard shall be referred for implementation. Gas turbines of integrated gasification combined cycle (IGCC) carry out gas turbine's emission limits of burning gas in this Standard.

This Standard is not applicable to the thermal power plants fired with domestic wastes and hazardous wastes.

This Standard applies to lawful behavior of pollutants emission. For new location set-up for pollution source and the management of current pollution source within special protected, they shall be carried out according to "The Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution", "The Law of the People's Republic of China on the Prevention and Control of Water Pollution", "Marine Environmental Protection Law of the People's Republic of China", "The Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes", "The Law of the People's Republic of China on Evaluation of Environmental Effects" and other laws and regulations.

2 Normative reference standards

This Standard quotes following documents or their provisions. For undated references, the latest edition applies to this Standard.

GB/T 16157 Determination of Particulates and Sampling Methods of Gaseous Pollutants Emitted from Exhaust Gas of Stationary Source

HJ/T 42 Determination of nitrogen oxide from exhaust gas of stationary Source ultraviolet spectrophotometry

HJ/T 43 Determination of nitrogen oxide from exhaust gas of stationary source hydrochloric acid naphthalene ethylenediamine spectrophotometry

HJ/T 56 Determination of sulfur dioxide from exhaust gas of stationary source Iodimetry

HJ/T 57 Determination of sulfur dioxide from exhaust gas of stationary source constant potential electrolysis

HJ/T 75 Specifications for continuous emission monitoring systems of flue-gas emitted from stationary sources (on trial)

HJ/T 76 Specifications and test procedures for continuous emission Monitoring systems of flue-gas emitted from stationary sources (on trial)

HJ/T 373 Technical Specifications for Quality Assurance and quality control for monitoring of stationary pollution source (on trial)

3 Terms and Definitions

The following terms and definitions apply to this Standard.

3.1

Thermal power plant

Power plant of burning solid, liquid or gaseous fuel

3.2

Standard condition

The condition of gas, at temperature of 273K and at pressure of 101 325 Pa, is called "standard condition" for short. The specified concentration of air pollutants in this Standard refers to the value of dry gas, under this Standard Condition.

3.3

Oxygen content