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

GB 13271-2014

**Emission standard of air pollutants for boiler
(English Translation)**

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1 Scope

This standard specifies the maximum allowable emission concentration limits and smoke blackness limits for particulate matter, sulfur dioxide, nitrogen oxides, mercury and their compounds in boiler flue gas.

This standard applies to steam boilers, which have a single output of 65 t/h and below, hot water boilers of various capacities, organic heat carrier boilers using coal, oil and gas as fuel; layer-burning furnaces and coal thrower furnace of various capacities.

Boilers that use briquettes, coal-water slurry, coal gangue, petroleum coke, oil shale, biomass pellet fuel, etc. shall refer to the emission control requirements of coal-fired boilers in this standard.

This standard does not apply to boilers, that use domestic waste and hazardous waste as fuel.

This standard applies to the air pollutant emission management of boilers in use, as well as the environmental impact assessment of boiler construction projects, the design of environmental protection facilities, the acceptance of completed environmental protection work, the management of air pollutant emissions after production.

This standard applies to pollutant discharge activities permitted by law. For the site selection of newly established pollution sources and the management of existing pollution sources in special protection areas, it shall be implemented, in accordance with the relevant provisions of the "Atmospheric Pollution Prevention and Control Law of the People's Republic of China", the "Water Pollution Prevention and Control Law of the People's Republic of China", the "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 Waste", the "Law of the

People's Republic of China on the Prevention and Control of Radioactive Pollution", the "Environmental Impact Assessment Law of the People's Republic of China", as well as other laws, regulations, rules.

2 Normative references

The contents of this standard refer to the following documents or their provisions. For undated referenced documents, the latest edition applies to this standard.

GB/T 5468 Measuring method for smoke and dust of boiler emission

Boiler

Equipment that uses heat energy or other thermal energy, which is released by fuel combustion, to heat hot water or other working fluids, to produce steam, hot water or other working fluids, which have specified parameters (temperature, pressure) and quality.

3.2

In-use boiler

Before the date of implementation of this standard, boilers that have been built and put into operation OR whose environmental impact assessment documents have been approved.

3.3

New boiler

From the date of implementation of this standard, the new, renovated, expanded boiler construction projects, whose environmental impact assessment documents had been approved.

3.4

Organic fluid boiler

A boiler that uses organic liquid as the heat carrier fluid.

3.5

Standard condition

The state of boiler flue gas, at a temperature of 273.15 K and a pressure of 101325

Pa, which is referred to as the "standard state". The emission mass concentrations, which are specified in this standard, refer to the values in dry flue gas under standard conditions.

3.6

Stack height

The height -- from the ground level where the stack (or boiler room) is located to the stack

outlet.

3.7

O₂ content

After fuel combustion, the excess free oxygen contained in the flue gas, which is usually expressed as a dry basis volume percentage.

3.8

Key region

According to the requirements of environmental protection work, the areas where the density of land development is high and the environmental carrying capacity begins to weaken, OR where the atmospheric environment capacity is small and the ecological environment is fragile, so serious atmospheric environmental pollution problems are prone to occur and air pollutant emissions need to be strictly controlled.

3.9

Special limitation for air pollutants

Air pollutant emission limits, which are formulated and implemented, in order to prevent and control regional air pollution, improve environmental quality, further reduce the emission intensity of air pollution sources, more strictly control pollution emissions. The control level of this limit reaches an internationally advanced or leading level; it is applicable to key regions.

4 Air pollutant emission control requirements

4.1

In-use steam boilers above 10 t/h and hot water boilers above 7MW will implement the emission limits, which are specified in GB 13271-2001, before September 30, 2015.

In-use steam boilers of 10 t/h and below and in-use hot water boilers of 7MW and below will implement the emission limits, which are specified in GB 13271-2001, before June 30, 2016.

4.2

In-use steam boilers above 10 t/h and in-use hot water boilers above 7MW will implement the air pollutant emission limits, which are specified in Table 1, from

October 1, 2015. In-use steam boilers of 10 t/h and below and in-use hot water boilers of 7MW and below will implement the air pollutant emission limits, which are specified in Table 1, from July 1, 2016.

higher than the tallest building.

4.6

If boilers constructed in different periods use a mixed method to emit flue gas, meanwhile the selected monitoring location can only monitor the concentration of atmospheric pollutants in the mixed flue gas, THEN, the most stringent emission limit among the limits for each period shall be implemented.

5.1 Pollutant sampling and monitoring requirements

5.1.1

Boiler user enterprises shall establish enterprise monitoring systems, formulate monitoring plans, carry out self-monitoring of pollutant emission conditions and their impact on the quality of the surrounding environment, keep original monitoring records, publish the monitoring results, in accordance with the provisions of relevant laws and the "Environmental Monitoring Management Measures".

5.1.2

Boiler user enterprise shall design, construct, maintain permanent sampling ports, sampling test platforms, sewage outlet signs, in accordance with the requirements of environmental monitoring management provisions and technical specifications.

5.1.3

Sampling of boiler exhaust gas shall be carried out, at the specified pollutant emission monitoring location, according to the types of pollutants to be monitored. If there is an exhaust gas treatment facility, monitoring shall be done behind the facility.

The monitoring and sampling of air pollutants in the exhaust pipe shall be carried out, in accordance with the provisions of GB 5468, GB/T 16157 or HJ/T 397.

5.1.4

Steam boilers of 20 t/h and above and hot water boilers of 14MW and above shall be equipped with automatic monitoring equipment for pollutant emissions, networked with the monitoring center of the environmental protection department, ensure normal operation of the equipment, in accordance with provisions of the relevant laws and the

"Automatic Monitoring Management Methods of Pollution Sources".

5.1.5 For the monitoring of air pollutants, monitoring quality assurance and quality

control shall be carried out, in accordance with the requirements of HJ/T 373.

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