

HJ

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**Technical specifications for emission monitoring of stationary
source**

(English Translation)

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Foreword

This Standard is established to carry out the Environmental Protection Law of the People's Republic of

China, and Law of the People's Republic of China on the Prevention and Control of Atmospheric

Pollution, prevent and control atmospheric pollution, and improve environmental quality.

This Standard specifies the manual sampling and determination of particulate and gaseous pollutants

monitoring methods in smoke flue, chimney, vent emission funnel and other fixed pollutant sources; and

the monitoring methods of the portable instruments. It formulated corresponding provisions on the

preparation for emission monitoring of stationary source, determination of exhaust emission parameter,

sampling and determination method of particulates and gaseous pollutant in exhaust, and the quality

assurance of monitoring, etc.

Annex A of this Standard is Informative Annex.

This Standard is first-time released.

This Standard was proposed by the scientific and technical standard department of State Environmental

Protection Administration.

This Standard was mainly drafted by organizations. China National Environmental Monitoring Center,

and Shenyang Municipal Environmental Monitoring Center.

This Standard was approved by State Environmental Protection Administration on December 7, 2007.

This Standard shall be Implemented from March 1, 2008.

This Standard shall be interpreted by State Environmental Protection Administration.

Technical specifications for emission monitoring of stationary source

1 Scope

This Standard specifies the manual sampling and determination of particulate and gaseous pollutants

monitoring methods in smoke flue, chimney, vent emission funnel and other fixed pollutant sources; and

monitoring methods of the portable instruments. It formulated corresponding provisions on the

preparation for emission monitoring of stationary source, determination of exhaust emission parameter,

sampling and determination method of particulates and gaseous pollutant in exhaust, and the quality

assurance of monitoring etc.

This Standard applies to the environmental monitor stations at all levels, industry and enterprise

professional organizations, and environmental scientific research institutes, to carry out the emission

monitoring of exhaust pollutants of stationary source; environmental protection acceptance monitoring

upon the completion of construction project; monitoring on the control effect of pollution treatment

facilities; verification monitoring on continuous emission monitoring system; and the technical research

monitoring of clean production process and pollution prevention.

2 Normative references

The articles contained in the following documents become part of this Standard when they are quoted

herein. For the undated documents so quoted, all the modifications or revisions made thereafter shall be

applicable to this Standard.

GB/T 16157 The determination of particulates and sampling methods of gaseous pollutants emitted from

exhaust gas of stationary source

HJ/T 47 Technical conditions of sampler for stack gas

HJ/T 48 Technical conditions of sampler for stack dust

ISO 12140 Agricultural machinery - Agricultural trailers and trailed equipment - Drawbar jacks

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

3.1 Pollution source

The facilities or building constructions (such as workshops) that emit atmospheric pollutants.

3.2 Stationary source

The pollution source that generates exhaust gases from the boiler and industrial furnace of coal, fuel oil

and fuel gas; and from the production process of petrochemical engineering, metallurgy and building

materials; which is emitted into the air via exhaust funnel.

3.3 Particulates

The solid and liquid granular material suspended in the exhaust gases and generated from the

combustion, composition, decomposition of fuel and other materials, and the mechanical treatment of

various materials.

3.4 Gaseous pollutants

All kinds of pollutants dispersed in exhaust gases in the state of gas.

3.5 Operational condition

The state of production operation of devices and facilities.

3.6 Isokinetic sampling

It refers to keep the plane of sampling nozzle onto airflow of exhaust gas, so as the flow speed of

entering the sampling nozzle is equal to exhaust flow speed at the measurement point.

3.7 Dry flue gas of standard conditions

The exhaust gas excluding moisture under conditions of temperature of 273.15 K and pressure of 101

3.8 Excess air coefficient

The ratio of the actual air supply amount AND the theoretical air requisite amount when fuel is burning.

4 Preparations for testing

Formulation of monitoring scheme

4.1.1

Collect related technical data, and understand the technological process of production and the

performance of production facilities that generated exhaust gas, the category of the principal pollutant