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

**GB 13746-2008**

Replacing GB 13746-1992

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**Safety and hygiene code for working with lead**

铅作业安全卫生规程

**Issued on: December 23, 2008**

**Implemented on: December 1, 2009**

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**Issued by: General Administration of Quality Supervision, Inspection and  
Quarantine;  
Standardization Administration of the PRC**

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## Foreword

All the technical contents of this standard is mandatory. This standard replaces GB 13746-1992 "lead job safety and health regulations." This standard compared with GB 13746-1992 amended as follows:

--- The Chapter 1, "subject matter and scope" to "" and delete obsolete stereotype from the scope of the standard Brush work, an increase of paints, plastics, glass, ceramics, shipbuilding and other lead-related jobs;

--- The Chapter 2, "Normative references" to "normative references";

--- To Chapter 3, "term" to "Terms and Definitions", on the "lead" the definition has been modified and improved, delete the words "molten lead Job" fixed Justice, an increase of "working with lead" is defined;

--- Increase in Chapter 4, "General Requirements" for the location and layout, electrical safety, mechanical safety, noise, technology and other aspects of the security guard Health and technical requirements;

--- Original standard Chapter 5, "ventilation purification" was renamed "ventilation and purification equipment", and modify some provisions of the original standard And adjusted as Chapter 7 of this standard;

--- Original standard Chapter 6, "Health and Safety Management" in the storage and transportation of the contents of this standard as Chapter 6, "Storage and transport", and Original standard relevant content accordingly amended and supplemented;

--- Original standard Chapter 6, "Health and Safety Management" was renamed "management" to delete the specific requirements of internal operations, an increase of occupation Safety and health management organizations, safety and health management systems and content of occupational health surveillance, personal protection and public health requirements into Line supplementary part of the chapter as Chapter 8 of the standard content. This standard was proposed by the State Administration of Work Safety. This standard produced by the National Standardization Technical Committee on Security. This standard is drafted by: Beijing Labor Protection Institute of Science. Participated in the drafting of this standard. Jiaozuo Oriental Gold & Lead Co., Ltd., Yangzhou Hengtong Environmental Protection Technology Co., Ltd. The main drafters of this standard. Wu Fang Gu, Zhang Yizheng, to the pillars, Lu Lin, Liu Yan, Huang Yandi, Zhang Xiaohu, Wang Fu, Lu Yu Wen. This standard replaces the standards previously issued as follows:

--- GB 13746-1992. Lead job safety and health regulations

## 1 Scope

GB 13746 is the mandatory safety and hygiene code for work involving lead - smelting and refining, lead salt production, lead-acid battery manufacture, cable sheathing, and the trades that handle lead or its compounds. It covers the layout and ventilation of the workplace, the containment of lead dust and fume, personal protective equipment, personal hygiene facilities and the discipline that prevents lead being carried home, together with health surveillance of the exposed workers. It is the document applied when a lead facility is inspected for occupational hazard. Issued on 23 December 2008, in force since 1 December 2009, replacing GB 13746-1992. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the edition it replaces are taken from there. The clause text, the tables and the numeric limits are not reproduced on this page - they are in the document itself, which is delivered in full in English translation.

This standard specifies the technical and administrative requirements lead job safety and health. This standard applies to the smelting of lead, lead salt production, the production of lead-acid batteries, cables and production of paints, plastics, glass, ceramics, shipbuilding and other Jobs involving lead the industry.

## 2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 2894 Safety Signs and use guidelines

GB 5083 production equipment with safety and health General

GB 13733 Toxic workplace air sampling specification

GB 15603 commonly used hazardous chemicals stored General

GB/T 16180 identifying employees the ability to work related injuries and occupational disability rating

GB/T 16758 hood classification and technical conditions

GB/T 17398 smelting of lead dust and poison regulations

GB 19891 Safety of machinery designed hygiene requirements

GB 50016 architectural design code for fire protection

GB 50019 Heating, ventilation and air conditioning design

GB 50052 power supply and distribution system design specifications

GB 50055 Universal power distribution equipment design specifications

GB 50187 for General graphic design specification AQ/T 9002 production units of production safety accident emergency response plan guidelines

## 3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 Metallic lead, more than 10% of lead alloys containing lead, lead salts, and inorganic lead compounds, but no other organic lead compounds.

3.2 In the lead, lead alloys, lead or lead compounds sinter deposit mix, reduction, melting, casting, hot and cold processing, regeneration, physico-chemical treatment and storage Operation of industry, including those engaged in cleaning operation leaded device internal operations and lead the workplace.

## 4 General requirements

4.1 Lead jobs enterprises new construction, renovation or expansion project should be carried out assessment of occupational hazard and safety assessment. Lead job site

4.2 enterprises should comply with the relevant requirements of GB 50016 and GB 50187's.

4.3 has lead fume and dust generating sources should be isolated from other plant workshop, the workshop should be set on the upwind side of the plant annual minimum frequency of wind direction. Lead job shop design and layout should meet the requirements of GB 50187.

4.4 All the installation and use of electrical equipment should comply with the relevant requirements of GB 50052 and GB 50055's.

4.5 All the installation and use of machinery and equipment shall meet the requirements of GB 5083 and GB 19891.

4.6 lead time lead smoke workplace weighted average allowable concentration should not exceed 0.03mg/m<sup>3</sup>, lead dust time weighted average allowable concentration should Not more than 0.05mg/m<sup>3</sup>, exhaust gas purification treatment should be carried out.

4.7 Lead continuous operator workplace noise exposure 8h per day, noise level should not exceed 85dB (A).

4.8 Lead production operations should be given priority use of advanced technology and equipment, improve the production process is airtight, mechanization and automation level.

4.9 Lead job shop floor should be easy to clean and lead dust recycling.

4.10 All raw materials and semi-finished storage location should be determined and arranged to collect lead dust container. Lead melting pot near

4.11 and the mouth should be set casting container storage scum.

4.12 Lead workplaces allow wet sweeping production equipment, should be taken to sweep wet, wet wipe method. Wastewater containing lead should focus on treatment, discharge, or Recycling latter purification.

4.13 Lead workplaces should be provided with effective ventilation and provided emergency ventilation facilities.

## 5 Process Equipment

5.1 Lead Smelting Lead smelting industry process equipment should conform to GB/T 17398 relevant requirements.

5.2 lead-acid batteries

5.2.1 lead melting pot should be set to closed exhaust purification device. Can not sealed,