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

GB/T 32146.1-2015

**Technical requirements for the design and construction of
inspection and testing laboratories - Part 1: General
specification**

检验检测实验室设计与建设技术要求 第1部分：通用要求

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Quarantine;
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Foreword

GB/T 32146 "inspection laboratory design and construction technical requirements", it includes the following components.

--- Part 1. General requirements;

--- Part 2. electrical laboratory;

--- Part 3. food laboratories. This section GB/T 32146 Part 1. This section drafted in accordance with GB/T 1.1-2009 given rules. Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents. This part is proposed by China Machinery Industry Federation. This part of the National Instruments and Laboratory Equipment Standardization Technical Committee (SAC/TC526) centralized. This part mainly drafted by: Head of Instrumentation Technology and Economy Institute, Guangdong Product Quality Supervision and Inspection Institute, river North Inspection & Quarantine Technology Center, China Institute of Metrology, Beijing Hui Nordisk (Beijing) Technology Co., Ltd. Tak friend technology Detection (Tianjin) Co., Ltd., Fujian Province, product quality inspection Institute, China National Accreditation Center, national food safety risk assessment Assessment centers, Article Numbering Center of China. The main drafters of this section. Zhang Guiling, Huang Yu, Wang Jianchang, Wang city, Liu Yi, Yuan Jing, Li Siyuan, Huang Jianyu, Lu Feilong, Houling Lin, Chen Di, when FANG Xiao, Mei Ke, Mayu Song, Liu Tang book, Jiang Jianhui, Loyalty concerning the Fixation Zhang Xiaoyun, skin Xiao Dong, Li Ye Peng, Lee Soo Young, Yi Lianfeng. Inspection and testing laboratory design and construction of the technical requirements Part 1. General requirements

1 Scope

Part 1 of China's series on the design and construction of inspection and testing

laboratories - the general specification, and the document a laboratory director and an architect need before either can brief the other. A testing laboratory is not an office with benches in it: it is a building whose services, layout and environment are part of the measurement, and a laboratory that has to fight its own building will never be accredited for the work it was built to do. This part specifies the general technical requirements for the design and construction of inspection and testing laboratories, and it applies to their planning, design, construction, alteration and acceptance. It works outward from the work itself: the planning and the siting, the functional zoning that separates the sample reception, the preparation, the instrument rooms, the wet chemistry and the office and welfare areas, and the flows of people, of samples and of waste that must not cross. Then the building: the structure, with the vibration and settlement limits that a balance room or an electron microscope imposes; the interior finishes, chosen to be cleanable and chemically resistant; the environmental services, with the temperature, humidity, air cleanliness, pressure differential and lighting each room requires; the electrical supply with its stability, its earthing and its uninterruptible provision; the laboratory gases, water and drainage; the fume cupboards and the local exhaust that decide whether the chemistry can be done safely; the electromagnetic and acoustic environment; and the fire, safety, waste and security provisions. It closes with the requirements for construction and for acceptance, which is where a laboratory building is either proved to meet the figures it was designed to or is not. Issued on 10 December 2015 and in force since 1 July 2016.

GB/T 32146 provisions of this part of the inspection and testing laboratories (hereinafter referred to as laboratory) classification, design, design process, regulation Planning and design, system design and detailed design requirements. This section applies to new construction, renovation and expansion of laboratory design and construction.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 190 packaging and marking of dangerous goods

GB 8978 Integrated Wastewater Discharge Standard

GB 14554 standard malodorous emissions

GB 16297 Air Pollutant Emission Standards

GB 16895.3 Electrical installations of buildings - Part 5-54. Selection and erection of electrical equipment

--- grounding configurations, and protective conductors Protective bonding conductor

GB/T 16895.6-2014 low-voltage electrical installations Part 5-52. Selection and erection of

electrical equipment - Wiring systems Section 7-713

GB 16895.29-2008 part Electrical installations of buildings. special installations or locations furniture

GB 18599 general industrial solid waste storage and disposal site pollution control standards

GB 18871 ionizing radiation protection and safety of radiation sources basic standards

GB 19489 General requirements for laboratory biosafety

GB 20425 saponin industrial water pollutant discharge standards

GB/T 23809 emergency guidance systems - Setting principles and requirements