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

GB 30186-2013

Safety specification for alumina production

氧化铝安全生产规范

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Table of Contents

- 1 Scope
- 2 Normative reference documents
- 3 Basic safety requirements
 - 3.1 Design
 - 3.2 Construction
 - 3.3 Site
 - 3.4 Factory area
 - 3.5 Plant
 - 3.10 Acts
 - 3.11 Clean up the repair operation
 - 3.12 Traffic, fire

Foreword

The standard 3.9,

3.11 and Chapter 4 are mandatory and the rest are recommended. This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard is proposed by the State Administration of Work Safety. This standard by the National Safety Production Standardization Technical Committee (SAC/TC288) and the National Nonferrous Metals Standardization Technical Committee (SAC/TC243). The drafting of this standard. China Aluminum Co., Ltd. Shandong Branch, Shandong Nanshan Aluminum Co., Ltd., China Nonferrous Metals Industrial Standard Measurement Quality Institute, China Aluminum Corporation Henan Branch, Luoyang Xiangjiang Wanji Aluminum Industry Co., Ltd. The main drafters of this standard. Du Xiangbing, Ma Haiyan, Zhong Yimei, Yang Zeyu, Wen Jinde, Liu Weicheng, Zhou Qingjun, Liu Haishi, Chen Hongjun, Li Yulian. Standard for safe production of alumina

1 Scope

GB 30186-2013 is the Chinese national standard on safety specification for alumina production, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 31 December 2013 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization

Administration of China, and has been in force since 1 December 2014. Classification: ICS 13.100, CCS H09. 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 issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the basic safety requirements for the safe production of alumina, equipment and equipment safety requirements and emergency response measures. This standard applies to the safety management of alumina enterprises in the design, construction, installation, production and maintenance of equipment.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, the only dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB 3095 Ambient Air Quality Standard

GB 4053.1 Safety requirements for stationary ladders and platforms - Part 1. Steel ladders

GB 4053.2 Safety requirements for fixed ladders and platforms - Part 2. Steel ladders

GB 4053.3 Safety requirements for fixed ladders and platforms - Part 3. Industrial protective railings and steel platforms Safety code for railway and road transport in industrial enterprises Code for gas safety of industrial enterprises

GB 6222 Classification of Casualties in Enterprise Workers

GB 8958 Safety rules for hypoxia hazard operation Comprehensive Emission Standard for Wastewater Code for selection of individual protective equipment

GB/T 11651 Standard for Environmental Noise Discharge of Industrial Enterprises

GB/T 13861 Hazardous and Hazardous Factors in Production Processes and Codes

GB 16297 Integrated Emission Standard for Air Pollutants Identification of Major Hazardous Sources of Hazardous Chemicals Code for design of town gas GB 50028

GB 50034 architectural lighting design standards GB Z1 industrial enterprises design health standards GB Z

2.1 Workplace Hazardous Factors Occupational Exposure Limits - Part 1. Chemical Hazardous Factors Occupational exposure limits for workplace hazards Part 2. Physical factors Technical specification for safety of AQ2006 tailings Guidelines for the Preparation of Emergency Preparedness for Safety Production Accidents in Production and Operation Units AQ/T 9002 Tailings Dam Safety Supervision and Management Provisions (State Administration of Work Safety Order No. 6)

3.1 Design

3.1.1 The safety facilities for new construction, alteration and expansion projects shall be designed, constructed and put into production and use at the same time as the main works. Investment in safety facilities should be included in the proposed project budget.

3.1.2 The design of the safety facilities of the construction project shall be undertaken by the design unit with the corresponding qualification and shall be examined by the production safety supervision and administration department agree. If the safety facilities are designed for major changes, they shall be approved by the original design unit and submitted to the original examination department for examination and approval.

3.1.3 The design of the safety facilities of the construction project shall include the prevention and control measures of the major disasters, the facilities, equipment and equipment to be determined. Home standards and industry standards.

3.1.4 design should be advanced technology, economic rational, safe and reliable, the preferred use of a high degree of safety and the high degree of technology and equipment to improve the mechanization With the level of automation, reduce the operator's labor intensity, reduce personal injury factors.

3.1.5 The introduction of foreign technical projects or equipment supporting the design of the project should be consistent with the relevant laws and regulations on safe production.

3.1.6 plant design should consider good ventilation and cooling, flood control, lighting and other external environmental conditions.

3.2 Construction

3.2.1 Construction units should be designed and constructed in accordance with the approved safety facilities. During the construction period, it is found that the safety facilities of the construction project are unreasonable or In the event of a major accident, the construction shall be stopped immediately and the construction unit shall be reported.

3.2.2 concealed works should be the construction unit, the supervision unit and the construction unit tripartite mutual examination and acceptance, experience acceptance, can be hidden.

3.2.3 Construction is completed, the construction unit should be completed the instructions, the completion of plans and change the instructions, delivery units to archive.

3.2.4 After the completion of the construction project, the safety production supervision and management department shall carry out the safety and safety conditions of the construction project. Income, acceptance of qualified, can be put into normal operation.

3.3 Site

3.3.1 site should be fully considered the surrounding environment, the overall planning, should not be adjacent to residential areas, scenic tourist areas, cultural relics protection areas, living water and Important agricultural areas; taking into account the waste water, waste, exhaust emissions, disposal and power grid flicker and other pollution caused by the impact and take the necessary anti Protection measures.

3.3.2 site should have good engineering geological and hydrogeological conditions, should avoid the fault, landslide, debris flow, silt, underground river, collapse Trapped, karst, expansive soil areas and other poor geological sites and high groundwater level and corrosive areas, according to seismic intensity level standard fortification.

3.3.3 The site shall not be located in the following areas. the mining value of the mining; blasting dangerous areas and mining subsidence and eventually the wrong area; large Reservoirs, oil depots, power stations, important bridges, tunnels, transport hubs, airports, radio stations, television stations, military bases, strategic objectives, and life With water sources and other areas within the protection; urban garden area, sanatorium, scenic area, important cultural monuments and archaeological areas.

3.3.4 site elevation should be higher than the highest flood level (including wave invasion and high water level) 0.5m above, located on the coast should be higher than the most Climax level above 1m. If you can not achieve, you should set up effective protective measures.

3.3.5 between the edge of the plant and the residential area, should be set up health protection zone or green belt distance, within this distance, should not be set up residential housing.

3.4 Factory area

3.4.1 The layout of the plant and plant should be in accordance with the project design.

3.4.2 plant layout should consider the material flow, to ensure smooth operation of materials.

3.4.3 workshop and the auxiliary workshop, should be arranged in the production process on the line.

3.4.4 According to the production process and operating characteristics, reasonable layout of the workshop process equipment, production facilities and operating areas to ensure the safety of the process, Antegrade.

3.5 Plant

3.5.1 Building thermal protection measures should be established around the construction