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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 47320-2026

Determination of major hidden dangers in the lightning protection safety of hazardous chemical enterprises

危险化学品企业防雷安全重大隐患判定

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the China Meteorological Administration. This document is under the jurisdiction of the National Technical Committee on Standardization of Meteorological Disaster Prevention and Mitigation (SAC/TC345). This document was drafted by: Anhui Provincial Meteorological Disaster Prevention Technology Center, Hangzhou Tianhu Intelligent Technology Co., Ltd., and Nanjing Meteorological Science and Technology Innovation Center. Research Institute, Jiangxi Xingfu Zhonglan New Materials Co., Ltd., China Academy of Building Research Co., Ltd., Ma'anshan Zhongxin Engineering Quality Testing Consulting Limited Company, Guangdong Energy Group Natural Gas Co., Ltd., Hebei Provincial Climate Center, Anhui Shenghui Testing Co., Ltd., Anhui Hongan Testing Limited Liability Company, Hefei Zhongying Information Engineering Co., Ltd., Guolei Safety Protection Technology (Xi'an) Co., Ltd., Shengqi Safety Technology (Beijing) Co., Ltd. The company, Chongqing Laiting Lightning Protection Technology Co., Ltd., Zhongke Tianji Technology Co., Ltd., Beijing Lightning Protection Device Testing Center, China Meteorological Bureau Meteorological Observation Center, Chongqing Lightning Protection Center, Jiangsu Provincial Meteorological Disaster Prevention Technology Center, Xinjiang Uygur Autonomous Region Meteorological Technology Equipment Emergency Support Center, Zhongshan City Lightning Protection and Disaster Reduction Affairs Center, Suqian City Meteorological Bureau, Anhui Provincial Meteorological Science Research Institute, Baoji City Meteorological Bureau, and Wanxi Academy Institute, Xinjiang Kangyi Chemical Co., Ltd., Anhui Huayun Meteorological Disaster Risk Assessment Center, Anhui Fengyun Lightning Protection Safety Testing Co., Ltd. company. The main drafters of this document

are. Qiu Yangyang, Liu Yan, Zhu Hao, Li Gen, Wu Qiang, Huang Yihui, Shu Chong, Zhang Hengjun, Zhang Lihua, Tang Wei, and Liu Zimeng. Du Kangyun, Tao Yin, Li Li, Sun Hao, Yu Linghua, Zhang Gang, Zhuang Daoquan, Chen Jingen, Wu Yicheng, Gao Panliang, Zhang Guoqiang, Lu Lei, Wang Zhongxiu, Tu Yonggao Zeng Yu, Xu Wei, Luo Zhiyong, Wang Zhongyang, Wang Yanhui, Zhang Yanhua, Zhang Chunlong, Zhu Zhanfang, Liu Xingyuan, Zhang Yongqin, Fu Yingying, Ye Nan, Hu Jia, Sun Lan Zhang Jianxun, Xu Kang, Chen Miaomiao, Liu Houfei. Determination of Major Lightning Safety Hazards in Hazardous Chemical Enterprises

1 Scope

GB/T 47320-2026 is the Chinese national standard covering what counts as a serious lightning protection defect at a chemical plant - the missing or corroded bonding on a tank, the unprotected vent, the inadequate earthing of a loading gantry, each defined precisely enough for an inspector to cite it. First edition, in force since 1 July 2026, with the public lightning guidance GB/T 47319-2026. It was issued on 31 March 2026 and has been in force since 1 July 2026, as a first edition. The document is under the responsibility of the China Meteorological Administration. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the basic requirements and procedures for determining major safety hazards related to lightning protection in hazardous chemical enterprises, and describes the determination methods. This document applies to the determination of major lightning protection safety hazards during the trial production (use) period and the formal operation period of hazardous chemical enterprises.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB 18218-2018 Identification of Major Hazard Installations of Hazardous Chemicals

GB 50057-2010 Code for Design of Lightning Protection of Buildings

GB 50650-2011 Code for Lightning Protection Design of Petrochemical Plants

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Hazardous chemicals Highly toxic chemicals and other chemicals that possess properties such as toxicity, corrosiveness, explosiveness, flammability, and combustion-supporting, and are harmful to human health, facilities, and the environment. [Source: GB 18218-2018, 3.1]

3.2 Chemical enterprises engaged in the production, storage, operation, and use of hazardous chemicals in production.

Note. This excludes group company headquarters without production entities.

3.3 Producing, storing, using, and handling hazardous chemicals on a long-term or temporary basis, where the quantity of hazardous chemicals equals or exceeds the critical quantity. Place, facility or location. [Source: GB 18218-2018, 3.4, with modifications]

3.4 In production and operation activities, violations of relevant laws, regulations, rules, standards, procedures, and lightning protection safety management systems constitute [a violation]. Dangerous conditions of objects, unsafe acts of people, and management deficiencies that may lead to lightning disasters.

3.5 A facility or system for protecting against lightning strikes, consisting of a lightning rod, down conductor, grounding device, surge protector, and its connecting conductors. system.