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

GB 42283-2022

**Safety regulation for the marine liquefied natural gas fuel
bunkering operation**

液化天然气燃料水上加注作业安全规程

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part

1. Structure and Drafting Rules for Standardization Documents" drafting. Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents. This document is proposed and managed by the Ministry of Transport of the People's Republic of China. Safety regulations for overwater bunkering of liquefied natural gas fuel

1 Scope

GB 42283-2022 is the Chinese national standard on safety regulation for the marine liquefied natural gas fuel bunkering operation, in the field of services and company organization. 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 29 December 2022 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2023. Classification: ICS 03.220.40, CCS R09. 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 document specifies the general safety requirements for LNG fuel bunkering operations over water, information confirmation before arrival at the port, inspection before bunkering operations, Filling operation procedure, operation after filling operation. This document is applicable to the water bunkering operation of liquefied natural gas fuel.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 20368 Production, storage and shipment of liquefied natural gas (LNG)

GB/T 26980 Specification for liquefied natural gas (LNG) vehicle fueling system

GB/T 51312 Design Standards for LNG Filling Stations for Ships Maritime Safety Administration of the People's Republic of China. Interim Rules for Statutory Inspection of Natural Gas Fueled Ships China Classification Society. Rules for ships powered by natural gas fuel

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 It has the function of storage and transmission of liquefied natural gas fuel, and is used to provide liquefied natural gas fuel bunkering service for ships.

3.2 LNGfueledship Ships receiving liquefied natural gas bunkering services. [Source: GB/T 51312-2018, 2.1.4]

3.3 raise bunkering The operation process of transferring liquefied natural gas fuel from the water filling station of liquefied natural gas fuel to the receiving ship.

3.4 filling system bunkeringssystem Consists of transfer equipment (if provided), submersible pump (if provided), pressurization device (if provided), connection equipment and related pipelines, etc. for liquefaction Natural gas fueled system.

3.5 A system for immediately disconnecting liquefied natural gas from one point to another, either locally or remotely, under certain circumstances.