



DIRECTORATE GENERAL OF MARITIME ADMINISTRATION, MUMBAI

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Draft DGMA Engineering Wing Circular No. xx of 2026

Subject: Methanol Bunkering Guidelines	
Ref. No.	Date: 2026
References:	a) MS Notice No. 3 of 2014

1. Background

1.1 Need for Methanol Bunkering Guidelines

The global maritime industry is undergoing a significant transition towards low- and zero-carbon fuels in response to the International Maritime Organization's (IMO) greenhouse gas (GHG) reduction strategy and the increasing demand for sustainable shipping. Among the emerging alternative marine fuels, Methanol has gained considerable prominence owing to its favourable environmental characteristics, ease of storage and handling compared with several other alternative fuels, and increasing global availability.

The use of Methanol as a marine fuel can significantly reduce emissions of sulphur oxides (SO_x), particulate matter (PM), and nitrogen oxides (NO_x), while offering a pathway for reducing greenhouse gas emissions, particularly when produced from renewable or low-carbon feedstocks. As the number of Methanol-fuelled vessels and Methanol bunkering facilities continues to grow worldwide, the establishment of a comprehensive regulatory framework governing safe and environmentally sound bunkering operations has become imperative.

At present, there are no dedicated national guidelines governing Methanol bunkering operations in India. The absence of a standardized regulatory framework may result in operational inconsistencies, safety risks, environmental concerns, and regulatory uncertainty for port authorities, bunker suppliers, shipowners, operators, terminal operators, and other stakeholders. It is therefore necessary to establish comprehensive guidelines covering the approval process, design and operational requirements, risk assessment, safety management, emergency preparedness and response, environmental protection, personnel competency and training, inspection, monitoring, and enforcement.

The issuance of these guidelines will facilitate the safe introduction and expansion of Methanol bunkering infrastructure across Indian ports and maritime facilities, promote investment in alternative fuel supply chains, support the implementation of the National Maritime Decarbonisation Policy Framework, and contribute towards India's commitment to achieving a safe, sustainable, and environmentally responsible maritime transport sector.

1.2 Methanol as a Marine Fuel

1.2.1 Methanol (CH₃OH) is a low-flashpoint liquid fuel that is colourless, fully miscible with water, and toxic if ingested, inhaled, or absorbed through the skin. Its flash point is approximately 11–12°C, and its flammable range in air is approximately 6–36% by volume, both of which are materially lower/wider than those of conventional marine fuel oil, requiring the safety measures set out in these Guidelines.

1.2.2 Methanol is classified as a low-flashpoint fuel for the purposes of IGF Code principles, although it is not currently a fuel type incorporated into the IGF Code itself. Ships using methanol as fuel are instead governed by MSC.1/Circ.1621 (Interim Guidelines for the Safety of Ships Using Methyl/Ethyl Alcohol as Fuel), approved by MSC 102 in November 2020.

1.2.3 Methanol as a marine fuel is distinct from its use as a feedstock in biofuel production. These Guidelines address methanol only in its capacity as a ship's fuel and not as an input to other fuel products.

1.2.4 Methanol supplied for bunkering under these Guidelines shall conform to ISO 6583:2024, *Methanol as a Fuel for Marine Applications — General Requirements and Specifications*, which specifies three marine methanol grades (MMA, MMB, and MMC) and their quality parameters.

1.3 Purpose

The Directorate General of Maritime Administration (DGMA), recognising the importance of facilitating the transition to cleaner marine fuels while ensuring the highest standards of safety, environmental protection, and operational efficiency, hereby issues this Circular to establish the regulatory framework governing Methanol bunkering operations in India.

The provisions of this Circular are intended to facilitate the safe planning, approval, conduct, monitoring, and oversight of Methanol bunkering activities in accordance with the applicable provisions of the Merchant Shipping Act, 2025, rules made thereunder, other relevant national legislation, and internationally accepted standards, codes, and best practices.

These guidelines aim to ensure the protection of life, property, port infrastructure, and the marine environment while facilitating the safe, efficient, and sustainable development of a Methanol bunkering ecosystem at Indian ports, terminals, jetties, anchorages, offshore installations, and other locations where bunkering operations are authorised by the Competent Authority.

2. Scope

2.1 This Circular applies to all ships calling at Indian ports, irrespective of flag, that are engaged in or receive Methanol bunkering services, all Methanol bunker suppliers, bunker barges and bunker tankers, terminal operators, port authorities, and any other entities involved in the planning, approval, conduct, or oversight of Methanol bunkering operations within Indian ports, terminals, jetties, anchorages, offshore installations, or other locations authorised by the Competent Authority.

2.2 This Circular prescribes the minimum safety, operational, technical, environmental protection, emergency preparedness, personnel competency, training, inspection, and reporting requirements for the conduct of Methanol bunkering operations. It also establishes the framework for the approval, monitoring, and enforcement of such operations to ensure the protection of life, property, and the marine environment.

3. Current State of Methanol Bunkering

3.1 Methanol bunkering in India is at an emerging stage of development. While initiatives have been undertaken to promote the use of Methanol as an alternative marine fuel and a limited number of ports and facilities are exploring or developing Methanol bunkering capabilities, the supporting infrastructure, operational procedures, and regulatory framework are still evolving. The absence of comprehensive national guidelines may create uncertainty for shipowners, operators, bunker suppliers, port authorities, and investors intending to adopt Methanol as a marine fuel.

3.2 Several factors influence the pace of Methanol bunkering development in India, including the capital investment required for bunkering infrastructure, the need to establish safe storage and handling systems for a low-flashpoint fuel, the development of reliable fuel supply chains, personnel training and competency, and the availability of a comprehensive regulatory framework. At the same time, increasing environmental awareness, the International Maritime Organization's greenhouse gas reduction strategy, the global transition

towards low- and zero-carbon fuels, and growing orders for Methanol-fuelled vessels are driving increased interest in the development of Methanol bunkering infrastructure.

3.3 To facilitate the safe and orderly development of Methanol bunkering in India, it is essential to establish a clear, transparent, and harmonised regulatory framework that addresses the existing gaps while promoting investment, innovation, and operational safety. These guidelines provide the framework for the planning, approval, conduct, monitoring, and oversight of Methanol bunkering operations, thereby fostering the development of a safe, efficient, and sustainable Methanol bunkering ecosystem in India, consistent with national maritime decarbonisation objectives and internationally accepted standards and best practices.

4. Objectives

4.1 The primary objective of these Guidelines is to establish a comprehensive, uniform, and risk-based regulatory framework for Methanol bunkering in India, ensuring the safe, efficient, and environmentally sound conduct of bunkering operations while facilitating the transition to cleaner marine fuels. The specific objectives are to:

- (i) establish a clear regulatory framework for the approval, establishment, operation, and oversight of Methanol bunkering facilities and services;
- (ii) prescribe minimum technical, operational, and safety requirements for the storage, transfer, handling, and bunkering of Methanol;
- (iii) establish standardized procedures for risk assessment, operational planning, emergency preparedness, incident response, and contingency management;
- (iv) ensure the protection of personnel, ships, port infrastructure, public safety, and the marine environment through appropriate environmental safeguards and pollution prevention measures;
- (v) prescribe competency, training, and certification requirements for personnel engaged in Methanol bunkering operations;
- (vi) establish inspection, monitoring, reporting, compliance, and enforcement mechanisms to ensure adherence to these Guidelines and other applicable statutory requirements;
- (vii) facilitate the development of Methanol bunkering infrastructure and supply chains by providing a transparent, predictable, and investment-friendly regulatory environment; and
- (viii) support the implementation of India's maritime decarbonisation objectives by promoting the safe adoption of Methanol as an alternative marine fuel in accordance with internationally accepted standards and best practices.

4.2 By achieving these objectives, these Guidelines seek to foster the development of a safe, reliable, efficient, and sustainable Methanol bunkering ecosystem in India, encourage investment and innovation in alternative marine fuels, enhance the competitiveness of Indian ports, and contribute to the decarbonisation of the maritime sector while ensuring the highest standards of safety and environmental protection.

5. Regulatory Framework

5.1 The regulatory framework for the approval, registration, and oversight of Methanol bunker suppliers is set out in **Appendix I** to these Guidelines. The framework establishes a transparent, risk-based, and uniform process to ensure that Methanol bunkering operations are conducted in a safe, secure, and environmentally responsible manner.

5.2 The approval and registration process shall include, inter alia:

- (i) submission of an application to the Directorate General of Maritime Administration (DGMA), together with the prescribed documents, including details of the applicant, facility design, equipment specifications, operational procedures, risk assessment, safety management system, emergency preparedness and response plan, personnel competency, and any other information required under these Guidelines and relevant international standards, including the applicable guidance issued by the International Association of Ports and Harbors (IAPH);
- (ii) technical evaluation of the application by the DGMA and authorisation of the Indian Register of Shipping (IRS), or any other Recognised Organisation authorised by the DGMA, to carry out interim, initial, renewal, and additional audits or inspections, as applicable;
- (iii) issuance of an Interim Registration Certificate or a Full-Term Registration Certificate as a Methanol Bunker Supplier upon satisfactory compliance with the applicable requirements of these Guidelines;
- (iv) periodic audits, inspections, surveillance, and compliance verification to ensure continued conformity with the requirements of these Guidelines and the conditions of registration; and
- (v) suspension, withdrawal, or cancellation of registration where the bunker supplier fails to comply with the applicable statutory requirements or the conditions of registration.

5.3 The approval and registration process is intended to ensure that Methanol bunkering facilities, equipment, operational procedures, and management systems are designed, established, maintained, and operated in accordance with the applicable statutory requirements and internationally accepted standards, thereby ensuring the safety of personnel, ships, port infrastructure, and the marine environment.

This Circular is issued with the approval of the competent authority.

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Encl. Appendix - 1

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