

Information Sheet on the Handling of Wastewaters from Vessels in the ports of Bremen

The purpose of this information sheet is to clarify the requirements for the management of vessel wastewaters, ballast water, scrubber water and domestic wastewater in the ports of Bremen.

1 Ballast water

Section 28b) of the Port Regulations applies to the discharge of ballast water according to the D1 standard of the Ballast Water Management Convention.

A valid type approval certificate and a maintenance certificate are to be held on board when discharging ballast water according to the D2 standard (without active substances).

A permit under water resources law from the water authority is mandatory for the discharge of ballast water according to the D2 standard that is treated with active substances. A General Ruling was prepared for this purpose. The maximum permissible concentration of active substance at discharge as specified in the type approval must be complied with (according to MEPC 68-21, page 12, subclause 2.41: since 2015 0.1 mg/l Cl₂, or 0.2 mg/l Cl₂ for older systems; validation is required). The water authority must be informed beforehand of the intended start, end and volume of discharge by written notification to the official email address ballastwater@umwelt.bremen.de (please refer to the appended form).

Discharge of ballast water outside of the D1/D2 standards is not permitted. (*Exception:* Fulfilment of an exception according to Regulation A 3 or Regulation B 4 of the Ballast Water Management Convention (Federal Law Gazette 2013 part II no. 3 of 13 February 2013).

2 Scrubber wastewater

Operation of an open loop system with direct discharge is not permitted.

(*Exception:* discharge from a flue gas scrubber, which is mandatory when discharging flammable liquids with a flash point of 60°C or lower due to international ship safety regulations (SOLAS Regulation II-2/10)).

A closed exhaust gas cleaning system must be operated (closed-loop system), if fuels with a sulphur content exceeding 0.10% by mass are used. Process water (bleed-off water) must not be discharged into the port waters and must be disposed of properly.

3 Domestic wastewater

3.1 Collection or sewer discharge of domestic wastewater

The following reception facilities are jointly operated at the ports of Bremen for the Bremerhaven and Bremen port groups:

Nehlsen GmbH & Co, Louis-Krages-Straße 10, 28237 Bremen;
Hansewasser Bremen GmbH, Schiffbauerweg 2, 28237 Bremen;

BEG Bremerhaven, Zur Hexenbrücke 16, 27570 Bremerhaven

Capacity: Several different suction tankers with 20 m³, 12 m³, 8 m³, 7, m³, 3m³ (BRH and HB).

In Bremerhaven, wastewater can be collected by vessel and delivered to the Bremerhaven central sewage treatment plant via the FBG sewer system in special cases. Details must be discussed with BEG, Mr Lühns (+49 471/186-345 Fax: +49 471/186-112).

Direct connection to the wastewater sewer system may be possible, but must be clarified with Hansewasser on a case-by-case basis. The local circumstances (heavy traffic etc.) must be taken into account in particular.

3.2 Direct discharge

3.2.1 Regulations for vessels calling at the ports of Bremen to tranship goods or to allow passengers to embark and disembark

Cargo ships that are subject to the Ordinance on Vessel Safety in Domestic Navigation [BinschUO] and do not have holding tanks for wastewater may discharge domestic wastewater directly. The discharge of wastewater from any holding tanks is not permitted.

Passenger vessels that are subject to the BinschUO and are licensed to carry more than 12 persons may discharge domestic wastewater from an on board sewage treatment plant if the plant meets the discharge criteria according to chapter 18 ES-TRIN (BOD5 25 mg/l, COD 125 mg/l, TOC 45 mg/l). Domestic wastewater from holding tanks must be disposed of properly (suction truck, sewer discharge).

Seagoing vessels that are subject to MARPOL Annex IV may discharge treated faecal water from an on board sewage treatment plant if the plant meets the discharge criteria as set out in Resolution MEPC 227(64) (COD 125 mg/l, BOD5 25 mg/l, total suspended solids 35 mg/l, coliforms 100/100ml, pH 6 - 8.5), total nitrogen 20 mg/l (or 70% reduction), total phosphorus 1 mg/l (or 80% reduction)). Domestic wastewater from galleys and washrooms (grey water) that is not subject to MARPOL Annex IV may be discharged directly if it cannot be retained on board.

3.2.2 Regulations for vessels that are laid-up at ports of Bremen and do not participate in traffic

- a) **For berths on the river**, direct discharge of the wastewater purified in the on board sewage treatment plant may be possible in Bremerhaven when the tide is going out.

The following points must be taken into consideration in this regard:

A permit under water resources law is mandatory for discharge. To obtain this permit, an application must be filed with the water authority in good time – at least 10 working days prior to the planned discharge – together with meaningful documents (submission of certification, analyses if available, flow chart, number of persons on board, berth and duration of stay, responsible persons). A current analysis of the treatment system's drain must be presented in order to assess the eligibility to be issued with a permit. The sampling that is required in this regard must be coordinated with the authority and

performed by an approved laboratory. The following parameters must be analysed in this context: BOD5, COD, TOC, total nitrogen, TSS, total phosphorus. CSB can be determined arithmetically based on the TOC. $CSB = 3 \times TOC$ applies in this regard.

The assessment basis for direct discharge is compliance with the effluent values according to MEPC227(64), i.e. COD 125 mg/l, BOD5 25 mg/l, total suspended solids 35 mg/l, coliforms 100/100ml, pH 6 - 8.5), total nitrogen 20 mg/l (or 70% reduction), total phosphorus 1 mg/l (or 80% reduction). The use of disinfectants is prohibited.

- b) The direct discharge of wastewater is not permitted if cruise vessels are used as emergency hospitals.
- c) Direct discharge of wastewater is prohibited at **berths on the river in the municipality of Bremen.**
- d) Direct discharge of wastewater is prohibited at **berths that are not on the river in Bremerhaven and Bremen.**
- e) Sewage sludge must not be discharged directly and must be disposed of properly.

4 Underwater cleaning/propeller polishing

A decision is made on a case-by-case basis depending on the selected processes and the required purification of the wash water; this decision is implemented in the form of a permit under water resources law as a rule. An application must be filed with the water authority at least 8 weeks prior to the start of the measures. The water authority can be contacted directly concerning the details of the permission process. Unauthorised use of bodies of water is prohibited.