

Guidance document for the audit of wastewater from ship transport



May 2022, version 1

Wastewater from ship transport **Definition and Regulatory Framework**

- The International Convention for the Prevention of Pollution from Ships (MARPOL) is a marine environmental convention
- Signatories (countries) of the convention commit to the requirements laid out therein
- MARPOL 73/78 Annex II has introduced prewash requirements in the port of unloading for certain high-viscosity or low-melting-point persistent floating products
- The wastewater generated during the prewash is to be discharged to a reception facility at the port of unloading until the tank is empty
- As per the list of persistent floating products, this prewash requirement also applies to oil tanks containing oil of biogenic origin, e. g. vegetable oils
- Wastewater generated from this prewash needs further treatment, resulting in water, sludge and (biogenic) oil
- Under ISCC, the prewash from cleaning of oil tanks containing oil of biogenic origin can be certified as wastewater from ship transport
- Apart from sea-going vessels, this waste stream can also occur from cleaning of inland barges
- Certification of wash water from sea-going vessels that fall under MARPOL regulation and inland barges that fall under EU waste legislation (Waste Framework Directive (WFD)) is subject to this guidance document
- Operators that are not subject to MARPOL and/or WFD shall provide evidence to ISCC that verification mechanisms as
 described in this guidance are in place. Certification shall only be possible upon explicit approval by ISCC.



Wastewater from ship transport Treatment

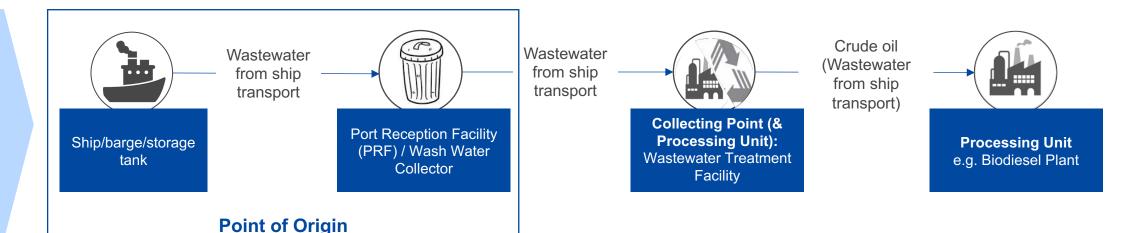
- Cleaning of ship containers
 - Containers are usually cleaned using salty or brackish water and potentially other cleaning agents, resulting in wash water – an oil-waterresidue
- Discharge of the wash water
 - Shipmasters / agents request the collection of wash water from authorized port reception facilities (PRF)* / wash water collectors
 - PRF / wash water collectors arrange the collection either via barge or truck depending on the port structure
- Treatment of wastewater is usually conducted in treatment facilities (e.g. shore tank) via heating and/or decanting
- Wastewater from ship transport is considered to have zero GHG emissions up to the process of further treatment
- The point of origin is the port reception facility / wash water collector who is responsible for arranging the collection of the wash water and therefore holds respective delivery documents

^{*}For sea-going vessels, authorized port reception facilities (PRF) are responsible for the collection of wash water. The IMO lists all recognized PRFs in the GISIS database: https://gisis.imo.org/Public/PRF/SearchResults.aspx?search=port

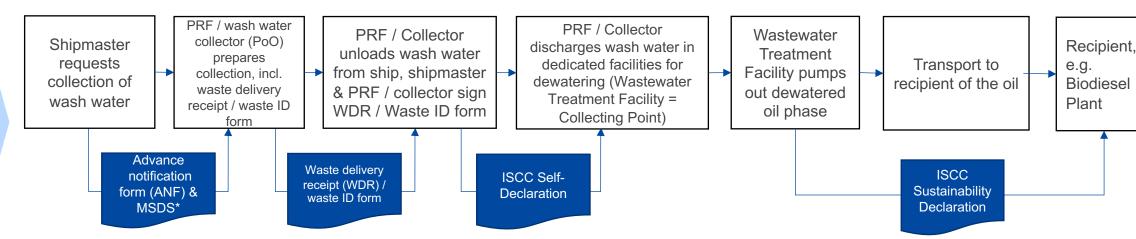
Wastewater from ship transport

Certification Approach & Process Flow

Supply Chain Set Up



Process Flow





^{*}Recommended, but not compulsory documents. Check if available. Check if similar documents / notifications are available.

Guidance for the Audit of a Wastewater Treatment Plant (Collecting Point) for wastewater from ship transport (I)

 Check the list of all PRF's / wash water collectors (Points of Origin) from which wastewater from ship transport is collected.

Sea-going vessels (MARPOL regulation):

- The list must include information about the port and the port reception facility unloading the maritime wastewater from the ship (name, address, contact details)
- Are the listed ports subject to the requirements laid out in MARPOL regulation?
- Are all listed PRFs recognized by the respective authorities resp. are they in possession of relevant permits? Check for example via GISIS database: https://gisis.imo.org/Public/PRF/SearchResults.aspx?search=port

Inland barges (WFD):

- The list must include information about the operator who collects waste material with a waste identification form (name, address, contact details)
- Are the listed wash water collectors subject to the requirements laid out in the WFD?
- Do all listed wash water collectors hold the respective permit by regional/national authorities? Also check which authority is responsible for issuing permits in the respective region.
- If the collection of wash water is **not conducted and monitored according to MARPOL regulation or WFD, the ISCC certification of this material is not possible according to this guidance**. A request may be sent to ISCC with evidence that verification of the requirements can be proven.



Guidance for the Audit of a Wastewater Treatment Plant (Collecting Point) for wastewater from ship transport (II)

- Check the amounts of wastewater from ship transport collected during the previous certification period (to be indicated in the ISCC audit procedures).
 - Is the total amount of material plausible? Check this against supporting documents (delivery documents, CMR document, weighbridge protocols, contracts/agreements, sample analysis reports, ISCC self-declaration, etc.).
 - Does the collected amount match the number of suppliers / points of origin and their capacities? Check transport modes and capacities of PoOs.
- Check the facilities that are used for wastewater treatment
 - Visual inspection of treatment facilities is required!
 - Does the capacity of the facilities match the volume and type of wash water collected?
- Check if the other materials / wash waters are also treated
 - Is the wash water with bio-based oil strictly separated from other oily residues, such as mineral oils? Make sure that only oil from bio-based origin is forwarded as sustainable under the ISCC certification.
- Check how the treatment is conducted resp. which extraction and separation processes are involved
 - Does it exceed mechanical treatment resp. fall into the definition of a processing unit under ISCC? Check if a processing unit scope is necessary, and therefore whether emissions from processing must be considered. Also refer to ISCC System Document 201 for scope definitions.



Guidance for the Audit of a **Port Reception Facility / Wash Water Collector** (**Point of Origin**) for wastewater from ship transport (I)

Though physically the waste is generated onboard a ship, to allow for a pragmatic audit approach, the point of origin scope is widened to the operator who is responsible for collecting the wash waters from the ship. In the case of sea-going vessels, this is the PRF while for inland barges, this can be different types of waste collectors who hold the respective permit to collect wash water from barges. **Point of origin audits must be conducted at the PRF's resp. wash water collector's site**.

The following aspects must be verified individually for a **sample of all port reception facilities (sea-going vessels)** / wash water **collectors (inland barges)**. The sample is at least the square root of all treatment facilities within the previous certification period (up to the point of audit).

Check whether standard documents are available and signed by the authorized people (waste receiving party, shipmaster / ship's agent)

Sea-going vessels – MARPOL standard documents

- If available, Advance Notification Form (ANF) from the shipmaster or ship's agent requesting the collection of prewashes from the ship. If ANF is not available, check if other evidence for collection request (e.g. informal email) is available.
- Waste Delivery Receipts, signed off by the shipmaster and the transporter. Compulsory requirement to use this document for the ISCC certification of wash water from sea-going vessels!

Inland barges – Documents required as per WFD

- Waste Identification Forms may vary across EU Member States but should be identical with regards to contents. Check which form is compulsory in the respective EU Member State.
- Contents of Waste Identification Forms must include the following information as per WFD: Unique delivery number, waste discharge date and time, waste producer (name of barge, owner or operator, gross tonnage), reception facility provider (name, address, permit number), waste carrier (name, address, registration number, license plate), treatment facility provider (name, address, company number, treatment technology), identification of the waste (description, quantity, EURAL code → shall include if biogenic or not)



Guidance for the Audit of a **Port Reception Facility / Wash Water Collector** (**Point of Origin**) for wastewater from ship transport (II)

- Check whether the wash water collected originates from a prewashing process concerning one of the materials listed
 as persistent floating products as identified by 16.2.7 in column 'o' of Chapter 17 of IBC Code, i. e. verify if oil fraction
 is of biogenic origin (ANF & WDR / waste identification form)
- Check if sample analysis reports of wash water is available
 - Do sample analysis reports support the oil extraction amount (indication of oil/water/sediment ratio)?
- Check whether ANF, WDR / waste identification form and sample analysis reports provide evidence for the
 documentation about amount of oil forwarded from the collecting point to the recipient of the extracted oil phase
- Check if logistics between ship and point of origin are plausible
 - Is the port structure aligned with transport modes (trucks/barge/vessel)?
 - Does the loading capacity of vessels and trucks match the collected amount?
 - Are ANF and WDR / waste identification form available for each unloading?
- Check if other materials / wash waters are also collected from ships/barges
 - Is the wash water with bio-based oil strictly separated from other oily residues, such as mineral oils?
 - Are transport modes (vessels/trucks/barges) cleaned (from non-biogenic contaminants) before the collection of wash waters or are dedicated transport modes in place?

