



SHIP SAFETY BULLETIN

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Subject: Regulatory Compliance and the Safe Transportation of Oil and Fuels.

Purpose

This bulletin includes guidance on how to comply with Canada’s regulations for transporting oil, fuels, and oil or fuel by-products such as waste oil.

Scope

This bulletin is intended for authorized representatives, owners and operators, masters and crew of oil tankers and vessels carrying oil and fuels in tanks on deck (including cargo barges), and suppliers and receivers of oil and fuels. It is specific to Canadian operators operating in Canadian waters.

Background

Traditionally, oil and fuel have been transported in one of two ways:

- either in the vessel’s integrated cargo tanks built for that purpose, or
- within some kind of portable containment carried on the deck of a vessel (e.g., cargo barge).

There are regulatory requirements which cover both types of transportation. Of late, there have been numerous instances where oil and fuel have been transported in an unsafe and non-compliant manner, thereby unduly exposing the public to the risk of possible fire or explosion, and the environment to the risk of possible pollution.

Keywords:

1. Portable tanks
2. Carriage of oil
3. Oil barges
4. Handling facility
5. Dangerous goods

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Some definitions

For the purpose of this bulletin, the following definitions are to be used:

1. In general terms, a **tanker**¹ is a vessel that carries flammable, toxic or hazardous liquid in bulk, an **oil tanker** is a tanker where the majority of the liquid is oil. The liquid may be carried within the hull (below the deck), or in integrated tank above the deck. (Please refer to the footnote below for a more detailed definition.)
2. An **oil barge** is a non-self-propelled oil tanker; and it includes any description of non-self-propelled vessel, other than an oil or gas offshore drilling unit or production unit, that is constructed or converted to carry bulk oil as cargo.
3. A **cargo barge** is a non-self-propelled barge that carries various types of deck cargo, including, possibly, oil in packaged form (e.g., portable tanks). (i.e., oil barges carry oil in bulk in permanent tanks, and cargo barges carry oil in portable tanks as packaged dangerous goods).
4. A **portable tank** is a tank that is loaded on and off the deck of a vessel, such as a cargo barge, together with its contents. When used for the transportation of fuels, portable tanks must be approved for the transportation of dangerous goods and as such, must be in compliance with relevant regulatory requirements. Tanker trucks carrying oil and driven on and off the vessel are one example of a portable tank. Fuel oil in a portable tank is a form of packaged dangerous goods.
5. An **integrated tank** is a tank that remains on the deck of a cargo barge and is neither loaded on or off it while containing the cargo. This does not refer to the means of fixing the tank to the deck. Methods of fixing a permanent tank are varied and can range from welding, to bolting down, to securing by lashing chains or wires, or in container shoes etc. (Note that the means of securing the tank to the deck does not have to be permanent; however, the tank is considered integrated since it itself is not off-loaded.)
6. **Oil** means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products (and therefore does not include petrochemicals which are noxious liquid substances subject to the provisions of Annex II of the MARPOL Convention) and, without limiting the generality of the foregoing, includes the substances listed in Appendix 1 to the MARPOL Annex I, as defined in TP 11960 following the IMO MARPOL Convention.
7. **Oil in bulk** is any kind of oil and fuel that is transported inside the hull of a vessel or oil barge, or in an integrated tank installed on the deck of a barge.
8. **Dangerous Goods** means a product, substance or organism as defined by the [Transportation of Dangerous Goods Act, 1992](#); and/or the [Transportation of Dangerous Goods Regulations](#) in Schedule 1 and Schedule 3. Oil and fuels are dangerous goods.
9. **Packaged goods** means dangerous goods in a form of containment specified in the International Maritime Dangerous Goods (IMDG) Code for those goods.

¹ For example the [Life Saving Equipment Regulations](#) define tanker as a cargo ship constructed or adapted for the carriage in bulk of liquid cargoes of a flammable, toxic or hazardous nature and includes a chemical tanker and a liquefied gas tanker. The [Vessel Pollution and Dangerous Chemical Regulations](#) define oil tanker as a vessel constructed or adapted *primarily* to carry oil in bulk in its cargo spaces and includes a combination carrier, a Noxious Liquid Substances (NLS) tanker and a gas carrier that is carrying a cargo or part cargo of oil in bulk.

10. **Package** means the complete product of the packing operation, consisting of the packaging and its contents prepared for transport (e.g., a portable tank filled with oil).
11. **Packaging** means one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions (e.g., a portable tank).
12. A **handling facility** means any shore or sea installation that is used for the loading or unloading of oil, oily mixtures, noxious liquid substances or dangerous chemicals to or from vessels, as defined in the [Vessel Pollution and Dangerous Chemicals Regulations](#).
13. **MTRB** stands for Marine Technical Review Board and is a means of obtaining an exemption from, or an equivalency to, an applicable section of a regulation under the [Canada Shipping Act, 2001](#) (CSA 2001).

What you need to know

Transportation of oil in bulk

- Transportation of oil in bulk includes its loading, carriage and unloading. In other words, bulk oil is pumped into a tank located on the vessel, carried from point A to point B, then pumped off from the tank located on the vessel to somewhere ashore or another vessel (oil terminal, portable tank, barge etc.). Since transportation of *oil in bulk*, categorizes the vessel when constructed or adapted primarily to carry oil in bulk in its cargo spaces or integrated tanks as an *oil tanker or an oil barge*; and such vessels are required to comply with all the applicable regulations for oil tankers. A complete guide to the requirements can be found in [TP11960: Standards for the Construction, Inspection and Operation of Barges Carrying Oil in Bulk](#).
- It is important to note that a vessel or barge used for transportation of oil in an integrated tank mounted on its deck into which bulk oil is loaded and/or from which bulk oil is unloaded while the tank remains on board, shall require compliance with applicable regulatory requirements for an oil tanker. However, since the term *oil tanker* has broad usage, it is recognized that some of the requirements for such regulatory compliance when transporting fuel within the coastal waters of Canada, could be different from the requirements for oil tankers on international voyages. Since the transportation of bulk oil in integrated tanks on vessels or barges can be done in many different and unique ways, Transport Canada **may** consider applications for alternatives or exemption from some regulatory requirements through the MTRB process. Guidance on this process can be obtained by contacting any Transport Canada Marine Safety office.

Transportation of oil in packaged form in portable tanks

- Transportation of oil in packaged form includes the loading, carriage and unloading of a package (e.g., a portable tank filled with oil). In other words, a package, such as a portable tank filled with oil, is driven or loaded by a crane onto a vessel, carried from point A to point B, and then driven off or unloaded by a crane from the vessel.

- Approved portable tanks² as per the [Transportation of Dangerous Goods Regulations](#) can be used for the transportation of packaged oil as part of the deck cargo carried on vessels or barges. However, segregation of packaged dangerous goods will be required as per the IMDG Code, in accordance with the [Cargo, Fumigation and Tackle Regulations](#).
- Portable tanks **cannot** be filled or discharged when on the deck of a cargo vessel or barge, as per the IMDG Code in accordance with the [Cargo, Fumigation and Tackle Regulations](#). The filling and emptying of portable tanks has to be done ashore.
- It is possible in some cases that either the filling or discharging of oil from portable tanks such as tanker trucks cannot be done off-barge. This could be the case when a shallow draft vessel or barge has to deliver fuel to remote communities, dredgers, aquaculture farms etc., where approach from the water is the only means of access. In such cases, TC may look into the possibility of issuing appropriate MTRB decisions to establish necessary conditions designed to ensure the safe transfer of bulk oil to or from a portable tank installed on the deck of the vessel or barge.

Transportation of oil in integrated as well as portable tanks (hybrid model)

- Operators can, for commercial reasons, elect to adopt a dual mode of carriage, whereby oil is simultaneously transported in both integrated tanks as bulk cargo, as well as in portable tanks as packaged dangerous goods. In such cases, the conditions cited under both the above subject headings will apply.

Some additional cautions and requirements

- Barges transporting bulk oil in integrated tanks are considered oil barges and are required to comply with the regulations, inspections and certification requirements that apply to oil tankers.
- Barges carrying oil in packaged form in portable tanks are cargo barges and are currently not required to be inspected or certified. However, they are required to comply with the [Transportation of Dangerous Goods Regulations](#) and the [Cargo, Fumigation and Tackle Regulations](#).
- Crew and personnel are not permitted on the deck of an oil barge or a cargo barge when in transit. Barges carrying crew are termed ‘Manned Oil or Manned Cargo Barges’ and require compliance with an additional set of regulatory requirements.
- Crew attending to any kind of oil transfer operation are required to have appropriate Supervisor of Oil Transfer Operation certification (SOTO).
- A risk analysis may be required when carrying packaged oil and other dangerous goods (such as explosives or propane) along with general cargo on a barge.
- Where it is impossible to comply with the applicable regulatory requirements due to the nature of the operation, the authorized representative may apply to Transport Canada Marine

² Approved as per the [Transportation of Dangerous Goods Regulations](#).

Safety for a MTRB decision under Section 28 of CSA 2001. The MTRB may grant an exemption from or a replacement of the applicable requirement if the Board is satisfied that the exemption or replacement would result in an equivalent or higher level of safety. The authorized representative remains responsible to maintain an equivalent level of safety and comply with the conditions of the MTRB decision.

- Final conditions to achieve an equivalent level of safety, shall consider at a minimum but are not limited to the following:
 - Guidance for training of crew, instead of crew carrying a SOTO CoP;
 - Safety procedures in place for safe transportation and usage of oil and fuels, in a portable tank, or in an integrated tank;
 - Means to ensure an adequate ventilation of the portable tank or integrated tank;
 - Minimum equipment for pollution prevention (SOPEP);
 - Minimum Fire safety and life Saving equipment;
 - Means to ensure an Emergency towline or a safe way to evacuate the crew in case of emergency (fire, explosion etc.);
 - Procedures to ensure means of safe cargo transfer;
- It is the responsibility of the authorized representative of the vessel to ensure compliance with regulatory requirements. Non-compliance with applicable regulatory requirements can result in significant penalties as per the [*Administrative Monetary Penalties and Notices \(CSA 2001\) Regulations*](#).