Oil transfer requirements for vessels and facilities delivering oil

A barge delivers fuel to a bulk carrier vessel at anchor in Port Angeles, Washington.

Contact information

Jason Reichert
Oil Transfer Inspector Lead
jason.reichert@ecy.wa.gov
360-407-7390

Notifications
OilTransferNotifications@ecy.wa.gov

Oil transfers
ecology.wa.gov/Regulations-Permits/Compliance-enforcement/Oil-transfers

Guide for users of the ANT System
fortress.wa.gov/ecy/publications/SummaryPages/0608040.html

Special accommodations

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-7211 or visit ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Washington’s oil transfer requirements

The Washington Department of Ecology’s three oil transfer rules are designed to prevent spills when oil is transferred over water. In 2004, state lawmakers instructed Ecology to adopt a “zero spills” goal. These transfer rules can help achieve that goal. The rules' citations in the Washington Administrative Code (WAC) are Chapter 173-180 WAC for facilities, and Chapters 173-184 and 317-40 WAC for vessels.

Advance Notice of Transfer

Delivering vessels and delivering Class 1, 2, and 3 facilities are required to submit Advance Notice of Transfer (ANT) notices. This submission satisfies both the state and federal requirements for advance notice of transfer in Washington State.

A vessel delivering over 100 gallons to a non-recreational vessel (see page 4) or facility must meet the advance notice of transfer requirements in WAC 173-184-100. The delivering vessel, or designee, must submit an ANT to Ecology on the same schedule as the local Captain of the Port requirements. If there is no Captain of the Port reporting requirements for your vessel type, you must submit this form at least four hours before the transfer begins.

A Class 1, 2, or 3 facility delivering over 100 gallons to a non-recreational vessel must meet the advance notice of transfer requirements in WAC 173-180-215. The delivering facility, or designee, must submit an ANT to Ecology at least 24 hours prior to the transfer, or as soon as possible if the oil transfer is scheduled within the 24-hour limit.
Do these rules apply to me?

All Class 1, 2, 3, and 4 facilities delivering oil in bulk to non-recreational vessels must meet state facility oil transfer requirements in Chapter 173-180 WAC.

These rules do not apply to fueling stations or marinas that transfer oil exclusively to recreational vessels.

All vessels delivering oil in bulk to a non-recreational vessel or facility must meet state vessel oil transfer requirements in Chapter 173-184 WAC. If providing bunkers to covered vessels, they must also meet the requirements in Chapter 317-40 WAC. Covered vessels are defined in Revised Code of Washington (RCW) 88.46.010.

Am I a Class 1, 2, 3, or 4 facility?

The rules establish four different classes of facilities:

**Class 1:** Large, fixed shore-side facilities such as refineries, refueling terminals, and oil pipelines. This definition includes facilities that transfer to tank vessels and pipelines.

**Class 2:** Mobile equipment such as tank trucks, railcars, and portable tanks that transfer to any non-recreational vessel of any size.

**Class 3:** Small tank farms and terminals that transfer oil to non-recreational vessels that have a fuel capacity of 10,500 gallons or more. This definition does not include facilities that transfer to tank vessels and pipelines, as they are Class 1 facilities.

**Class 4:** Marinas or other small fueling facilities that transfer oil to non-recreational vessels that have a fuel capacity of less than 10,500 gallons. A separate focus sheet is available that addresses the requirements for Class 4 facilities, Focus on Marinas and Small Fueling Facilities (Publication # 06-08-033).

**Designating the Person-In-Charge (PIC)**

All Class 1, 2, and 3 facilities and vessels transferring oil in bulk on or over state waters must designate a “person in charge” (PIC) who is responsible for supervising the oil transfer. They must be sufficiently trained to ensure a safe transfer. Class 1 and 2 facility transfer personnel must carry proof that they have been trained and certified as required in Chapter 173-180 WAC.

**Pre-transfer conference**

A face-to-face conference between the receiving and delivering PICs must occur prior to the oil transfer. The PICs may conduct the pre-transfer conference via radio if weather conditions make moving from vessel to facility or vessel to vessel unsafe.

The PICs must be able to communicate in English during this pre-transfer conference.

The PICs must discuss and approve:

- The pre-transfer plan.
- The contents of the Declaration of Inspection (DOI).
- The procedures for communicating soundings, changing over tanks, topping off, shift changes, and emergency shutdown.
- Possible impacts of predicted weather and/or sea conditions.

For transfers to vessels covered by Washington’s bunkering rule, the conference will also identify the point-of-transfer watch and deck-rover watch on the receiving vessel.

**Pre-loading or cargo transfer plan**

A pre-load or cargo transfer plan must be completed prior to the pre-transfer conference. At a minimum, the plan must include:

- Identification, location, and capacity of the vessel’s tanks receiving oil.
- Level and type of liquid in all bunker or cargo oil tanks prior to the oil transfer.
- Planned final innage or ullage — the height of the oil above the bottom of the tank or the height of free space above the oil level, respectively.
- Planned final percent of full of each tank after filling.
• Sequence in which the tanks will be filled.
• Procedures for regularly monitoring all receiving tank levels and valve alignments during the transfer operation.

Communication between PICs

Delivering and receiving PICs must ensure continuous, two-way voice communication between them during the transfer operation. The facility PIC must ensure that two portable and intrinsically safe communication devices are available for use during the transfer.

An air horn must be available for emergency shutdown signals. All personnel involved in the oil transfer must know and use English phrases and hand signals indicating STOP, HOLD, WAIT, FAST, SLOW, and FINISH.

Safe transfer operational requirements

All oil transfer operations at Class 1 and 2 facilities must be conducted according to the facility's Ecology-approved operations manual.

All persons involved in an oil transfer must have the means to contain and recover any drips or leaks from connections within the oil transfer system. Deliverers providing oil to vessels without fixed containment must provide adequate portable containment for each tank vent on the vessel.

Before the transfer starts, the PICs must verify that:
• The DOI is signed by both PICs.
• The available capacity in the receiving tank(s) is (are) greater than the volume of oil to be transferred.
• All valves are properly aligned.
• An emergency shutdown capability is in place and operable.

Once the transfer starts, the PICs must ensure the tanks designated in the pre-transfer plan are receiving oil at the planned rate. If a shift change occurs, the relieving PIC must notify the person in charge at the other end of the transfer and sign the DOI.

The delivering PIC must refuse to start or continue an oil transfer if the receiving PIC:
• Has not provided complete information as required by the DOI, or refuses to correct deficiencies identified in the pre-transfer conference;
• Does not comply with the operations manual or does not respond to identified concerns; and/or
• Refuses to discuss the pre-load plan and oil transfer rate.

Work hours

Delivering facility personnel with oil transfer duties may NOT work more than 16 hours in any 24-hour period, or more than 40 hours in any 72-hour period. Receiving and delivering vessel personnel involved in bunkering may NOT work more than 15 hours in any 24-hour period, or more than 36 hours in any 72-hour period, per WAC 317-40-085. The exception for both facility and vessel personnel would include working in an emergency or to respond to a spill.

The owner or operator of a vessel engaged in bunkering and Class 1, 2, or 3 facilities must maintain work hour records demonstrating compliance with the above work hour restrictions.

Oil transfer equipment requirements

Oil transfer hoses and piping used by Class 1, 2, 3, and 4 facilities and/or piping used in oil transfer operations must meet the following criteria:
• Must be well supported to avoid crushing or excessive strain.
• Flanges, joints, hoses, and piping must be visually checked for cracks and leakage prior to transferring oil.
• Must be in good condition and not have any loose covers, cracks, kinks, bulges, soft spots, or other defects that penetrate the hose reinforcement layer.
• Hoses or piping must not be permitted to chafe on the dock or vessel, or be in contact with any other surface that might damage the hoses or piping.
• All hoses and loading arms must be long enough to allow the vessel to move to the limits of its moorings without placing excessive strain on the oil transfer equipment.

• Hose ends must be tightly closed with properly secured flanges when they are moved into position for connection. They must be tightly closed immediately after they are disconnected.

• Residue in the hose or loading arm must be drained either into the vessel’s tanks or into suitable shore receptacles before they are moved away from the point of connection.

Oil transfer equipment testing

Annual tests of all oil transfer equipment, such as pumps, valves, piping, manifolds, connections, and hoses, are required. These tests must be done in accordance with the manufacturer’s recommendations and industrial standards, or through procedures identified under federal regulations.

For facilities, the design, construction, and repair records for storage tanks, pipelines, and all oil transfer equipment testing and repair records, must be kept for the life of the equipment. Inspection, maintenance, and repair records for pumps, valves, manifolds, and other ancillary equipment used in oil transfers must be kept for ten years.

What is a recreational vessel?

A vessel owned and operated only for pleasure with no monetary gain involved, and if leased, rented, or chartered to another for recreational use, isn’t used for monetary gain. Examples are house boats, ski boats, and other small craft on a rental or lease agreement.

If a vessel does not meet the definition of a recreational vessel, it is considered a non-recreational vessel. Some examples of non-recreational vessels are sight-seeing or tour boats, passenger vessels, chartered fishing boats, boats used for parasailing, tug boats, etc. This definition is based on the vessel’s use, and not on its size.