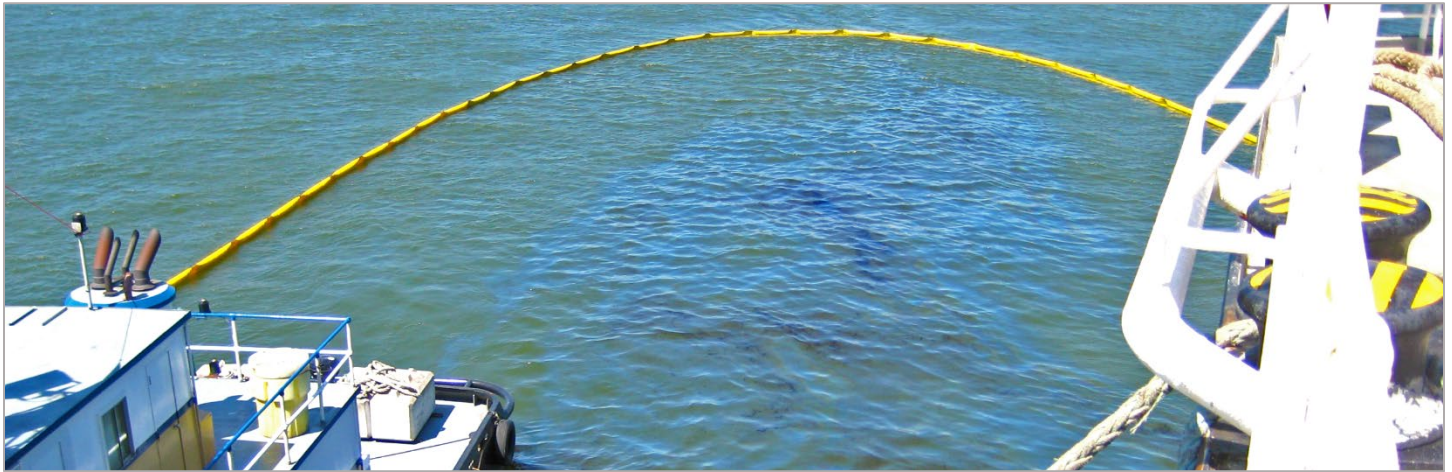


Pre-booming Requirements for Vessels Delivering Oil



Pre-boomed vessel with spilled oil contained within the boom.

Contact

Prevention Section
Spill Prevention, Preparedness, &
Response Program
Department of Ecology
360-407-7455
360-407-7288 fax

Vessel information
ecology.wa.gov/vessel-information

Notifications
OilTransferNotifications@ecy.wa.gov

Accommodations

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6831 or visit <https://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.

The Washington Department of Ecology's oil transfer rules are designed to prevent and contain spills when oil is transferred over water. The rules are found in the Washington Administrative Code (WAC) Chapter [173-180](#) for facilities, and WAC Chapters [173-184](#) and [317-40](#) for vessels.

What rules apply to my vessel?

Any vessel delivering oil in bulk to a non-recreational vessel or facility on or over Washington waters must meet the requirements of WAC 173-184 and, if engaged in bunkering a covered vessel, also the requirements of WAC 317-40. Covered vessels are defined in [RCW 88.46.010](#).

Does my vessel need to pre-boom every oil transfer?

Our rules use **Rate A** or **Rate B** to define the pre-booming and alternative measures requirements. All delivering vessels or facilities (deliverers) must pre-boom a **Rate A** transfer when it is safe and effective to do so. When transferring at **Rate B**, a deliverer may choose to either pre-boom or use alternative measures. When it is not safe and effective to pre-boom, the deliverer must meet the alternative measures requirements described in WAC [173-184-115](#) and [120](#).

How do I know if my vessel is conducting a Rate A transfer or a Rate B transfer?

Rate A or **Rate B** refers to the gallons per minute pumping transfer rate of a specific oil transfer operation.

The transfer rates are:

- **Rate A** – Operations transferring oil over 500 gallons per minute.
- **Rate B** – Operations transferring oil at 500 gallons per minute or less.

It is important to determine the planned transfer rate prior to the transfer operation, and stay within those boundaries during the transfer operation.

This knowledge can prevent a spill from tank overflows, as well as ensure the proper requirements for pre-booming or alternative measures are met.

I am going to transfer at Rate A. What are my requirements?

All **Rate A** transfers must be pre-boomed when it is safe and effective to do so. Prior to a **Rate A** transfer, the delivering vessel must:

- Have access to boom four times the length of the largest vessel involved in the transfer or 2,000 feet, whichever is less.
- Deploy boom with a 5-foot stand-off around the vessel(s) and/or facility dock area to maximize the containment effectiveness.

All boom and related equipment must be of the appropriate size and design for the environmental conditions at the site based on the manufacturer's specifications. In the event of an emergency, the delivering vessel must be able to quickly disconnect all containment boom.

What is a safe and effective threshold report?

A Safe and Effective Threshold Determination Report (S&E report) establishes the sea and weather conditions that might make it unsafe or ineffective to pre-boom. Delivering vessel owners or operators must submit an S&E report to Ecology for review and approval for each location where the vessel will conduct **Rate A** transfers. The S&E report must list the "threshold values" for sea and wave conditions, wind speed, current velocity, and any other conditions beyond which pre-booming is expected to be unsafe and/or ineffective.

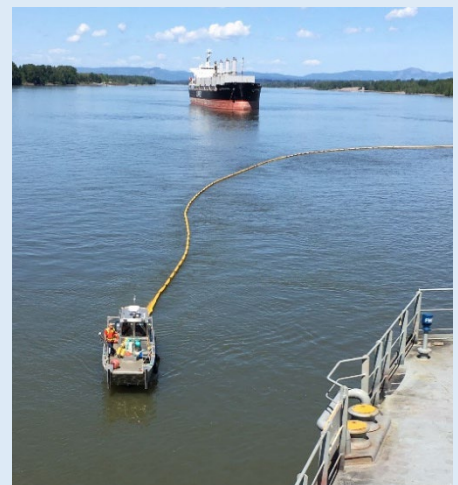
Vessels transferring at Class 1 facilities should use the safe and effective threshold values already determined in the facility's operations manual.

Flexibility for unique environments

Pre-booming a transfer means completely surrounding the vessel(s) and/or facility dock area involved in the oil transfer.

The rule allows flexibility for vessels delivering oil in specific environments. In environments where spilled oil will always travel in one direction, such as a river, the delivering vessel must boom to provide for maximum containment of any oil spilled. In river environments, it may be more appropriate to use a boom configuration that provides containment downstream of the transfer rather than a configuration that surrounds the transfer.

Delivering vessels may not boom solely under the transfer hose/manifold area because it does not provide for maximum containment of oil spilled outside the narrowly boomed area.



Unique pre-booming configuration used on the Columbia River. This configuration accounts for river current.

What should I do if it is not safe to pre-boom?

Pre-booming is not required if conditions at the site of the transfer exceed the approved safe and effective threshold. In this case, you must submit a boom reporting form in the Advance Notice of Transfer (ANT) system, by email, or by fax.

In addition, you must:

- Ensure access to boom four times the length of the largest vessel involved in the transfer or 2,000 feet, whichever is less.
- Ensure personnel are trained in the proper use and maintenance of boom and recovery equipment.
- Ensure recovery equipment is readily available onsite for a seven-barrel spill (i.e. containers, shovels, sorbent materials, storage capacity, etc.).
- Within 30 minutes of notification of a spill, have the ability to safely track the spill in low visibility conditions and the tracking system on-scene.
- Within 1 hour of notification of a spill, be able to completely surround the vessel(s) and/or facility dock area with containment boom.
- Within 2 hours of notification of a spill, have additional boom available for containment, protections, and recovery. Boom must be four times the length of the largest vessel involved in the transfer or 2,000 feet, whichever is less.
- Within two hours of notification of a spill, have an operable skimming system available on site with 50 barrels recovery and 100 barrels of storage.

I am going to conduct a Rate B transfer. What are my requirements?

Rate B transfers are not required to be pre-boomed. A delivering vessel conducting a **Rate B** transfer may choose to either pre-boom the transfer or employ alternative measures. If pre-booming is chosen, surround the transfer area, similar to the Rate A requirements. The exceptions are:

- At 1 hour, an additional 500 feet of boom must be able to be deployed, and recovery equipment for a two-barrel spill must be available.
- Within 2 hours of notification of a spill, an additional 500 feet of boom must be available on-scene for containment, protection, and recovery.

For additional pre-booming requirements refer to WAC 173-184-120.

Correct and incorrect use of the boom reporting form

Use the boom reporting form to document conditions that exceed the safe and effective thresholds at the site of the transfer.

Do not use the boom reporting form to document conditions that make pre-booming difficult, but do not exceed the safe and effective threshold. Examples of conditions that require pre-booming and should not be on a boom reporting form include:

- Damaged or unavailable boom.
- Favorable weather conditions at the transfer site, but poor weather conditions during transit to the transfer site.
- Weather conditions that make pre-booming difficult but are not addressed in the safe and effective threshold report (fog, temperature).

If conditions at the site of the transfer do not exceed the approved safe and effective threshold and pre-booming is required but not possible, alternative options are to delay the transfer until pre-booming is possible, or to transfer at Rate B instead.

Deploy boom if it is safe to do so. If oil spills, boom will contain at least some of the oil until more response resources arrive, regardless of wind, waves, or current conditions.

The boom reporting form is available at:

<https://fortress.wa.gov/ecy/publications/documents/ecy070215.pdf>