



Lower Columbia Region Harbor Safety Committee

**Vessels Traveling
East of Ryan Point Vancouver, WA.
Standard of Care**



A. Towed barge, passenger and other vessels Standard of Care

1. Purpose

The Columbia River towed barge, passenger and other vessels Standard of Care is intended to eliminate conflicts between towing vessels, passenger and other vessels on the Columbia River and Tributaries east of Ryan Point with a resulting improvement in navigation safety.

2. Background

The most predominant method of barge towing on the Columbia River east of Ryan Point is in the “push” or “river” mode of towing, whereby a towboat or tugboat faces up directly against the stern, or into a towing “notch” on the stern of a barge, and connecting to the barge with a system of wires. For the purposes of this standard of care, towing a barge in the alongside towing mode is considered equivalent to the push mode.

Since the earliest days of navigation on the river, it has been necessary for Log tows to be towed on a tow wire or hawser in the astern towing mode. This mode of towing is used when towing log rafts.

The concerns that most commonly arise with respect to towed barge operations being addressed by this SOC are:

- The ability of the towing vessel to safely control the tow under all anticipated river conditions during a transit.
- Communications between towing vessels, passenger and other vessels on the Columbia River and tributaries east of Ryan Point.

3. Scope

Geographic Area of Applicability

This SOC applies to all towed barge and passenger vessel operations on the Columbia River and tributaries east of Ryan Point at approximately mile 108.2 to Lewiston Idaho on the Snake River at mile 140 and Clearwater River to mile 1.2.

Vessels Covered by the SOC

This SOC applies to towed barges, passenger and other vessels, along with log raft towing operations.



B. General Requirements

The master and pilots of passenger vessels, tugs towing barges and log rafts should have due regard for the needs and considerations of each other's respective vessels. The master of a tug should ensure that the tug is able to exert positive control of their tow at all times. Positive control means that the Master is able to maintain the tow on a stable track and maneuver the tow under all reasonably anticipated river conditions during a transit.

Tug and passenger vessel masters should ensure that appropriate voyage planning takes place to identify one-way traffic and holding areas which require close coordination and passing arrangements with other traffic in both meeting and overtaking situations.

When either the tug, passenger or other vessel recognizes that a meeting or overtaking situation is developing, they should communicate directly on the bridge-to-bridge radio and coordinate their actions in accordance with the Inland Rules of the Road to accomplish a safe passage.

C. Communications

Clear and timely communications between the towing vessels, passenger and other vessels are absolutely essential to safe navigation. The primary communication method is by VHF radio on channel 13. All vessels should ensure that the automatic identification systems (AIS) on their respective vessels are updated, properly programmed and operating.

The master and pilots of tugs towing barges, passenger and other vessels should respond to security calls when appropriate and encourage timely and thorough bridge to-bridge communications to effect safe passing arrangements.



1. Security Call Checkpoints

In addition to the information provided by AIS, a voluntary system of security call checkpoints is recommended to be used at all times when using the main channel and during periods of reduced visibility. These calls are broadcast on the bridge-to-bridge radio (VHF channel 13). Tugs, passenger and other Vessels are encouraged to participate in the checkpoint system. When reporting at the points listed below, the following information should be provided:

- Tug/vessel identification.
- Tug/vessel type.
- Current position or check point.
- Direction of travel.

Example- “Tug Chief with a tow is inbound Ryan Point”.

The following list of checkpoints is recommended, but may not be inclusive of all locations or situations when the use of a security call would be appropriate.

INBOUND East of Ryan Point		
NAME	LOCATION	REASON
Airport Dike	Mile 110.0	Traffic inbound/outbound
Fishers Quarry	Mile 115.0	One-way-Traffic
Sundial Chip	Mile 118.0	One-way-Traffic
Washougal Dolphin #50	Mile 123.0	Traffic inbound/outbound
Tunnel Point	Mile 127.6	Traffic inbound/outbound
Cape Horn	Mile 131.3	Traffic inbound/outbound
Prindle Dike	Mile 134.0	One-way Traffic
Skamania Light	Mile 139.5	One-way-Traffic
Fort Rains	Mile 146.6	One-way Traffic
Spring Creek	Mile 168.0	Hood River One-way Traffic
Straights Point	Mile 175.0	Traffic inbound/outbound
Squally Point	Mile 184.8	±Traffic inbound/outbound
Browns Island	Mile 198.0	Traffic inbound/outbound
Celilo Park	Mile 202.0	One-way Traffic
Light 50	Mile 274.9	Traffic inbound/outbound
Devil’s Bend Rapids	Mile 285.0	Traffic inbound/outbound



State Line	Mile 309.7	Traffic inbound/outbound
Mouth of Snake River	Mile 324.1	Traffic inbound/outbound
East Pasco	Mile 2.8	One-way Traffic
Hard Rock	Mile 11.0	Traffic inbound/outbound
Fish Hook Park	Mile 17.0	Traffic inbound/outbound
Sheffler Elevator	Mile 29.0	Traffic inbound/outbound
Burr Canyon	Mile 35.8	Traffic inbound/outbound
Steamboat Bend	Mile 57.6	One-way Traffic
Riparia	Mile 67.2	Traffic inbound/outbound
New York Bar	Mile 80.5	Traffic inbound/outbound
Schultz Bar	Mile 101.0	One-way Traffic
Nisqually John Landing	Mile 125.7	Traffic inbound/outbound
Silcott Island	Mile 131.4	Traffic inbound/outbound
Wilma	Mile 136.0	Traffic inbound/outbound



OUTBOUND From Lewiston Idaho		
NAME	LOCATION	REASON
Lewiston Port Docks	Mile 1.1 Clearwater River	Traffic inbound/outbound
Silcott Island	Mile 131.4	Traffic inbound/outbound
Boyer Park	Mile 105.4	Traffic inbound/outbound
Schultz Bar	Mile 101.0	One-way-Traffic
Lake Bryan Light 14	Mile 82.3	Traffic inbound/outbound
Texas Rapids	Mile 66.0	Traffic inbound/outbound
Lyons Ferry	Mile 60.0	One-way-Traffic
Scott	Mile 36.2	Traffic inbound/outbound
Votow	Mile 22.6	Traffic inbound/outbound
Fish Hook Park	Mile 44-17.0	Traffic inbound/outbound
East Pasco	Mile 2.8	Traffic inbound/outbound
Mouth of Snake River	Mile 324.1	Traffic inbound/outbound
Finley	Mile 322.0	Traffic inbound/outbound
Yellepit	Mile 314.4	Traffic inbound/outbound
Hogue Warner	Mile 279.0	Traffic inbound/outbound
Fulton Canyon	Mile 206.7	Traffic inbound/outbound
The Dalles Lock	Mile 191.8	Traffic inbound/outbound
Lyle	Mile 181.0	Traffic inbound/outbound
Straights Point	Mile 175.0	Traffic inbound/outbound
Bingen	Mile 170.0	One-way Traffic
Anderson Point	Mile 154.0	Traffic inbound/outbound
Bonneville Locks	Mile 145.4	Traffic inbound/outbound
Oneonta	Mile 137.6	One-way Traffic
Corbett	Mile 126.0	One-way Traffic
Lady Island Towers	Mile 120.0	One-way Traffic
Ryan Point	Mile 108.2	Traffic inbound/outbound

Lockage Guidelines



A. Lockage Guidelines 1. Purpose/ Scope

To provide uniform guidelines to be followed by all personnel operating vessels and/or tows through locks, as per 33 CFR, section 207.718, on the Columbia and Snake Rivers. The term "Vessel" used in this chapter includes all connected units, tugs, barges, tows, boats or other floating objects.

2. General Information

- a. The vessel operator shall conduct a pre-locking meeting (Work Safety Assessment) with all required personnel. This shall include, but not be limited to, the following:
 - 1) Use of proper Personal Protective Equipment.
 - 2) Position of deck crew while maneuvering and mooring.
 - 3) Monitoring mooring bit ties.
 - 4) Monitoring tow position in lock between yellow lines.
 - 5) Risk assessment and mitigation of all known or potential hazards.
 - 6) Any special locking instructions provided by the lock operator.
 - 7) Communication requirements.
 - 8) Number and location of lines and tie off bits to be used.
- b. The vessel operator shall ensure mooring bit ties are properly monitored to assure the vessel remains in a safe position. During the entire lockage, the vessel operator shall constantly attend the wheelhouse, be aware of the vessel's position, and monitor radio channel 14 on frequency 156.700 MHz, or otherwise be constantly able to communicate with the Lock Master. At a minimum, vessels shall be as vigilantly manned as if underway.
- c. Lockage shall not be construed as being routine. Lockage has inherent risks and hazards including changes in the force of water movement impacting the tow throughout the lockage.
- d. Vessel operator shall request notification from the Lock Master of all gate openings before they are actually opened.
- e. When approaching a lock the vessel operator shall ensure that all radars are either in the off or stand by position, as early as safe navigation permits, but always before entering the lock.

B. Procedures 1. Arrival

- a. The vessel operator shall contact the Dam by radio a minimum of 30 minutes out and pass vessel dimensions and whether there is hazardous cargo to Lock



Master. When a tug draws more water than the barges in tow both drafts are to be passed.

- b. The vessel operator shall ask the Lock Master if a normal lockage is expected or are there any changes to the locking process currently in place.
- c. The vessel operator shall enter the lock on green light and with a verbal OK to enter from the Lock Master. A red signal light shall indicate it is not safe to proceed.
- d. The vessel operator shall ensure that a qualified crew member, wearing appropriate personal protective equipment, is positioned on the tow early enough to provide the vessel operator with accurate and timely safe guidance information during the approach to the lock.
- e. A qualified crew member on the bow shall visually inspect the lock chamber to ensure that the gates are fully opened, no drift is present in the chamber and no overhead hazards exist that shall interfere shall the lockage.
- f. The vessel operator shall maneuver into the lock while being assisted by both visual signals and radio communications from the qualified crew member.

2. Lockage

- a. The vessel operator shall ensure the vessel and/or tow is secured, between the yellow lines, in a manner permitting minimal lateral and minimal fore and aft movement. A minimum of two lines shall be used for tows of empty barges and four lines shall be used for any tow with at least one load in it.
- b. The vessel and/or tow shall be tied to at least two (where practicable) floating mooring bits with ropes or lines adequate to ensure that there is no fore or aft movement of the vessel and that lateral movement is minimized. Redundancy can further reduce risk; where practicable, four mooring lines can provide greater security than two lines. Besides mooring procedures, mooring lines that are in good serviceable condition are essential in preventing movement of vessel and/or tow in the lock.
- c. After the vessel and/or tow is secured in locks, a qualified crew member shall visually inspect the yellow line and the stern of the boat and notify the vessel operator of the distance between the stern and the yellow line. The vessel operator shall add the distance between the stern of the vessel and the yellow line into the tow's length to ensure the overall length does not exceed 650'. The vessel operator shall then report to the Lock Master that the tow is in position between the yellow lines and is secured.
- d. When Lock Master arrives at the head of the vessel and/or tow, the vessel operator shall ask for verification that the bow of the vessel and/or tow is at or behind the yellow line. (The Lock Master may observe the position of the vessel



by using remote control video cameras and may not actually walk on the lock wall.)

- e. The vessel operator shall maintain continual monitoring of mooring lines and vessel movement during the entire lockage.

3. Departure

- a. Prior to departure a qualified crew member shall pass the completed lock slip to the Lock Master, if requested.
- b. The vessel operator shall not leave the locks until a green light is visible and a horn signal or verbal OK has been received from the Lock Master.
- c. The vessel operator shall develop as much understanding as is reasonable and prudent regarding traffic in the departure area prior to moving out of the lock. The vessel operator shall always exercise due caution to avoid the development of an unsafe situation.
- d. Deck personnel shall release lines and provide guidance for lock clearance and traffic avoidance for the vessel operator, both by visual signal and radio communication, until the vessel and/or tow is safely clear of the lock and all traffic or other hazards to safe navigation.