

# PACIFIC PILOTAGE AUTHORITY

1000 – 1130 West Pender Street  
Vancouver, B.C  
V6E 4A4



## NOTICE TO INDUSTRY

**Date Issued:** 30 May 2023

**Notice Number:** 05/2023  
(replaces Notice 02/2022)

**Subject:** **Cascadia** - Tug requirements for ship berthing/unberthing

**Geographic Area:** Vancouver Harbour, BC

**Details:** Following a successful year-long live trial of departures at currents up to 2.5 kts, the BC Coast Pilots are expanding the below tug matrix to allow departures from Cascadia at currents up to 3.0 kts. The below matrix provides guidance on tug requirements based on the *Bollard Pull* of the tugs, as well the *Line Forces* required. Note that the maximum tug line forces must not exceed the SWL of a ship's fittings, regardless of the tugs' bollard pull ratings.

If any safety concerns are noted, or after one year, this notice will be reviewed.

### Guideline:

Length Overall	Draft	Current Strength at Second Narrows	Berthing Tugs: Line Forces Required	Unberthing Tugs: Line Forces Required
≤ 180m	≤ 10m	≤ 2.0 kts	2 x 30t	2 x 30t
		2.1 – 3.0 kts	N/A	2 x 30t
	> 10m	≤ 2.0 kts	2 x 30t	2 x 30t
		2.1 – 3.0 kts	N/A	2 x 30t
181m - 210m	≤ 10m	≤ 2.0 kts	2 x 30t	2 x 30t
		2.1 – 3.0 kts	N/A	2 x 40t
	> 10m	≤ 2.0 kts	2 x 40t	2 x 40t
		2.1 – 3.0 kts	N/A	2 x 40t
210m - 230m	≤ 10m	≤ 2.0 kts	2 x 40t	2 x 40t
		2.1 – 3.0 kts	N/A	2 x 60t
	> 10m	≤ 2.0 kts	2 x 60t	2 x 60t
		2.1 – 3.0 kts	N/A	2 x 60t

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Length Overall	Draft	Current Strength at Second Narrows	Berthing Tugs: Line Forces Required	Unberthing Tugs: Line Forces Required
230m - 240m	≤ 10m	≤ 2.0 kts	2 x 60t	2 x 60t
		2.1 – 3.0 kts	N/A	2 x 60t
Beam ≤ 40m	> 10m	≤ 2.0 kts	2 x 75t	2 x 75t
		2.1 – 3.0 kts	N/A	2 x 75t

## Note:

1. This berth normally has a 2.0 knot current restriction, based on Second Narrows predictions, and ships will not be moved outside this parameter except as below.
2. For any departures with current >2.0 kts:
  - a. The *maximum* current on the specific tide must be looked at:
    - If *maximum* current ≤ 3.0 kts, then departures up to 3.0 kts are allowed over that full tidal cycle.
    - If *maximum* current > 3.0 kts, then departures up to 3.0 kts are only allowed on a **reducing** current (i.e., approaching slack water).
  - b. The Pilot Order Time must be at least 30 min *before* the window closes.
  - c. Line crew *must* be ready on the dock 15 min *before* Pilot Order Time.
  - d. **For any arrivals or departures over 2.0 kts, at the discretion of the Pilot a third tug may be required.**
3. All ship-berthing tugs must have certification indicating sustained bollard pull rating in metric tonnes.
4. Due to currents within TCZ-2, no consideration will be given for ships' bow or stern thrusters.
5. Pilot discretionary considerations include:
  - visibility
  - predicted current
  - freset
  - vessel draft
  - other vessel traffic
  - manoeuvring characteristics or mechanical history of the vessel
  - other relevant factors
6. The Real-Time AIS tide gauge at Second Narrows Bridge will be utilized to verify the tidal predictions.

Please contact the PPA at [marineops@ppa.gc.ca](mailto:marineops@ppa.gc.ca) if there are any queries or concerns.