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

NOTICE TO INDUSTRY

Date Issued: 28 February 2020 **Notice Number:** 01/2020

Subject: Pembina Vancouver Wharves – Passing Vessel Effects

Geographic Area: Vancouver Harbour, BC, Canada

Details: Damages to moored vessels and terminal loading equipment have occurred at Pembina Vancouver Wharves due to hydrodynamic interaction between berthed vessels and passing vessels. Critical factors appear to be high passing vessel speeds, separation distance between passing and moored vessels, deeper drafts of passing and moored vessels, low tidal heights, higher tidal current velocity, and slack mooring lines on the moored vessel. Berth #1 is more susceptible to the passing vessel effects than berth #5.

Guideline:

The following recommendations will help to reduce the hydrodynamic effects of passing vessels on the moored vessels at Pembina Vancouver Wharves:

(1) Passing vessels must transit on (or south of) the centerline of the TCZ-1 channel.

(2) Through-water passing ship speed up to nine (9) knots is acceptable, except where safety of navigation requires otherwise.

(3) Mooring arrangements should be a minimum of four (4) head lines, two (2) forward spring lines, two (2) aft spring lines, and four (4) stern lines for all vessels. If possible, Panamax-size vessels should deploy additional mooring lines. When possible, breast lines (perpendicular to the ship) may be beneficial for restraining motion when the vertical line angle is not excessive.

(4) Mooring line tension should always be maintained at 10% of their Minimum Breaking Loads (MBL).

(5) The clearance between the ship loader and the hatch coaming of the moored ship should be at least two (2) metres when ships are passing Pembina Vancouver Wharves.

(6) Refer to the Vancouver Fraser Port Authority Port Information Guide (ver. May 2019) for terminal gangway procedures (page 152).

Please contact PPA at marineops@ppa.gc.ca for queries or concerns.