



PUGET SOUND PILOTS

Protecting your waterways since 1935

July 9, 2010

To our valued customers:

We have enclosed an updated copy of *General Guidelines for Vessels Transiting Restricted Waterways or Ports*.

These guidelines are offered for your assistance in planning your transits and to give you a general indication of what requirements might apply to your transits. These general guidelines are advisory in nature only and are not intended to supersede the authority or judgment of the individual pilot or pilots. Every specific situation is unique with regard to the type and class of vessel, the existing weather and numerous other variable conditions. All decisions rest with the discretion of the pilot(s) dispatched to the job.

Very truly yours,

Puget Sound Pilots

Capt. Frantz A. Coe
President
Enc.
cc: Dispatchers

GENERAL GUIDELINES FOR VESSELS TRANSITING RESTRICTED WATERWAYS OR PORTS

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GENERAL DEFINITIONS

1. Unless a more stringent requirement is expressed, any reference to “tugs” in these guidelines shall refer to tugs of suitable power and configuration for the transit.
2. Unless a more stringent requirement is expressed, any reference to “bow thrusters” in these guidelines shall refer to fully documented and available bow thrusters of suitable power.
3. As used in these guidelines, the term “4% Bow Thruster” shall refer to bow thruster(s) with documented and 100% available metric horsepower (1.36 HP/KW) greater than or equal to 4% of the vessel’s DWT.

UNDER-KEEL CLEARANCE IN ALL PORTS and WATERWAYS

Vessels exceeding 400 feet in length transiting restricted waterways are to maintain a minimum under-keel clearance of three (3) feet or 10% of draft, whichever is greater, at the time of transit.

While the above guideline is general in nature, it is noted that the determination of an appropriate minimum under-keel clearance for a specific vessel transiting a specific waterway must take into account many factors in addition to vessel draft and least depth, including but not limited to: Vessel size, configuration, speed, trim, and list; the shape, size and hydrography of the waterway; and variations from predicted tidal levels.

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ANACORTES - PORT DOCKS

1. Vessels exceeding 400 feet in length arriving or departing berths **port-side-to** are to transit during flood current, at slack current, or when the ebb current is 0.5 knot or less.
2. Vessels exceeding 400 feet in length arriving or departing berths **starboard-side-to** are to transit during ebb current, slack current, or when the flood current is 0.5 knot or less.

BELLINGHAM - SQUALICUM WATERWAY

Vessels exceeding 300 feet in length will transit on a rising tide and will be dispatched with 2 tugs. If the vessel has a bow thruster, one tug may be sufficient depending on vessel size.

Assignments to Bellingham Cold Storage will be daylight only unless Squaticum Creek Waterway Buoy #2 is lighted and the lighted ranges are operational.

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FERNDALE – CONOCO - PHILLIPS REFINERY

1. Tankers berthing at the Conoco Phillips Refinery wharf will be starboard side alongside.
2. Docking of all deeply loaded tankers is based on adequate tugs and acceptable weather conditions, and should take place at the following times:
 - A. High water or low water slack current, or
 - B. During ebb currents, except during the hour of maximum flow on an ebb current with a maximum velocity exceeding 3 knots.

*NOTE: Times of predicted slacks and maximum currents are based on Rosario Strait except that the slack water time before the ebb current will be Rosario Strait **plus** one and one-half (1-1/2) hours. Velocity refers to that published for Rosario Strait.*

3. Tankers may be dispatched with an additional tug(s) if dictated by the prevailing circumstances.

GUEMES CHANNEL

Unless the predicted Rosario Strait current at Green Point is one knot or less, tankers inbound to Guemes Channel and not in ballast, shall arrive at Green Point at predicted slack current, plus or minus 30 minutes.

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OLYMPIA

1. **All Vessels.** All transiting vessels must have a minimum under keel clearance of three (3) feet or 10% of draft, whichever is greater.
2. **Arriving vessels.** Vessels with a draft of 25 feet or more will be limited to entering the channel on a rising tide at least 1 hour before high water. All vessels over 300 feet in length will be dispatched with 2 tugs except that a vessel may be dispatched with 1 tug if it has a 4% Bow Thruster and an unobstructed waterway and turning basin.
3. **Departing Vessels.** Vessels with a draft of 25 feet or more will depart on a rising tide. All vessels over 300 feet in length will be dispatched with 2 tugs unless: 1) it has 1 tug and a 4% Bow Thruster and is departing bow out, or; 2) it has 1 tug and the vessel is departing an unobstructed waterway and turning basin, bow out, 1 to 2 hours before high water.
4. **Vessels over 700 feet.** All transits of vessels with a LOA over 700 feet should be discussed with the President of Puget Sound Pilots well in advance.

PORT ANGELES HARBOR

The following vessels will be dispatched with an assist tug when underway in Port Angeles Harbor:

1. Laden petroleum tankers of any size and LPG/LNG cargo vessels exceeding 40,000 DWT.
2. Vessels exceeding 800 feet in length with a draft of 40 feet or more.
3. Any vessel exceeding 40,000 DWT when a laden petroleum tanker or LPG/LNG cargo vessel is already at anchor.
4. All oversized tank vessels that have been re-measured to less than 125,000 DWT.

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PORT TOWNSEND HARBOR

1. Vessels exceeding 700 feet in length or 30 feet in draft shall enter and exit Port Townsend harbor 1 hour before to 1 hour after the predicted slack current in Admiralty Inlet.
2. Vessels exceeding 38 feet in draft will generally require tug assistance.

SEATTLE - SHILSHOLE BAY TO LAKE WASHINGTON

1. **ALL VESSELS:**
 - A. Vessels exceeding 500 feet in length or 68 feet in beam are not considered suitable for transit from Shilshole Bay through the Hiram Chittenden Locks and the Lake Washington Ship Canal. Exceptions to the above must be discussed with the President, Puget Sound Pilots well in advance of the intended transit date.
 - B. Tug assistance, time of transit, and other restrictions may be imposed during times of significant fresh water runoff or fish net congestion.
 - C. Adequate fenders, as specified by the Lockmaster, are required for transiting locks.
2. **VESSELS EXCEEDING 300 FEET IN LENGTH**
 - A. Transit of the Shilshole Bay Entrance Channel is to be made on a rising tide, height of tide zero (0) feet or greater.
 - B. All vessels will be dispatched with a minimum of 2 tugs except that 1 tug may be dispatched to a vessel with a 4% Bow Thruster.

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Revised July 2010.

3. TANKERS - TIME OIL

- A. Tankers inbound from Shilshole Bay to Time Oil will be starboard-side-to and will have a maximum saltwater draft of 25 feet.
- B. Tankers outbound from Time Oil (starboard-side-to) are to have a maximum freshwater draft of 19 feet forward.
- C. Daylight transits are required for tankers exceeding 400 feet in length.

SEATTLE - ELLIOTT BAY DOCKS

- 1. **Pier 90 and Pier 91.** All dry cargo vessels will be dispatched with a minimum of 2 tugs except that 1 tug may be dispatched to a vessel with a 4% Bow Thruster.
- 2. **Other Elliott Bay Docks.** All dry cargo vessels will be dispatched with 2 tugs except that vessels with a bow thruster may be dispatched with 1 tug if no adverse conditions of obstruction, wind, current or freshet runoff exist.

SEATTLE - PIER 90 EAST SIDE (Berths 2, 4 & 6)

- 1. Vessels Maneuvering Around Berthed Vessels:
 - A. The height of tide shall be 6 feet or greater;
 - B. The vessel will be dispatched with 2 suitable tugs except that dry cargo vessels with a 4% Bow Thruster may be dispatched with 1 suitable tug depending on vessel size, obstructions, wind, and currents; and
 - C. If the combined beam of both vessels is greater than 140 feet, the transit must be discussed with the President, Puget Sound Pilots well in advance of the intended transit date

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SEATTLE - EAST WATERWAY

1. Dry cargo vessels with a LOA of 900 feet or greater will be dispatched with a minimum of 2 tugs except that 1 tug may be dispatched to a vessel with a 4% Bow Thruster **departing** T-18 berths 1 or 2 if berth 1 is unoccupied.
2. All other dry cargo vessels will be dispatched with 2 tugs except that 1 tug may be dispatched to: 1) a vessel with a 4% Bow Thruster, or; 2) a vessel with a bow thruster **departing** T-18 berths 1 or 2 if berth 1 is unoccupied.

SEATTLE - WEST WATERWAY

1. All vessels with a LOA of 900 feet or greater will be dispatched with a minimum of 2 tugs except that 1 tug may be dispatched to a vessel with a 4% Bow Thruster **departing** on a rising tide when there are no other vessels or obstructions at T-5 or the oil terminal at Pier 11.
2. All other vessels will be dispatched with 2 tugs except that 1 tug may be dispatched to a vessel with a 4% Bow Thruster.

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SEATTLE - DUWAMISH WATERWAY

I. All Vessels:

- A. Strong ebb currents caused by freshet conditions and/or extreme low waters may require waterway transits to begin between 1 and 2 hours before the predicted high water, at the discretion of the pilot. Additional restrictions may be imposed depending on conditions.
- B. Air draft clearance with the fixed West Seattle Freeway bridge span needs to be at least 2 meters (6.6 feet) or greater at the time of transit.

NOTE: Air draft clearance may be determined by the following formula:

Clearance (in feet) = 150.4 - **Ht** - **Hb** + **D** where:

150.4 = 140 clearance + 10.4 mean high water datum

Ht is height of tide at time of transit

Hb is height of ship from base line to mast top, or highest point of ship

D is draft of ship in way of highest point on ship

- C. Vessels will be dispatched with 2 tugs except that a vessel with a bow thruster may be dispatched with 1 tug, depending on vessel size and other prevailing conditions.
2. **Waterway transits of vessels exceeding 400 feet** in length will be dispatched with 2 tugs and are to begin 1 to 2 hours before the predicted high water or approximately 1 hour after the predicted low water.
 3. **Vessels with a Draft of 30 Ft. or More Transiting the Waterway Stern First** will be dispatched with 2 tractor tugs of suitable power, except that if the vessel has a bow thruster it may be dispatched with 1 tractor tug of suitable power and 1 conventional, twin-screw, ship assist tug.

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4. **Vessels Exceeding 90 Feet in Beam** will be dispatched with 2 pilots and the transit must be discussed with the President, Puget Sound Pilots, well in advance of the intended transit date. The following topics should be discussed:
 - A. The need for additional tugs.
 - B. Whether special circumstances or vessel configurations may require a daylight transit.
 - C. Status of other vessels or obstructions in the waterway.
- A. **Vessels Greater Than 95 Feet in Beam** are not considered suitable for transit through the Burlington Northern railroad bridge.

TACOMA - BLAIR WATERWAY BELOW 11th ST.

1. All vessels with a LOA of 900 feet or greater will be dispatched with a minimum of 2 tugs except that 1 tug may be dispatched to a vessel with a 4% Bow Thruster **departing** when there are no other vessels or obstructions in the waterway.
2. All other vessels will be dispatched with a minimum of 2 tugs except that 1 tug may be dispatched to a vessel with a 4% Bow Thruster.

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TACOMA - BLAIR WATERWAY ABOVE 11th STREET

1. **All vessels** will be dispatched with 2 tugs.
2. **Vessels exceeding 90 feet in beam where forward visibility is restricted** will be dispatched with 2 pilots.
3. **Vessels exceeding 95 feet in beam** should be dispatched with two (2) tractor tugs as primary assist tugs. If such a vessel elects to use a tractor tug paired with a conventional tug as the primary assist tugs, it will be dispatched with a third conventional tug. If such a vessel elects to use two conventional tugs as the primary assist tugs, it will be dispatched with two additional conventional tugs. All conventional tugs referred to in this section must be twin screw.
4. **Automobile carriers exceeding 85 feet in beam** will be dispatched with 2 pilots if they are a "box-like" configuration.
5. **Laden tankers exceeding 106 feet in beam** will be dispatched with 3 tugs, 2 of which must be suitable tractor tugs, provided that vessels with a bow thruster and twin screws may be dispatched with 2 suitable tractor tugs.
6. **Vessels of unusual configuration and all tank vessels in excess of 750 feet in length** may require daylight transit, as well as additional tugs or pilots. The transit of these vessels must be discussed with the President, Puget Sound Pilots well in advance of the intended transit date.

TACOMA - HYLEBOS WATERWAY

- I. **All vessels** will be dispatched with 2 tugs and must have air draft clearance with the overhead power cables of at least 3.1 meters (10.0 feet) at the time of transit.

NOTE: Air draft clearance may be determined by the following formula:

Clearance (in feet) = 183.9 - Ht - Hb + D where:

$$183.9 = 173 \text{ feet clearance} + 10.9 \text{ mean high water datum}$$

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Ht is height of tide at time of transit

Hb is height of ship from base line to mast top or highest point of the ship

D is draft of ship in way of highest point on ship

2. Vessels may require additional tugs or pilots if the navigable channel is obstructed, provided that **all transits must have a minimum unobstructed** navigable channel (except for the 11th Street Bridge) of 80 feet plus the beam of the vessel.
3. **At Schnitzer Steel** port-side-to berthing is not considered suitable.
4. **Vessels exceeding 23 feet in draft** must start transits between 1 and 1 ½ hours before the predicted high water.
5. **Vessels exceeding 90 feet in beam** will be dispatched with 2 pilots.
6. **Vessels between 90 feet and 95 feet in beam with a draft of 30 to 33 feet** will start transits 1 hour prior to the highest high water of the day if the difference between the 2 high waters of the day is greater than 0.5 feet.

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7. **Vessels exceeding 95 feet in beam or 630 feet in length and tankers exceeding 90 feet in beam or 630 feet in length** are subject to the above guidelines. In addition the transit of these vessels must be discussed with the President, Puget Sound Pilots, well in advance of the intended transit date. The following topics will be discussed:
 - A. Vessel length and draft. Length is not to exceed 630 feet if using the upper turning basin.
 - B. Number of pilots.
 - C. Transits restricted to daylight.
 - D. Use of two (2) tractor tugs of suitable bollard pull and configuration.
 - E. Channel conditions for the transit and turning in the basin.
 - G. Limiting the start of the transit to 1 hour prior to the highest high water of the day, if the difference between the two (2) high waters of the day is greater than 0.5 feet.
8. **Vessels exceeding 106 feet in beam** are not considered suitable for transit through the 11th Street Bridge.

TACOMA - SITCUM WATERWAY

1. Unless other more restrictive waterway guidelines apply, all vessels with a LOA of 900 feet or greater will be dispatched with a minimum of 2 tugs except that 1 tug may be dispatched to a vessel with a bow thruster **departing** the outer berth at either Maersk or T-7 when the berth directly across the waterway is unoccupied.

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2. Unless other more restrictive waterway guidelines apply, all other vessels will be dispatched with 2 tugs except that 1 tug may be dispatched to:
 - A. Vessels with a 4% Bow Thruster,
 - B. Vessels with a bow thruster starboard-side-to **departing** the outer berth at T-7; and
 - C. Vessels with a bow thruster port-side-to at the APM terminal when there is no vessel on the APM side of the waterway between the vessel and Commencement Bay.

3. Two tractor tugs will be dispatched to vessels transiting when there is a vessel berthed at T-7 and another vessel berthed directly or almost directly across the waterway at the Maersk terminal. In addition, all of the following conditions must be met:
 - A. The beam of the vessels must be such that there will be a net clearance available at all times to the maneuvering vessel of 140 feet, meaning a minimum of 70 feet clearance on each side when the vessel is in the center of the available waterway;
 - B. No bunker barges are alongside any vessel that the maneuvering vessel will have to pass; and
 - C. 2 pilots will be dispatched to vessels with a beam of 105 feet or greater making this transit.

4. Be advised that an individual pilot might decide not to move a vessel under certain conditions when the container booms are lowered and the pilot believes they should be raised or if the pilot believes the weather conditions are sufficiently adverse.

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