



PORT OF MILFORD HAVEN

ENTRY AND DEPARTURE GUIDELINES FOR VESSELS

ISSUED BY THE MILFORD HAVEN PORT AUTHORITY

NINTH EDITION

May 2021

Amendment 2

April 2022

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RECORD OF AMENDMENTS

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Ninth Edition – April 2021	Port of Milford Haven	4	MHPA Acts and Orders 1983-2002	
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Amendment 1 – Oct 2021	Port of Milford Haven Schedule 2 Checklist October 2021	49	Updated Schedule 2	
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MILFORD HAVEN PORT AUTHORITY

PORT OF MILFORD HAVEN

INTRODUCTION

The Port of Milford Haven (51° 42' N, 05° 02' W) covers a well sheltered extensive area of the Haven from its entrance, which lies between St. Ann's Head (51° 41' N, 05° 10' W) and Sheep Island, two miles ESE to the upper reaches of the River Cleddau, as defined by Milford Haven Port Authority Acts and Orders 1983 to 2002.

Milford Haven is a river valley drowned by rising sea waters at the end of the Ice Age and now forms an arm of the sea enclosing over 70 miles of coastline within an entrance less than 1½ miles wide. The bed of the river forms a natural deep-water channel.

The dredged channel as far as Valero jetty no.1 berth allows vessels of up to 15.6 metres draft to berth on every tide.

The tidal range varies from 6.3 metres at Mean Springs to 2.7 metres at Mean Neaps. The maximum tidal velocity does not exceed 2.12 knots below Wear Point.

Compared with almost all other ports in the UK, Milford Haven is relatively fog free. Fog, with a visibility of less than 300 metres, occurs on average for short periods on only 15 days a year. While winds of gale force occur rather more frequently than in many ports in the UK, their average duration is only 6 hours.

FUNCTION

The Port of Milford Haven, which includes Pembroke Port, is principally a major energy port equipped with oil terminals for deep draught ships serving one refinery, two LNG terminals and two tank storage terminals.

A general cargo terminal operates at Pembroke Port together with a Ro-Ro ferry terminal whose service links the area with Rosslare in the Republic of Ireland.

Milford Docks has a dry dock and repair facilities for vessels up to 100 metres long and 19 metres beam. It also serves as a base for deep sea trawlers. A part of the dock is given over to a Marina. Vessels carrying explosives have been worked in the port, but only Pembroke Port Quay 1 holds an explosives license.

PORT AUTHORITY

The body responsible for the area is the Milford Haven Port Authority, Gorsewood Drive, Milford Haven, Pembrokeshire, SA73 3EP. Telephone No.: 01646 696100.

The Port Authority has its offices at Hubberston Point (51° 42'.44 N. 05° 03'.09 W) where the Port Control is located: -

Telephone No.: +44(0) 1646 696136/7
Email: portcontrol@mhpa.co.uk

PILOT VESSELS

The pilot vessels have green hulls, white superstructures, with “Pilot” painted in black. They are equipped with Radar AIS and VHF/DSC.

TUGS

The tugs are operated by Svitzer Marine Ltd, Svitzer House, Pembroke Port, Gate 4, Fort Road, Pembroke Dock, SA72 6TB.

Tel: (0)1642 258390

Mob: (0)7919 570892

There are nine tractor (twin asd) tugs with bollard pull between 117 tonnes and 80 tonnes permanently on station in the Haven. All the tugs are equipped for firefighting. During emergencies the tugs come under the direct control of the Harbourmaster, within port limits. Tugs moor at the following locations when not occupied: Carr Jetty and PDFT pontoon, Wear Spit moorings, Angle Bay moorings and South Hook moorings. Svitzer Haven, Caldey and Ramsey are refinery tugs. Svitzer Waterston is the Dragon LNG guard tug. LNG tugs are available for third party use but this is not available at short notice.

APPROACH AND ENTRY

The Harbour is entered through the West Channel, the main deep-water approach channel, or the East Channel. At their convergence a single dredged channel leads towards the various berthing areas. The West and combined channels are marked by leading lights, which are fitted with high intensity lights for use in daylight in reduced visibility. These day lights will be exhibited on request to the Port Control at any time. Lighted buoys and beacons warn the mariner of dangers up as far as Neyland Spit (51° 42'.1 N, 04° 56'.8 W).

HIGH INTENSITY LEADING LIGHTS AND RACONS

The following leading lights are fitted with high intensity lights for use in daylight in reduced visibility: West Blockhouse Point, Watwick Point, Great Castle Head, Little Castle Head, Popton Point, Bullwell and Newton Noyes. In addition, Great Castle Head is fitted with a high intensity PEL light.

These “daylights” will be exhibited, on request to the Port Control at any time.

Racons are fitted to West Blockhouse (Q) and Watwick (Y) leading lights and transmit continuously.

CASTLEMARTIN FIRING RANGE

The gunnery ranges at Castlemartin are active for up to 44 weeks in the year, starting in late February and ending in mid-December.

The danger area extends out to sea from the coast between Little Furznip, (51° 39'.2 N 05° 03'.5 W) and St. Govan’s Head (51° 35'.8 N, 04° 55'.5 W).

The actual danger area on any particular day depends on the type of weapons and ammunitions being fired. The area can extend out to 12 nautical miles off the coast, or as little as 3 nautical miles.

DIRECTIONS FOR DEEP DRAUGHT VESSELS

Vessels with a draught of 14.5 metres and over enter the harbour through the West Channel (51° 40'.0 N, 05° 10'.4 W) only and normally with a west going tidal stream. Under these conditions, vessels will be heading about 040° to keep the outer leading lights in line bearing 022½° and will thus be on the right heading for the West Channel leading lights on passing Middle Channel Rocks light. (Fl.(3) G. 7 secs.).

VESSELS CONSTRAINED BY THEIR DRAUGHT

Within the port limits a vessel of draught 12 metres or more should exhibit the shape and lights, and in restricted visibility should make the appropriate sound signals, for a vessel constrained by her draught. Such a vessel is particularly restricted when in the vicinity of Angle light buoy.

CONTROLLING DEPTH

The controlling depth for all states of the tide as far as the Valero deep water berths is 15.6 meters and for the Valero Pembrokeshire Oil Terminal (VPOT) deep water berth is 11.8 meters. The control depth from VPOT to the Ferry Terminal at Pembroke Port is 7.1 meters when proceeding north and east of the Dockyard Bank. The control depth in the Milford Shelf swinging ground is 9.3 metres for vessels over 275m LOA. For vessels under 275m the control depth is 11.0 metres. For the latest information on the controlling depths, the Port Authority should be contacted.

UNDER KEEL CLEARANCE

The minimum under keel clearance allowed is 10% of the vessel's deepest draught reading but this may be increased in periods of heavy swell. However, it should be noted that heavy swell may be experienced until inside St. Ann's Head and in adverse conditions as far as Angle light buoy. As a general rule, the under-keel clearance for deep draught vessels on the oil and gas terminals is 1 metre but should not be less than 5% of the vessel's draft.

DENSITY

The water density is 1.026 g/cm³ within the open confines of the harbour.

DEEP DRAUGHT VESSELS - INWARD PROCEDURE

Vessels bound for the oil terminals make tugs fast between the Angle buoy and South Hook buoy. VLCCs and LNGCs which require 4 or 5 tugs have little, but adequate time to make them fast. It is therefore extremely important for a deep draught tanker to have everything ready and the crew on stations prepared to make tugs fast by the time the Angle buoy is reached and that after the turn is made the speed over the ground is reduced quickly so that by the time the South Hook buoy is reached, all tugs are fast. LNG vessels make 4 tugs fast. One is an escort which will make fast outside and the remaining three meet the vessel, from Mill Bay (one may be at Angle buoy at the pilot's discretion for bow to bow work), in the West Channel to begin making fast.

BERTH APPROACHES

Many of the incidents during berthing operations have arisen because of a combination of an angled approach to the berth, excessive headway and berth approach speed with a sheer resulting from astern engine movements.

Vessels, particularly of 70,000 DWT and over, are strongly advised against approaching terminal berths at an angle. The safest maneuver being to bring the ship to rest, stopped over the ground, parallel to and about 40 - 60 metres off the berth before breasting in.

BUNKERING

Bunkering is only permitted within the designated areas defined in these Guidelines. Bunker check lists are to be completed and Port Control advised prior to commencing and on completion of bunker operations.

ANCHORAGES

Vessels wishing to anchor inside the port limits must obtain prior clearance from the Port Control. Vessels at anchor within the Haven must seek the permission of the Harbourmaster prior to bunkering or immobilizing engines.

Loaded small tankers arriving at the port are not normally permitted to anchor within the Haven. Partially loaded small tankers which have commenced loading at oil terminals, may be permitted to anchor within the Haven only with the Harbourmaster's permission.

Vessels which have to wait outside the Haven should keep well offshore, maintaining a listening watch on VHF channels 16 and 12 and allowing sufficient time to reach the entrance at the proper time for boarding the Pilot to enter port.

Ships of up to 12 metres draft for which there is no berth available can find an anchorage within the Haven, but because of problems experienced in the past the Port Control will encourage vessels of more than 7 metres draught to remain outside the Haven.

Dale Roads is the only anchorage for ships over 7 metres and under 12 metres draught. It is exposed to wind and swell and has an uneven, rocky bottom which does not always offer a good holding ground. Many ships have dragged anchor here and several have lost an anchor, and it is emphasised that a full anchor watch must be maintained on all vessels, with a listening watch on VHF channels 16 and 12.

If at anchor in Dale Roads at the onset of a gale, it is usually sound advice to pick up the anchor and proceed to sea, this should be done in good time to embark and disembark a Pilot if the Master is not in possession of a Pilotage Exemption Certificate. Ships without a Pilotage Exemption Certificate will not normally be permitted to anchor within the Haven for this reason.

Stack Anchorage can be used by medium sized vessels up to 7 metres draught. It is a little more sheltered and has better holding ground.

Small ship anchorages are at Dale Roads and Dale Shelf.

Cruise ships, up to 220m LOA, may anchor on Milford Shelf to tender passengers to/from shore. The designated cruise ship anchorage position is 51° 42.06'N 005° 02'W and is marked on BA Chart 3274, 3275. A Milford Haven pilot will be aboard at all times and a harbour tug made fast. Wind limits for cruise ships are: 20knots with a Svitzer tug; 15knots with a smaller tug.

TIDAL STREAMS

Across the entrance to Milford Haven the streams run approximately at right angles to the line of approach; well within the entrance they run nearly parallel to the channel.

The tidal streams run approximately as follows: -

Position	Interval from HW Milford Haven	Direction
One mile outside the entrance	+ 0455	East
	- 0125	West
Inside the entrance	- 0555	In going
	+ 0030	Out going

The maximum spring rate in each direction is 2¼ knots.

The maximum spring ingoing rate is 1½ knots and the outgoing rate is 1¾ knots.

Tidal streams within the Haven run in the direction of the deep water channel as far as Wear Point (51° 42' N, 04° 59' W). In the reach above Wear Point the in going stream is deflected to the north side of the channel by Carr Spit (51° 42' N, 04° 57'.8 W).

SWELL EFFECTS

During or after south west or westerly gales, there may be a heavy swell running straight into the West Channel, making steering, and even keeping a fixed course, difficult. Vessels may yaw through up to 20°. The swell does not dissipate until the Mill Bay area and its effect is not lost until in the lee of Thorn Island. Consideration should be given on more exposed berths in the Western Haven that might still feel the effect of the swell and vessels moored on these berths may need additional lines accordingly.

NAVIGATION

WEST CHANNEL

The West Channel with a minimum depth of 15.6 metres is available to all vessels of suitable size and draft.

All large vessels approach the West Channel using either the West Blockhouse/Watwick (022°) leads or the Great Castle/Little Castle Head (040°) leads.

In addition to marking the lines of approach, the leads can be used to assess rate of drift across track. Care should be taken to remain in the white sector of the West Blockhouse Point light (220° to 250°) during the turn at Angle buoy.

A high intensity PEL light is also available on request covering the entrance to the West Channel – see Admiralty Sailing Directions.

EAST CHANNEL

The East Channel with a minimum depth of 9.8 metres is available to all vessels of suitable size and draft; however, the 9.8 metre patch opposite Thorn Rock restricts the turning of large vessels into the main channel.

Tidal streams to seaward of the East Channel are similar to those off the West Channel, although the effect of the north-west stream is lost earlier than the south.

MAIN CHANNEL

The control depth from Chapel buoy to Valero is 15.6 metres.

Blue LED leading lights at Bullwell/Popton, available on demand from Port Control, are for use for swinging LNG carriers in the South Hook LNG swinging area.

South Hook to Puma Energy Jetty

A bar extends into the channel at South Hook. With deep draught vessels, it may be necessary to reduce speed beforehand to minimise the effects of squat.

The flood tide can set strongly onto the Qatar buoy and the ebb can set strongly onto South Hook buoy. At night, these buoys, and outbound traffic can be difficult to pick out from amongst the backdrop of refinery/terminal lights.

The principal aid for the reach from Qatar buoy to East Angle buoy is the Popton/Bullwell leads. Once past South Hook LNG terminal No. 1, the south side of the deep-water channel is marked by a light beacon, 20 metres south of the front leading light, in line with the Bullwell rear light.

A "Guard" tug will be stationed off South Hook LNG terminal to shadow vessels, over 50 metres LOA, passing and to be able to offer assistance if required in an emergency.

Port Control will instruct vessels whether to use the North or South Channel when passing South Hook LNG. The South Channel has a control depth of 9.4 metres.

From East Angle buoy, the Newton Noyes south (080°) leads serve as far as Valero No.1 berth. There is shallow water near South Hook LNG terminal No. 3 berth; therefore, care must be taken at the East Angle turn in a deep draught vessel.

The leading lights at Popton/Bullwell and Newton Noyes are fitted with high intensity day lights which operate on request to the Port Control.

This whole section tends to be a navigation "pinch point" with inward and outward vessels constantly changing their courses and aspects. This is compounded by strong tidal sets and winds.

As the channel is relatively narrow throughout this section, vessels with high freeboards will "crab" along the channel in high crosswinds, taking up most of the available width. For this reason, such vessels should not pass between South Hook buoy and the eastern end of Puma Energy terminal in high crosswind conditions.

Puma Energy to Valero Pembrokeshire Oil Terminal (VPOT) Jetty

The channel is narrow between Newton Noyes Jetty and No. 5a buoy, therefore deep draught vessels must be kept strictly on track. The Wear Spit south west Martello Tower leads mark the port side of the channel, and the Llanreath/Pennar leads mark the starboard side, as far as VPOT Jetty.

Above Valero Pembrokeshire Oil Terminal (VPOT) Jetty

From VPOT Jetty to Wear Spit, the channel narrows considerably. Only one large vessel (a vessel over 50 meters LOA), unless otherwise approved by the Harbourmaster, may move at a time above Newton Noyes.

In the reach above Wear Spit the channel width is reduced to 100 - 200 metres. This can give problems at Carr Spit turn; too wide a turn will close the north bank and too tight a turn will result in the ship coming close to the northern side of Carr Spit.

The tidal streams above Wear Spit introduce further hazards. Because of the narrowing of the channel, the stream runs faster than those experienced downstream. The flood stream is deflected to the north side of the channel by Carr Spit.

In Pembroke Reach, the flood stream runs principally in the channel, north of Dockyard Bank. It is weak and irregular in the channel south of this bank, in which it attains a spring rate of ½ knot. The ebb stream runs strongly in the channel south of Dockyard Bank attaining a spring rate of 2 knots and sets strongly onto Dockyard Bank No. 4 buoy and the Offshore jetty. In the channel to the north of the bank, the ebb stream is weak on the south side of the channel, but on the north side, an eddy runs strongly during the ebb.

PEMBROKE PORT

The western approach to Carr Jetty is made after passing Carr No. 2 buoy, using the (153°) leads. The eastern approach is through Pembroke Reach, thence east and south of Dockyard Bank.

Within Pembroke Port, vessels up to 100 metres length may berth at any state of tide. Larger vessels may only berth at slack water, subject to Pilots discretion. The approaches and berths are liable to rapid silting.

MILFORD DOCKS AND APPROACHES

The narrow approach channel to the lock entrance is marked by two buoys at the inner end, 1 cable from the lock. The channel is also marked by blue LED strip leads. The alignment of these lights (348°) leads from the deep-water channel to the approaches to the lock. This channel is buoyed. There are shoal patches which lie less than ½ cable on either side of this line. The tidal stream runs across the entrance to the lock.

Maximum width between the lock gates is 20.5 metres. Speed should be minimised on entry and exit as the lock gates and the caisson gates are still affected by interaction, even when tied back. Least depth over the sill is 3.2 metres. The caisson, when open, partially obstructs the inner entrance.

The maximum length to swing in the dock is 113 metres. This would be reduced as appropriate with another vessel alongside.

SOUTH HOOK LNG TERMINAL

The swinging area to the west of the berths is marked by buoys and the blue LED leading marks.

PUMA ENERGY TERMINAL

Inside Berth

The inside berth at Puma Energy Jetty (No. 3) has a northern limit marked by two fixed red light beacons on the jetty, in line, bearing 254°. This is 190 metres from the face of the jetty.

VALERO TERMINAL

Inside Berths

The inside berths at Valero Jetty (Nos. 4 and 5) have a southern limit marked by two pairs of light beacons on the jetty, in line, bearing 268°. The fixed red lights are 125 metres from the face of the jetty. The fixed yellow lights are 140 metres from the face of the jetty.

The maximum ship length for the inside berths at Valero is 100 metres. Ebb berthing is permitted unless the vessel is greater than 90 metres LOA with no bow thruster, but particular care is required when berthing on inside berths on spring ebb with strong southerly and easterly winds.

DRAGON LNG TERMINAL

Leading lights situated at Dragon LNG indicate the approach to the berth.

VALERO PEMBROKESHIRE OIL TERMINAL (VPOT)

The VPOT turning basin is marked at its southern extremity by a buoy. The Llanreath/Pennar leading lights provide a clearing line for the shallow water. Off VPOT No. 3, a bank extends southward into the channel; special care is required turning off this berth.

MILFORD HAVEN PORT AUTHORITY

PORT CONTROL

Description: Shipping movements are coordinated by the Milford Haven Port Authority Port Control. It is mandatory for all vessels over 20 metres in length operating in Milford Haven and approaches.

Jurisdiction: The sea area, as defined by Milford Haven Port Authority Acts and Orders 1983 to 2002, bounded by:

- a. An imaginary line commencing at the western extremity of Studdock Point and drawn in a south easterly direction to the point of intersection of latitude $51^{\circ} 36'.25$ N with longitude $05^{\circ} 03'.00$ W, thence in a westerly direction to the point of intersection of latitude $51^{\circ} 36'.25$ N with longitude $05^{\circ} 16'.00$ W and thence in a northerly direction to the point of intersection of latitude $51^{\circ} 40'.8$ N with longitude $05^{\circ} 16'.00$ W and thence in an easterly direction to the south western extremity of St. Ann's Head; and
- b. The level of high water on the shores of Milford Haven and the approaches thereto within the line aforesaid, including all bays, creeks, pools, inlets and rivers as far as the tide flows other than a creek, pool or inlet into which the tide flows only through a culvert or pipe and other than a dock which is normally tidally enclosed.

POLICY:

- (1) Milford Haven Port Control is a Traffic Organisation Service defined by the IMO as "a service to prevent the development of dangerous maritime traffic situations and to provide for the safe and efficient movement of vessel traffic within the VTS area".
- (2) Port Control is to maintain a control of shipping movements by providing pertinent, accurate and timely advice to vessels entering or leaving the Haven.
- (3) Port Control will consult and plan the sequence of vessel movements for both entry and exit from the Haven and advise Masters and Pilots of their place in any queue.
- (4) Policy will be to maintain the sequence of movements where practicable by instructing Masters and Pilots not to proceed until permission has been granted.
- (5) Once a movement has commenced Port Control will support that movement through to completion.
- (6) Port Control is to monitor the traffic image to maintain situational awareness and use this to ensure that potential conflict is assessed early and, if necessary, intervene.
- (7) Decisions made and advice given by Port Control staff pursuant to this Policy carry the formal authority and support of the Harbourmaster and Chief Executive.
- (8) Port Control staff will always be appropriately qualified. This will include experience in the port, VI03/1 minimum, but VI03/02 or senior STCW for Duty Officers.
- (9) Port Control will record and respond to incidents, near misses and infringements.

Note:

- (1) The Master of a vessel is always in command.
- (2) When on board, a Pilot/Exemption Certificate holder has the conduct of the vessel and is responsible to the Master for its safe navigation.
- (3) The Master, or Officer of the watch, has the conduct of the vessel when no Pilot is on board.

STATIONS

(1) PORT CONTROL

Operator: Milford Haven Port Authority.
Call: "Milford Haven Port Control".
Location: Hubberston Point (51° 42'.44 N, 05° 03'.09 W).
Telephone: +44(0) 1646 696136/7.
Fax: +44(0) 1646 696110.
Email: portcontrol@mhpa.co.uk.
Frequency: Channels 09, 10, 11, 12, 14, 15 and 16 VHF.
Hours: Channels 11, 12, 14 and 16 VHF continuous.

(2) PATROL LAUNCH

Operator: Milford Haven Port Authority.
Call: "Milford Haven Patrol".
Frequency: Channels 06, 08, 11, 12, 14 and 16 VHF.
Hours: Channels 11 and 12 VHF continuous.

(3) TUGS, MOORING BOATS, WORK BOATS AND WASTE BARGE

Operator: Svitzer Marine Ltd.
Frequency: Channels 06, 08, 09, 11, 12, 14, 15 and 16 VHF.
Hours: Channels 12 and 16 VHF continuous.
Location of Shore Base: Svitzer Marine Ltd, Svitzer House, Pembroke Port, Gate 4, Fort Road, Pembroke Dock, SA72 6TB.
Telephone: (0)1642 258390
Mobile: (0)7919 570892

(4) WORK BOATS

Operator: Williams Marine Ltd.
Frequency: Channels 06, 08, 09, 11, 12, 14, 15 and 16 VHF.
Hours: Channel 12 when manned.
Location of Shore Base: The Dockyard, Pembroke Dock.
Telephone: +44(0) 1646 684169

PROCEDURE – REPORTING AND COMMUNICATIONS

Schedule 2 report must be sent to Milford Haven Port Control before arrival and departure. See Appendix 1 for a sample Schedule 2 Report.

DANGEROUS GOODS IN HARBOUR AREAS REGULATIONS 2016

The report must be sent to Milford Haven Port Control and berth operator at least 24 hours before arrival at Milford Haven by the following method:

- i. Through the vessel's agent.

Any vessel wishing to immobilize engines, undertake hot work, launch lifeboats or any other such activity must gain permission from Milford Haven Port Authority.

VESSELS INWARD BOUND

- a. Vessels must send ETA at least 12 hours in advance to Port Control, with any subsequent amendments at least 2 hours before arrival.
- b. Vessels must confirm ETA by VHF when within 20 - 30 nautical miles of St. Ann's head (51° 40'.9 N, 05° 10'.4 W).
- c. When within 1 hour of St. Ann's head, vessels must contact Port Control on VHF channel 12 and must subsequently maintain watch on channel 12 as directed.
- d. Vessels with any damage or suspected damage must advise Port Control and obtain permission to enter.
- e. Vessels towing must give a full description of the tow and obtain permission from Port Control to enter. Towing vessel must submit a Tow plan and nominate a Tow master. See MHPA Towing Guidelines – <https://www.mhpa.co.uk/marine-services/>

INBOUND REPORTING POINTS

Vessels must report to the Port Control when passing in the vicinity of the following:

	Name	Position		Remarks
A	West Approach	51° 39'.30 N	05° 18'.00 W	Arriving from west
B	South Approach	51° 36'.25 N	05° 14'.10 W	Arriving from south
C	East Approach	51° 36'.25 N	05° 08'.60 W	Arriving from east
D	St. Ann's light buoy	51° 40'.21 N	05° 10'.17 W	When using West Channel
E	Sheep light buoy	51° 40'.12 N	05° 08'.58 W	When using East Channel
F	Thorn Rock light buoy	51° 41'.70 N	05° 07'.65 W	
H	Cunjic light buoy	51° 41'.98 N	05° 02'.55 W	
K	Wear Spit	51° 41'.69 N	04° 58'.73 W	Bound for Pembroke Dock
J	Milford Docks	51° 42'.55 N	05° 02'.29 W	Entry or departure to Milford Docks

VESSELS UNDERWAY WITHIN THE HAVEN

Vessels underway within the Haven must maintain a continuous listening watch on VHF channel 12. Vessels intending to change to VHF channel 06, 08, 09 or 15 for berthing operations and communications with tugs should first advise Port Control. Vessels must report to Port Control when all fast on the berth.

VESSELS ANCHORING WITHIN THE HAVEN

Vessels brought up in an anchorage must report to Port Control and whilst at anchor, must maintain a continuous listening watch on VHF channel 16 and 12. Vessels at anchor will not be permitted to take on bunkers or immobilise main engines without the permission of the Harbourmaster.

VESSELS OUTWARD BOUND

Vessels must report to Port Control as follows:

- a. Prior to getting underway from a berth or anchorage.
- b. On getting underway from a berth or anchorage and maintain a continuous listening watch on VHF channel 12 until clearing port limits.
- c. When the pilot has disembarked.

OUTBOUND REPORTING POINTS

Vessels must report to Port Control when passing in the vicinity of the following:

	Name	Position		Remarks
K	Wear Spit	51° 41'.69 N	04° 58'.73 W	
J	Milford Docks	51° 42'.68 N	05° 02'.40 W	When departing Milford Docks
H	Cunjic light buoy	51° 41'.98 N	05° 02'.55 W	
G	Qatar light buoy	51° 41'.78 N	05° 05'.25 W	Request clearance for east or west channel
D	St. Ann's light buoy	51° 40'.21 N	05° 10'.17 W	When using West Channel
E	Sheep light buoy	51° 40'.12 N	05° 08'.58 W	When using East Channel

Vessels must then maintain continuous listening watch on VHF channel 16 until 1 hour after leaving port limits.

INCIDENT REPORTS

Vessels must immediately report the occurrence of any fire, oil pollution or other emergency within the Haven to Port Control on VHF channel 12 or 16 or by telephone.

INFORMATION BROADCASTS

- i. Gale warnings on VHF channel 12 and 14 on receipt from The Met Office*.
- ii. Expected shipping movements within the port will be given to vessels entering the port and prior to getting underway from a berth or anchorage, also on request at any time.
- iii. Height of tide and wind speed and direction also barometric pressure on request.

* Prior to these broadcasts, notification will be transmitted to all ships on VHF channel 16.

HARBOUR SURVEILLANCE RADAR

Mariners are reminded that Milford Haven Port Authority operates a VTS Traffic Organisation Service which includes harbour surveillance radar covering Milford Haven up to the Cleddau Bridge and seaward approaches for ranges up to 6 miles.

Vessels may obtain navigational advice and port operational information at any time by contacting "Milford Haven Port Control".

The above services are offered and will be rendered only on condition that neither the Authority nor any of its servants or agents shall be liable to any person whomsoever for any injury, loss or damage of any kind howsoever caused or arising, whether as a result of negligence or otherwise, as a result of non-availability of the service.

PASSAGE PLANS

Vessels of 50 metres or more in length wishing to enter, depart or navigate within the area of jurisdiction of the Authority shall prepare a passage plan and declare such to Port Control, prior to each movement commencing.

The format of the passage is left to the discretion of the Master/Exemption Certificate holder but attention is drawn to the International Chamber of Shipping's Bridge Procedures Guide, Fifth Edition 2016, in particular, Sections 2.5 and 2.6.

ACCIDENT PROCEDURES

PORT OF MILFORD HAVEN EMERGENCY PLAN

Implementation of the Emergency Plan will be announced by Port Control on channels 16 and 12. All available relevant information will be given. Vessels in the Haven should maintain watch on VHF channel 12 for further instructions from Port Control.

VHF channel 14 is the port's designated emergency frequency. When a major emergency has been declared, vessels directly involved must maintain a listening watch on channel 14.

SEARCH AND RESCUE

H.M. Coastguard has a statutory duty to be responsible for initiation and coordination of search and rescue. However, there may be circumstances within Milford Haven Port limits when it will be appropriate for HMCG to appoint Port Control or another unit as on-scene coordinator.

MILFORD DOCKS VHF WORKING CHANNEL

Permission to enter Milford Dock lock must be obtained directly from “PIERHEAD” on VHF channel 14. Vessels entering or leaving Milford Docks should remain on VHF channel 12 and only change to channel 14 when “working” with the “PIERHEAD”. Permission to enter the Haven from the Dock during “free flow” or from the lock during other times must be obtained from Port Control on channel 12. Merchant vessels with Pilot, PEC (Pilot Exempt) Masters should use VHF channel 8 to liaise with Milford Dock Dockmaster on entry.

BERTHING OPERATIONS, WORKING CHANNELS

VHF channels 15 and 9 have been allocated for berthing and unberthing operations within the main body of the Haven; for use by ships, tugs, mooring boats and jetties. The channel allocation is as follows:

	Primary	Secondary
North Shore	9	15
South Shore	15	9

ALONGSIDE SAFETY

Mariners are reminded of the dangers of embarking and disembarking vessels from jetties or quays within the Haven.

In particular, attention is drawn to the need for a vessel making fast to be fully secure and engines stopped before shore personnel embark.

Mariners should exercise caution and communicate with the jetty when safe means of access has been provided for shore personnel to embark.

SMALL CRAFT MOORING AREAS

Mariners are reminded that vessels or objects moored to licensed permanent buoys within the following designated “small craft mooring areas” are NOT required to exhibit, all round, white riding lights.

Navigation outside the recognised channels should only be undertaken with local knowledge and, particularly during the hours of darkness, with alertness and caution.

Mooring areas as displayed on Admiralty Charts No’s. 3273, 3274 and 3275:

- Dale.
- Sandy Haven.
- Gelliswick, Cunjic and Milford Dock West.
- Milford Dock East.
- Castle Pill.
- Angle.
- Pembroke River.
- Hazelbeach and Neyland.
- Pembroke Dock.
- Hobbs Point.
- Barnlake.
- Barnlake Point and Burton.
- Warrior.
- Burton Point and Rudders Boatyard.
- Jenkins Point and Lawrenny.
- Rooseferry.
- Llangwm.
- Landshipping Quay.
- Upstream a line from position: latitude 51° 46'.00 N, longitude 04° 54'.20 W.
latitude 51° 46'.00 N, longitude 04° 53'.22 W.

MILFORD HAVEN PORT AUTHORITY

PILOTAGE

- a. All waters over which the Milford Haven Port Authority have jurisdiction (the seaward limit of which is an imaginary line commencing at the western extremity of Studdock Point and drawn in a south easterly direction to the point of intersection latitude 51° 36'.25 N with longitude 05° 03'.00 W, thence in a westerly direction to the point of intersection of latitude 51° 36'.35 N with longitude 05° 16'.00 W and thence in an easterly direction to the south western extremity of St. Ann's Head).
- b. The docks and works belonging to the Milford Docks Company and the waters over which they have jurisdiction.

Call Sign: Milford Haven Pilot.

Telephone: +44(0) 1646 696136/7.

Email: portcontrol@mhpa.co.uk.

Frequency: Pilot Cutter: channels 06, 08, 11, 12, 14, 16 and 67 VHF.

Hours: Pilot Cutter: channels 12 and 16 : 24 hours.

Procedure: Pilotage is compulsory for all vessels over 50 metres in length within the Pilotage District except H.M. ships, vessels which are moving from one berth to another within a dock and vessels exempted by law. Request for a Pilot should be included in ETA message to the Milford Haven Port Authority Port Control. Vessels should remain at least 5 nautical miles off St. Ann's Head until contact has been established with the Pilot Cutter.

TUG AND TOW

Compulsory pilotage if the overall length of tug plus tow plus towline is over 50 metres. (<https://www.mhpa.co.uk/marine-services/>)

When disconnected both will be subject to compulsory pilotage if they are each over 50 metres LOA.

BOARDING POSITION FOR LARGE VESSELS

4 miles south west of St. Ann's light house:
51° 36'.80 N.
05° 13'.50 W.

All vessels to wait at least 5 miles off until instructed to proceed closer by either Port Control or Pilot directly.

COMBINATION LADDERS

Vessels with more than 9 metres freeboard require a combination ladder rigged. No forward facing accommodation ladders will be accepted and all rungs of pilot ladder must lie against ship's hull. Pilots have been instructed not to board vessels which do not meet these requirements. Please see Pilot Boarding Arrangements for further details: (<https://www.mhpa.co.uk/marine-services/>)

PILOT LADDER DEFECTS

Pilots may refuse to board if pilot ladders are defective. All deficiencies will be brought to the attention of the Master.

Owing to the large size of Pilot Cutters, the successful boarding of a Pilot in rough weather is significantly reduced by having to use combination ladders. It is therefore advisable to reduce the freeboard to below 9 metres in vessels where this is possible, to avoid delays.

If combination ladders are used, the accommodation ladder should be rigged as high as possible, preferably the end platform should be at least 7 metres above the water level. Under no circumstances should tripping lines be used on the rope ladder.

VESSELS ARRIVING OFF THE PORT If a pilot booking has not been received, they are to be asked to stay at least 10 miles off the port.

FUEL CHANGEOVER ON SHIPS To clarify the ports stance on vessels changing over to / from low Sulphur fuels. We require ships to change over only when made fast. Ships have a two-hour grace period after having tied up or before letting go to change over and therefore there should be no reason to change fuel – with the possibility of a blackout being caused while underway. **Use of Open Loop Scrubbers are not authorised.**

REDUCED VISIBILITY Vessels over 30,000 DWT and all LPG ships carrying LPG or not gas free must have at least 1 mile visibility prior to moving in the harbour.

Vessels less than 30,000 DWT carrying dangerous or polluting goods in bulk must have at least ½ mile visibility prior to moving in the Haven.

All reporting vessels over 20 metres LOA must have at least 0.1 mile visibility prior to moving in the harbour.

PILOT BOOKINGS Vessels on jetties - from the terminal operator (Oil), Agent (LNG), Agent or Master (Milford Dock and Port of Pembroke).
Vessels at sea - from the terminal operator or Master or Agent with the agreement of the terminal operator.
Bookings can also be made by a Pilot in conjunction with the Master/Agent to suit operating conditions. Please see Pilot Boarding Arrangements for further details (<https://www.mhpa.co.uk/marine-services/>)

PILOTAGE EXEMPTION CERTIFICATES

Masters holding Pilotage Exemption Certificates are required to inform the Port Control of their certificate number when passing the vessel's ETA. Failure to give a valid number will mean that the vessel will be required to take a Pilot to navigate within the Haven.

TUG USAGE FOR BERTHING OF CRUDE CARRIERS

Up to 100,000 DWT	-	Minimum of 2 tugs
100,000 to 150,000 DWT	-	Minimum of 3 tugs
Over 150,000 DWT	-	Minimum of 4 tugs

It must be recognised that the above are only general guidelines and may be varied at the pilot's discretion, depending on weather and known ship's limitations. Tug numbers may be reduced depending on ship's equipment, i.e. bow and stern thrusters, twin screw, high lift rudders, dp capability, etc. Tug numbers may also be reduced for un-berthing operations at Pilots' discretion.

For all movements of vessels over 25,000 DWT regardless of thrusters, at least one tug to be in attendance. All other tug requirements for all other ships will be to Pilots discretion as agreed with the Master.

TUG USAGE FOR MOVEMENT OF LNGC

LNGC will be provided with 4 tugs, one of which will be an active escort. The tug at the bow will always make fast through the center lead. The stern escort will also use the center lead.

USE OF CHAIN STOPPERS ON TOW ROPES

Mariners should be aware of the dangers involved in the use of chain stoppers when releasing tug tow ropes. Milford Haven tugs are equipped with synthetic tow ropes, so chain stoppers should not be used when letting go tugs either alongside a berth or underway.

MILFORD HAVEN VLCC DEFINITION

Vessels of 65,000 gross tonnes and over are defined as a VLCC and are provided with two Pilots inward, one of which must be a Class 1, bound from sea to berth. VLCCs outward bound are provided with two Pilots from berth until swung, proceeding out clear of the jetties and tugs dismissed.

LNGC DEFINITION

Vessels designed and built to carry liquefied natural gas in bulk. These vessels will be provided with two suitably Classed Pilots.

LNGC / SPECIFIED VESSEL RESTRICTIONS PER NOTICE TO MARINERS

Controlled Zones

Extending 1 mile ahead and astern of the specified vessel and within the main channel. No commercial vessel of 20 metres or more may navigate within the controlled zone except astern of the specified vessel where such navigation is away from it and provided that prior permission has been sought from and granted by Port Control.

Exclusion Zones

Extending ahead to the limit of the line of sight from the bridge of the specified vessel within the confines of the channel, no vessel is permitted to navigate within this zone at any time. Such limit will be determined by a patrol vessel stationed ahead. The zone astern will extend to the stern of an escort tug, where provided, or 100 metres where it is not.

ENTRY RESTRICTION FOR LARGE VESSELS

- (1) For booking purposes, loaded VLCCs may only enter between 1½ hours before HW and HW Milford Haven.
- (2) Ballast VLCCs. Entry to Pilot's discretion, subject to there being sufficient under keel clearance and weather/tidal considerations.
- (3) For vessels of more than 17.0 metres draught, consideration must be given to allowing the vessel to manoeuvre into, or out of the Haven under carefully prescribed conditions which will be discussed and agreed between the Harbourmaster, Pilots and the company concerned.
- (4) LNGC may enter at any time subject to sufficient under keel clearance, weather and resource constraints.

UNDER KEEL CLEARANCE

A minimum of 10% is required at all times, while underway. To Pilots' discretion 20% in West and East Channels.

SWINGING ROOM

As a very general rule pilots require 1½ x ships length sea room for swinging, although this may be varied by prior agreement.

PROCEDURE

The order in which ships should enter or leave the Haven when a conflict of interests occurs will be governed by the following considerations (in no particular order of preference):

(1) **FIRST COME, FIRST SERVED**

All things being equal, the principles of "first come", "first served" will be observed, and where a ship has been delayed on a previous tide, she will be given priority on the following tide.

(2) **ARRIVAL AND DEPARTURE**

In view of the fact that a vessel at a safe anchorage, or suitably moored alongside, is in a safer position than an arriving vessel, priority will be given to arriving vessels. This criterion is unlikely to be invoked frequently owing to the wide disparity in draught of arriving and departing vessels.

(3) **TUGS**

The availability of tugs must have an influence on the order in which ships are handled, it being generally accepted that no very large vessel should commit herself to the entrance until sufficient tugs are available to handle her.

(4) **TIDE**

The best use of tide must always be an important consideration and this will be affected by:

- a. Maximum draught of ships involved.
- b. The effects on other movements of vessels swinging.

(5) **TERMINAL TO WHICH BOUND**

All other things being equal, the vessel bound further up the Haven will be given priority over the other, but this criterion is looked upon as the least important and will not be used to over-ride other considerations.

(6) **SPECIAL CONSIDERATIONS**

For instance:

- a. Urgently required ship.
- b. Position of rope runners, mooring parties, etc.
- c. Special representations concerning, say, tidal restrictions at other ports in the case of product tankers.

(7) **FERRY MOVEMENTS**

Ferry movements should be given priority whenever possible. Oil and gas companies have agreed to amend movement times, except in the case of VLCCs and other tidally restricted movements where amendments could lead to long delays.

(8) **PEMBROKE PORT**

The larger vessels stemmed for the Pembroke Port will usually be tidally restricted and there will be occasions when they clash with oil company vessels on the same tide. The decision as to who takes priority should in the first instance be decided by the two parties concerned. If this approach fails the Harbourmaster or in his absence the Duty Harbourmaster will be responsible for programming ship movements.

OVERCARRIAGE

- (1) A request for overcarriage may be received by Port Control from any vessel in the port after these requirements have been explained to the Master by the vessel's Agent in advance as follows:
 - a. Vessels must have acceptable accommodation and conditions. Pilots will advise of any deficiencies.
 - b. Vessels will sail at the earliest convenient time and proceed with best dispatch to overcarriage port.
 - c. Recognised overcarriage ports due to COVID restrictions are Falmouth and Breaksea. Other ports that may be considered are Lynas, Dublin, Belfast, Waterford, New Ross, Cork and Holyhead.
 - d. Pilots will be returned to Milford Haven by the quickest reasonable means.
 - e. Vessels must comply with the rules as set out below.
 - f. Pilots will decide on whether or not to overcarry both before sailing and once again at the port limits, when they may disembark if conditions allow.
- (2) Vessels of over 25,000 DWT overcarry to Lynas and Falmouth with the Pilots at the request of the Master. Holyhead is an acceptable substitute for Lynas. Such vessels may also overcarry to Breaksea, Dublin, Waterford, New Ross, Cork and Belfast at the discretion of the Pilots, bearing in mind safety and the best interests of our customers.
- (3) Vessels of less than 25,000 DWT may overcarry to Lynas, Falmouth, Breaksea, Dublin, Waterford, New Ross, Cork and Belfast at the discretion of the Pilots, bearing in mind safety and the best interests of our customers. Holyhead is an acceptable substitute for Lynas.
- (4) Consideration may be given to overcarry a Pilot to Lynas, Falmouth, Breaksea, Dublin, Waterford, New Ross, Cork and Belfast depending upon the availability of a Pilot. Holyhead is an acceptable substitute for Lynas.
- (5) In certain circumstances consideration may be given for Pilots to join at overcarrying ports for inbound movements (undercarry).
- (6) The ships agent should confirm that the destination port is actually working ships and that a pilot launch will be available at that port.

LNG Movement Constraints

Dragon LNG

- Conventional ships to/from Dragon LNG can pass any ship at South Hook LNG.
- Conventional ships to/from Dragon LNG can swing off Valero (Milford Shelf swinging grounds) with Valero 1 and 6 occupied.
- Q Flex outbound from Dragon LNG cannot pass a LNGC berthed at South Hook No 2 berth.
- Q Flex to Dragon LNG if swinging in the Milford Shelf swinging grounds may swing with Valero berth 1 and 6 occupied with one of the vessels having a beam under 25m. Weather indication at Milford Docks should be taken into account for the swinging aspect of this operation.
- Q Flex from Dragon LNG – may swing with Valero berth 1 or 6 occupied.

South Hook LNG

- Vessels on berth 2 can depart if head out with berth 1 occupied.
- Q Flex head in can depart by swinging in the Milford Shelf swinging ground if Valero berths 1 or 6 are empty.
- Q Max berthed head in must wait until berth 1 (South Hook LNG is empty).

For Clarification:

- Conventional LNG is a LNGC under 300m LOA not classed as Q Flex or Q Max and can be spherical or membrane construction.
- Q Flex is a LNGC of approximately 315m LOA.
- Q Max is a LNGC of approximately 345m LOA.

Other constraints such as resource and weather limits apply.

SAFE SPEED WHEN TRANSITING THE HAVEN

All vessels regardless of size are to comply with The International Regulations for Preventing Collisions at Sea, Regulation 6 “Safe Speed” and Harbour Byelaw 20 “Navigate with Care”

Notwithstanding this fact all reporting vessels will, under normal circumstance, observe the following maximum speeds when within the Haven.

Sea to West Blockhouse – Full Manoeuvring Speed.

West Blockhouse to South Hook Buoy – 16 knots.

South Hook Buoy to Newton Noyes Jetty – 12 knots.

Newton Noyes Jetty to Cleddau Bridge – 10 knots.

MILFORD HAVEN PORT AUTHORITY

UNITED KINGDOM REGULATIONS FOR PORT ENTRY AND DEPARTURE

THE MERCHANT SHIPPING (VESSEL TRAFFIC MONITORING AND REPORTING REQUIREMENTS) REGULATIONS 2011 AS AMENDED

For details of other reporting requirements see MSN 1899(M+F) –January 2020.

A completed Schedule 2 should be sent to Port Control at least one hour before departure by all vessels required to take a Pilot or with a PEC (Ferry excepted).

DANGEROUS GOODS IN HARBOUR AREAS (DGHA) REGULATIONS 2016

RESPONSIBILITY

Masters or **Agents** are responsible for informing the Port Control and berth operator in advance which dangerous substances and in what amounts they are going to be brought into the harbour area. The normal minimum period of notice for entry of dangerous substances by (land or) sea is 24 hours. Where it is not reasonably practicable to give 24 hours' notice, the Harbourmaster and the berth operator together may agree to accept shorter notice.

Vessels carrying a dangerous substance should immediately inform the Port Control on VHF channel 12 of any untoward incident which occurs or has occurred on the vessel. "Untoward incident" means an incident involving or threatening the containment of a dangerous substance.

DEFINITION

Dangerous Goods are defined as those classified in the International Maritime Dangerous Goods Code (IMDG Code) in chapter 19 of the International Gas Carriers Code (IGC Code) and in chapter 17 of the International Bulk Carriers Code (IBC Code).

Polluting Goods are oil as defined in MARPOL Annex I, noxious liquid substances as defined in MARPOL Annex II and harmful substances as defined in MARPOL Annex III.

Bunkers, stores and equipment for use on board a vessel are not regarded as dangerous or polluting goods for the purpose of the Regulations.

For workboats delivering stores including Dangerous Goods, these are declared to Port Control prior to movement. There are no specific restrictions to their movement within the waterway.

CERS III came into force on 1st April 2017 and requires all vessels over 300 GT arriving to and sailing from Milford Haven to complete an accurate CERS Workbook and forward it to the port at least 24 hours prior to arrival, or as soon as possible when the voyage time is less.

It is vital that all relevant parts of the CERS Workbook are completed prior to each arrival and departure from the port. Failure to submit a completed CERS Workbook prior to arrival and departure could result in transit delays for the vessel.

The reporting requirements apply to all vessels over 300 GT arriving to and sailing from a UK port. It also applies to fishing vessels, traditional ships and recreational craft with a length of 45 metres or more. Ferries and other similar scheduled vessels may be exempt on receipt of a CERS exemption certificate. UK Warships and other government vessels as well as EEC Warships are exempt.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – South Hook LNG Terminal

OPERATOR – South Hook LNG Terminal Ltd

BERTH DETAILS	No. 1 BERTH	No. 2 BERTH	No. 3 BERTH
Length of Face	107m	107m	73m
Deck Height above Chart Datum	10m	10m	9.75m
Direction	096° - 276°	096° - 276°	080° - 260°
Control Depth	17.0m	18.4m	Berth not in use
Last Survey	2021	2021	2021
Control Depth – Approach	16.1m	16.1m	15.4m
Last Survey	2021	2021	2021
Max. DWT	190,000	190,000	36,000
Max. LOA			OUT OF SERVICE
Jetty Weight Limit	12t	12t	
Fresh Water	OOC	OOC	OOC
Lighting for Night Operation	OOC	OOC	OOC
FFA to DSHA Regs	OOC	OOC	OOC
Ship to Shore Access	OOC	OOC	OOC
Max speed berthing to fenders			
Waste	OOC	OOC	OOC

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	4.5 miles.
B.	Pilot on Board to Berth	1½ hours.
C.	Tidal Stream Requirement	Dependent upon swinging and berthing plan.
D.	Swinging	Limiting depth in Swinging Area 10.8 metres.
E.	Tugs	As per guidelines – 4 tugs on all LNG movements.
F.	Mooring Boats/Gangs	2 mooring boats + mooring gang for all berthing operations.
G.	Communications	VHF working channel 9 or 15 S Hook No 1 etc.
H.	Known Obstructions	No.
I.	Adjacent Berth Movements	As per guidelines for LNG movements – exclusion zone, patrol vessel etc.
J.	Day/Night Operation	Yes.
K.	Remarks	No. 3 berth is not operational. Vessels are NOT permitted to berth.
		Maximum approach speed – 0.15 m/sec (0.29 knots).
L.	Operating Wind Limits Sustained	Stop cargo transfer – 35knots (18m/sec) Manoeuvring gangway (off or on) – 40knots (20m/sec) Disconnect cargo transfer equipment – 40knots (20m/sec) Terminal will review need to take further actions – 45knots (23m/sec) The wind readouts from Mid Channel Rock beacon will be used as default.
		Entry and transit parameters 25knots gusting 30knots maximum. Visibility parameter – not less than 1nautical mile.
M.	Bunkering	Bunkering is not currently permitted.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Puma Energy

OPERATOR – Puma Energy UK Ltd

BERTH DETAILS	No. 1 BERTH	No. 2 BERTH	No. 3 BERTH
Length of Face	135m	70m	37m
Deck Height above Chart Datum	10m	10m	10m
Direction	075° - 255°	075° - 255°	075° - 255°
Control Depth	17.6m	10.2m	Berth not in use
Last Survey	2021	2021	2021
Control Depth – Approach	16.1m	16.1m	5.5m
Last Survey	2021	2021	2021
Max. DWT	275,000	40,000	7,000
Max. LOA	320m	201m	122m
Jetty Weight Limit	15 tonne – 2 axle lorry, 24 tonne vehicle weight.		
Fresh Water	Yes	Yes	Yes
Lighting for Night Operation	Yes	Yes	Yes
FFA to DSHA Regs	Yes	Yes	Yes
Ship to Shore Access	Gangway	Gangway	Berth face ladders
Waste	Yes	Yes	Yes

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	4.9 miles.
B.	Pilot on Board to Berth	1 hour.
C.	Tidal Stream Requirement	Valero swinging ground control depth = 9.3 metres.
D.	Swinging	Valero swinging ground control depth for vessel of 275m or over = 9.3 metres. Valero swinging ground control depth for vessel under 275m = 11.0 metres. Swinging off Puma Energy: to Pilots advice.
E.	Tugs	Tugs as per guidelines. Lineboat/tug required for small LPG vessels to Puma Energy 3.
F.	Mooring Boats/Gangs	Mooring boats and gangs.
G.	Communications	Channel 9 or 15 VHF c/s “Puma Energy No 1” etc.
H.	Known Obstructions	Berth 3: distance from jetty face to FR lights 190 metres (5.6 metres dredged area).
I.	Adjacent Berth Movements	Keep in view main channel movements.
J.	Day/Night Operation	
K.	Remarks	Max. wind = 30 knots to berth at Puma Energy 3. The wind readouts from Mid Channel Rock beacon will be used as default.
L.	VLCC, light arrival, laden departure	Arrival in ballast berthing programmed for 3 hours before HW (draft allowing) for a swing off Valero and berthing bow west at Puma 1. Active Escort inbound, 4 tugs and Patrol If Valero 6 & 1 occupied, then 9.3m (valid at time of issue) is used for swing Sailing loaded to be planned for 1 ½ hr before HW with Active Escort and Patrol. Number of Tugs at pilots discretion. South Hook 2 berth empty for sailing

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Milford Dock

OPERATOR – Milford Dock

BERTH DETAILS	No. H	No. I	No. Hakin	No. J
Length of Face	70m	70m	150m	200m
Deck Height above Chart Datum	5m	5m	5m	5m
Direction	290/110	330/150	010/190	300/120
Control Depth	For depths in Dock contact Pierhead Dock Ops Staff			
Last Survey	2021	2021	2021	2021
Control Depth – Approach	1.4m	In Docks approach channel – survey 2020		
Last Survey	2021	2021	2021	2021
Max. DWT	N/A	N/A	10,000	5,000
Max. LOA/Max. Beam	70m/19m	25m	130m/19m	75m/19m
RoRo Linkspan/jetty weight limit	Unknown			
Fresh Water	No	No	Yes	Yes
Lighting for Night Operation	No	No	Yes	Yes
FFA to DSHA Regs	No	No	Yes	Yes
Ship to Shore Access	No	No	Yes	Yes
Waste	Yes	Yes	Yes	Yes

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	6.0 miles.
B.	Pilot on Board to Berth	Timed to enter at half tide i.e. 1 hour before HW to clear fishing vessels etc.
C.	Tidal Stream Requirement	A set to the West is a “rule of thumb” to be noted.
D.	Swinging	Normal max. length to swing a VSL with other VSLs alongside = 100 metres.
E.	Tugs	3 hours’ notice. Tug required for tankers – other vessels to pilot discretion.
F.	Mooring Boats/Gangs	Provided for all vessels over 60 metres.
G.	Communications	Pier Head works VHF channel 14 – Call Sign “Pier Head” Marina 37, c/s “Pier Head”. VHF channel 8 for large vessels requiring Dockmaster.
H.	Known Obstructions	Marina. Caisson when open partially obstructs inner entrance.
I.	Adjacent Berth Movements	Fishing vessels moving to/from ice berth. Yachts moving to/from Marina.
J.	Day/Night Operation	Day and night.
K.	Remarks	Tankers are required to have a gas free certificate before entry.
		Speed on entry/exit to be minimum as lock gates and caisson gates affected by interaction even when tied back. Specific risk assessment may allow 2.0m control depth in approach channel.
		Pilotage guidelines using Milford Docks: 1. For vessels fitted with bow and stern thrusters max. beam 20.12 metres
		2. For conventional vessels (no thrusters) max. beam 18.9 metres.
		For protection of the caisson at least one tug should be in attendance for tanker movements.
		Weather limits apply – max. wind speed for vessels over 50 metres LOA = 25 knots measured at Pierhead.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Milford Dry Dock

OPERATOR – Haven Marine Services (Wales Ltd)

BERTH DETAILS	No. Dry Dock		
Length of Face	180m		
Deck Height above Chart Datum	5m		
Direction	310/130		
Control Depth	4.5m/7.5m		
Last Survey	N/A		
Control Depth – Approach	N/A		
Last Survey	N/A		
Max. DWT	N/A		
Max. LOA/Max Beam	180m/19m		
RoRo Linkspan/jetty weight limit			
Fresh Water	Yes		
Lighting for Night Operation	Yes		
FFA to DSHA Regs	Yes		
Ship to Shore Access	Gangway		
Waste	Yes		

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	
B.	Pilot on Board to Berth	
C.	Tidal Stream Requirement	
D.	Swinging	
E.	Tugs	
F.	Mooring Boats/Gangs	
G.	Communications	
H.	Known Obstructions	
I.	Adjacent Berth Movements	
J.	Day/Night Operation	
K.	Remarks	Continued from Milford Docks Pilotage Guidelines:
		1. Squat allowance: vessels of 12 – 18 metres beam = 0.3 metres.
		2. Vessels in excess of 18 metres beam = 0.6 metres. Such allowance added to normal draft plus 10% figure.
		3. Maximum width lock gates = 20.5 metres with fenders removed.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Valero

OPERATOR – Valero Energy Corp

BERTH DETAILS	No. 8 BERTH	No. 7 BERTH	No. 6 BERTH	No. 1 BERTH
Length of Face	75m	75m	114m	123m
Deck Height above Chart Datum	10.8m	10.8m	10.8m	11m
Direction	085° - 265°	085° - 265°	085° - 265°	088° - 268°
Control Depth	15.5m	13.8m	18.5m	18.5m
Last Survey	2021	2021	2021	2021
Control Depth – Approach	16.1m	16.1m	16.1m	16.1m
Last Survey	2021	2021	2021	2021
Max. DWT	60,000	60,000	270,000	275,000
Max. LOA	240m	240m	365m	365m
Min. LOA	61m	61m	185m	70m
Jetty Weight Limit	13.0t	13.0t	13.0t	13.4t
Fresh Water	No	No	No	No
Lighting for Night Operation	Yes	Yes	Yes	Yes
FFA to DSHA Regs	Yes	Yes	Yes	Yes
Ship to Shore Access	Yes	Yes	Gangway	Ggwy & BF lad
Waste	Yes	Yes	Yes	Yes

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	6 miles.
B.	Pilot on Board to Berth	1 to 1½ hours.
C.	Tidal Stream Requirement	
D.	Swinging	Valero swinging ground control depth for vessel of 275m or over = 9.2 metres. Valero swinging ground control depth for vessel under 275m = 11.0 metres
E.	Tugs	Tugs as per guidelines. Pilots advice, Masters request.
F.	Mooring Boats/Gangs	Mooring boats and gangs.
G.	Communications	Channel 15 or 9 VHF. c/s “Valero No 1” etc.
H.	Known Obstructions	None known.
I.	Adjacent Berth Movements	Keep in view main channel movements.
J.	Day/Night Operation	Day and night.
K.	Remarks	In the right conditions it may be possible to extend some of the DWT limits.
L.	CLAUS and WILLY to Valero 1	<ol style="list-style-type: none"> 1. A lineboat to be immediately available for pushing up while either of these ships berth to Valero Berth 1. 2. The boat must be in attendance should the wind or forecast be 12 knots or greater and from 090-180-270 degrees. 3. The wind readouts from Mid Channel Rock beacon will be used as default.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Valero

OPERATOR – Valero Energy Corp

BERTH DETAILS	No. 2 BERTH	No. 3 BERTH	No. 4 BERTH	No. 5 BERTH
Length of Face	98m	62m	37m	37m
Deck Height above Chart Datum	11m	11m	11m	11m
Direction	090° - 270°	090° - 270°	089° - 269°	089° - 269°
Control Depth	13.7m	11.2m	5.8m	5.8m
Last Survey	2021	2021	2021	2021
Control Depth – Approach	16.1m	16.1m	5.2m	5.2m
Last Survey	2021	2021	2021	2021
Max. DWT	100,000	35,000	2,500	6,000
Max. LOA/Cu M (LPG)	270/85,000 (LPG)	240/50,000 (LPG)	75m	100m
Min. LOA	120m	70m		
Jetty Weight Limit	13.4t	13.4t	13.4t	13.4t
Fresh Water	No	No	No	No
Lighting for Night Operation	Yes	Yes	Yes	Yes
FFA to DSHA Regs	Yes	Yes	Yes	Yes
Ship to Shore Access	Gangway	Berth Face Ladders	Berth Face Ladders	Berth Face Ladders
Waste	Yes	Yes	Yes	Yes

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	6 miles.
B.	Pilot on Board to Berth	1 to 1½ hours.
C.	Tidal Stream Requirement	C & D for berths 2 and 3.
D.	Swinging	Due care should be taken of wind and tidal stream conditions. Over 90 metres LOA without bow thrust only floodtide when berthing.
E.	Tugs	Up to 2 small tugs, depending on weather and tidal stream conditions at berths 4 and 5.
F.	Mooring Boats/Gangs	Mooring boats and gangs.
G.	Communications	Channel 15 or 9 VHF. c/s “Valero No 2” etc.
H.	Known Obstructions	Berths 4 & 5, distance from jetty face to FR lights 125m.
I.	Adjacent Berth Movements	Keep in view main channel movements.
J.	Day/Night Operation	Day and night.
K.	Remarks	Berthing on numbers 4 and 5 may be on ebb tide. Restricted in easterly winds of greater than 20 knots particularly on spring ebb tides.
		Minimum distance between vessels on berths 4 & 5 is 30m.
L.	Max Approach speed to fenders	Max speed of approach whilst berthing at Valero Pembroke is 0.15mtrs/second (just under 0.3knts) at a 10deg max angle to berth.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Valero

OPERATOR – Valero Energy Corp

BERTH DETAILS	No. RO RO			
Length of Face	27m	Face to north dolphin 93m		
Deck Height above Chart Datum	7.9m			
Direction	175° - 355°			
Control Depth	-2.6m	0.3m 27 metres from face		
Last Survey	2019			
Control Depth – Approach	-0.2m			
Last Survey	2019			
Max. DWT	Each load is calculated first and any additional requirements are arranged prior to load arrival.			
Max. LOA				
RoRo Linkspan/Jetty Weight Limit				
Fresh Water				
Lighting for Night Operation	Portable			
FFA to DSHA Regs				
Ship to Shore Access				
Waste	Yes			

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	6 miles.
B.	Pilot on Board to Berth	1 to 1½ hours.
C.	Tidal Stream Requirement	
D.	Swinging	Flood tide and HW slack only
E.	Tugs	To Pilot's advice.
F.	Mooring Boats/Gangs	Mooring boats and gangs.
G.	Communications	Channel 15 or 9 VHF. c/s "Valero Ro Ro".
H.	Known Obstructions	
I.	Adjacent Berth Movements	Keep in view main channel movements.
J.	Day/Night Operation	Daylight berthing and unberthing only. A Nighttime transit can be considered and discussed on a case by case exceptional circumstance based, supported with details RAMS including consideration of the following; i) Tug skippers must be familiar with the location and have undertaken at least 3 approaches / departures from the area previously in daylight. ii) Steady wind speeds, if Easterly should not exceed 20kts (MCR data). iii) Visibility in the area must be at least 1 mile. iv) The RoRo area and roadway will be well illuminated with suitably controlled lighting.
K.	Remarks	All Ro Ro operations will require a passage/tow plan to be submitted before commencement. If necessary, a planning meeting may also be required.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – VPOT

OPERATOR – Valero Pembrokeshire Oil Terminal (VPOT)

BERTH DETAILS	No. 2 BERTH	No. 3 BERTH	No. RO RO
Length of Face	121m	63m	
Deck Height above Chart Datum	10.67m	10.67m	
Direction	098° - 278°	098° - 278°	098° - 278°
Control Depth	15.1m	10.3m	
Last Survey	2021	2021	
Control Depth – Approach	11.8m	10.4m	
Last Survey	2021	2021	
Max. DWT	165,000	20,000	
Max. LOA	283m	153m	
Approach Road/Jetty Weight Limit	30te/axel	30te/axel	
Fresh Water	No	No	
Lighting for Night Operation	Yes	Yes	
FFA to DSHA Regs	Yes	Yes	
Max. speed approach to fenders			
Ship to Shore Access	Gangway	Underberth walkway	
Waste	Yes	Yes	

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	7.3 miles.
B.	Pilot on Board to Berth	1½ to 2 hours.
C.	Tidal Stream Requirement	C & D berthing & unberthing.
D.	Swinging	Swinging area control depth 11.9 m - 2021
E.	Tugs	Tugs as per guidelines.
F.	Mooring Boats/Gangs	Vessels under 10kt – 1 rope runner and 2 mooring gang personnel. Vessels over 10kt – 2 rope runners and 4 mooring gang personnel. Rope runners will not work for berthing vessels until there is 2m of tide. This to be borne in mind for accepting bookings
G.	Communications	
H.	Known Obstructions	None known.
I.	Adjacent Berth Movements	Keep in view ferry movements.
J.	Day/Night Operation	Day and night.
K.	Remarks	The wind readouts from Mid Channel Rock beacon will be used as default. See below:

Berthing	Loaded	up to 228 mts LOA	Swing at pilots discretion with allowance for tidal state
		228 - 242mts	Berthing on ebb tide
		242 - 283mts	Berthing on first of ebb tide, ebb tide at pilots' discretion subject to under keel clearance
	Ballast	up to 228 mts LOA	Swing at pilots' discretion with allowance for tidal state
		228- 242 mts LOA	Will be berthed on ebb, or swung and backed up at pilots' discretion, water, tugs and weather permitting
		242-283 mts LOA	Swing at Valero swinging ground and back up with 3-4 tugs and less than 20knts wind. Dragon unoccupied
Departure	Loaded	up to 228 mts LOA	Swing at pilots' discretion with allowance for tidal state
		228 - 242 mts LOA	Depart at HW during slack tide
		242 and upwards:	
	Ballast	up to 14 mts draft (berthed head west)	Sail at any time, subject to tidal state
		over 14 mts draft	Sail at HW - 1.5 hours, and can back up and swing,
		242 - 283 mts LOA	Backed down on the ebb tide and swing at Valero swinging ground with 3-4 tugs and less than 20knts wind. Dragon unoccupied.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Dragon LNG

OPERATOR – Dragon LNG

BERTH DETAILS	No. 1 BERTH		
Length of Face	192m		
Deck Height above Chart Datum	11.46m		
Direction	098° - 278°		
Control Depth	13.6m		
Last Survey	2021		
Control Depth – Approach	11.8m		
Last Survey	2021		
Max. DWT	150,000		
Max. LOA	300m (320m)*		
Approach Road/Jetty Weight Limit	30t		
Fresh Water	No		
Lighting for Night Operation	Yes		
FFA to DSHA Regs	Yes		
Ship to Shore Access	Gangway		
Waste	Via barge**		

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	7.0 miles.
B.	Pilot on Board to Berth	1.5 – 2.0 hours.
C.	Tidal Stream Requirement	C & D.
D.	Swinging	Valero swinging ground: control depth for vessel of 275m or over = 9.3 metres. Valero swinging ground control depth for vessel under 275m = 11.0 metres.
E.	Tugs	Min. 4 required as per Port Guidelines and one stand-by while v/l alongside.
F.	Mooring Boats/Gangs	2 mooring boats (8tbp) & gangs provided at terminal.
G.	Communications	VHF 15 & 9/Electrical Pyle National 37 pin/Miyak/Fibre Optic.
H.	Known Obstructions	None known.
I.	Adjacent Berth Movements	None during LNGC movements.
J.	Day/Night Operation	Day/night operation.
K.	Remarks	Maximum berth approach angle 7° (0 preferred). Maximum berth approach speed 10cm/sec. When touching fenders 8cm/sec.
		Docking display board located to the east of loading arms on loading arm platform and indicates distance off and speed of approach of bow and stern.
		The max. sustained wind, at 10 metres elevation, in which a v/l is allowed to berth/sail, is 25 knots with gusts of 30 knots except if the wind is southerly then the limit is 20 knots with gusts of 25 knots. The wind readouts from Mid Channel Rock beacon will be used as default.
		LNGC's are not permitted to enter the Haven or move if the visibility is less than 1 nautical mile.
L.	Wind Operating Limits (sustained)	Stop cargo transfer 32 knots, disconnect 40 knots.
M.	Bunkering	Bunkering is not permitted.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Power Station Ro Ro

OPERATOR – RWE

BERTH DETAILS	No. RO RO			
Length of Face	19.4m			
Deck Height above Chart Datum	9.35m			
Direction	East/West	(end on)		
Control Depth	0.8m			
Last Survey	2020			
Control Depth – Approach	1.0m			
Last Survey	2020			
Max. DWT	Berth designed for CEGB heavy load carriers – end on berthing.			
Max. LOA	82.5m for alongside berthing.			
Ro Ro Linkspan/Jetty Weight Limit				
Fresh Water	Yes			
Lighting for Night Operation	Yes			
FFA to DSHA Regs	No			
Ship to Shore Access	Via ramp			
Waste	Yes			

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	9.0 miles.
B.	Pilot on Board to Berth	1½ to 2 hours.
C.	Tidal Stream Requirement	High water.
D.	Swinging	
E.	Tugs	To pilots advice.
F.	Mooring Boats/Gangs	Mooring boat and gang.
G.	Communications	VHF Channel 9 & 15. c/s “Power Station Ro Ro”.
H.	Known Obstructions	Pennar Gut silts up very quickly so the above control depth should not be relied on.
I.	Adjacent Berth Movements	Keep in view ferry movements.
J.	Day/Night Operation	Night operation – buoyage leading to the power station jetty in Pennar Gut is unlit. Nighttime operations only by specific risk assessment.
K.	Remarks	Arrival criteria: vessel to pass Pennar Point between 1½ hours before HW Milford Haven and 1½ hours after high water.
		Departure criteria: vessel to pass Pennar Point before HW Milford Haven. Latest Pilot boarding time - ½ hour before HW Milford Haven.
		For tug and barge work – dependent on UKC.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Carr Jetty

OPERATOR – MOD

BERTH DETAILS	No. LONG ARM	No. SHORT ARM		
Length of Face	115m	50m		
Deck Height above Chart Datum	9.3m	9.3m		
Direction	139° - 319°	049° - 229°		
Control Depth	8.0m	4.6m		
Last Survey	2021	2021		
Control Depth – Approach	6.7m*	5.3m	*approaching from east.	
Last Survey	2021	2021		
Max. DWT				
Max. LOA	151m	50m		
Jetty Weight Limit				
Fresh Water	Yes	Yes		
Lighting for Night Operation	Yes	Yes		
FFA to DSHA Regs	Yes	Yes		
Ship to Shore Access	Gangways	Gangways		
Waste	On request	On request		

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	8.6 miles.
B.	Pilot on Board to Berth	1½ to 2 hours.
C.	Tidal Stream Requirement	Large vessels normally berth on flood tide or slack water depending on length and draft.
D.	Swinging	Large vessels normally berth head north (port side to) on the long arm.
E.	Tugs	Up to 2 tugs.
F.	Mooring Boats/Gangs	Mooring gang only.
G.	Communications	Internal Svitzer.
H.	Known Obstructions	Unlit targets on Dockyard Bank.
I.	Adjacent Berth Movements	Keep in view ferry and POP movements. Only one large vessel.
J.	Day/Night Operation	Day and night.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Pembroke Dock Ferry Terminal

OPERATOR – Pembroke Port

BERTH DETAILS	No. RO RO		
Length of Face (Upper and Lower)	12m - ramps	190m - berth	
Deck Height above Chart Datum	Ramp 2.2m to 4.95m		
Direction	086½° - 266½°		
Control Depth	7.7m		
Last Survey	2021		
Control Depth – Approach	7.1m		
Last Survey	2017		
Max. DWT	6,000		
Max. LOA	185m		
RoRo Linkspan/Jetty Weight Limit	Lower 90t - Upper 44t		
Fresh Water	Yes		
Lighting for Night Operation	Yes		
FFA to DSHA Regs	Yes		
Ship to Shore Access	Passenger walkway		
Waste	Skip on pontoon		

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	9.3 miles.
B.	Pilot on Board to Berth	1½ to 2 hours.
C.	Tidal Stream Requirement	No special requirement.
D.	Swinging	Stern to the pontoon, vessels swing NE of the berth.
E.	Tugs	To Pilot's/Master's request, usually for weather.
F.	Mooring Boats/Gangs	Mooring gang only.
G.	Communications	Channel 9 or 15 VHF. c/s "Ferry Terminal".
H.	Known Obstructions	Unlit targets on Dockyard Bank.
I.	Adjacent Berth Movements	Keep in view Carr Jetty and POP. Only one large vessel movement at a time above the Wear.
J.	Day/Night Operation	
K.	Remarks	Keep in view vessels with "Visor" bows when berthing bow on because they may foul upper deck of pontoon.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Pembroke Port

OPERATOR – Pembroke Port

BERTH DETAILS	No. 1 QUAY	No. 2 QUAY	No. 3 QUAY	No. RO RO
Length of Face	180m	100m	65m	11.5m
Deck Height above Chart Datum	8.8m	8.8m	Wedge	5.8m
Direction	104° - 284°	014° - 194°	012° - 192°	
Control Depth	5.0m*	5.9m	1.8m	1.2m
Last Survey	2020	2020	2020	2000
Control Depth – Approach	4.4m	4.1m	2.4m	1.8m
Last Survey	2021	2021	2021	2000
Max. DWT				
Max. LOA	164m	96m		
RoRo Linkspan/Jetty Weight Limit				
Fresh Water				
Lighting for Night Operation				
FFA to DSHA Regs				
Ship to Shore Access				
Waste	On request	On request	On request	

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	9.4 miles.
B.	Pilot on Board to Berth	1½ to 2 hours.
C.	Tidal Stream Requirement	Vessels of up to 100 metres LOA berth anytime on Quay 1. Vessels of 100 metres to 120 metres at Pilots option, over 120 metres LOA only slack water berthing.
D.	Swinging	
E.	Tugs	Up to 2 tugs for large vessels, tugs may be required for Quays 2 & 3.
F.	Mooring Boats/Gangs	Mooring gang only.
G.	Communications	Channel 8 VHF. c/s “Port of Pembroke”.
H.	Known Obstructions	Approaches and berths liable to rapid siltation.
I.	Adjacent Berth Movements	Ferry Terminal keep in view ferry movements. Only one large vessel.
J.	Day/Night Operation	
K.	Remarks	Contact Port of Pembroke for details
		*Control depth for Quay 1 is 5.0 metres for vessels up to 160 metres in length and 7.0m for vessels up to 140m in length.
		Control depth for Quay 2 is 4.4 metres for vessels up to 80 metres in length.
		Control depth for Quay 3 is 4.4 metres for vessels up to 55 metres in length.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Offshore Jetty

OPERATOR – Pembroke Port

BERTH DETAILS	No.		
Length of Face	30m		
Deck Height above Chart Datum	9.2m		
Direction	073° - 253°		
Control Depth	5.9m		
Last Survey	2000		
Control Depth – Approach	5.9m		
Last Survey	2000		
Max. DWT	6,500 (approx.)		
Max. LOA	30m max. beam		
RoRo Linkspan/Jetty Weight Limit	Out of commission		
Fresh Water			
Lighting for Night Operation			
FFA to DSHA Regs			
Ship to Shore Access			
Waste			

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	9.4 miles.
B.	Pilot on Board to Berth	2 hours.
C.	Tidal Stream Requirement	To Pilot's advice.
D.	Swinging	No special requirements.
E.	Tugs	To Pilot's advice.
F.	Mooring Boats/Gangs	Mooring gang only.
G.	Communications	Channels 15 or 9 VHF. c/s "Offshore Jetty".
H.	Known Obstructions	Disused cables on seabed in the swinging areas off the berth.
I.	Adjacent Berth Movements	None. Keep in view ferry movements.
J.	Day/Night Operation	Day and night.
K.	Remarks	The berth is currently out of commission.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY INFORMATION

JETTY – Waterloo Quay

OPERATOR – Ledwood Construction Ltd

BERTH DETAILS	No.		
Length of Face	40m		
Deck Height above Chart Datum	8.2m		
Direction	313° - 133°		
Control Depth	-3.70m	Drying height	(By observation 05/21)
Last Survey	Jun-05		
Control Depth – Approach	-3.45m	Drying height	(By observation 05/21)
Last Survey	Jun-05		
Max. DWT			
Max. LOA	79m		
Jetty Weight Limit	500t	45t point loading	
Fresh Water	On request		
Lighting for Night Operation	Yes		
FFA to DSHA Regs	No		
Ship to Shore Access	None		
Waste	On request		

SAILING DIRECTIONS FOR BERTHING AND UNBERTHING

A.	Distance – Entrance to Jetty	10.8 miles
B.	Pilot on Board to Berth	Approx. 2½ hours before HW (arrival). Approx. 1 hour before HW (dep.).
C.	Tidal Stream Requirement	Arrive and depart Cosheton Pill before ebb is away in the river.
D.	Swinging	No special requirements.
E.	Tugs	2 small tugs or large work launches to be considered for large barges. Reviewed on a case by case basis.
F.	Mooring Boats/Gangs	Mooring gang only.
G.	Communications	Channels 15 or 9 VHF. c/s “Waterloo Quay”.
H.	Known Obstructions	Obstruction on seabed SE side of berth marked with red stripe on adjacent Larsen pile. Bridge height 37 metres.
I.	Adjacent Berth Movements	None. Keep in view ferry movements.
J.	Day/Night Operation	Daylight berthing/unberthing only.
K.	Remarks	Seabed and control depth at berth should be checked before vessels proceed to this berth.

MILFORD HAVEN PORT AUTHORITY

PORT GUIDELINES – JETTY MOORING ARRANGEMENT

VALERO PEMBROKESHIRE OIL TERMINAL (VPOT)

0-3,000 TONNES DEADWEIGHT

Normal conditions	2-1-2 each end
If no breast lines	2-0-2 each end
Heavy weather	West end 3-1-2 East end 2-1-3
If no breast lines	West end 3-0-2 East end 2-0-3

3,000 – 10,000 TONNES DEADWEIGHT

Normal conditions	3-2-2 each end
Heavy weather	West end 4-2-2 East end 3-2-3

10,000 TONNES AND ABOVE

Normal conditions	3-2-2 each end
Heavy weather	West end 4-2-2 East end 3-2-3

IN HEAVY WEATHER FOR VESSELS 50,000 TONNES AND ABOVE

West end	4-3-2
East end	3-2-4

Heavy weather = Force 9 (45 knots) and above.

SHORE WIRES

There are no shore wires at VPOT.

DRAGON LNG

4-2-4 EACH END

PUMA ENERGY MILFORD TERMINAL

NO 1 BERTH

VLCC's	4-2-2 each end
80,000 tonnes plus	3-2-2 each end
16,000 tonnes product ships	2-2-2 each end

NO 2 BERTH

1,000 tonnes max. 1-0-1 each end LPG vessels 1-0-2 each end
5,000 tonnes max. 4-0-1 each end LPG vessels 4-0-2 each end
30,000 tonnes max. 2-2-2 each end

NO 3 BERTH

1,000 tonnes max. 2-0-2 each end
5,000 tonnes max. 2-1-2 each end
(Breast lines lead forward and aft)

SHORE WIRES

There are no shore wires at Puma Energy.

VALERO

Ship Size	Head and Stern Moorings	Head and Stern Breast or Intermediate Moorings	Head or Stern Springs
2,000 DWT – 4,999 DWT	2 each end		2 each end
5,000 DWT – 9,999 DWT	2 each end	1 each end	2 each end
10,000 DWT – 29,999 DWT	2 each end	2 each end	2 each end
30,000 DWT – 99,999 DWT	3 each end	2 each end	2 each end
100,000 DWT and above	4 each end	2 each end	2 each end

For vessels on berths 4 and 5 up to 6,000 DWT springs 2 headlines/sternlines.

For severe weather, moorings to be increased in line with availability of ships leads, suitable moorings.

On some ships it may not be possible to run breast lines as well as head/stern lines, where this is not possible the head and stern moorings should be increased.

SHORE WIRES

Shore wires not available.

MOORING BOAT DEPLOYMENT

A mooring boat with Coxswain in attendance is kept at the Valero terminal at all times when ships are alongside; this is for running additional moorings and other duties. The boat is only removed when ships are alongside if the Coxswain considers it is unsafe to station the boat at the terminal. In this case the mooring boat will be stationed at the closest safe point to the terminal.

NORMAL MOORING BOATS DEPLOYMENT

All vessels up to 10,000 DWT: 1 mooring boat and 1 mooring gang consisting of 2 linesmen.

Vessels over 10,000 DWT unless ship's Master requests otherwise: 2 mooring boats and 2 mooring gang consisting of 4 linesmen.

SOUTH HOOK LNG TERMINAL

BERTH 1

125,000 – 140,000 m ³	3-3-2
140,000 – 180,000 m ³	3-3-2
180,000 – 235,000 m ³	2-2-3-2
235,000 – 270,000 m ³	See ship specific mooring plans vessels.

BERTH 2

125,000 – 140,000 m ³	3-3-2
140,000 – 180,000 m ³	3-3-2
180,000 – 235,000 m ³	2-2-3-2
235,000 – 270,000 m ³	See ship specific mooring plans for vessels.

Wind Limits for Cargo Transfer Operations (five minute Average Wind Speed)

- **Stop cargo transfer** = 35 knots (18m/sec)
- **Manoeuvring gangway (off or on)** = 40 knots (20 m/sec)
- **Disconnect cargo transfer equipment** = 40 knots (20 m/sec)
- **Review need for further action** = 40 knots (20 m/sec)
- **Loading arm operating limit** = 43 knots (22.5 m/sec)
- **Take further action (e.g. tugs to push up)** = 45 knots (23 m/sec)

SHORE WIRES

Shore wires are not available at South Hook LNG terminal.

MOORING BOAT DEPLOYMENT

Two mooring boats will be used for all berthing operations. A mooring boat will be available for running additional moorings and other duties at all times while a vessel is alongside for the terminal unless weather, sea conditions or other circumstances are such that it is not safe for a mooring boat to be deployed at the terminal.

TUG ROPERUNNER OPERATIONAL DUTIES – BERTHING

BERTHING OF VESSELS WITH NO HARBOUR TUGS IN ATTENDANCE (OVER 10K)

Tug Rope Runner + 1 Rope Runner.

If the vessel needs the springs run across the berth, this will be carried out by a rope runner. The tug rope runner cannot escape under the berth so the Coxswain will only carry out this operation if he is assured that the vessel will be held off the berth until the tug rope runner is clear of the area.

BERTHING OF VESSELS WITH HARBOUR TUGS IN ATTENDANCE

Tug Rope Runner + 1 Rope Runner or 2 Rope Runners (optional).

If the tug rope runner is used, the rope runner only will be used to cross springs. The tug rope runner can only be used to run springs to the berth ends.

BERTHING OF VESSELS UNDER 10K

Tug Rope Runner and Rope Runner (if required).

Tug rope runner will be used to assist a vessel alongside, hold in position until springs are placed, then the tug rope runner will proceed to run the bow and stern mooring ropes/wires.

In the event of a vessel berthing on to berths 4 or 5 at high water and it is not possible for the tug rope runner to run the mooring ropes, then it will assist alongside, return to the pontoon then the operation will be completed with a rope runner.

Additional mooring boats can be ordered if required if one hour's minimum notice is given to the terminal.

SAFETY SIGNALS WHEN RUNNING LINES

Whilst berthing, if there is an issue with a rope or wire being heaved up before crew are ready on a tug or mooring boat, or if vessel does not pay out sufficient rope/wire then the mooring boat coxswain or the Tug Master will sound **6 SHORT BLASTS** to warn the deck crew whilst informing the Pilot / Master via VHF of the situation.

JETTY WIND PARAMETERS FOR LOADING / DISCHARGING / BALLASTING / DEBALLASTING

VALERO

The "heavy weather" parameter is 40 knots. Terminal operations are suspended when mean wind speeds exceed this figure or where regular gusting above 40 knots gives the terminal or the ship cause for concern.

PUMA ENERGY

Winds in excess of 35 knots (sustained gusts) – loading, etc. suspended.
Winds in excess of 40 knots (sustained gusts) – vessel disconnected.

VALERO PEMBROKESHIRE OIL TERMINAL (VPOT)

During sustained winds of 45 knots or more all-cargo operations are shut down and consideration given to disconnecting if it is safe to do so. Unless of course the Master raises concerns prior to this, when all cargo operations will be shut down immediately.

DRAGON LNG

Wind in excess of 32 knots – stop cargo transfer.
Wind in excess of 40 knots – disconnect cargo.
Wind in excess of 48 knots – remove gangway.

MIXED MOORINGS

Mariners should be aware of the dangers in the use of mixed moorings.

Generally mooring lines of the same size and material should be used for all leads, if this is not possible due to the available equipment, all lines in the same service, i.e. breast lines, spring lines, head and stern lines should be of the same size and material.

The use of mixed moorings for similar service comprising full length synthetic ropes used in conjunction with wires, should be avoided. If a synthetic rope and a wire are used in the same service the wire will carry almost the entire load while the synthetic rope carries practically none.

MILFORD HAVEN PORT AUTHORITY

ACTIVE ESCORTING

GUIDELINES FOR PILOTS

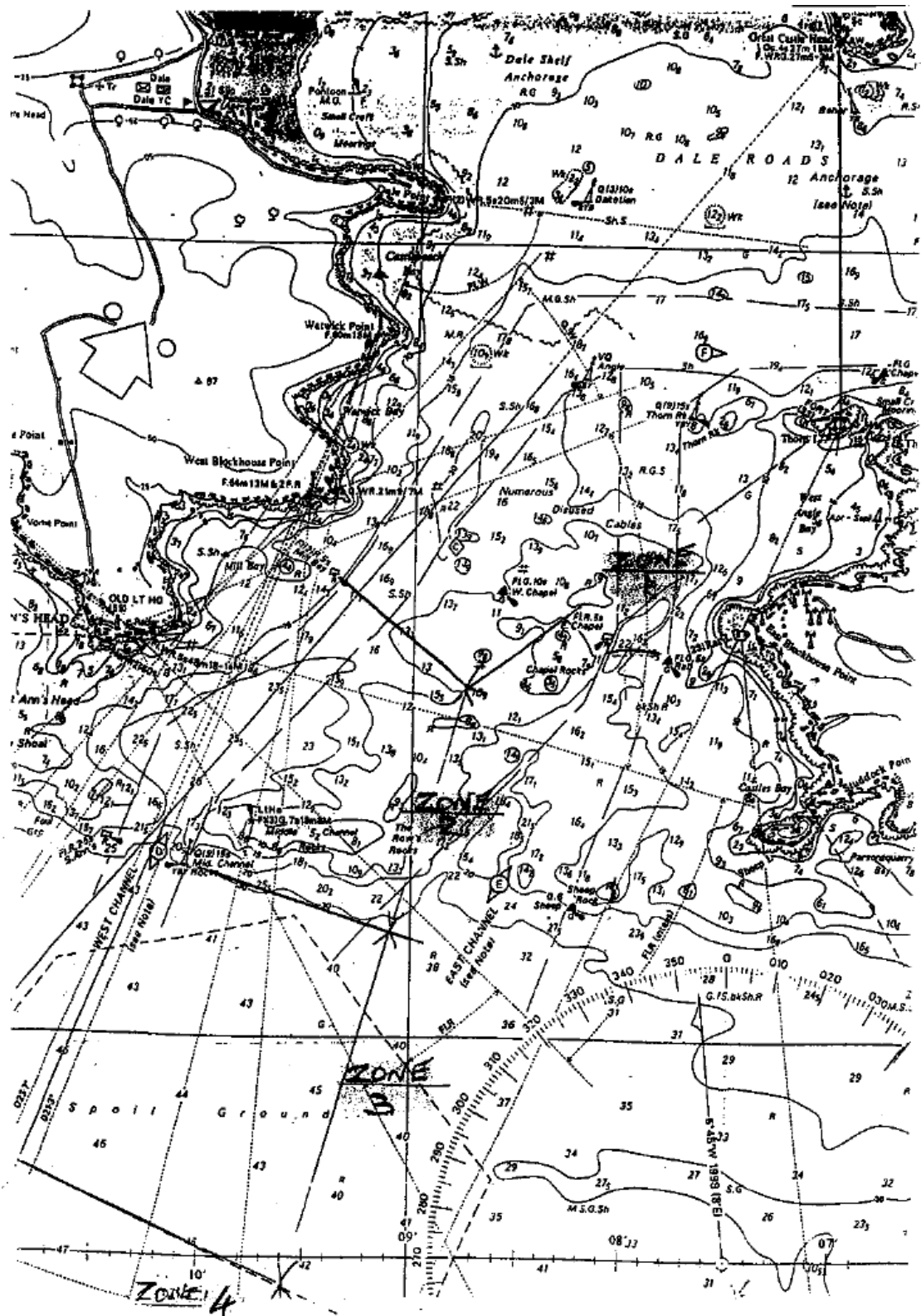
- (1) Active escorting will be weather limited, the decision to connect and the position of the start of the escort will be made after agreement with the tug Master. The active escort tug will determine if he can make fast using swell height as shown on the Mid Channel Rock. He will also proceed to sea to determine conditions if marginal. LNGC's must be Active escorted.
- (2) Weather permitting, inbound vessels will be Active escorted from zone 4 to the rendezvous position with the berthing tugs, outbound vessels will be Active escorted from a position off the berth until clear of the entrance buoys in zone 3 or when ordered to disconnect by the Pilot (see chartlet on next page).
- (3) Pilots are to ascertain from the Master which leads and bollards are suitable for attaching the towline.
- (4) **Pilots are to advise the Master:**
 - a. The likely towline forces to be encountered.
 - b. The speed of passage and the speed of the tug.
 - c. Method by which the ship's crew should take on and release the towline.
 - d. Areas of transit posing particular risks with respect to possible use of the tug.
 - e. Primary and secondary VHF channels and the availability of a rate of turn indicator and its operational state.

Pilot/Tug Master Exchange:

- a. Position and SWL of attachment point.
- b. Mode of escorting depending on conditions. This will always be active on LNGC.
- c. Berthing arrangements and repositioning of escort tug.
- d. Any unusual characteristics of the vessel as gleaned from the Master.
- e. Pilots and tug Masters should endeavour to keep each other fully informed during all stages of the operation particularly where safety and navigation are concerned. If an emergency situation arises the speed and ROT of the vessel should be broadcast to the tug Master at regular intervals.

Nominated Tugs:

- a. Only authorised active escorting Tug Masters are to be utilised.
- b. All refiner and LNG tugs are escort notated and specific tugs are dedicated to LNGC escorting. For QMAX LNGC's if the escorting tug has less than 100T bollard pull, then upper wind limits are reduced to 20kts gusting 25kts.



GUIDANCE FOR SHIPS MASTERS

The Port of Milford Haven has introduced escorting as a risk control measure designed to improve the safety of vessels navigating within the jurisdiction of the Authority.

Active escorting is seen as the most effective measure though passive escorting is also beneficial.

Active escorting will only take place if the sea state is acceptable to both the pilot and tug master.

From time to time vessels may be required to participate in escorting exercises. However, whenever possible, we will seek to both reach agreement with Masters and minimise delays.

MASTER/PILOT EXCHANGE

- (1) In addition to the standard information to be passed between Pilot and Master, it is recommended that the Pilot is provided with a simple A4 arrangement of the poop deck area showing the layout and safe working load (SWL) of the mooring fittings and inform him of the appropriate point for towing.
- (2) The Pilot will provide additional information to the Master over the escorting process.

Escorting is compulsory for:

- a. All loaded tankers of 50,000 tonnes deadweight and above.
- b. Certain loaded vessels between 25,000 and 50,000 tonnes deadweight carrying persistent oil cargo at the discretion of the Harbourmaster.
- c. All LNGC.

M RYAN
Harbourmaster

Port of Milford Haven Schedule 2 Checklist October 2021

Arrival	
Movement	
Sailing	
Please tick as appropriate	

ETA/ETD	
Previous port	
Next Port	
Agents (Owner if none)	

Vessel details	
Vessel name	
IMO number	
Callsign	
MMSI number	

Total Cargo on board	
Type	
Total tonnes (m ³ for LNG)	
Loading or Discharging?	
Full or Part Cargo?	

Vessel particulars	
DWT	
GRT	
Length overall	
Beam	

Freeboard/Draft for movement (in metres)	
Draft	
Freeboard	
Pilot Access Door	

Vessel propulsion		
Propulsion Type		
No of propellers		
CPP/FPP/Azipods		
Thrusters	Number	Power (kW / BHP)
Bow		
Stern		

Manoeuvring	
No of rudders	
Type of rudders	
Min. steering speed (kts)	
Special Manoeuvring Equipment	

Vessel equipment	
Type	All in good working order?
Mechanical	Yes/No
Communication	Yes/No
Navigation	Yes/No
Safety	Yes/No

Defects / Conditions of Class:

All certification and documentation held is valid:	Yes/No
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Checklist (see attached information on page 2 for guidance)	Yes/No
Pilot/Combination Ladder: Confirm all are properly constructed; recently inspected; in good condition and complete arrangement rigged as per SOLAS and IMO requirements and that it rests against vessel hull over complete length.	
Belting: Confirm where fitted that there is a 6m longitudinal gap at the pilot ladder for pilot boat access as per SOLAS	
Weighted heaving lines: Confirm that weighted monkey fists on heaving lines will not be used.	
Criminal prosecution may result if these are deployed	

Masters Surname	
Masters Initial	
P.E.C No	

Pilot Required	
Date	



SAFETY BULLETIN No. 2

DANGEROUSLY WEIGHTED SHIPS HEAVING LINES

There have been several instances where dangerously weighted heaving lines, including the use of monkey's fists with additional weights inserted into them, have been used resulting in serious injury. Further guidance is contained in Ch 26 section 26.3.5 in the 2015 edition of the Code of Safe Working Practices for Merchant Seafarers.



Vessels using dangerously weighted heaving lines in the UK may be subject to prosecution

To arrange a subscription to future Safety Bulletins go to <https://www.gov.uk/government/publications/maritime-and-coastguard-agency-mca-safety-bulletin>. For further information please contact Ship Safety Branch, Maritime & Coastguard Agency Tel: +44 (0) 2393 329 100
MSF 5029 Rev 10/14
Issued: 28 September 2015

REQUIRED BOARDING ARRANGEMENTS FOR PILOT

In accordance with SOLAS Regulation V/23 & IMO Resolution A.1045(27)
INTERNATIONAL MARITIME PILOTS' ASSOCIATION
H.Q.S. "Wellington" Temple Stairs, Victoria Embankment, London WC2R 2PN Tel: +44 (0)20 7240 3973 Fax: +44 (0)20 7210 3518 Email: office@impahq.org
This document and all IMO Pilot-related documents are available for download at: <http://www.impahq.org>

