

# SHIP TOWAGE GUIDELINES FOR THE RIVER MEDWAY AND THE SWALE 2013



Peel Ports Medway (Port of Sheerness Ltd.) is the Statutory and Competent Harbour Authority for the tidal River Medway, from the Medway Approach Buoy to Allington Lock, and for The Swale. These Ship Towage Guidelines are published by Peel Ports Medway for the use of pilots, ships' masters and tug crews, who are involved in, or likely to be involved in ship towage operations. They may be referred to as the Medway Ship Towage Guidelines.

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# SHIP TOWAGE GUIDELINES

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## PART ONE: SAFETY OF SHIP TOWAGE OPERATIONS

Part One of these Guidelines provides both generic guidance on ship towage operations and also specific references to local good practice in ship berthing and unberthing operations on the Medway and The Swale.

### 1. PREPARING FOR TOWAGE OPERATIONS

#### 1.1 PLANNING AND CO-ORDINATION

Before beginning towing operations, a comprehensive plan, as part of the ship's port passage plan and the Pilot's own plan, should be agreed by the Master and Pilot, where a Pilot is embarked. This should take account of all relevant factors, including tide, wind, visibility, ship size, type and characteristics, and specific berth requirements. A good knowledge of the type and capabilities of the tugs allocated to the job is important, in order that the Master / Pilot can ensure tugs are both suitable for the task ahead and positioned on the vessel so as to be most effective to facilitate a safe operation.

Any conflict or mismatch between the required manoeuvre and the tugs allocated must be resolved before the towage operation begins.

Responsibility for co-ordinating a towage operation lies with whoever has the conduct of the vessel being towed, be that the Master or the Pilot. When berthing and unberthing, it is the duty of the Master / Pilot to ensure that the vessel is handled in a safe and controlled manner, having due regard to the safety of all those involved, including the assisting tugs, line-handlers or mooring gangs and other port users as appropriate.

The number of personnel employed in any towage operation should be determined having due regard for the size of the vessel and the prevailing operational and environmental circumstances. In all cases, sufficient manpower should be provided to ensure that individuals are not exposed to undue risk, and that the operation can be conducted safely and efficiently. Due regard should also be given to the size, weight and scope of the towing gear and lines to be handled.

All those with a responsibility for personnel or equipment involved in assisting the towage / mooring of vessels have a duty to ensure that safe working practices are followed, and that associated equipment is fit for purpose. They should also ensure that those involved are properly trained, adequately briefed in their duties and issued with, and use, suitable and effective personal protective equipment (PPE).

#### 1.2 PILOT / VESSEL MASTER EXCHANGE

In addition to the standard information passed to the Pilot, it is recommended that the Master provides the Pilot with a plan showing the layout and safe working load (SWL) of the mooring fittings and inform him:

- which fairleads, chocks, bollards and strong points can be used for towing;
- the SWL of this equipment;
- areas of hull strengthened or suitable for pushing by tugs and relevant identification marks employed;
- any special features (e.g. controllable pitch propellers, thrusters etc);
- power available at fairleads

The Pilot should advise the Master of the following:

- the tug rendezvous time and position;
- the number of tugs and the mode of towage;
- the planned (optimum) ship speed when connecting to the tugs' lines;
- whether the ship's or the tug's lines are recommended for use;
- the type of tugs to be used and their bollard pull;
- if escorting, the maximum towline force that the tug may generate at escort speeds;
- maximum planned speed for the passage;
- the method by which the ship's crew should heave and release the tug's towline;
- a dedicated crew member to monitor tug and tug's line during heave and release;
- the prohibition on the use of incorrectly weighted heaving lines;
- that on release, the tug's gear should be lowered back under control;
- areas of the transit posing particular risks with respect to the possible use of the tug;
- intentions with regard to use and positioning of each tug for berthing manoeuvres;
- intentions with regard to use of tugs in an emergency (escort operations); and
- primary and secondary VHF channels for use in the operation.

### **1.3 PILOT / MASTER / TUGMASTER EXCHANGE**

The Pilot / Master and Tugmaster should, as a minimum, discuss the following issues:

- the SWL of the vessel's chocks, bollards and strong points to be used for towing;
- the tug hook up point, taking into account the prevailing weather and sea conditions, for escorting operation (if appropriate) and berthing;
- the planned (optimum) ship speed when connecting to the tug's lines;
- if active escorting, the start point of the escorted passage;
- the maximum speed of the tug;
- passage details in their entirety while accompanied by the tugs, particularly details of any swing, manoeuvre, release position and sequence of release;
- berthing details in their entirety, including tug positioning around the vessel's hull and the vessel's required position on the berth;
- intended and emergency use of ship's anchors;
- any unusual items regarding the particular vessel as gleaned from the Master / Pilot exchange;
- if appropriate, any shallow water or bank effect areas where significant surges may be experienced that might add to the tug loads;
- the Tugmaster should advise the Pilot / Master (as far in advance as possible of the scheduled manoeuvre) if the tug is experiencing a failure or reduction in its ability to manoeuvre or deliver full bollard pull;
- when confirming that the tug is fast and ready to assist, the Tugmaster should also confirm both the tug's name and her position on the vessel.

### **1.4 PREPARATIONS ON BOARD THE TUG**

Operations such as mooring and towing impose very great loads upon ropes or wires, gear and equipment. As a result of the imposed loads, sudden failure in any part of the system may cause death or serious injury to personnel. Tugmasters should avoid men being stationed or necessarily working in the bight of a wire or rope formed by the lead from the winch or windlass round and

through the fairleads and over-side. In any case, the consequences of failure in any part of the system must be carefully considered and effective precautions taken.

All fixed and running gear including ropes shall be carefully maintained, tested, certified and regularly inspected against wear, damage and corrosion. Particular attention is drawn to the need to ensure that fairleads, lead bollards, mooring bitts etc. are used appropriately and within their design capabilities and effectively secured to a part of the ship's structure which is suitably strengthened.

The emergency release mechanisms on towing hooks and winches must be tested, both locally and, where fitted, remotely, at frequent intervals to ensure correct operation. All towing equipment in use should be inspected for damage before undertaking and after completing a towage operation.

Tug crews involved in towage operations on deck will always wear approved and in-date self-inflating lifejackets and other appropriate PPE throughout the operation. They should ensure that the working area is safe and free from trip or slip hazards and remain alert to what the vessel crew is doing.

Mooring winches and other equipment shall be maintained to the manufacturers' specifications and be properly serviced. Equipment such as heaving lines and messengers should be of appropriate length and strength. All equipment shall be checked before the start of each operation. Life saving equipment shall be available for immediate use.

When a tug is engaged on any towage operation all watertight openings must be securely fastened. All watertight openings shall be marked with a sign stating that they are to remain closed during towage operations. Any such openings used whilst moving about the tug during a towage operation are to be re-secured immediately after use.

## 1.5 LICENSING REQUIREMENTS

All ship towage tugs for use on the Medway and the Swale are required to be licensed by Peel Ports Medway (Port of Sheerness Ltd) as being "fit for purpose". They should only be used in assisting ship manoeuvring and berthing/unberthing operations for which they have the capacity and are licensed.

The details of which tugs are currently licensed by the port to undertake ship towage operations are available from Medway Navigation Service.

## 2. STANDARD COMMUNICATIONS

VHF communications are a vital component of safe towing operations. It is essential that those onboard the vessel, the tugs, where appropriate the mooring / line boats, and those on the berth, are able to communicate promptly throughout the towage operation.

Prior to towing operations being undertaken, the Pilot, Master, Tugmasters and Line-handlers and Boatmen should establish suitable means of communications, exchange relevant information and agree a plan for the towage operation.

Once VHF communications have been established, tested and information has been exchanged, personnel should keep transmissions to a minimum and should normally only call when in doubt, or in an emergency. Mooring personnel shall monitor the tug / ship VHF working channel in order to have a proper appreciation of progress in the berthing / unberthing operation.

During operations, it is important that effective communications shall be maintained between the towing vessel and both the bridge team, and the mooring decks of the vessel under tow, and between the ship's tow parties and the bridge team. **Any unclear messages should be questioned.**

In all communications, clear identification of the parties communicating shall be used to prevent misunderstandings. The Tugmaster and Boatmen shall be kept informed of the proposed use of thrusters and anchors on the towed vessel and of engine movements and helm orders, as appropriate. **Early warnings of intended course / engine changes should be given where possible.**

The Port of Sheerness Ltd operates a Vessel Traffic Service at Garrison Point, Sheerness, using the call sign "Medway VTS". It is important that Medway VTS is included in the communication loop, as appropriate, when planning and then executing ship towage operations. Medway VTS has its own role and responsibilities to undertake on such occasions and will be available to provide information on tug allocations, act as a communication link with the berths, agents, and where necessary Boatmen and Line-handlers. VTS will also advise the Pilot / Master of any traffic likely to affect or be affected by the towage operation.

During the towage operation, it is important for Pilots and Masters to keep Medway VTS fully apprised of the planned manoeuvre and any significant changes to the plan that may occur. VTS shall keep other port users informed and warn of dangers or restrictions created by the operation. Pilots / Masters are to advise Medway VTS of the tug VHF working channel, which will be monitored by Medway VTS, as appropriate.

Pilots, PEC holders and Tugmasters should be well acquainted with the emergency towing sound signals

### 3. TOWAGE OPERATIONS

#### 3.1 CONNECTING AND DISCONNECTING TOWING GEAR

Before arrival at the tug connecting position, the Pilot / Master shall establish effective communications with each tug and agree working channels. Likewise, effective communications must be established between the bridge and the vessel's crew at 'stations' and they should confirm that they are ready to receive the tug.

The vessel's speed must be reduced to that which allows a safe rendezvous and connection with the tug. The required speed should be agreed in advance between the Master / Pilot and with all Tugmasters involved. At all times during the connecting process, the Pilot / Master should be aware of the position and intention of all relevant shipping movements in the area.

The Pilot / Master should ensure that his planning takes full account of the time taken to connect each tow, especially if adverse conditions are likely to extend this process. Account should also be taken of potential language difficulties, which may lead to confusion. Vessel mooring parties should be fully briefed and the Pilot / Master should check when in doubt and be confident that his instructions are being followed.

Ships heaving lines should be readily available and of a suitable make up. **Extra weights must NEVER be inserted in the 'Monkey's Fist' or attached to the heaving line.** A small canvas sandbag is the towage industry's preferred option. Ship's personnel should wherever possible, agree with the tug crew the area where the heaving line is to be thrown, to allow the recipients to move clear. When connecting to the vessel, the tug crew should ensure that the towing gear is clear of any obstructions, able to run freely and is released from the tug in a controlled manner. The ship shall not test the bow or stern thrust controls prior to berthing at the time when the tug is under the bow or stern passing a line. Changes in speed and or course should also be avoided while the towing gear is being connected as it may not be possible for tugs to react sufficiently quickly to sudden increase or decrease in a ship's speed/direction. Where a change in speed / course is necessary, the Pilot / Master should ensure that all tugs involved in the operation are advised in good time.

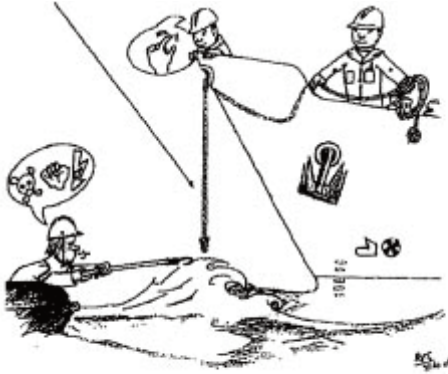
The Pilot / Master shall maintain contact with the Tugmaster / vessel crew throughout the process. He should be ready to revise the intended tug position if the Tugmaster reports any restrictions at the chosen position, e.g. large flare, overhanging anchor or unsuitable push up point. The Pilot / Master must keep all those involved up to date on the plan and apprised of any changes to the agreed plan.

During disconnection, both the vessel's and tug's crew on deck should be aware of the risk of injury if the towing gear is released from the tow in an uncontrolled manner and avoid standing directly below. They should also be aware that any towing gear which has been released and is still outboard may 'foul' on the tug's propeller(s), steelworks or fendering, causing it to come tight unexpectedly. The towline should always be lowered onto the tug deck, never just 'cast off' and

# ON ARRIVAL

**NO**

**YES**

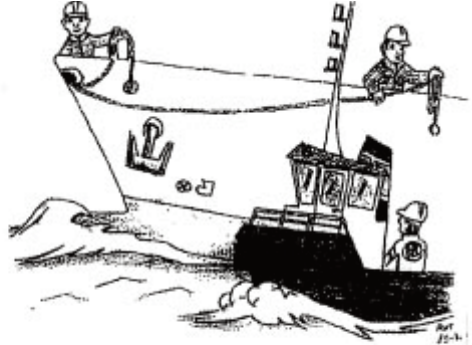


Please use thin heaving lines on arrival.

# ON ARRIVAL

**NO**

**YES**

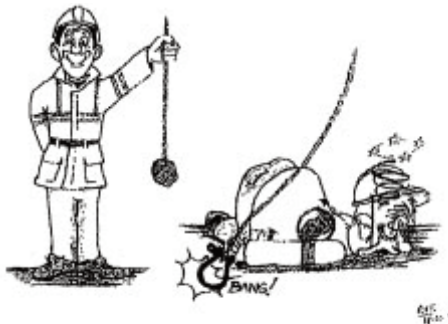


Tug stays behind ship's bow wave.

# GOOD SEAMANSHIP

**NO**

**YES**



Use a monkey's fist but without extra load.

# ON DEPARTURE

**BOW TUG:**  
Let go towing line immediatly.



**STERN TUG:**  
Let go towing line **SMOOTHLY** (propeller damage).





### 3.2 CRITICAL TUG POSITIONS

The positioning of tugs on a vessel is a matter for discussion between the Pilot / Master and the Tugmaster, having full regard for the areas of the hull which should be avoided, e.g. watertight doors, between frames etc. The forward tug is especially vulnerable when passing up the tow line. This tug has to position itself very close under the bow, sometimes under 1 metre from the ship's water plane. The Tugmaster will be concerned about any bulbous bow or other underwater protrusion, the proximity of the flare of the bow etc. At the same time the Tugmaster is countering the hydraulic pressure wave that exists around the bow to avoid severe interaction.

Flares or cut-aways at the bow or stern are of particular concern and can increase the dangers of interaction. Extra caution should be taken by Pilots / Masters when the tug is making fast under a flare / cutaway, especially when the vessel is moving / swinging towards the tug. The danger is compounded at night with the risk of shadows from deck lighting.

### 3.3 SPEED

Speed is a critical factor for the tug when making fast and letting go. When considering speed it is the **speed through the water** that is of concern. It is generally accepted that 5 to 8 knots is appropriate when making fast and letting go; however, due consideration should be given to tugs manoeuvring astern.

Caution must be exercised when using the engines whilst the tugs are working. The stern tug will be affected by the wash and every tug will be affected by the change of speed either up or down, and a rapid change in speed is all the worse. If the situation dictates the use of the engines, the minimum that the situation allows should be used and the tugs should be informed of what the ship is about to do as it will affect their own actions.

In strong tidal conditions a high percentage of the tug's power may be utilised in maintaining position on the vessel before applying thrust to the vessel. If the tugs are made fast alongside they are at their most effective with a minimal ship speed through the water.

### 3.4 INTERACTION

Interaction and its effects on the tug and its handling are well known, and appreciated in port/harbour towage. Pilots, Masters and Tugmasters are reminded that these effects are multiplied as the vessel's speed increases. Areas of high and low pressure exist in and around the ship's hull and these areas can cause adverse movements of smaller vessels in close proximity. The speed of water flowing between the tug and the vessel increases at the last moment as the tug comes alongside. As this happens the tug therefore has to increase speed to maintain the same speed as the vessel. The Tugmaster has to compensate for the tug either being drawn in or pushed off the vessel.

In areas where interaction exists, and when manoeuvring alongside a vessel, the Tugmaster should be aware of the possibility of underwater obstructions such as bulbous bows, stabiliser fins etc; and areas of the ship's side, such as pilot doors, which are to be avoided. The Pilot/Master and the crew should be aware of interaction and the effect it may have on the tug. Marine Guidance Notice 199(M) – Dangers of Interaction – provides further guidance and information on the effects of interaction, including when manoeuvring at close quarters.

### 3.5 RUNNING AGAINST THE TIDE

Masters and Pilots should be aware that it is sometimes difficult to manoeuvre a tug into position against the tide without putting any weight on the towline. Sometimes it may be appropriate for a tug to run with the vessel stern first to make fast and thus be ready to tow in the same direction.

### 3.6 PRECAUTIONS DURING TOWAGE OPERATIONS

Once the towing gear is connected, the crew should indicate this to the Tugmaster and then clear the area. Any crew that are required to remain on deck should stand away from the towing gear in a safe position. If the crew are required to attend the towing gear during a towing operation, the length of time exposed should be kept to a minimum.

During towage operations the towing gear equipment and personnel should be continuously monitored and any change in circumstances immediately relayed to the Tugmaster. This is

particularly important on tugs where the Tugmaster has a restricted view of the towing area/personnel. Tug and vessel crews should be aware that the towline may have to be released in an emergency situation, and that this may occur without warning.

The Tugmaster, having verified with the tug and vessel' crews that the towline is fast to the vessel, must confirm this with the vessel's bridge. The Pilot / Master should then re-confirm this to the Tugmaster, thus completing the communication loop. Sometimes it is not possible for the Tugmaster to see the crew on deck due to structural design or at night when they may be obscured by deck lighting on the ship.

Tugmasters, Pilots and Masters should be aware, at all times, of the position and intentions of mooring boats, especially in strong tidal conditions, at night or during restricted visibility or adverse weather conditions. This is particularly important in circumstances where visibility is limited from the tug's wheelhouse and ship's bridge. Remember that bow and stern thrusters, and the wash from tugs and the vessel being assisted, can all cause significant problems for mooring boats, especially when they are in close to the vessel and/or tug(s), picking up and running with lines. Controllable pitch propellers are a separate but equally dangerous hazard. The Pilot or Master should never use the vessel's engines without confirming with the Boatmen and / or Line handlers as to the position of the mooring boats. Sound signals can be used as a warning on occasions when vessel noise compromises VHF monitoring.

## 4. TOWAGE IN RESTRICTED VISIBILITY

### 4.1 TOWAGE PLAN

Towing in restricted visibility poses a serious threat to the safety of the tug, its crew, and other port users.

Restricted visibility is any circumstance where visibility is reduced to a distance where the tugs' normal ability to perform may be impaired. Such restrictions in visibility could be due to fog, mist, snow, rain, sleet or any other similar conditions

In circumstances where restricted visibility exists, or is likely to exist, the Master / Pilot and Tugmaster shall, as part of the passage plan and risk assessment process, agree how the operation will be conducted, what dangers are associated with towing in restricted visibility and what risk reduction measures should be applied. When completing this assessment the following should be considered:

- The suitability of the tug to operate in the current or expected conditions of restricted visibility;
- The operational status of all navigational aids and equipment;
- The type of vessel being assisted and in particular the minimum and maximum speeds which will be encountered during the operation;
- The terminal or berth to or from which the vessel is to be assisted, including specific operating parameters;
- Length of time to complete the operation;
- The tug-assist methods that might be used;
- The movement of other vessels in the area;
- The navigational characteristics of the particular area of the port including the use of information from VTS;
- The characteristics of any other tugs which will be involved in the operation;
- The level of experience of the Tugmaster and the crew, in particular when operating the bow tug;
- Forecast conditions

- Contingency plan, should visibility deteriorate after the tow has commenced and / or if the tug has to disengage at any stage of the operation;
- Delaying operation until more favourable conditions exist.

#### **4.2 PROCEDURES WHEN RESTRICTED VISIBILITY EXISTS OR IS EXPECTED**

- Towage operations should not normally take place in visibility of less than 0.2 NM;
- The pick up speed in reduced visibility to be a maximum of 6 knots through the water;
- If visibility falls to 0.2NM or less when a vessel is committed to her manoeuvre then tugs may attend in a push mode only but will not make fast.
- Tugmaster to confirm watertight integrity of tug, Pilot / Master to inform tug if they observe any exterior openings on the tug that are not closed, and which affect tugs' watertight integrity.
- Pilot / Master and Tugmaster to agree the plan, which should be recorded;
- During operations in restricted visibility the Pilot / Master of the assisted vessel shall provide well in advance all engine movements, thrusters movements and alterations of course;
- Both Pilot / Master and Tugmaster shall inform the other of any changes in their circumstances that will impact on the agreed plan.

It is important that Medway VTS are kept apprised of the plan and any subsequent changes.

Should visibility become restricted during a towage operation, the Pilot / Master and the Tugmaster will discuss the situation immediately and agree upon a course of action to ensure the safety of all persons and vessels involved given the location, environmental and vessel traffic conditions, seeking the advice of Medway VTS as appropriate.

The Pilot or Master will advise Medway VTS of the circumstances and any decisions made immediately, keeping VTS informed of any operational developments, or any improvement or deterioration of the visibility.

The Tugmaster should immediately inform the Pilot / Master and VTS of any concerns that he may have as to the safety of his tug and crew. The Pilot / Master and Tugmaster should take immediate action to ensure the safety of both the tug and the assisted vessel. If necessary the operation should be aborted as soon as it is safe to do so.

## **5. TUG ESCORTING**

Escorting as a regular operation is becoming common within the port towage industry.

This type of operation is carried out in the 'passive' and 'active' modes: passive when running free in close attendance, and active when fast to the tow. If active escort is being undertaken the form of towage can be 'direct' or 'indirect', depending on the speed of the tow. When made fast, all those involved should be aware that increased loads can be applied to towing gear, especially when operating in the indirect mode.

## PART TWO - RULES AND GUIDELINES FOR UTILISATION OF SHIP TOWAGE TUGS

The purpose of these Rules and Guidelines is to provide assistance when considering tug allocations for ships using and manoeuvring in the River Medway and The Swale.

Rules are indicated in red and thus compulsory. The sections not in red, which deal with tug recommendations, are guidelines only and are thus not compulsory. However, the guidelines are a result of many years Pilotage experience in manoeuvring vessels in the Medway and The Swale, where techniques and tug types have proved efficient, effective and safe. It should be appreciated that Medway Pilots are experts in their district and prudent shipmasters would be well advised to heed the Pilots' tug requirements. Pilots in UK law are more than advisors; in compulsory Pilotage areas (such as the Medway and The Swale) they are entitled to be given the 'conduct' of the vessel. This does not relieve the Master of his specific or common law duties of command.

Circumstances may arise that dictate a departure from these guidelines. A Pilot may require more tugs than the recommendations suggest, which may be the result of particular tidal, weather or traffic concerns. Equally, Pilots may use their discretion to alter the recommendations if circumstances permit. In the rare case of disagreement the Statutory Port Authority will be the arbiter.

The tug systems presently used in the Medway are 'tractor' units using ASD, or Voith systems and other approved units. These systems have distinctly different handling characteristics and may require different configurations. Medway Pilots are highly trained and experienced in ship handling and tug use, their expertise should be respected.

Pilots and Tugmasters should be aware of the capabilities and limitations of the tugs involved in each operation. Particular consideration should be given as to the best use of individual tugs bearing in mind the planned manoeuvre, and the local conditions and circumstances.

# 1. TUG REQUIREMENTS

## SHEERNESS

Berth	Vessel Length	Which Side to	Tide / Wx / Manoeuvre	Tug Requirement
Sheerness No 1, 2, 3, 6, 7, 11	> 100m	Port Side to	Any	As per Pilot / Master
	100-120m	Port Side to	Any	1T*
	120-135m	Port Side to	Any	2T
	> 135m	Port Side to	Any	2ASD*
Sheerness No 1, 2, 3, 6, 7, 11	> 100m	Stbd Side to	Flood Tide	As per Pilot / Master
	100-135m	Stbd Side to	Flood Tide	2T*
	> 135m	Stbd Side to	Flood Tide	2ASD*
Sheerness No 1, 2, 3, 6, 7, 11	> 100m	Stbd side to	Ebb Tide	As per Pilot / Master
	100-135m	Stbd Side to	Ebb Tide	2T
	> 135m	Stbd Side to	Ebb Tide	2ASD
Sheerness No 1, 2, 3, 6, 7, 11	≥ 100m	Stbd Side to	30 mins after HW to 1 hour before LW, where average wind speed is ≥ 25 knots with any westerly component)	At least 1T
Sheerness No. 10	≤ 120m	Any	Any	1T *
	> 120m	Any	Any	2 T *
Sheerness No. 4 (Car Terminal)	> 170m (large car carriers) **	Port Side to	Any	2T ***
Sheerness No. 4 (Car Terminal)	> 170m (large car carriers) **	Stbd Side to	Flood Tide	2ASD ***
			Ebb Tide	3 (at least 2 ASD) ***
Sheerness No. 5	Any	Any	Wind > 15 knots (other than straight up or down berth)	1ASD
			Wind > 25 knots	2ASD ***

\* 1 tug may be replaced by an operational bow thrust.

\*\* for vessels other than large car carriers the requirements are as per berths 1,2,3,6, 7 & 11

\*\*\* for departures 1 tug may be replaced by an operational bowthrust

## ISLE OF GRAIN

Berth	Vessel Length	Which Side to	Tide / Wx / Manoeuvre	Tug Requirement
BP Jetty 1 *	For all operations on this berth refer to B.P. Towing & Berthing Guidelines. For vessels up to 130m tugs to be tractor tugs. For vessels over 130m tugs to be ASD tugs except that where 3 tugs are specified, the 3 <sup>rd</sup> tug may be any type and of sufficient bollard pull and manoeuvrability			
Thamesport Upper & Lower ***	< 100m	Any	Any	As per Pilot / Master
	100m – 140m	Any	Any	1T*
	140m – 170m	Any	Any	2T*
	170m – 250m	Any	Any	2ASD*
	>250m**	Any	No Swing	2ASD*
Jetty 6 and 7	>200m	Any	Berthing	2ASD
			Unberthing, when LNG vessel alongside jetty 8 or 10	1ASD
LNG Jetty 8 and 10	For all operations on this berth refer to Grain LNG Pilot Information Pack			

\* 1 tug may be replaced by an operational bowthrust

\*\* For v/l's over 300m and / or draft 12.3 or more minimum combined bollard pull 125t.

\*\*\*For vessels over 250m operating in the following conditions a 3<sup>rd</sup> tug is recommended:

Berthing stern to FLOOD tide, swinging on an EBB tide, in a steady wind of 20 knots or more (For v/l's over 300m and/or draft 12.3 or more: minimum combined bollard pull 185t)

Berthing stern to EBB tide is NOT recommended. However if this manoeuvre is undertaken extra tugs must be used.

## OAKHAMNESS

Berth	Vessel Size	Which Side to	Tide / Wx / Manoeuvre	Tug Requirement
Oakharness	≤ 30,000 DWT*	Any	Any	2ASD
Jetty	30-50,000 DWT*	Any	Any	3 (at least 2ASD)
	>50,000DWT*	Any	Any	4 (at least 2 ASD)

\* without manoeuvring aids

## CHATHAM AND ABOVE

Berth	Vessel Length	Which Side to	Tide / Wx / Manoeuvre	Tug Requirement
Chatham	<92m	Any	Any	As per Pilot / Master
Locks & Basin No.3	92m – 125m	Any	Any	1T*
	125m – 140m	Any	Any	2T*
All berths above Chatham up to Rochester Bridge	>92m > 107m	Any Any	Any Any	1T* 2T*

\* 1 tug may be replaced by an operational bowthrust

## THE SWALE

Berth	Vessel Size	Which Side to	Tide / Wx / Manoeuvr	Tug Requirement
Chalk Wharf	Any	Any	Any	1
Marsh Wharf	Any	Any	Any	1
Washer Wharf	≤90m >90m	Any Any	Any Any	As per Pilot / Master 1
Ridham Dock	≤80m	Any	Any	As per Pilot / Master
	80m - 95m	Any	Any	1*
	>95m	Any	Any	2*
Grovehurst	≤90m	Any	Any	1*
	>90m	Any	Any	1

\* 1 tug may be replaced by an operational bowthrust

## 2. FURTHER GUIDANCE AND ADVICE

Further guidance and advice can be found in the following publications:

- Tug Use in Port: A Practical Guide – Nautical Institute;
- Recommendations for Ships' Fittings for use with Tugs – OCIMF;
- The Ship handlers' Guide – Nautical Institute;
- Current relevant Merchant Shipping Notices;
- Code of Safe Working Practices for Merchant Seamen;
- Management of Health & Safety at Work Regulations;
- Current relevant Merchant Shipping Acts;
- Pilots LNG Information Pack, Peel Ports

*While the advice given in these Guidelines has been developed using the best information currently available, it is intended purely as guidance to be used at the user's own risk. It is for the user to decide in each case whether, in the circumstances arising, it is appropriate to use the guidance. No responsibility is accepted by the Port of Sheerness Ltd or by any person, firm, corporation or organisation which has been in any way concerned with the supplying of information or advice included in it or for any omission from it or for any consequences whatsoever resulting directly or indirectly from compliance with or adoption of this guidance.*

*These Guidelines and other local navigational information, Byelaws and Directions can be viewed and downloaded from the Peel Ports Medway website at [www.peelports.co.uk/port-authorities/medway](http://www.peelports.co.uk/port-authorities/medway)*

## ANNEX A

### STANDARD TUG COMMUNICATIONS

The format of instructions shall be: Tug name // position // power  
e.g. *Victory, right astern, easy weight.*

Forward Tug:

Right Ahead

Port of starboard bow (45 degrees)

Variations here by degrees or points

On the beam (90 degrees)

Act as a spring

Stand by to .....

Alongside Tug:

Push on

Pull off

Act as a Spring

Stand by to .....

Aft Tug:

Right aft

On the Quarter (45 degrees)

Variations also by degrees or points

On the beam (90 degrees)

Stand by to .....

Power:

No Weight / Stop

Easy 12T

Half 25-30T

Full 50-70T

Status? (Request for particular tug's setting)



## EMERGENCY COMMUNICATIONS

In the highly unlikely event of failure of Main V.H.F. & Portable V.H.F. communications between the vessel and the tugs, the following sound signals apply for Medway towage operations –

From Pilot to Tug:

HEAD TUG:

Tow to Starboard	1 Short Blast
Tow to Port	2 Short Blasts
Tow Ahead	3 Short Blasts
Stop	5 or more Short Blasts

FORWARD ALONGSIDE TUG:

Tow off	1 Short Blast
Push On	2 Short Blasts
Stop	5 or more Short Blasts

Both forward tugs must work together

STERN TUG:

Tow to Starboard	1 long + 1 Short Blast
Tow to Port	1 long + 2 Short Blasts
Tow Astern	1 long + 3 Short Blasts
Stop	1 long + 5 or more Short Blasts

AFT ALONGSIDE TUG:

Tow Off	1 long + 1 Short Blast
Push On	1 long + 2 Short Blasts
Stop	1 long + 5 or more Short Blasts

Both stern tugs must work together