



# Standard for Commercial Marine Construction Activities – Townsville

Maritime Safety Queensland

February 2022

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# Departmental Version Control

Version Number	Revision Date	Author	Summary of Changes	Approved by
1.0	February 2022	Frank R D'Souza	New Document	RHM Townsville

# Harbour Master Direction

## Direction to master about operation of ship in relation to a pilotage area, *Transport Operations (Marine Safety) Act 1994, section 88.*

I, Frank D'Souza, Regional Harbour Master (Townsville) am appointed as a harbour master under Part 7 of the *Transport Operations (Marine Safety) Act 1994*.

Under section 86 of the *Transport Operations (Marine Safety) Act 1994* a harbour master may give a direction if the harbour master reasonably considers it necessary to ensure the safety and the effectiveness and efficiency of the Queensland maritime industry.

Furthermore, section 86A of the *Transport Operations (Marine Safety) Act 1994* enables a harbour master to give a general direction that applies to all ship owners, ship's masters, ships, other persons or matters or is limited in its application to stated classes of ship owners, ship masters, ships, other persons or matters

To ensure marine safety in the Townsville Region, this Standard for Commercial Marine Construction Activities – Townsville Region, has been issued as a general direction.

### I DIRECT THAT:

The *Standard for Commercial Marine Construction Activities – Townsville* must be complied with by all masters engaged in, or otherwise associated with, commercial marine construction activities in the Townsville Pilotage Area.

It is an offence to fail to comply with my Direction without a reasonable excuse. It is also an offence to obstruct a harbour master in the exercise of a power. The maximum penalty is 200 penalty units for an individual for each offence. If you fail to comply with my Direction you may be prosecuted, then I may carry out the Direction myself and recover all expenses associated with performing the Direction from you as a debt in civil jurisdiction.



Frank D'Souza  
Regional Harbour Master (Townsville)  
Maritime Safety Queensland

DATED AT TOWNSVILLE THIS 15<sup>th</sup> DAY OF February 2022

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# 1 Marine Operations Activity Areas

## 1.0 Description

The standards and associated guidelines that are described herein are specifically formulated for the Townsville Region, and particularly the Pilotage Areas of Townsville.

For the purposes of this document,

- **Trade ships** are Piloted commercial vessels trading in Townsville
- **Harbour Tugs** are tugs engaged in the movement of trade ships
- **Commercial Marine Construction Vessels** (*construction vessels*) are vessels engaged in, or otherwise associated with, Commercial Marine Construction Activities
- **Lines launches** are launches engaged in the movement of trade ships
- **Ferries** are regular passenger and vehicle ferries operating from the Port of Townsville.

## 1.1 Application

This *Standard for Commercial Marine Construction Activities – Townsville* applies to all masters engaged in, or otherwise associated with, commercial marine construction activities in the Townsville Pilotage Area.

This *Standard for Commercial Marine Construction Activities – Townsville* does not apply to trade ships, harbour tugs, fishing vessels, lines launch and/or ferries conducting their normal business.

It should be noted that the standards herein do not exempt or excuse any person from conforming to the appropriate legislation for their specific operations.

## 1.2 Pilotage Areas

### 1.2.1 Townsville Pilotage Area

The Townsville Pilotage Area is described in Schedule 2 of the [Transport Operations \(Marine Safety\) Regulation 2016](#) as the area of:

- a) Waters bounded by an imaginary line:
  - starting at the high-water mark on the northern extremity of Cape Cleveland
  - then in a north-westerly direction to the position of latitude 19° 04.91'S, longitude 146° 52.07'E
  - then west to latitude 19° 04.91'S, longitude 146° 45.07'E
  - then south to the high-water mark on the mainland at longitude 146° 45.07'E
  - then by the high-water mark along the shoreline of the mainland to the starting point; and
- b) The navigable waters of rivers and creeks flowing, directly or indirectly, into the waters referred to in paragraph a).

### 1.2.2 Townsville Compulsory Pilotage Area

The Townsville Compulsory pilotage area is described in Schedule 3 of the [Transport Operations \(Marine Safety\) Regulation 2016](#) as the area of:

- a) Waters bounded by an imaginary line:
- starting at the high-water mark on the northern extremity of Cape Cleveland
  - then in a south-westerly direction to latitude 19° 13.599' south, longitude 146° 54.300' east
  - then west to latitude 19° 13.539' south, longitude 146° 51.450' east
  - then in a north-easterly direction to latitude 19° 11.789' south, longitude 146° 52.750' east
  - then in a north-easterly direction to latitude 19° 06.949' south, longitude 146° 55.050' east
  - then in a north-westerly direction to latitude 19° 04.909' south, longitude 146° 52.070' east
  - then west to latitude 19° 04.909' south, longitude 146° 45.070' east
  - then south to the high-water mark on the mainland at longitude 146° 45.070' east
  - then by the high-water mark along the shoreline of the mainland to the starting point; and
- b) the navigable waters of rivers and creeks flowing, directly or indirectly, into the waters referred to in paragraph a).

### **Transport Operations (Marine Safety) Act 1994 Part 8, section 99**

A person must not navigate a ship in a compulsory pilotage area unless the person uses the services of a pilot.

Maximum penalty – 200 penalty units.

The following ships are ships to which [part 8](#) of the [Act](#) applies—

- (a) a ship that is 50m or more;
- (b) a small ship (the **relevant ship**) if—
- (i) it is combined with another small ship for propelling 1 of the ships; and
  - (ii) the combined length of the ships is 50m or more; and
  - (iii) the master of the relevant ship has command of the combined ships;
- (c) a ship whose owner or master asks for the services of a pilot;
- (d) a ship whose master is directed by a harbour master to use the services of a pilot.



## 2 Port Rules

### 2.1 General

All *construction vessels* are bound by the ColRegs.

Trade vessels are often restricted in their ability to manoeuvre and constrained by their draft. Vessels engaged in tow operations may also be restricted in their ability to manoeuvre. It is important that operators in waterways ensure good communication between all vessels to prevent incidents and assist in port operational continuity.

The philosophy employed when developing these rules was for them to be simple, easy to understand, based primarily on-water and effective in reducing the identified risk in the area.

These rules are in addition to the existing rules detailed in the *Port Procedures and Information for Shipping – Port of Townsville*, which must be complied by all vessels

masters to which this standard is applicable, are required to observe the following rules:

1. Masters and crew must be certified for commercial operations to satisfy the requirements of the Australian Maritime Safety Authority (AMSA).
2. All *construction vessels* within a Townsville Pilotage Area must be suitable for all operating conditions that may be experienced.
3. All powered *construction vessels* working within a Townsville Pilotage Area shall have a service speed of no less than five knots against any tide or weather condition.
4. *Construction vessels* are to display flags/day shapes/lights as appropriate to the task being conducted.
5. *Construction vessels*, whilst engaged in marine construction activity, must have an Automatic Identification System (AIS) operating and transmitting at all times within the Townsville Pilotage Area.
6. All powered *construction vessels* >15m intending to enter or cross the restricted areas referred to in s.2.1 must contact Townsville VTS at the start of each journey and communicate their departure point and destination. Further requirements can be found in *Section 6 - Communication Procedures*.
7. *Construction vessels* are to comply with the requirements of all relevant legislation including:
  - the *Transport Operations (Marine Safety) Act 1994* and *Transport Operations (Marine Safety) Regulation 2016*,
  - *Marine Safety (Domestic Commercial Vessel) National Law Act 2012*, or *Navigation Act 2012*, whichever applies to the vessel
  - *Transport Operations (Marine Pollution) Act 1995* and *Transport Operations (Marine Pollution) Regulation 2018*
  - *International Regulations for the Prevention of Collisions at Sea (ColRegs)*
  - *Port Procedures and Information for Shipping for the ports of Townsville* as appropriate.
8. Trade vessel operations (large RORO, tanker, cargo vessels) have operational precedence over construction vessels.
  - 1) *Construction vessels* will schedule their movements to ensure trade vessels movements are not impeded (regardless of late changes).
  - 2) *Construction vessels* will not use the declared channels if there is a safe alternate route available.

- 3) *Construction vessels must not* cross the channel ahead of a trade vessel using the declared channel.
- 4) *Construction vessels must not* cross the channel within 300 metres astern of a trade vessel using the declared channel.
- 5) *Construction vessels* waiting for a trade vessel transiting along the declared channel **must not** approach within 145 metres of the toe line of the channel (remain at least 100 metres outside the line of beacons (physical or Virtual) demarking the navigation channel, until the vessel is past.
- 9) Departing TUF or Dredge Barge - all *Construction vessels* to use all available means including the AIS display to check for potential traffic conflicts before letting lines go (if in doubt that there is enough time to make a safe transit before a trade ship requires a clear channel, then the vessel is not to cast off).
- 10) All *Construction vessels* with LOA >15m departing a mooring, TUF or dredge barge must contact VTS on VHF 12 before letting lines go.
- 11) All vessels to use all available means including the AIS display to check for potential traffic conflicts during transits.
- 12) Bright deck lights on *Construction vessels* to be shielded to seawards (directed downwards) as best possible.
- 13) Non-essential deck lights on *Construction vessels* to be turned off when underway.
- 14) *Construction vessels* must not communicate on the VHF radio channels used for Harbour tug communication – channels 6, 8 & 13.
- 15) *Construction vessels* are only to display warning flags/shapes when operations require them and to remove them when not necessary.
- 16) All *Construction vessels* to ensure own AIS activated and working effectively.
- 17) *Construction vessels* must not anchor within the *Restricted areas* (s 2.2) or in any manner that impacts the normal operations of the port.

Note:

  - If securing arrangements are expected to impede commercial operations, project teams must prepare a plan for consultation and endorsement by the port and RHM. Ship simulations may be required to assess any safety concerns.
  - Where a construction vessel required to anchor/operate within the restricted area to deliver the activity, the specifics of the task and traffic management plan must be developed in consultation with the RHM, to ensure the operation does not impact navigational safety of other waterway users.
- 18) If, in emergency, it is required to anchor within a *restricted area*, the master **must**;
  - a) Notify VTS immediately,
  - b) Call for assistance to remove the vessel from the *restricted area*,
  - c) Notify VTS when clear,
  - d) Submit a report on the cause of the emergency and corrective action to prevent recurrence.
- 19) Unpowered construction vessels (dumb barges) must have a tug on standby when anchored
  - a) During night-time hours, or
  - b) If winds are forecast to be greater than 20kts.
- 20) During the daylight hours if an anchored unpowered *construction vessel* (dumb barge) is to be left unattended (without a tug on standby) VTS must be notified of;
  - a) the duration unpowered *construction vessel* will be unattended, and

- b) the name of Tug to be called in event of emergency.

Note: Reference to a tug on standby in s.2.19 and 2.20 above means a tug hipped up or anchored close by ready to attend/tow the dumb barge.

## 2.2 Restricted Areas

The Sea Channel, Platypus, Channel, Outer Harbour, Inner Harbour, Ross Creek and Ross River Channel are declared as *restricted areas*. *Construction vessels* must not enter and operate in the *restricted areas* without the authorisation of the harbour master (RHM) or Townsville VTS. The purpose is to ensure the safe movement of trade ships, ferries and other vessels normally operating in these waters.

All vessels are prohibited from anchoring within *restricted areas*.

*Construction vessels* may manoeuvre in the *restricted area* in accordance with the approved traffic management plan.

- 1) all *construction vessels* in the *restricted areas* must maintain a listening watch on VHF channels 12 & 16.
- 2) *construction vessels* with LOA greater than 15m entering or moving within a *restricted area* must call up VTS Townsville on VHF 12 or 16 prior to entry/move to advise VTS of their intentions/destination and seek clearance to proceed.
- 3) *construction vessels* must give way and keep well clear of any piloted shipping movement.
- 4) tugs with a barge in tow must not enter a *restricted area* if there is a shipping movement, until the piloted ship has passed and tug and barge can proceed clear astern
- 5) If due to the nature of the construction activity a *Construction vessel* is required to anchor or moor within the *restricted area* adjacent to the shipping channels or swing basins, the project team will develop operating guidelines (Traffic Management Plan) in consultation with the port, pilots and RHM to facilitate the operation. The Traffic Management Plan must be endorsed by the RHM

## 2.3 Other Restricted Areas

The RHM may declare a *Marine Construction - Restricted Area* around the areas of construction.

Project applicant intending to seek a *Marine Construction - Restricted Area* must submit to the RHM at least 4 weeks prior to the date:

- 1) The purpose for the *Marine Construction - Restricted Area*,
- 2) Adequate justification for the *Marine Construction - Restricted Area*,
- 3) The date of proposed commencement and date of cancellation of the *Marine Construction - Restricted Area*,
- 4) Vessels/entities authorised to operate within the *Marine Construction - Restricted Area*,
- 5) The method of restricting, monitoring and ensuring unauthorised vessels will not enter/ transit the *Marine Construction - Restricted Area*,
- 6) Stakeholder communication to be implemented (Media broadcasts, publication of the *Marine Construction - Restricted Area* in local newspapers, and so on).

If the RHM approves the *Marine Construction – Restricted Area* proposal, it will be published as a Notice to Mariners on the Maritime Safety Queensland website -

<https://www.publications.qld.gov.au/dataset/townsville-notice-to-mariners>

The applicant must ensure unauthorised people and/or vessels do not enter or transit the *Marine Construction - Restricted Area*.

## 2.4 Maritime Security Zones

There is a 60 metre Maritime Security Zone around all berths when a trade vessel is alongside. VTS and Port Security monitors the movement of vessels and will report any suspected breaches to the appropriate authorities.

## 2.5 Extreme Weather Contingency Plans

Any vessels working within the pilotage areas must have an extreme weather contingency plan in place prior to the cyclone season, November to April inclusive. This plan will supplement the port authority and RHM's extreme weather procedures and must not interfere with the extreme weather contingency plans of existing vessels working in the pilotage area. The RHM requires a detailed extreme weather contingency plan to be submitted for review for any project. The plan will detail the location where each construction vessel will shelter in the event of extreme weather.

Owners/operators shall provide details of their extreme weather contingency plan for *construction vessels* as part of the Marine Execution Plan (see *Section 7*), for approval by the RHM. These contingency plans should be prepared with reference to the Extreme Weather Event Contingency Plan – Townsville Region.

## 2.6 Pilotage Requirements

A pilot (or a suitably certified pilot exempt master) is required for all vessels manoeuvring within the compulsory pilotage area;

- 50 or more meters in length, or
- where the "combined length" of the tug & barge combination is 50 m or more, or
- when directed by the RHM to use a pilot.

The pilot exempt master (PEC) may be on the tug towing the barge or be on the attending tug assisting with the towing of the barge. The attending tug does not have to be physically connected to the barge, but it should be clear that the pilot exempt Master is in-charge of the pilotage operation.

Before the operation the master in charge with PEC authority must call VTS to

- report their name and the vessels (combination of vessels) in their charge during the pilotage;
- If PEC or Pilot is on the assisting vessel, confirm suitable secure communication has been established with the combination.

## 3 Vessel Requirements

### 3.1 Automatic Identification System and Electronic Chart System

Automatic Identification System (AIS) and Electronic Chart System (ECS) can be utilised to enhance situational awareness and aid collision avoidance.

The performance and effectiveness of AIS and ECS as aids to masters and vessel traffic service operators is heavily dependent on the correct configuration and operation of these units.

All requirements listed here are considered to be minimum requirements.

The equipment prescribed in this Standard is to improve situational awareness and collision avoidance and does not replace navigational equipment mandated by relevant state, national, or international legislation.

#### 3.1.2 Automatic Identification System

All commercial vessels 10 metres or greater in length (including dumb barges) and all passenger transfer vessels 6 metres or greater in length, involved in project activities within a Pilotage Area and not required to carry a Class A AIS, must have a Class B AIS transceiver<sup>1</sup> installed, configured and operating in the manner prescribed in this document.

The AIS unit must:

- comply with International Electrotechnical Commission (IEC) standards<sup>2</sup>,
- be installed, configured and operated to transmit and receive AIS data and display received AIS data on an ECS,
- broadcast prescribed static information indicating certain particulars of the vessel including Maritime Mobile Service Identity (MMSI)<sup>3</sup>, name, type of vessel, call sign (if applicable) and dimensions of vessel,
- broadcast prescribed dynamic information<sup>4</sup> about the vessel's position and movement,
- refresh dynamic information at intervals no greater than every 30 seconds (if the speed over ground of the vessel is greater than two knots) and no greater than every three minutes (if the speed over ground of the vessel is equal to or less than two knots),
- be capable of receiving VDL (VHF Data Link) Message 21 – Aids To Navigation Report for reception of Virtual Aid to Navigation information,
- masters will be required to demonstrate their ability to use AIS equipment as a situational awareness tool.

<sup>1</sup> Class B AIS transceivers are AIS units that perform not necessarily in full accordance with IMO's AIS requirements. Class B units are defined in Recommendation ITU-R M.1371 and test standard IEC 62287.

<sup>2</sup> In particular the AIS unit must conform with the following IEC standards as appropriate:

For Class B: IEC 62287-1 *Maritime navigation and radio communication equipment and systems – Class B ship-borne equipment of the Automatic Identification System (AIS) – Part 1: Carrier Sense time division multiple access (CSTMDA) techniques*

For Class A: IEC 61993-2 *Maritime navigation and radio communication equipment and systems – Automatic Identification Systems (AIS) – Part 2: Class A shipborne equipment of the universal Automatic Identification Systems (AIS) – Operational and performance requirements, methods of test and required test results*

<sup>3</sup> The Australian Maritime Safety Authority (AMSA) allocates and issues MMSI to vessels.

<sup>4</sup> Dynamic information to be broadcast includes the vessel's position (with accuracy indication and integrity status), time (in UTC), course over ground, speed over ground and true heading (optional).

### 3.1.3 Electronic Chart System

All commercial vessels 10 metres or greater in length (excluding dumb barges) and all passenger transfer vessels 6 metres or greater in length, involved in commercial activities are recommended to have an ECS, operating and configured to display prescribed AIS vessel information for the vessel and vessels in the vicinity, on a single graphic display that complies with the National Standard for Commercial Vessels<sup>5</sup>.

If no ECS vessels are to have the appropriate up to date charts and publications on board and be able to demonstrate regular position identification to an MSQ officer post any transit.

## 3.2 Barges

All barges must be manned with certified complement in accordance with the respective legislative requirement – Marine Safety (Domestic Commercial Vessel) National Law Act 2012 (national law act) or Navigation Act 2012 and/or relevant WHS regulations.

Masters and/or operators of construction vessels being unpropelled barges (*dumb Barges*), must only operate in accordance with the relevant AMSA legislation and Safety Management System procedures—including stability assessment and appropriate crew (minimum qualifications, experience and induction processes).

Where a unpropelled barges (*Dumb barges*), does not have a dedicated Master, the loading and unloading of the dumb barge, (equipped with or without crane, pile driver, excavator, or any other equipment), must be supervised by a suitably qualified person (*person in charge*) responsible for the safety of persons and stability of the barge.

The *person in charge (PIC)* at any given time must be documented and any hand overs from one *PIC* to another *PIC* documented to ensure continuity of command.

The *person in charge (PIC)* must

- have immediate access to VHF radio to enable contact with Townsville VTS. This may be a handheld radio capable of receiving and transmitting on VHF Channel 12 and 16.
- have a means of communicating with any persons operating equipment (crane, pile driver, excavator and so on), on that barge.

All movements of unpropelled commercial marine construction vessels (dumb barges), within Townsville inner harbour and/or outer harbour must as a minimum employ 1 tug of appropriate power and a support vessel. Under this arrangement, the tug will act as a prime mover and be secured to the barge. The support vessel (assist vessel) will operate to instructions from the PEC Master or Pilot.

Prior to any operations within the Townsville inner harbour and/or outer harbour, the project team will assess whether a 2<sup>nd</sup> tug is required to safely manoeuvre the load and provide appropriate towage.

The assessment indicating the machinery configuration of the primary tug, the use of the assist vessel or tug, the size and power of the tugs and assist vessels will form part of the marine execution plan submitted to the RHM for approval. Project team, marine contractors are encouraged to discuss their proposals with the Port, Pilot manager and RHM well in advance of the presentation of any documents to ensure all safety concerns are addressed.

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<sup>5</sup> As specified in Annex C to Part C, Section 7, Subsection 7C of the *National Standard for Commercial Vessels*:

2.2.2.3 *Display legibility* - The display shall be viewable and all text legible by day and night at a minimum distance of 1 metre from the *ECS* or where the design of the navigation control station does not allow a 1 metre viewing distance, the maximum distance that the person responsible for navigation may be from the *ECS* while navigating the vessel.

### 3.3 Jack-up Barges (JUB)

Jack-up barges in spud retracted mode (afloat) are treated:

1. If self-propelled - as a vessel of its length,
2. If un-propelled (thrusters are not a form of propulsion) - as a dumb barge of its length.

Jack up Barge in floatation mode, under tow transiting from one location to another within the pilotage area will be navigated with the same requirements as a Commercial marine constructions vessel and will engage the services of a Pilot or a Pilot Exempt Master.

Jack up Barge when in the jacked-up mode

- does not require a master, but it does require a competent person in accordance with the relevant AMSA legislation and Safety Management System procedures and any operational policies and procedures to operate.
- using spuds, anchors (with or without assistance of thrusters) to move (*walking*) is permitted without pilotage assistance. The JUB must have as a minimum must have a Master class 4 with area endorsement on board in charge of the manoeuvre. The JUB must have at least
  - i) two anchors out during the move; and/or
  - ii) one leg pinned to the seabed during the move

It is preferred that a PEC master is in-charge of a JUB during *walking* manoeuvres within the compulsory pilotage area.

### 3.4 Tugs

All tugs new to the Townsville Region must ensure the tow hook/winch quick release will operate under all towing conditions, via a load test. This test must be undertaken with an AMSA approved surveyor or Class surveyor and the results of this test maintained with the vessel's documentation.

The results of the test should also be included in the Marine Execution Plan.

### 3.5 Pipeline Obstructions

Floating and/or submerged pipelines can be an obstruction to navigation and require RHM approval for their deployment. Any such approval will only be granted if the potential obstruction is marked in the following manner;

- floating pipelines are to be lit at 60m intervals with yellow flashing lights visible at a minimum 2nm from all directions; so that it is evident that there is no safe passage between successive lights located on the pipeline.
- submerged pipelines which are likely to be a hazard to surface navigation; must be marked by special mark buoys fitted with yellow flashing lights visible from a minimum 2nm from all directions, with the interval between successive buoys such that the location of the pipeline is readily apparent to the mariner.

#### 3.5.1 Cyclone Moorings

Application for a buoy mooring is detailed on the MSQ website at;

<https://www.msq.qld.gov.au/Waterways/Buoy-moorings>

To apply for a cyclone mooring the applicant must submit detailed drawings and certification for cyclone moorings (including but not limited to);

- i) Certified engineering drawings showing the mooring is designed for the vessel (name or type/size) to be moored;
- ii) Maximum wind rating to which the mooring will hold that particular vessel(s)
- iii) Proposed position of the mooring
- iv) Maximum breaking load of the mooring

The RHM will consider the proposed position, design and impacts on other marine traffic and either approve the buoy mooring with conditions or refuse the application.

Each cyclone mooring buoy must be lit at night with yellow flashing lights Fl (Y) 2.5 s with 360-degree visibility and a visible range of 4Nm



## 4 Crew Requirements

### 4.1 Application

These following are the minimum requirements for manning *construction vessels*

### 4.2 Vessel Master

The master must:

- hold the appropriate qualification for the size and class of the vessel,
- have successfully completed a local knowledge examination and/or PEC to operate within the Pilotage area.

### 4.3 Tug and Unpowered tow combinations

Tug masters require a Certificate of Competence Master Class 4 or as prescribed for the length of the powered vessel, which is higher.

Tug and unpowered tow combinations are classified as a 'small ship' as detailed in section 163(1)(b) of the *Transport Operations (Marine Safety) Regulation 2016*.

For combinations of ships over 50 metres (total length of ships), in addition to the relevant certificate of competence and successful completion of specified local knowledge test, masters will require a Pilotage Exemption Certificate when operating within Compulsory Pilotage Areas; else a Harbour Pilot will be required for each movement

### 4.4 Barge Master

All barges must be manned with certified complement in accordance with the respective legislative requirement – Marine Safety (Domestic Commercial Vessel) National Law Act 2012 (national law act) or Navigation Act 2012.

### 4.5 Other crew

The operator (master) has a duty of care to their employees, including deckhands.

One way of demonstrating that duty has been met, at least in part, is to ensure crew;

- have formalised training in MARSS00008 Shipboard Safety Skill Set (formally ESS) or equivalent,
- hold a current first aid certificate, and
- be in-house competency trained to operate the vessel in emergency situations including radio communications.

The ship's SMS may nominate alternative arrangements that will still satisfy the duty of care.

## 4.6 Foreign Certificates

Masters with foreign certificates (and not the requisite domestic qualification) must consult the Australian Maritime Safety Authority for information on the issue of certificates of recognition. An AMSA approved certificate of recognition must be obtained prior to functioning as a vessel master engaged in commercial marine construction activities under this Standard.

## 4.7 Manning & Competency requirements for Barges

Barges and JUB's which are not self-propelled do not require manning as per the *National Law* requirements for seafarers. The barges will have an SMS which defines the level, competency and qualifications of the crew to satisfy its operation.

## 4.8 Pilot Exemption Certificates

Application for a PEC is made to the RHM's office. The candidate will be provided with a *Record of qualifications and training for pilotage exempt masters – Project work and Tug & Tow operations*.

The candidate must

- i) have a current seagoing marine qualification suitable for the size of vessel to be operated in the pilotage area.
- ii) have at least 3 months previous experience working in a pilotage area.
- iii) undertake a number of observation trips day and night (if seeking night certification) with a pilot or PEC Master within the compulsory pilotage area.
- iv) be employed by a company or contractor who will or currently operates work vessels in the pilotage area.

The application must be accompanied by a letter of endorsement from the company or contractor employing the candidate. The letter will detail the candidate's previous experience and position(s) within the company as well as any past experience.

Number of observation trips will be determined by RHM depending on experience of the candidate, complexity of the operation, construction requirements and the need to access specific areas within the port.

Apply to MSQ for pilotage exemption by submitting the following:

- application for marine pilotage qualification,
- current medical,
- original marine qualifications (copies to be certified),
- letter from company,
- copy of local knowledge qualification (written local knowledge and blank chart examination)
- fees
- number of observations trips (page 2 of application, confirmed by Master or company),
- letter of recommendation from senior training master (if mentor trips are conducted under their guidance).

On receipt of above, MSQ will issue temporary authority to enable applicant to complete supervised mentor trips and check trips.

On completion of the mentor trips and check trips

- letter of recommendation from senior training master (if mentor trips are conducted under their guidance).
- Check Trip Assessment report.

Refer: Record of qualifications and training for Pilot Exempt Masters – Project work and Tug & tow operations.

The master applying for PEC involving towage, must demonstrate competence in each type of operation or mode for example, tow/hip-up operation or using any arrangement (that is barge with multiple combination push/pull/tow work vessels).

Mentor trips must be undertaken under the supervision of a marine pilot or PEC master. The pilot/training master conducting the observations trips will complete and sign the record of qualification & training for Pilotage Exempt Masters for the candidate. This form should be submitted along with the application.

PEC candidates must visit the Manager Vessel Traffic Services (MVTs) at Townsville for a briefing on operation within the pilotage area.

PEC candidates must successfully pass a written local knowledge and blank chart examination conducted by the Regional Harbour Master.

A successful candidate will be issued with PEC for a period of 2 years. The Regional Harbour Master may stipulate specific exemptions or limits on the PEC such as;

- the maximum length of vessel or combination of tug/barge,
- include areas where the PEC will be applicable,
- limit to a specific vessel or vessel and barge combination,
- limit hours of operation (daylight only).

A person with a PEC must notify the Regional Harbour Master if they cease working in the pilotage area or change employer. The PEC may be suspended or cancelled on written notification by RHM Townsville.

## 4.9 Training Masters

Port operational requirements may mean it's not always feasible to engage the services of a certified marine pilot. For this reason, companies are encouraged to identify a senior training master holding an appropriate PEC to provide the conduct the Mentor trips

The senior training master will not be permitted to set or assess practical examinations for the applicant.

Senior training masters will satisfy the requirements of the *Transport Operations (Marine Safety) Regulation 2016* by having the conduct of the vessel until the master has obtained the requisite pilotage exemption.

The senior training master will:

- have pilotage conduct (valid Townsville PEC) of commercial vessels in the Townsville Region to meet the regulatory requirements of the Transport Operations (Marine Safety) Act 1994,
- provide the opportunity for masters to gain and demonstrate the practical ship handling skills and local knowledge expertise to obtain a Pilotage Exemption Certificate for ports in the Townsville Region,

- provide feedback to the RHM (Townsville) about the Pilotage Exemption Certificate applicants' competence in ship handling and local knowledge to support the RHM decision for pilotage exemption,
- not permit a Master not holding a valid PEC to have conduct of the marine commercial vessel within the pilotage area unless the master of the vessel is gaining local knowledge expertise and demonstrating practical ship handling competence for the purpose of obtaining a Pilotage Exemption Certificate and is under his supervision.
- have the skills and experience to train, mentor and assess in the areas of:
  - local knowledge of the port of operation,
  - ship handling skills of vessels for which the exemption will be sought.

The senior training master must:

- act reasonably and fairly,
- exercise professional skill and judgment in the conduct of marine vessels in the Townsville Region ports,
- provide prompt and accurate advice to pilotage exemption applicants and MSQ.

Senior training masters are not agents, employees or sub-contractors of MSQ.

Theoretical testing of all applicants will be undertaken by the RHM (Townsville)

## 4.10 Local Knowledge Examinations

Master's of tugs / work vessels (length less than 50m) within the pilotage or construction area not requiring PEC, must undertake a "Local Knowledge Exam" at the RHM's Office.

Masters of vessels who are required to complete local knowledge exam to operate in the pilotage area must obtain a briefing on operations within the pilotage area by the Manager Vessel Traffic Services (MVTs) at Townsville or their authorised delegate.

Local knowledge expires 1 year from the last date of operation in the pilotage area.

## 4.11 Auditing

Holders of Pilotage Exemption Certificates granted by MSQ will be subject to audits conducted by MSQ personnel.

These audits may include verification of records of service and Check Pilot observational assessments conducted during routine movements to verify the holders' practical ship handling ability and local knowledge. A Check Pilot refers to a person who is licensed under a regulation as a pilot and who is authorised by the RHM to assess an applicant's competence.

MSQ officers or delegate will also perform 'Check Pilot' audits including on board observation, supervisor trips, and practical examination trips to verify the performance of PEC holders.

# 5 Operating Procedures

## 5.1 Communication Procedures

### 5.1.2 Townsville and Townsville VTS Areas

In order to enhance the safety of vessels within Townsville Pilotage areas, as well as maintain efficient communications for all port users, communication procedures have been implemented and must adhered to by all vessels operating within the Pilotage areas.

It is mandatory for all commercial craft operating in Townsville and Townsville VTS areas under this Standard to maintain radio communications on VHF Ch12.

Commercial marine constructions vessels greater than 15m must

- a) notify VTS of departure point and intended destination.
- b) not commence moving within the pilotage area prior to obtaining VTS clearance for the intended movement on VHF Ch12. Instructions and
- c) comply with advice from Townsville VTS.

To ensure good understanding of intentions and to maintain sound communications, correct marine radio etiquette is to be observed at all times including listening for other radio transmissions prior to transmitting, clarity in transmissions and patience.

Examples of standard radio transmissions on channel 12 are:

- **'All ships this is PMG Panther & Barge – Departing TUF for Dredger Woomera – West of Platypus Channel';** or
- **'All ships this is PMG Pride – Departing TMP for PBP "TT";** or
- **VTS Townsville this is PMG Pride requesting clearance to depart TMP for PBP "TT"**

The following table details the radio channels used in the Port of Townsville and the service each channel provides. As channels listed are dedicated harbour working channels specific to harbour operations, Commercial marine constructions vessels are to use VHF channel 15 when for internal inhouse operational communications.

Note: It is mandatory that all commercial craft be able to simultaneously work VHF Ch12 whilst maintaining a listening watch on VHF Ch16.

Townsville VHF radio channels

Channel	Call sign	Service
12	Townsville VTS	Vessel reporting, vessel traffic management, port working
06	User (tugs/pilots)	Port operations, pilots and tugs
08	User (tugs/pilots)	Port operations, pilots and tugs
13	User (tugs/pilots)	Port operations, pilots and tugs
11 and 14	REEFVTS	Vessels transiting Great Barrier Reef
15	User	Commercial marine constructions vessels
16	User	Emergency and initial calling

Commercial marine constructions vessels must use VHF 15 for communicating between individual operations (for example, a tug and its barge) or UHF radio for in-house communications.

In order to assist the master with on-board decision making, Pilot on trade ships transmit an all ships broadcasts on VHF channel 16

- Entering Sea Channel
- P 13
- Prior to departing a berth

advising when trade vessels are approaching designated waypoints. This is a general broadcast and there is no requirement to respond via radio.

The following examples indicate a typical radio broadcast and format.

**'All ships this is Townsville VTS – the vessel Nadi Chief is departing berth 3 outbound to sea. She is constrained by draft and all vessels are to remain clear. Townsville VTS out'**.

Vessels to which this standard applies must contact Townsville VTS when

- Planning to cross the shipping channel
- Intending to enter a restricted area - Sea Channel, Platypus, Channel, Outer harbour, Inner Harbour, Ross Creek and Ross River Channel

The following example indicates a typical radio broadcast by a *construction vessel*.

**'Townsville VTS this is PMG Panther & Barge PMG 181 – Departing TUF for Dredger Woomera, west of Platypus Channel, requesting clearance and traffic over'**

## 5.2 Passenger Number Verification Procedure

Commercial marine constructions vessels undertaking dedicated transits ferrying construction workers, dredger crew from shore to construction sites, dredgers must have an AMSA approved passenger number verification procedure carried on board.

The procedure should ensure all persons on board can be accounted for and should include requirements for crew lists and passenger manifests.

The master of any crew transfer operation must ensure the AIS is updated with the number of passengers and crew prior to departing.

## 5.3 Marine Incident Reporting

### 5.3.1 General

**All marine incidents occurring within the Townsville region regardless of the regulatory agency must be immediately be reported to the Regional Harbour Master (Townsville) through VTS Townsville.**

Initial reports should be conveyed through to VTS Townsville:

Telephone: 1300 721 263 or 1300 721 293

VHF channel: 12 or 16

**A written report must be submitted to the RHM within 48 hours of the incident.**

In, addition written reports must be submitted within the relevant timeframes as specified in the respective regulations (refer: Port Procedures and Information for Shipping – Port of Townsville, January 2022 - 12.7.1; 12.7.2; 12.7.3) in the appropriate format to the appropriate agency and to Maritime Safety Queensland:

Maritime Safety Queensland - 60 Ross Street, South Townsville Qld 4810 Postal address: GPO Box 1921, Townsville Qld 4810, or

Email: [RHMTown@msq.qld.gov.au](mailto:RHMTown@msq.qld.gov.au) or [vtstownsville@msq.qld.gov.au](mailto:vtstownsville@msq.qld.gov.au)

**A written report must be submitted to the RHM within 48 hours of the incident.**

While definitions of an incident may use different wording, common to all legislation is the requirement for incidents to be reported for events involving:

A **marine incident** is defined as an event causing

- (a) the loss of a person from a ship; or
- (b) the death of, or grievous bodily harm to, a person caused by a ship's operations; or
- (c) the loss or presumed loss or abandonment of a ship; or
- (d) a collision with a ship; or
- (e) the stranding of a ship; or
- (f) damage, or danger of significant damage, to a ship; or
- (g) defect or damage to a ship's equipment; or
- (h) damage caused by a ship's operations; or
- (i) danger of significant damage to a structure caused by a ship's operations; or
- (j) danger to a person caused by a ship's operations.

A **near miss** is an unplanned event which has the potential to develop into a marine incident and required action to prevent an incident occurring.

Where a marine incident or a near miss occurs during the pilotage, or in the pilotage area, the pilot or Pilot Exempt Master or master must

- I. As soon as practical notify Townsville VTS of the situation, requesting assistance as required; and
- II. Within 48 hours of the incident or near miss submit a written report to the Regional Harbour Master providing details of the incident or near miss. The report must be made on the approved [Marine Incident Report Form F3071](#).

### **5.3.2 Vessels Operating Under the *Marine Safety (DCV) National Law Act 2012* or the *Navigation Act 2016***

A detailed incident report must be submitted to AMSA on [Form 18](#) (within 4 hrs) and [Form 19](#) (within 72 hours) after the incident occurring.

Reports are to be submitted by fax: +61 2 6230 6868 or 1800 622 153 or by email: [reports@amsa.gov.au](mailto:reports@amsa.gov.au).

Further details of these requirements and relevant forms are available on the AMSA website: <http://amsa.gov.au/vessels/ship-safety/incident-reporting/>

### **5.3.3 Vessels Operating Under the *Transport Operations (Marine Safety) Act 1994***

All marine incidents must be reported to a shipping inspector within 48 hours and a written marine incident report is also to be submitted.

Shipping Inspectors are Marine Officers (located at MSQ regional offices), officers of Queensland Water Police and Queensland Boating and Fisheries Patrol. The report must be made on the approved [Form F3071](#). This form can be downloaded from the MSQ website: <http://www.msq.qld.gov.au/Safety/Marine-incidents.aspx>.

## 5.4 Marine Pollution Reporting

The *Transport Operations (Marine Pollution) Act 1995* is designed to protect Queensland's marine and coastal environment by minimising deliberate and negligent discharges of ship-sourced pollution. Discharges of oil, noxious liquid substances, sewage and garbage from ships (*MARPOL Annexes I, II, IV and V*) are prohibited in Queensland coastal waters and pilotage areas.

MSQ has the authority to detain any vessel suspected of causing marine pollution and to intervene where there is imminent danger to the coastline.

Section 67 of the *Transport Operations (Marine Pollution) Act 1995* requires the master of a ship to report a discharge or probable discharge without delay to the harbour master.

The report should be made via 'Townsville VTS' (24 hours) on:

VHF radio: 12 or 16

Phone: 1300 721 263

Email: [Vtstownsville@msq.qld.gov.au](mailto:Vtstownsville@msq.qld.gov.au)

The following details should be provided in a report of marine pollution:

- date/time of incident,
- location (latitude, longitude and/or physical site),
- report source and contact number,
- nature, extent and estimated quantity of spill,
- type of oil or description,
- spill source and point of discharge from source,
- identity and position of nearby ships or name of alleged polluter,
- nature and extent of spill and movement and speed of spill,
- local weather/tide/sea conditions,
- whether a sample of the substance spilled has been collected,
- any additional information that relates to the spill,

The VTS centre will complete form F3968 Marine Pollution Report based on the above information and notify the relevant authorities.

**The polluter must also complete form F3968 Marine Pollution Report with all relevant information and email the form to [pollution@msq.qld.gov.au](mailto:pollution@msq.qld.gov.au)**

## 5.5 Environmental Incidents

Incidents with potential to cause or which have caused 'environmental harm' (as defined in the *Environmental Protection Act 1994*) within the port, including land and facilities under control of the port authority, must be reported to the authority as soon as reasonably practicable.



Port users, owners, masters and organisations are reminded of their responsibility to notify the Department of Environment and Science (DES) and/or the relevant Regional Council where the incident is of the nature that requires notification under the Environmental Protection Act 1994 and environmental protection policies.

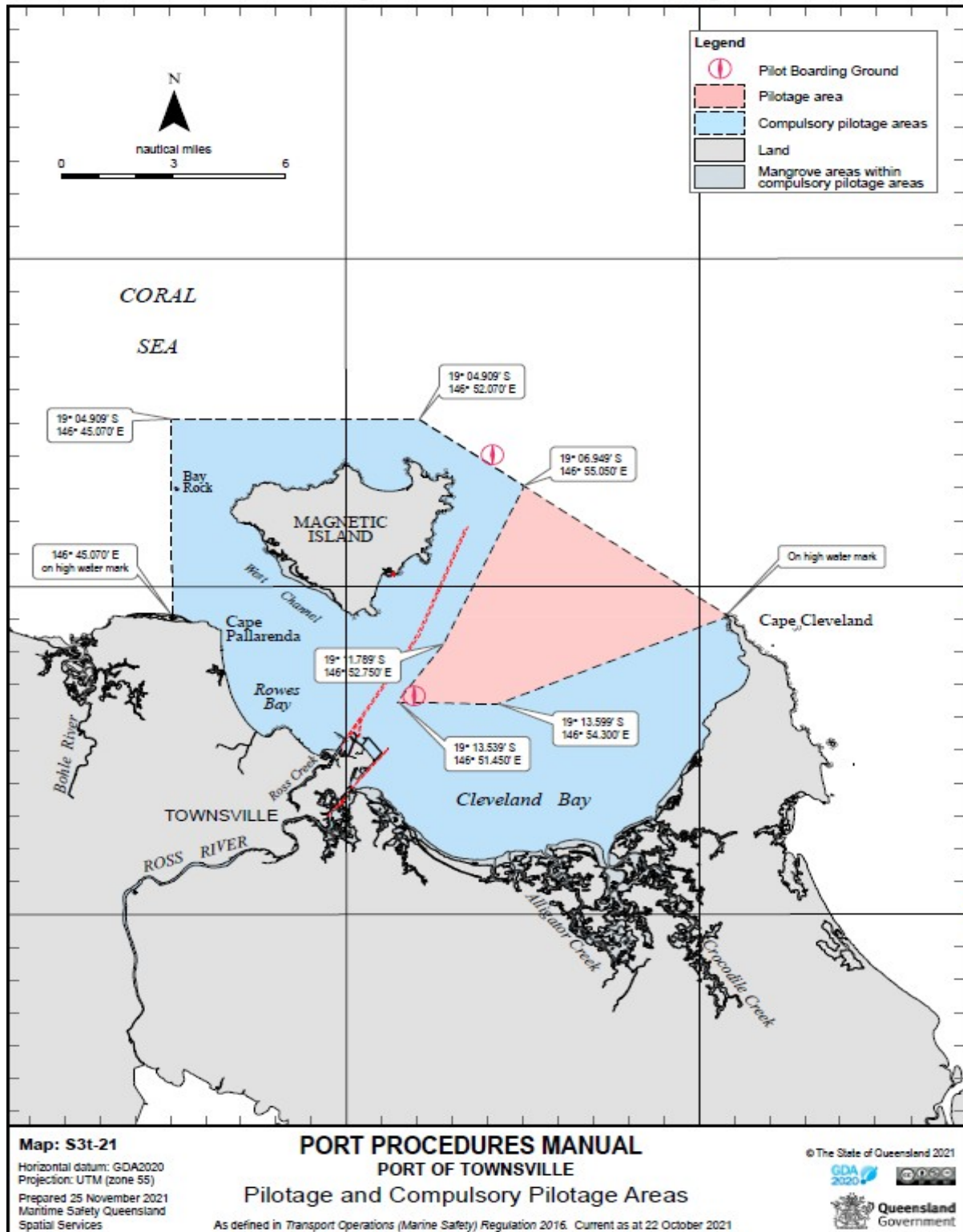
## 5.6 Dangerous Goods Transportation

Chapter 5, Part 4 of the Transport Operations (Marine Safety) Regulation 2016 outlines the duties of owners and masters of vessels in relation to the carriage of dangerous goods. The Regulation requires that ships carrying dangerous goods and bulk liquids must comply with the appropriate directions of the IMDG Code and AS3846 and are to notify the port authority and the RHM of the intent to carry dangerous cargo in a pilotage area.

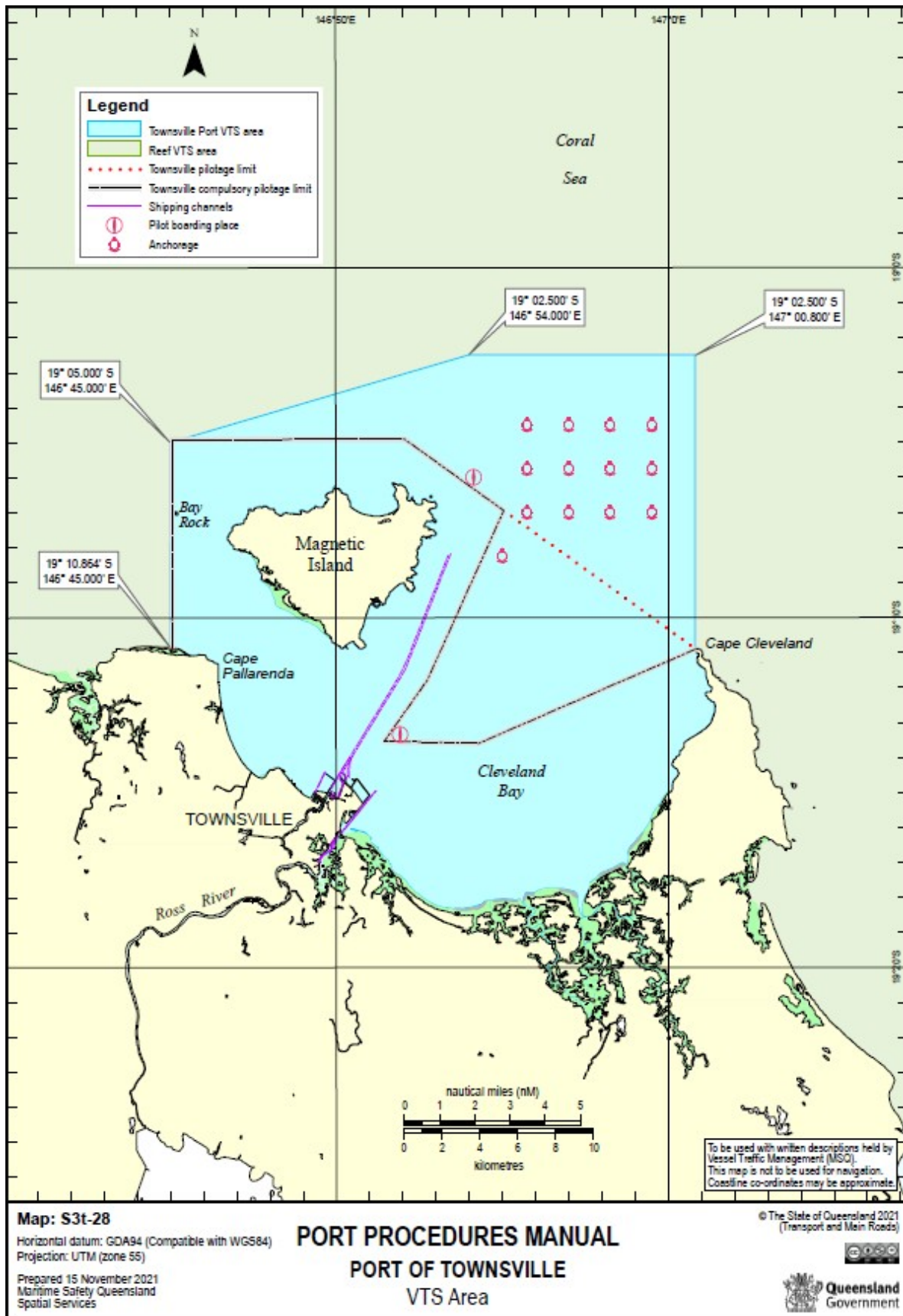
A person who is the owner or master of a ship operating on a local marine service must lodge a Dangerous Cargo Report at least 48 hours prior to the start of the service which is to be accompanied by a list of dangerous cargo to be carried.

# 6 Appendix

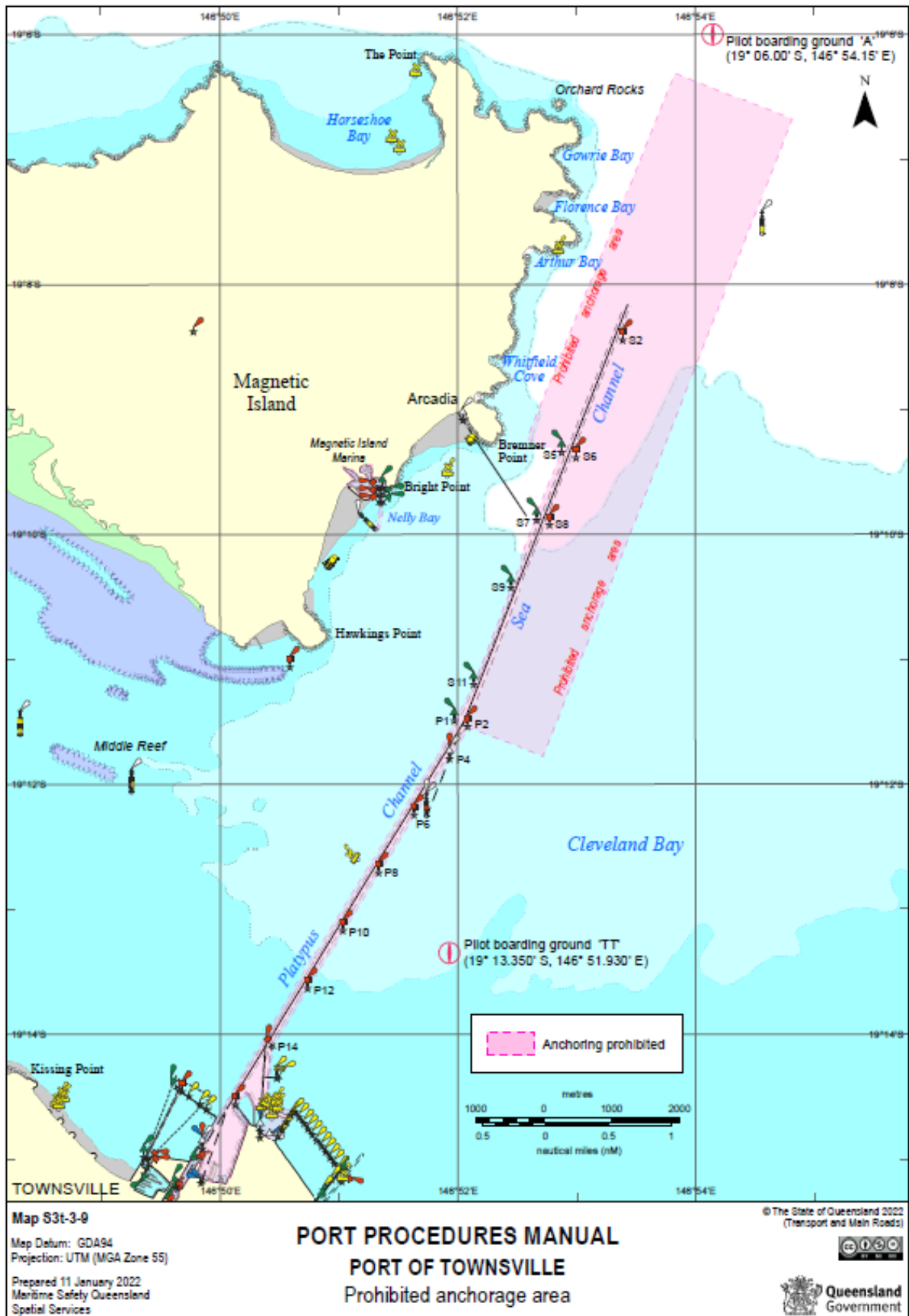
## 6.1 Townsville Pilotage & Compulsory Pilotage Area



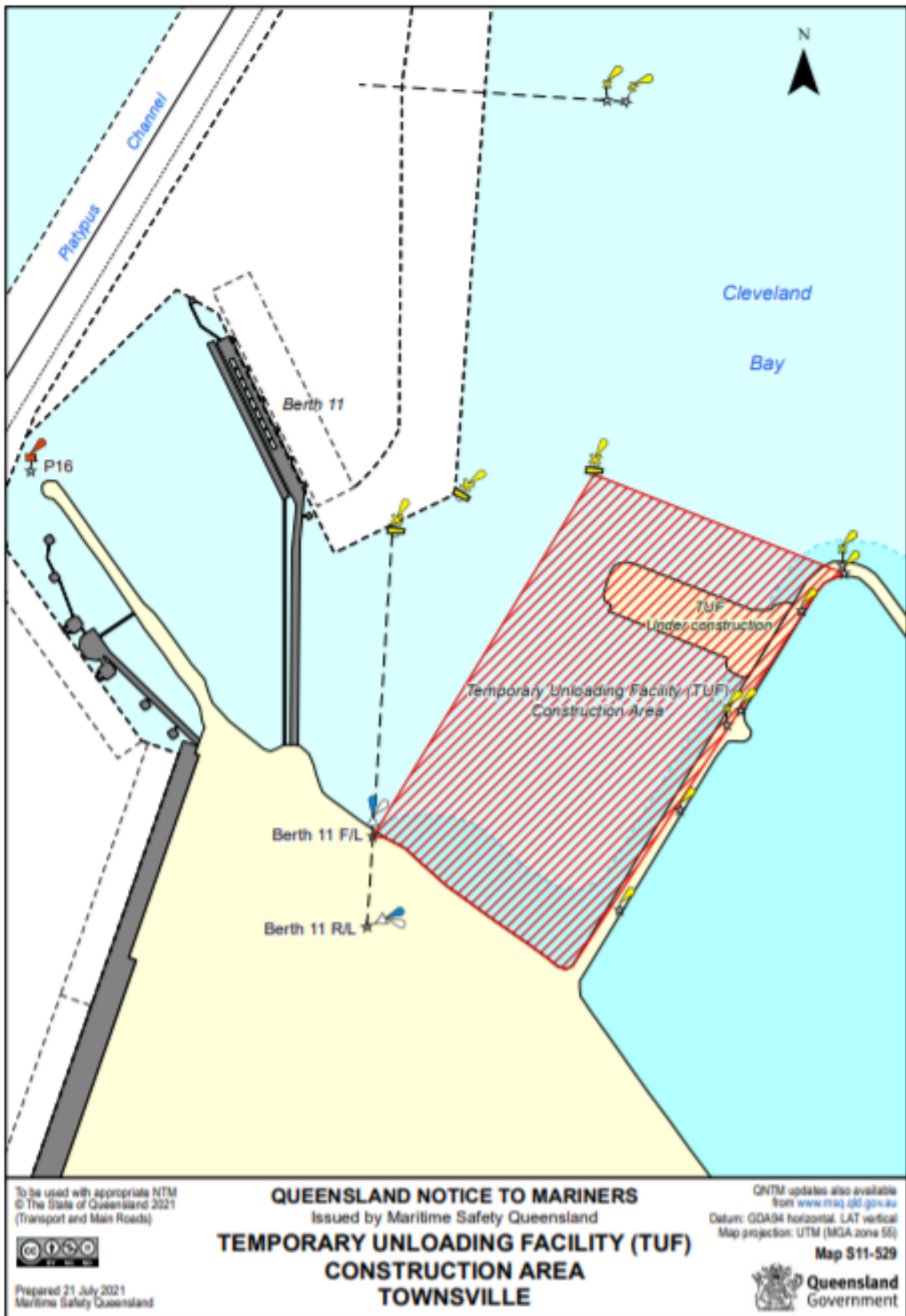
## 6.2 Townsville VTS Area and anchorage area



## 6.3 Anchoring Restricted areas.



## 6.4 Example of Restricted area



## 6.5 Townsville Pilotage Exemption Requirements

<h3>Local Knowledge Familiarisation checklist</h3>	 <small>QUEENSLAND GOVERNMENT</small>
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### Training for Townsville

Candidate:	Date	
Employer:		

### Briefing Points – Townsville

Port Overview: Berths, Layup areas, Tug facilities, Port/compulsory pilotage limits, PBG	
Navigational: Leads, Lights, Marks, Dangers,	
Restricted Areas	
Tidal Flows directions and times of change	
VTS reporting requirements and all ships calls	
VHF channels in use	
Keeping clear of shipping movements	
Communicating with pilots, VTS and so on	
Marine and Pollution Incident Reporting	
Responsibility of Pilotage, IE. Safety vs. commercial decisions	
Planning of movement and adequate resources (personnel and towage)	
Contingency planning including safe anchorages	
Granting of Pilotage Exemption gives no additional rights in relation to complying with Collision Regulations or Port Rules.	

#### Senior Marine Check Pilot Attending

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### Candidate

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_