4. Port description

4.1 General

The Port of Hay Point is situated 40 kilometres south of Mackay, with the berths located up to 4 km offshore and are exposed to the SE trade winds that blow for most of the year.

The winds produce a short sharp sea and swell which has a long fetch up the Capricorn Channel to the SE.

In addition, the area experiences a large tidal range with king tides reaching heights of 7m above LAT. With this large tidal range comes strong currents, with the Ebb tide setting to the NNW and the flood tide to the SSE on about 150°. To facilitate berthing operations, the berths (except HP1) have been aligned with the 150/330° to minimise the effect of current.

In inclement weather shipping operations, particularly berthing becomes difficult and operations are often suspended, particularly on a flood tide when the current is running against the prevailing wind and sea.

In more severe conditions ship movement alongside the berths can lead to broken mooring lines, hull damage and damage to wharf infrastructure (fenders). Hay Point VTS maintains a close weather eye on sea and wind conditions and is supported by a sea condition analysis program, Berth Alert System (BAS) to provide advance warnings.

4.2 Pilotage area

The pilotage limits for the port of Hay Point are divided between a Pilotage Area and a Compulsory Pilotage Area. Vessels may anchor within the designated Pilotage Area without utilising the services of a pilot.

Hay Point Pilotage Area defines the area of jurisdiction of the Regional Harbour Master.

The Hay Point pilotage area is the area of-

- a) Waters bounded by an imaginary line drawn:
 - starting at the high-water mark at the southern extremity of the north head of Bakers Creek entrance
 - then generally north-easterly along the geodesic to latitude 21° 10.759'S, longitude 149° 17.730'E
 - then generally north-easterly along the geodesic to latitude 21° 09.909S, longitude 149° 20.060'E
 - then east along the parallel to latitude 21° 09.909'S, longitude 149° 30.060'E
 - then south along the meridian to latitude 21° 17.909'S, longitude 149° 30.060'E
 - then west along the parallel to the intersection of the high-water mark on the mainland with latitude 21° 17.909'S
 - then generally northerly along the high-water mark on the mainland to the starting point
- b) the navigable waters of rivers and creeks flowing, directly or indirectly, into the waters in paragraph (a).

4.2.1 Compulsory pilotage area

The Compulsory Pilotage Area defines that part of the Pilotage Area where a vessel of LOA 50 metres or more must use the services of a pilot The Hay Point Compulsory Pilotage Area is described in Schedule 3 of the <u>Transport Operations (Marine Safety) Regulation</u> 2016 as the part of the Hay Point pilotage area that is the area of:

- a) Waters bounded by an imaginary line drawn-
 - starting at the high-water mark at the southern extremity of the north head of Bakers Creek entrance
 - then generally north-easterly along the geodesic to latitude 21° 10·76'S, longitude 149° 17·73'E
 - then generally south-easterly along the geodesic to latitude 21° 14·00'S, longitude 149° 20·50'E
 - then south along the meridian to latitude 21° 15·69'S, longitude 149° 20·50'E
 - then generally north-easterly along the geodesic to latitude 21° 14·49'S, longitude 149° 25·41'E
 - then generally south-easterly along the geodesic to latitude 21° 14·80'S, longitude 149° 25·50'E
 - then generally south-westerly along the geodesic to latitude 21° 16·11'S, longitude 149° 20·50'E
 - then south along the meridian to latitude 21° 17.91'S, longitude 149° 20.50'E
 - then west along the parallel to the intersection of the high-water mark on the mainland with latitude 21° 17.91'S
 - then generally northerly along the high-water mark on the mainland to the starting point; and
- b) the navigable waters of rivers and creeks flowing, directly or indirectly, into the waters in paragraph (a) Internal anchorage sites and arrival limit.

Mapping of both the Pilotage Area and the Compulsory Pilotage Area are available in section 16.7 Port and Pilotage Limits.

4.3 Load lines

Hay Point is in the Tropical Load Line Zone. The area outside the Great Barrier Reef is in the South Pacific Seasonal Tropical Zone.

| Tropical: | From 1 April to 30 November; and |
|-----------|----------------------------------|
| Summer: | From 1 December to 31 March. |

4.4 Vessel requirements

There are no restrictions on length. Refer to individual berth information for maximum vessel size. (5.1 Berth Information).

A Departure channel has been established with a least design depth of 14.9 metres above port datum (LAT). Please refer to the latest Queensland <u>Notices to Mariners</u> for up-to-date port depth information.

The port of Hay Point tugs are of varying bollard pull, from 65t to 80t. Vessel >80,000mt deadweight bollards and fairleads should be rated at no less than a Safe Working Load (SWL) 64 tonnes.

4.5 Trim requirements

The safe handling of ships within the confines of the channels requires certain conditions of trim. Ships should be ballasted or loaded in order to have an even keel or trimmed by the stern.

- a) The propeller fully submerged.
- b) The trim is to be not more than 2.5m by the stern. Vessels that are directed to depart, with trim greater than 3.5m, require a third tug.
- c) Vessels with length overall less than 250m and displacement less than or equal to 90,000t may be pre-approved with a trim no greater than 3.5m and propeller being no less than 90% immersed for arrival movements only. See section 9.2.1 for tug requirements.
- d) Vessels trimmed by the head or listing are not permitted. Ships not meeting trim requirements may experience considerable delays until the problem is rectified. All vessels are to advise VTS of any change to their draft.

Masters should pay special attention to their loading/ballasting plans to ensure that their ships are suitably trimmed and able to put to sea at short notice, especially during the cyclone season from November to April and when the winds are approaching or exceed the weather as per section 7.3.5.2 Removals.

4.6 Time zone

UTC + 10 hours throughout the year

4.7 Working hours

Port Service providers are available 24 hours per day seven days per week.

4.8 Charts and books

For navigation in pilotage areas, masters should refer to the nautical charts produced by the Australian Hydrographic Office and Admiralty Sailing Directions NP15 (Australian Pilot Volume III / V). Charts of the area include: AUS 249 and AUS250, ENC AU5250P0 and AU422149

4.8.1 Notices to Mariners

Maritime Safety Queensland promulgates marine safety information to mariners, organisations and other interested parties, in the form of Notices to Mariners. The Notices

to Mariners are posted on the MSQ website: https://www.qld.gov.au/transport/boating/notices.

Notices to Mariners provide advice on:

- navigation warnings and hazards (such as aids to navigation which may have been destroyed, missing or unlit);
- changes to the uniform buoyage system (which assists with the correction and updating of marine charts);
- navigation depths (necessary when navigating in channels with depth restrictions);
 and
- any other works which may affect the safe navigation of vessels in Queensland coastal waters and ports (such as dredging operations and construction works).

4.8.2 Request to issue Notice to Mariners

A <u>Notice to Mariners Request form</u> is available to organisations or individuals who wish to apply for a Notice to Mariners or Advice Notice to be issued. Once the form is complete it should be emailed to VTS for consideration.

- A Notice to Mariners is issued for the purpose of providing permanent navigation information – generally this information will result in a chart correction.
- A Notice may be marked Temporary (T) if the information will remain valid only for a limited time.
- Advice notices will cover short term navigation advice and may include information on fireworks displays, aquatic events or similar.