# 6. Weather information

### 6.1 General

The prevailing southeast trade winds may blow strongly at times, making it difficult to berth. In these conditions it is prudent for the pilot, ship's master, tug masters and berth operator to liaise in order to determine whether berthing should be attempted.

Weather conditions do not normally affect departures.

Port operation may be affected by tropical cyclone conditions in summer months. The Regional Harbour Master (Townsville), pilot and berth operator will jointly decide when it is not safe for a ship to be alongside.

A tropical cyclone watch message is issued when a cyclone or potential cyclone is expected to affect conditions in the area within the next 48 hours and is reviewed every three hours.

A tropical cyclone warning message is issued when a cyclone or potential cyclone is expected to affect conditions in the area within the next 24 hours and is reviewed every three hours.

Weather charts, satellite images, warnings and reports may be polled by fax - 1800 630 100 and from the <u>Australian Bureau of Meteorology</u>.

Alternatively, the following telephone numbers offer the listed information service.

1300 659 210..... tropical cyclone information

1300 659 210..... coastal marine warning

1300 878 6264.....current tsunami threat

## 6.2 Cyclone procedures

The Regional Harbour Master (Townsville) is responsible for shipping and navigation within the port of Abbot Point.

The management of North Queensland Export Terminal (NQXT) is responsible for the offshore loading facility including safety for the berth and personnel on the facility.

North Queensland Export Terminal (ngxt.com.au)

### 6.2.1 Severe weather event

The Townsville region severe weather contignecy plan is located on the MSQ website (<u>Preparing for extreme weather</u>).

The ports of Abbot Point and Bowen adhere to the Australian Warning System for extreme weather events incorporating a tier alert system of five distinct phases.

Appendix 11 – Abbot Point and Bowen (publications.qld.gov.au)

In the event of an extreme weather event threat the Regional Harbour Master will take the following action:

- Restrict the movement of vessels if necessary.
- Direct and oversee the evacuation of ships within the port, the anchorages or specific areas of the port or other affected areas if applicable.

• Provide directions which restrict and/or allow the entering or leaving a pilotage area, in effect closing and reopening the port.

The Regional Harbour Master will also:

- Advise mariners of relevant warnings and response requirements
- Seek compliance with the response requirements.

These actions will be enacted over five distinct phases that allows for the development of appropriate responses to the threats faced.



Destructive Winds, Swell, Rain or Riverine Flooding Forecast Within 24-48 Hours

Destructive Winds, Swell, Rain or Riverine Flooding Forecast Within 12-24 Hours



Destructive Winds, Swell or Riverine Flooding Forecast Within 6 Hours

Yellow – 🔬 🛦 Advice

After The Event Has Passed, Recovery Underway

## White – All clear

Port Open To All Traffic, Business As Usual

#### Reopening of the port

The pilotage area will not be re-opened until the Regional Harbour Master is satisfied that all danger has passed, and the pilotage area is safe for vessels to re-enter and following inspections and surveys to critical maritime infrastructure (for example navigational aids and wharves) as well as clearance of navigational hazards.

The vessel traffic services centre will coordinate the safe movement of vessels following the opening of the pilotage area in accordance with normal practice. Berths will be re-opened and operations resumed when wind and sea conditions are within operational limits.

#### Communication

The successful implementation of this plan relies on high quality communication of information and directions.

The vessel traffic services centre will implement the extreme weather event contingency plan on behalf of the Regional Harbour Master by acting as the central communications point for the duration and aftermath of the extreme weather event.

The vessel maritime control centre call sign is Abbot Point VTS

VHF channels 16, and 12 will be continuously monitored before and during the extreme weather event. Extreme weather watches, warnings and any directions will be issued on these channels.

If the plan requires actions such as port evacuation or closure such will be coordinated by the Abbot Point VTS

## 6.3 Tidal information

The tidal flows are approximately parallel to the wharf with the ebb flowing at  $300^{\circ}$  (T) and the flood at  $120^{\circ}$  (T).

Abbot point is a standard port in the Queensland Tide Tables.

| HAT  | MHWS  | MHWN  | MLWS  | MLWN  |
|------|-------|-------|-------|-------|
| 3∙6m | 2∙69m | 2∙07m | 0∙67m | 1·29m |

#### Table 10 – Tidal information

The tidal times and heights for standard Queensland ports are available in the Queensland Tide Tables and are also available on the <u>Bureau of Meteorology</u> website.

Tidal stream predictions for standard Queensland ports are available upon request through the Regional Harbour Master's office.

Real time tidal data is available on the Dynamic Underkeel Clearance System

### 6.3.1 Tidal information – tsunami effects

The north-west and east coasts of Australia are bordered by active tectonic plates which are capable of generating a tsunami that could reach the coast-line within two to four hours. The resultant change in swell height could have an adverse effect on a vessel with a minimum under keel clearance navigating within or close to port areas.

The Joint Australian Tsunami Warning Centre (JATWC) has been established to monitor earthquake activity that may lead to a tsunami forming. Warnings are currently issued for the Pacific Ocean region by the Pacific Tsunami Warning Centre (PTWC) in Hawaii and for the Indian Ocean region by the Japan Meteorological Agency (JMA). Mariners are advised to take heed of such warnings, plan their bar crossings and tend their mooring or anchorages accordingly.