6. Weather information

6.1 General

The prevailing winds tend to be easterly to south easterly. Although calmer conditions occur during the winter months, they may become very difficult during the summer months when the sea breeze augments the prevailing south easterlies.

Weather charts, satellite images, warnings and reports may be polled by fax from 1800 630 100 and from the Bureau of Meteorology.

Coastwatch is a website with useful nautical information links.

6.1.1 Extreme Weather Contingency Plan

Extreme Weather Event Contingency Plan can be found at the following link to the MSQ website:

See https://www.msq.qld.gov.au/Safety/Preparing-for-severe-weather

6.2 Tidal information

Amrun has a diurnal tide range, which is a tide which has a period or cycle of approximately one tidal day (about 25 hours). Diurnal tides usually have one high and one low tide each day. When the wind has been constantly blowing from the Southeast it is not uncommon for the tides to be 25 to 30 centimetres (cm) below prediction.

Ships masters must take this factor into account when determining the load draft of the ship as ships with insufficient UKC will not be approved to sail.

There are no discharge facilities in Amrun for an overloaded ship to reduce its draft.

When tides are over prediction, export ships must determine load drafts based on predicted tides only.

6.2.1 Tidal streams

South-Easterly winds tend to decrease in strength from October to December. The flood tidal stream in Albatross Bay flows to the North-East, and the ebb to the South-West, attaining a maximum velocity in the middle of the bay of 1.5 knots.

Tidal flow at the Jetty is complex and varied with a max. velocity of 0.8 knots.

Amrun is a standard port in the Queensland Tide Tables.

The recorders refer to lowest astronomical tide and show the actual tide height above lowest astronomical tide. Maritime Safety Queensland provides tidal predictions for pilotage areas. The tidal times and heights for standard Queensland ports are available in the Queensland Tide Tables and may be accessed at the Bureau of Meteorology website.

Table 13 Tidal information

Tidal Information (in metres) – Amrun			
HAT	3.09m	LAT	0.00m
MHHW	2.73m	MLLW	1.36m
MLHW	2.17m	MHLW	0.80m
For tidal stream data refer to Australian pilot and hydrographic chart			

6.2.2 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 coastline 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.

Mariners are advised to take heed of such warnings, plan their bar crossings and tend their mooring or anchorages accordingly.

6.3 Water density

Sea water is usually 1025 kilograms per cubic metre but may vary during the summer months after periods of heavy rain.