



Bayview Marina

Cyclone Response Plan

2018 / 2019

Cyclone Emergency Response Plan

Purpose

Being prepared to handle an event be it Cyclonic, Marine Accident or Oil Spill is the major factor in ensuring that the event is managed efficiently and safely. To assist the management and staff of Bayview Marina Estate, response plans have been prepared for cyclones, oil spills and marine accident. It is intended that the plans evolve and deficiencies rectified with each annual or post event review.

The aim of the Cyclone Emergency Response Plan is to provide a process to prepare for and respond to cyclonic activity at the marina by the Estate Manager, Maintenance Manager or Lockmasters depending on the stage of cyclonic activity.

Scope

All persons employed by the Bayview Marina Estate and using the facilities of Bayview Marina must follow this emergency response plan.

Prior to Cyclone Season

As part of everyday operations of the marina the following activities will be undertaken.

1. All telephones within the marina office will have a list of emergency numbers secured onto or next to, the phones. Emergency numbers (Annexure 1.) will include but not be limited to the following:
 - Darwin Port – General Manager Operations/Regional Harbourmaster,
 - Darwin Harbour Control;
 - Bureau of Meteorology general weather information service and tropical cyclone information hotline;
 - Police, Fire Brigade, Hospital and Ambulance;
 - Northern Territory Emergency Service;
 - Pollution Response Line; and
 - Maritime Search and Rescue.
2. Flow chart for emergency response plan attached to notice board in marina office, Annexure 4.
3. The induction process for new marina staff and marina members will include familiarisation with the emergency Response Plan for Cyclones.

4. A cyclone drill will be carried out each year. Marina staff will conduct a cyclone drill at the beginning of the cyclone season in October.
5. Ensure that Cyclone Emergency Stores are inspected, current, replace where necessary. See Annexure 2
6. Ensure that no items are left lying around that could become lethal projectiles in the case of high winds.

Useful Information

Estimated Mooring Loads as advised by American Boat and Yacht Council

Boat Length 52 Knots 64 Knots 100 Knots 130 Knots

15 metres	2,250 kgs	4,500 kgs	9,500 kgs	12,700 kgs
12 metres	1,600 kgs	2,950 kgs	4,500 kgs	6,750 kgs
9 metres	900 kgs	1,600 kgs	2,250 kgs	2,750 kgs

1 kg = 2.2 pounds

Tropical Cyclone severity Categories

Category	Strongest gust (km/h)	Typical effects
1 Tropical Cyclone	Less than 125 km/h Gales	Minimal house damage. Damage to some crops, trees and caravans. Boats may drag moorings.
2 Tropical Cyclone	125 - 164 km/h Destructive winds	Minor house damage. Significant damage to signs, trees and caravans. Heavy damage to some crops. Risk of power failure. Small boats may break moorings.
3 Severe Tropical Cyclone	165 - 224 km/h Very destructive winds	Some roof and structural damage. Some caravans destroyed. Power failure likely.
4 Severe Tropical Cyclone	225 - 279 km/h Very destructive winds	Significant roofing and structural damage. Many caravans destroyed and blown away. Dangerous airborne debris. Widespread power failures.
5 Severe Tropical Cyclone	More than 280 km/h Extremely destructive winds	Extremely dangerous with widespread destruction.

Stages of Cyclone

1. Broadcast by Bureau of Met. **Cyclone Watch within 48 hours.**
2. Broadcast by Bureau of Met. **Cyclone Warning within 24 hours**
3. Broadcast by Bureau of Met. **Cyclone Imminent (siren) within 6–12 hrs**
4. Broadcast by Bureau of Met. **Cyclone All Clear**

Any Cyclone advice that is issued for the Gulfs of Carpentaria, Van Diemen, Joseph Bonaparte, Beagle or Arafura Sea or Timor Sea that could affect the Marina operations within 48 hours.

1. Ensure that all staff and Marina Residents are aware that an advice has been issued by placing a notice in the Marina Office Notice Board.
2. Turn the tidal recharge gates and recharge pump off.
3. Nominated staff member to:
 - Obtain and record updates from the Bureau of Meteorology tropical cyclone information hotline and ABC Regional Radio 105.7;
 - Post updated information on a central notice board; and
 - Inform Marina Manager and Estate Manager of latest information.
4. Advise owners that all unattended craft as a minimum must be secured as per configuration shown in annexure 2 by placing the information in the Marina Office Notice Board.

CYCLONE WARNING (Expected within 24 hours)

The following action must be taken immediately.

1. Staff secures Marina office, carpark, fuel storage, shops, berthing area, pump out facilities etc. (ie secure loose objects, remove objects away from windows etc.)
2. Ensure that all Staff and Marina Residents are aware that a Cyclone Warning has been issued by placing an update notice in the Marina Office Notice Board.
3. Inform all Marina Boats owners by placing an update notice in the Marina Office Notice Board that we intend to drop the level of water in the Marina to **6.2 meters chart datum (as shown on the lock consol for the marina depth)**.
4. Inspect all vessels moored at Marina and within remainder of canal in accordance with figure on annexure 2.
5. Advise owners on board to secure vessel and to arrange accommodation elsewhere, (i.e. not on vessel) **should cyclone warning go to 6-12 hours**. Note in Emergency can use the toilet area in Marina facilities building.
6. Identify Marina boats that are not currently moored in the Marina. Contact the vessel if possible (VHF Channel 68 or by phone) and advise of the cyclone warning. Note the intentions of vessel and if returning the approximate time of arrival. Advise vessel that should conditions **deteriorate to a cyclone warning (6-12 hours)**, it may not be possible to admit the vessel to the Marina without endangering the whole Marina.
7. Advise owners that power to the fingers could be turned off at any time at the discretion of staff depending on conditions.
8. Inform all owners by placing an update notice in the Marina Office Notice Board with air docks to fill them with water and moor vessels securely with the air dock in the submerged position.

CYCLONE WARNING (Destructive winds forecast within 12 hours)

The following action must be taken immediately.

1. Inspect vessels moored at Marina and within remainder of canal in accordance with similar configuration to below.
2. Advise owners where possible to:-

To secure vessel, reduce windage to a minimum by removing all awnings, roller furled sails, deck gear stowed, motors removed from dinghies and stowed. **Provide chafe protection to all deck lines.**

Seek accommodation elsewhere. (ie not on vessel).

Note: In Emergency the toilets in Marina Facilities building can be used

All dinghies to be removed from Marina or alternatively, securely tied to boardwalk piles and sunk ie filled with water to the gunnels.

3. Conduct a final check of the Marina and canal for anyone who is not a staff member. Advise them to leave the complex and return home. Advise any person remaining on board their craft that they are doing so at their own risk and help will not be available as it could endanger the lives of those attempting to assist.
4. During a cyclone event, all individuals will remain in a safe location (preferably their own home, but in an emergency, if necessary, in a safe pre-determined location , the Marina Facilities Building – depending on number of persons, take the appropriate items into the ablution areas of the facility and then listen to Radio for any further information and direction.

CYCLONE IMMINENT (Destructive Winds within 6 hours)

The following action must be taken immediately.

1. Conduct a final check of the Marina and canal for anyone who is not a staff member. Advise them to leave the complex and return home. Advise any person remaining on board their craft that they are doing so at their own risk and help will not be available as it could endanger the lives of those attempting to assist.
2. Allow persons to shelter in the Marina Facilities Building (Toilets).
3. Advise Emergency Services Co-ordinator and the Darwin Port - General Manager Operations/Regional Harbourmaster that the Marina is “locked down” and seek immediate shelter.
4. Listen to radio and remain in shelter until all clear is given.
5. 6 hours before a cyclone is due, all personnel should be allowed to go home to attend to their family and home.
6. The Darwin Port – General Manager Operations/Regional Harbourmaster may request boats be taken into your facility for shelter, if space is available. He will advise when the Port is closed and re-opened. This information will also be given on commercial radio.

ALL Clear (Advised on radio)

The following action must be taken immediately.

1. Conduct a check of the Marina and canal for anyone who remained with craft. Ensure that they are OK and render assistance if necessary.
2. Make list of any apparent damage. **In the event there is possible water damage to electrical circuits do not turn on. Wait until such time as qualified persons are available.**
3. If extensive damage has occurred, the relevant authorities are to be notified by the Marina Estate Manager.
4. Marina Estate Manager is to initiate and coordinate clean up action as soon as possible.
5. The effectiveness of the Cyclone Emergency Action Plan will be reviewed and any deficiency modified.

(Any vessel that wishes to leave the Marina, after the Port has been declared open by the Darwin Port – General Manager Operations/Regional Harbourmaster, must contact and receive permission and updates on navigational hazards in the Harbour.) Darwin Harbour Control is available 24 hours for updates on navigational hazards in the Harbour.

(On returning to work, all your staff should be briefed, emphasising that their workplace is no longer what it was, as safety procedures and safeguards may no longer be in place due to damage. Special attention must be given to their surroundings when going about their duties.)

ANNEXURE 1

Direct Contacts in Emergency	Phone Number	
Darwin Harbour Control- 24 Hours (First point of contact)	8919 0821	
General Manager Operations - Captain Ian Niblock	8919 0850	0419 840 041
Regional Harbour Master - Captain Tony O'Malley	8999 3867	0428 181 480
Assistant Regional Harbour Master – Bradley Thomson	0999 3972	0439 082 103
Port Working Channel	VHF Channel 10	
Marine Guard Security	8919 0816	0401 110 320
Bhagwan Marine 24hr Emergency line		
Bevan Lamb	0488 939 012	
Bill Bryant	0498 939 571	
Northern Territory Police, Ambulance, Fire & Emergency Services Emergencies Only	000	
Northern Territory Police 24 Hour Assistance	131 444	
General enquiries business hours	8999 5511 / 8922 3344	
General enquiries after hours	8922 1560	
Water Police	8947 0391	
NT Emergency Services during business hours	8922 3630	
Duty Officer	132 500	
NT Fire Services		
General enquiries business hours North NT	8946 4107	
General enquiries business hours South NT	8951 6688	
General enquiries after hours	8922 1555	
For Emergency help in Floods, Storms & Cyclones	132 500	
Marine Search & Rescue 24 Hours (Call NT Police in first instance)	1800 641 792 131 444	
Royal Darwin Hospital switchboard 105 Rocklands Drive, Tiwi.	8922 8888	
Pollution Response Line (EPA)	1800 064 567	
Bureau of Meteorology switchboard	8920 3800	
Forecasting (Not for General Enquiries)	8920 3824 / 8920 3830	
Cyclone Information Service	1300 659 211	
Cyclone Liaison	8920 3820	
Contact Numbers for Bayview Estate Management		
Estate Office	8981 3788	
Lockmaster	0418 910 888	

Contact Numbers for Bayview Lock Maintenance & Operation

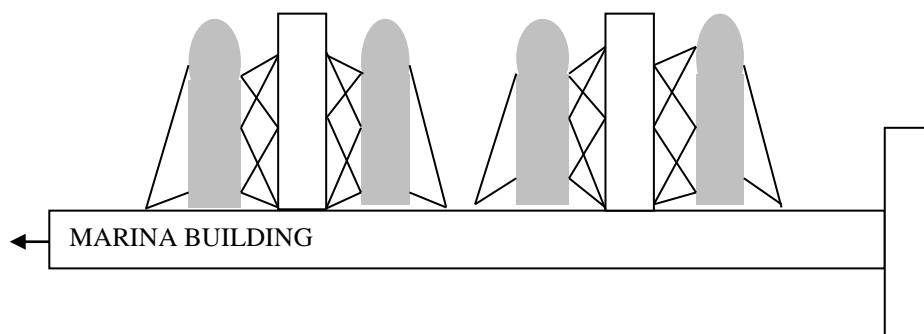
Radio Contact
Lockmaster

VHF Channel 68
0418 910 888

ANNEXURE 2

CYCLONE EMERGENCY STORES

VHF Radio Battery Powered	1	On Permanent issue to Lockmaster
Dolphin Torch	1	Located at Lock Console
Spare Batteries Dolphin	1	Located in stores Facilities Building
Spare Bulbs Torch	1	Located in stores Facilities Building
Matches Waterproof Pkts	6	Located in stores Facilities Building
Gas Bottle (full)	1	Located in stores Facilities Building
Gas Ring	1	Located in stores Facilities Building
Large Plastic Rubbish Bags	30	Located in stores Facilities Building
Masking Tape (50mm)	2	Located in stores Facilities Building
Coil Rope (50M)	2	Located in stores Facilities Building
Plastic Water Containers	4	Located in stores Facilities Building
Water Pura Tablets Kit Pkts	6	Located in stores Facilities Building



ANNEXURE 3

VHF CHANNELS USED IN THE PORT OF DARWIN

CHANNEL	USED BY	TYPE OF USE
16	All ships	Emergency
10	All ships in the port	Port working frequency
12 & 13	Ships and tugs	Ship manoeuvring with the assistance of tugs
14 & 69	Naval Ships	Navy working frequency in the port
06	DPC Lockmaster	Used by the Lockmaster in talking to ships entering and leaving the Frances Bay Mooring Basin
11	Cullen Bay Lockmaster	Used by the Lockmaster in talking to ships entering and leaving the Cullen Bay Marina
08	Tipperary Waters Lockmaster	Used by the Lockmaster in talking to ships entering and leaving the Tipperary Waters Marina
68	Bayview Marina Lockmaster	Used by the Lockmaster in talking to ships entering and leaving the Bayview Marina
17	Hudson Creek	Used by Rooney's Shipping in Hudson Creek
9	Darwin LNG	Used by Conoco Phillips / Tugs and Ships
72	All ships	General chat channel used also by Australian Customs

All craft must keep a listening watch on channel 10 either by fixed, dual or scan mode whilst navigating in the Port of Darwin.

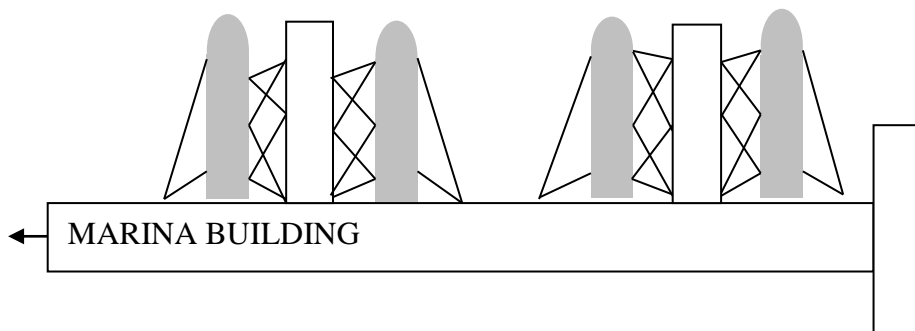
ANNEXURE 4

Cyclone Emergency Response Plan – Summary

A response plan has been prepared for cyclones. Please read this summary so you understand the procedures in the event of a cyclone.

Stages of Cyclone

1. Broadcast by Bureau of Met. **Cyclone Watch within 48 hours.**
 - a. Ensure that Marina Residents are aware by placing an update notice in the Marina Office Notice Board that an advice has been issued.
 - b. Advise owners by placing an update notice in the Marina Office Notice Board that all unattended craft as a minimum must be secured as per configuration shown below



2. Broadcast by Bureau of Met. **Cyclone Warning within 24 hours**
 - a. Inform all Marina Boats owners by placing an update notice in the Marina Office Notice Board that we intend to drop the level of water in the Marina by **6.2 meters chart datum (as shown on the lock consol for the marina depth)**.
 - b. Advise owners on board to secure vessel and to arrange accommodation elsewhere, (i.e. not on vessel) **should cyclone warning go to 6-12 hours.**
 - c. Identify Marina boats that are not currently moored in the Marina. Advise vessel that should conditions **deteriorate to a cyclone**

warning (6-12 hours), it may not be possible to admit the vessel to the Marina without endangering the whole Marina.

- d. Advise owners that power to the fingers could be turned off at any time depending on conditions.

3. Broadcast by Bureau of Met. **Cyclone Imminent (siren) within 6–12 hrs**

- a. Owners too secure vessel, reduce windage to a minimum.
- b. Seek accommodation elsewhere, (ie not on vessel).
- c. All dinghies to be removed from Marina or alternatively, securely tied to boardwalk piles and sunk.
- d. Conduct a final check of the Marina and canal for anyone who is not a staff member. Advise them to leave the complex and return home.
Advise any person remaining on board their craft that they are doing so at their own risk and help will not be available as it could endanger the lives of those attempting to assist.
- e. Advise Emergency Services Co-ordinator and the Darwin Port – General Manager Operations/Regional Harbourmaster that the Marina is “locked down” and seek immediate shelter.

4. Broadcast by Bureau of Met. **Cyclone All Clear**

Vessels that wishes to leave the Marina, after the Port has been declared open by the Darwin Port – General Manager Operations/Regional Harbourmaster, must make contact and receive permission and updates on navigational hazards in the Harbour. Darwin Harbour Control is available 24 hours for updates on navigational hazards in the Harbour.