



CYCLONE CONTINGENCY PROCEDURE

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Non-Core

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VARIATION RECORD:

Version No.	Version Date	Brief Description of Change
1	16 December 1999	Original issue.
2	9 October 2000	Update contact list attachment.
2.1	19 June 2009	Update KPA logo, KPA acronym.
2.2	9 November 2009	Update and revised contact list.
2.3	31 October 2010	Update.
3.0	14 October 2011	Update information for new HM.
3.1	August 2012	Minor changes.
4.0	October 2013	Update - minor changes.
1.0	October 2014	Re-issue as KPA.
1.1	December 2014	Amend FESA to DFES, updated Appendix A Key Contact List
1.2	January 2015	Minor updates to plan – content item 3.2 to include Deputy Harbour Master details; to number all Blue, Yellow and All Clear items; make changes to references to the ablution block as it is now a permanent tie-down structure on the wharf; remove item regarding emptying the portable ablution block; update all references from Reliance Petroleum to Broome Bunkering Services; to remove the sentence re the Wharf Closed sign; gatehouse locking/de-manning to include – Gatehouse Security phone to be diverted to Operations Manager; action item All Clear to include notification to Port employees about return to work and to include Port Engineer in the responsibility section.
2.0	December 2015	Amend section 3.3 – removed reference to larger vessels and replaced with all vessels. Amend section yellow alert 5 remove any and replace with all vessels.
3.0	October 2016	Amend section 1 to correct A/Harbour Master name; section 3.3 changed wording from jetty to wharf; section 4 update to singular coordinator; section 4.3 minor wording changes; and Appendix A updated contact list record number.
4.0	February 2018	Section 4.1 added – Alert Levels. Minor changes clarifying staff work attendance obligations in each phase.
5.0	October 2018	Full review.
6.0	October 2019	Annual review and update. Update Plan to Procedure.
6.1	October 2019	Updated Section 3.5
7.0	October 2020	Full review.

1. INTRODUCTION

Cyclonic weather conditions may occur at any time of the year. In the north-west of Australia, the most likely period during which cyclones may generate is the tropical summer from November to April.

Tracks that cyclones follow are often erratic and they may have a life cycle of a few days through to some weeks.

History shows that winds in the vicinity of 200 km/hr have been recorded a number of times in the Broome area. The most devastating cyclone affecting the region wiped out Broome's pearling fleet off Eighty-mile beach in 1908, resulting in major loss of life.

Although modern forecasting enables major weather events to be predicted and tracked with great accuracy, the development and movement of tropical cyclones remains somewhat unpredictable.

Tropical cyclones can be highly destructive to property and they pose significant risk to life. In order to effectively combat the potential effects of a tropical cyclone, a documented strategy which coordinates the actions of all affected groups is essential.

Nothing in this procedure relieves the Owner or Master of a vessel of their legal obligations in relation to the safety of their vessel and its crew.

The information outlined in this procedure are intended to assist the owners and masters of vessels as well as Kimberley Ports Authority (**KPA**) staff to:

- minimise risk to life and property; and
- ensure that the Broome wharf, shore based infrastructure and environment are protected as far as practicable from the effects of a cyclone.

Suggestions for improving this procedure can be forwarded to:

Harbour Master

Kimberley Ports Authority

PO Box 46, BROOME WA 6725

Phone: (08) 9194 3100

Fax: (08) 9194 3188

E-mail: harbourmaster@kimberleyports.wa.gov.au

2. COORDINATION

It is recommended that the following groups familiarise themselves with the details of this procedure:

- Port of Broome Port users;
- Kimberley Ports Authority Broome tenants;
- Broome Volunteer Sea Rescue Group;
- Department of Transport – Broome;
- Broome Police Headquarters;
- DFES; and
- Shire of Broome.

3. BACKGROUND INFORMATION

3.1. Activation of the Procedure

This procedure is automatically activated once a Cyclone Watch has been issued for the Broome area. The procedure may also be activated at the direction of the Harbour Master when forecasting provides long term advice of a potentially problematic weather system.

While the stages of this procedure are based upon the DFES alert system, variations on these stages might be taken at the direction of the Coordinator. This is principally because in most circumstances the Port preparations may, by necessity, be ahead of the land based alert system. For example ships may need to run ahead of the cyclone for sheltered waters.

3.2. Kimberley Ports Authority Cyclone Procedure Coordinator and Deputy

Coordinator: *Harbour Master, Kimberley Ports Authority*

Phone: 08 9194 3100 or 0429 121 875.

Deputy Coordinator: *Operations Superintendent, Kimberley Ports Authority*

Phone: 08 9194 3100 or 0477 702 923.

3.2.1. Coordinator's Role

The Coordinator's role is to manage and organise KPA activities and preparations in accordance with this procedure. The Deputy Coordinator is to assist the Coordinator in the conduct of his duties. All actions taken in accordance with this procedure are to be minuted and filed to allow the complete recreation of the decision making processes. The Coordinator is to ensure that regular updates are sent to port users and relevant regulatory bodies. The Coordinator will also conduct daily briefings for the benefit of port users and staff as appropriate to update them on the ports intentions and rationale.

3.3. Kimberley Ports Authority Facilities

The Broome wharf does not constitute a safe haven against severe weather for ships or boats.

Depending on their Individual cyclone arrangements vessels will be directed to vacate the wharf between 24 and 12 hours before the anticipated onset of gale force winds associated with a cyclonic system. This will allow vessels proceeding to sea to clear port waters and gain necessary sea room

prior to coming under the influence of gale force winds, or in the case of vessel proceeding to moorings the opportunity to secure to moorings and secure their vessel before sea conditions make mooring operations unsafe.

In any event vessels should leave the wharf as soon as practical after a Blue Alert has been issued. No vessel is to remain alongside the wharf once a Yellow Alert has been issued. Vessel Masters should seek approval and/or guidance from the Harbour Master if they wish to deviate from these guidelines as a result of extenuating circumstances.

All vessels remaining in Port waters should make fast to their own certified cyclone mooring or proceed to sea in sufficient time to take necessary cyclone avoidance action.

Use of the Slipway area is controlled under the Terms and Conditions for Use of the Slipway and Storage Area. KPA does not organise the removal of vessels from the water to the hardstand. Refer to KPA's website for further information www.kimberleyports.wa.gov.au

3.4. Tidal Storm Surge

A tidal storm surge generated by cyclonic conditions may be experienced in Roebuck Bay. Such a surge may result in significantly higher tides than those normally expected and may result in flood damage of low lying areas.

3.5. Communications

The public telephone network (including digital mobile, email and facsimile services) should be used as much as possible to coordinate activities.

KPA will monitor VHF Channel 14 and 16 until a Yellow Alert is issued, at some stage during the yellow alert and before a red alert is issued the Radio station will be closed down. A limited short range radio listening service on these channels may be provided by remote handheld radio, but this service cannot be guaranteed.

The Port working channel for emergency coordination and response is VHF Channel 14.

3.6. Masters and Owners of Vessels

Masters and owners of vessels are responsible for:

- the safety of their vessels and crews;
- any damage caused to other vessels and public facilities by their vessel;
- having and observing their own Cyclone Contingency Plan; and
- for Broome based vessels, providing a copy of their vessel's Cyclone Contingency Plan to KPA.

Masters should report immediately to the Coordinator or the Deputy Coordinator of any conflict arising between the requirements of KPA and their own Cyclone Contingency Plan.

4. ACTIONS AND OPERATIONS

This section defines a suggested sequence of activities. The KPA Cyclone Contingency Procedure Coordinator will need to modify and add to the activities at their discretion. A running log of actions and events is to be maintained after a Cyclone Watch has been issued. The Coordinator or Deputy Coordinator as detailed, is responsible for maintaining this log.

4.1. Alert Levels

As it is possible for the Port to be at an alert level not aligned with the DFES alert stages of Blue, Yellow and Red an overarching but loosely aligned Port alert system exists.

The Cyclone Coordinator will advise the alert level appropriate to the Port through the CEO and Management team.

Port Alert		Actions to be taken
Stage 1	Cyclone or tropical low has formed or is likely to form in our region	As per Cyclone Watch
Stage 2	Gale force winds expected in the Port within 48 hours	As per "Blue Alert"
Stage 3	Gale force winds or greater expected within 12 to 24 hours	As per "Yellow Alert"
Stage 4	Cyclone or severe weather imminent or likely to impact Port	As per "Red Alert"
Stage 5	Weather threat has passed	As per "All Clear"

4.2. Pre Cyclone Season

KPA will take the following actions prior to the end of October each year.

Action	Responsibility
Require boat masters/owners to have cyclone plans.	Harbour Master
Update the KPA Cyclone Contingency Procedure.	Harbour Master
Liaise with State Emergency Services.	Harbour Master
Clear port areas of unwanted materials or rubbish.	Operations Superintendent
Clear drains of rubbish or obstructions.	Operations Superintendent

Advise Port slipway users of their pre cyclone responsibilities.	Operations Support with direction from Harbour Master
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4.3. Cyclone Watch

On receipt of initial advice from the Bureau of Meteorology or the Ports contracted Meteorological service provider confirming the declaration of a Cyclone Watch for the Broome area, the Port Coordinator is to ensure the following actions are taken:

Action	Responsibility
Commence recording and plotting weather details obtained from Weather Guard.	Harbour Master and Operations Support
Confirm serviceability of KPA's Coordinator's radio equipment.	Harbour Master

4.4. Blue Alert - threat of gale force winds within 48 hours

Staff to attend work as normal.

On receipt of advice from DFES confirming the declaration of a Blue Alert (threat of gale force winds within 48 hours, but not expected in 24 hours) for the Broome area, the Port Coordinator is to ensure the following actions are taken:

Action	Responsibility
B1. Establish contact with Broome Police, Broome Cyclone Control Centre (DFES), the Deputy Coordinator, Broome Volunteer Sea Rescue Group and the Department of Transport.	Harbour Master
B2. As far as is practicable, direct owners of vessels at anchor or moorings to take immediate precautions to safeguard their vessels.	Harbour Master and Operations Superintendent
B3. Commence recording actual tide levels, hourly wind speed/direction to compare with predicted hourly tide values to determine the approach of a positive or negative storm surge.	Harbour Master and Operations Officer

Action	Responsibility
B4. Arrange for Kimberley Waste to remove bulk rubbish skips from the Port or move into cargo shed.	Operations Superintendent
B5. Carry out radio communication checks on VHF Channels 16 and 14.	Harbour Master and Operations Superintendent
B6. Position and secure "Ramp Closed to Outward Traffic - Severe Weather Forecast" signs at the public boat ramps at Entrance Point, and report closure to WA Police.	Operations Superintendent
B7. Visit or contact all port tenants, contractors, and vessel owners/masters in the Port area to ensure all are aware of the weather forecast and arrangements concerning the possible closure of the Port.	Harbour Master and Operations Superintendent
B8. Obtain from vessel owners/masters the details of any persons planning to remain on board vessels and report these contact details to WA Police.	Harbour Master and Operations Superintendent
B9. Ensure all small vessels are removed from the wharf and proceed with their individual contingency plans. Port tender demobilised to the wash down bay in the works yard.	Harbour Master and Operations Superintendent
B10. Check the port precinct for potential missiles and other hazards and take appropriate preventative measures.	Operations Superintendent
B11. Clear the wharf of stores including containers, cattle loading ramps, passenger gangway and 240 litre wheelie bins and secure as appropriate. One gangway is to be lashed securely and left on the jetty for emergency evacuation by a vessel if required. Small stevedoring equipment bins etc. to be stowed into the cargo shed and or demobilised to the works yard.	Operations Superintendent and Operations Supervisor

Action	Responsibility
<p>Lash and secure cruise ship gangway (tank stand).</p> <p>Lash and secure cruise ship gangway (jetty) to bollards.</p> <p>Remove walkway bins – Close walkway.</p>	
<p>B12.</p> <ul style="list-style-type: none"> • MHC stowed and prepared for heavy weather. • 250T crane demobilised to the works yard. • Grove 45T crane demobilised to the works yard. • 10T forklift demobilised to the works yard. • Vessel gangways and larger stevedoring equipment lashed and secured to 250T crane counter weights. 	Operations Supervisor
<p>B13. Refuel all port vehicles.</p>	Operations Superintendent & individuals with port vehicles assigned
<p>B14. Ensure employees and their families have planned for their own safety.</p>	CEO and all Managers
<p>B15. All cargo work to cease and vessels to prepare for sea and leave Broome Wharf (at the Harbour Master's discretion).</p>	Harbour Master and Operations Superintendent
<p>B16. Contact Broome Bunkering Services to ensure that the fuel supply to the wharf is isolated in accordance with BP cyclone contingency plans.</p>	Harbour Master
<p>B17. Secure all port vehicles in the maintenance yard and ensure that crane booms are configured so that they do not collect water.</p>	Operations Superintendent / Maintenance Superintendent
<p>B18. Ensure the Port's water tanks are full. When full shut off the inlet and outlet valves to ensure that an emergency water supply is available.</p>	Operations Superintendent / Maintenance Superintendent
<p>B19. Once all preparations are complete and there is no further assistance required area managers may in consultation with the CEO</p>	CEO and all Managers

Action	Responsibility
and cyclone coordinator release staff to attend to their own home preparations.	

4.5. Yellow Alert (gale force winds within 12 hours)

If sent home during a yellow alert and DFES do not issue a red alert return to work as normal once yellow alert is lifted.

On receipt of advice from DFES confirming the declaration of a Stage Yellow Cyclone Alert (cyclone is moving closer to the area and appears inevitable in 12 hours) for the Broome area, the Port Coordinator is to ensure the following actions are taken:

Action	Responsibility
Y1. Confirm communications with Broome Police, Broome Cyclone Control Centre (DFES), the Deputy Coordinator, Broome Sea Rescue Group and Department of Transport in Fremantle.	Harbour Master
Y2. Ensure any vessels en-route to the port are kept informed of conditions and mooring arrangements within the port waters.	Harbour Master and Operations Superintendent
Y3. Notify police of any vessels which are known to usually be in the area but which have not been accounted for.	Harbour Master and Operations Superintendent
Y4. All vessels remaining in Port Waters are to proceed to cyclone moorings or for the open sea for diversion action as appropriate.	Harbour Master and Operations Superintendent
Y5. Make backup tapes of the Port's computer databases and secure copies offsite.	ICT Officer
Y6. The wharf gate is to be disengaged from the drive motor so that it can be pushed open if required. The gate is to be left closed and locked. Once disengaged the gate is unlocked.	Operations Superintendent
Y7. Transmit on radio to all stations: "Securite, Securite, Securite, All stations (x 3), this is the Port of Broome (x 3). A yellow alert is now	Harbour Master

Action	Responsibility
current for Broome waters. The Port of Broome is now closed to all traffic. All vessels should follow their cyclone contingency plans. This frequency may not be monitored by this call sign for the next 24 hours or until the cyclone has passed. Any emergency calls during this time can be directed to the Port Harbour Master on 0429 121 875”.	
Y8. The power to the wharf can remain on until such time as it is deemed absolutely necessary to shut it off.	Operations Superintendent and Engineering Managers
Y9. Gatehouse to be locked and keys/phone to be taken home by the Harbour Master or Deputy Coordinator. The Security Gatehouse mobile phone (0419 044 765) to be diverted to the On Call Officers phone.	Operations Superintendent
Y10. If not already closed to shipping Harbour Master to close the port. Advising DFES, Police, Shire, port users, tenants and media by telephone and radio that the port will be closed until further notice. Notify RCC Canberra 1800 641 792.	Harbour Master

4.6. Red Alert (cyclone is imminent)

No actions defined for Coordinator. Consider own safety and observe standard DFES procedures. Monitor situation as deemed safe and appropriate.

The Red Alert will continue for a period after the impact of the cyclone. DFES will declare an ‘All Clear’ through the local media as appropriate.

4.7. All Clear

Staff remain at home following a red alert all clear until contacted by their manager.

If your own home has sustained extensive damage during the cyclone please endeavour to advise your manager or the Coordinator as soon practicable so that your circumstances can be considered in the return to work process.

On receipt of advice from DFES confirming the declaration of an 'All Clear' (major danger from the cyclone has passed, although heavy rain and high winds may persist for a period) for the Broome area, the Port Coordinator is to ensure the following actions are taken:

Action	Responsibility
<p>C1. Inspect the Port precinct for damage. Be aware of dangerous situations – fallen power lines, weakened structures, debris, and submerged hazards. Any hazards to be clearly marked and advertised by the most expedient method.</p> <p>Identify situations requiring high priority attention and initiate action or assist as required.</p>	<p>CEO, Harbour Master, Operations Superintendent and Engineering Manager</p>
<p>C2. As deemed appropriate managers will be advised of return to work arrangements by the CEO or Coordinator and will relay their requirements to their staff.</p> <p>Toll to advise when head office (549) is all clear and safe to enter as per Toll Cyclone procedure.</p>	<p>CEO/Coordinator and Individual Manager's</p>
<p>C3. As deemed appropriate, contact all vessels and masters/owners, confirm that all personnel remaining on board vessels have been accounted for; record any injury to persons or damage to vessels.</p>	<p>Harbour Master and Operations Superintendent</p>
<p>C4. Confirm all port navigation aids are operational and have not been displaced. Conduct sounding runs in channels and alongside the wharf.</p>	<p>Harbour Master</p>

Action	Responsibility
<p>C5. Once Harbour Master deems conditions in the port are suitable for safe marine operations re-open the Port Transmit on VHF Channel 16 - "Securite (x3), All stations (x 3), this is Port of Broome, for a port status update please listen out on CH14".</p> <p>One minute later on CH14 transmit - "Securite (x3), All stations (x 3), this is Port of Broome, be advised that as a result of the cyclonic event the following hazards have been identified within the port (advise of all known hazards). The Port of Broome is now open to shipping. Mariners are advised to exercise extreme caution when manoeuvring in the Port and channel due to the possibility of other yet unidentified hazards".</p> <p>Harbour Master to amend notice as required for the prevailing circumstances.</p>	<p>Harbour Master and Operations Superintendent</p>
<p>C6. Make an initial status report to the Broome Cyclone Controller (DFES), Broome Police and the Maritime Division of the Department of Transport in Fremantle.</p>	<p>Harbour Master</p>
<p>C7. Reset electrical breakers (if required), so long as power outlets/cabling appear to be undamaged, otherwise have system checked by qualified electrician.</p>	<p>Engineering Manager</p>
<p>C8. If water reticulation system undamaged, re-open water tank valves.</p>	<p>Maintenance Superintendent</p>
<p>C9. Confirm with Broome Pipelines that the fuel lines to the wharf are undamaged and that supply can be reconnected.</p>	<p>Operations Superintendent</p>
<p>C10. Record and photograph any damage</p>	<p>HSER Manager</p>
<p>C11. Retrieve 'boat ramp closed' and 'wharf closed' signs.</p>	<p>Operations Superintendent</p>
<p>C12. Advise DFES, Police, Shire, port users, tenants and media by telephone and radio that</p>	<p>Harbour Master</p>

Action	Responsibility
the port is open for business. Notify RCC Canberra.	

APPENDIX A – KEY CONTACT LIST

See latest KPA Emergency Contact List. IFM009/84448.

Port Operations Centre	Phone: (08) 9194 3100 Fax: (08) 9194 3188 operations@kimberleyports.wa.gov.au
Harbour Master Capt. David Duncan	Mobile: 0429 121 875
Luke Westlake Chief Operating Officer	Mobile: 0429 910 388
Operations Superintendent Mal Gower	Mobile: 0477 702 923
On call Operations (24 Hours)	Mobile: 0417 173 679
Security Gatehouse (24 Hour Watch)	Mobile: 0419 044 765
Pilot Boat (Kestrel) Master Zarak Bin Lusimoen	Mobile: 0428 523 581