CYCLONE ACTION PLAN
Technical Services, Faculty of EHSE

FOREWORD

This document outlines the general and specific actions to be taken in relation to cyclones. Information contained in this document references the Emergency Management Plan of Charles Darwin University which considers any special processes undertaken in buildings (e.g. laboratory activities, computer operations, research materials, etc.) and provides shutdown processes in the event of an emergency.

GENERAL INFORMATION

Cyclone season in Australia is between November and April, but cyclones can still occur in the month of May. Cyclones often produce winds in excess of 200 km/h which can cause extensive damage to property and turn debris into dangerous missiles. Cyclones can also bring flooding rains, which cause further damage to property, and increase the risk of drowning or storm surge. Cyclones can cause huge seas, putting vessels in danger both in harbour and out at sea.

**Cyclone Watch** – a cyclone watch is issued by the Bureau of Meteorology when a cyclone or developing cyclone is likely to affect coastal or inland communities within 24 to 48 hours.

**CDU RESPONSE:**

1. University's Emergency Controller will advise all key staff and wardens on the Cyclone Distribution List of the Cyclone Watch and the current status of the cyclone. Emergency Controller remains available to provide advice and assistance to faculties and cost centres should this be required.

2. Deans/Directors and Cost Centre Managers should activate the first stage of their individual Cyclone Action Plans.

**Cyclone Warning** – a cyclone warning is issued by the Bureau of Meteorology when a cyclone or developing cyclone is likely to affect coastal or inland communities within 24 hours. Communities under threat will be advised to take certain precautions to safeguard life and property.

**CDU RESPONSE:**

1. The University's Emergency Controller will notify all key staff and wardens on the Cyclone Distribution List and advise them that a Cyclone Warning has been issued, and to implement the second stage of their Cyclone Action Plans. Key staff and wardens on the Cyclone Distribution List will be alerted to the possibility of closure of the University, and system shutdowns.

2. If the Bureau of Meteorology forecasts the likelihood of cyclonic winds affecting the Darwin (Nhulunbuy) region immediately prior to, during or soon after University teaching hours, a decision to close the University will be made by the Vice-Chancellor at the earliest opportunity based on advice from the Emergency Controller. This Notice of Closure will be conveyed to staff via email, SMS alerts and CDU website announcements, and broadcast on all emergency and commercial radio stations.

The decision to close the University will be based on the following considerations: - obligations of staff and student needs in relation to closures of schools and child care centres, children at home, elderly relatives and visitors. Environmental factors such as local flooding, and issues such as public transport and the requirement to take shelter, including the need to evacuate students in residence, will be taken into consideration at this point. Authority to advise staff to proceed home and to order any building, facility or the entire University closed rests with the Vice-Chancellor. Cost Centre Managers wishing to release staff from duty or close down all or part of any building they occupy are required to consult with their supervisor prior to taking such action.
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PRE-CYCLONE EVENT (HOUSEKEEPING)

Technical Services staff to inspect and ensure the following areas are inspected, cleaned or cleared up:

1. Blue 5 surrounds
2. Yellow 2 surrounds
3. Yellow 3 surrounds
4. Purple 2 & 12 surrounds
5. Pink 1
6. Pink 4 and Pink 5 and surrounds including Shadehouses
7. Green 4 surrounds
8. Any other occupied area by EHSE courses and programs

All Technical Services staffs are strongly encouraged to register or update their mobile numbers with eCentre during this period of time.

2. Cyclone Kit

A fully operational battery operated torch, FM radio and spare batteries for those items are to be placed in relevant buildings’ Warden’s office before end of October.

Cyclone season information update

The Emergency Management Team member for each building (or delegate) will:
1. Distribute all sources of cyclone information including web links to CDU, Bureau of Meteorology, Territory FM, and all cyclone related communications/updates issued by CDU via email to EHSE Allstaff list.
2. Provide the names of staff to be included on the Cyclone Distribution List to the CDU Emergency Controller

CYCLONE EVENT

STAGE 1 – CYCLONE WATCH

1. Take action to store documents in the safest and most secure location available in individual offices and buildings.
2. Remove equipment from desks and tables adjacent to windows; if practicable
3. Check to ensure equipment stored in the open is secure
4. Move vehicles which are to remain on campus to previously designated locations.
5. Field work in progress will need to stop and return to base. Experimental work already underway will need to be shut down or reasonable alternative arrangements made. All fieldwork and experimental work not already underway will be postponed upon the issue of the first official University advice.
6. Undergraduate teaching will only cease upon notification to do so from the University.
7. Secure vehicle/boat shed
8. Move equipment adjacent to windows to a more secure location, if practicable.
9. Switch off and unplug computers/printers and other scientific equipment in all laboratories
10. The Technical Services Manager (TSM) and Emergency Management Team (EMT) members for respective buildings and areas will distribute the University Notice(s) via email and post a copy in the foyer of respective buildings. In the event of loss of electronic communication all advices will be those generated on Territory FM. The TSM and EMT members will monitor the radio and will become the sole point of contact for providing the updates in the respective areas.
If a Cyclone Watch is current on a Friday then immediately move to Stage 2 (Cyclone Warning) arrangements and ensure all is completed before close of business of that day.

**STAGE 2 – CYCLONE WARNING**

When appropriate the Emergency Coordinator at the University will issue suitable advices via the emergency email system. At that time all technical staff should:

1. Complete Stage 1 actions
2. Ensure all portable outdoor furniture and related items are stored within individual buildings
3. Commence shutdown off non-essential equipment including computers and laboratory equipment and instruments.
4. Shutdown all gas supplies at the bottles (unless running an instrument deemed to be essential)
5. Commence lock up of rooms and facilities in preparation for vacation of University property.
7. The Technical Services Manager (TSM) and Emergency Management Team (EMT) members for respective buildings and areas will distribute the University Notice(s) via email and post a copy in the foyer of respective buildings. In the event of loss of electronic communication all advices will be those generated on ABC Radio. The TSM and EMT members will monitor the radio and will become the sole point of contact for providing the updates in the respective areas.
8. When advised to by the Vice-Chancellor, vacate the University buildings and campus and seek appropriate shelter as advised by the Northern Territory Emergency Services.

**Area-specific actions**

**Blue 5 – Clinical Practice Suites (SOH)**

1. Unplug all electronic/electrical equipment in clinical practice suites:
   a. Electric beds
   b. IV pumps
   c. ECG machine
   d. PCA
   e. Simulation mannequins
   f. Remove sim pads and lock inside associated bed side cabinet
2. Lock store rooms and clinical practice suites.
3. Close all internal doors within clinical practice suites.

**Yellow 2 (SPCS/SENV)**

1. Ensure all equipment or items outside are brought in (this includes the balcony off the tea room, the bike racks, items in and around loading bays).
2. Turn off non-essential equipment or place equipment in standby mode, where possible.
3. Turn off gases in the gas cages at the end of the building.
4. Move equipment away from windows, where possible.

**Yellow 3 – Pharmacy Labs**

1. Ensure majority of smaller equipment in Y3.1.10/11/12/13/14/15 are moved and secured in the storeroom and where possible pack away smaller items.
2. Turn off all non-essential equipment in Y3.1.10/11/12/13/14/15 (balances, ovens, computers, fume hoods, bio cabinets)
3. Empty ice makers
4. FAS to take down Sail outside staff room Y3.1.25 and between buildings Yellow 3 and Yellow 4 covering the BBQ area.
5. Turn off the LPG at the bottle in the cage outside
6. Turn off the gases at the wall near the entrance door of Lab Y3.1.05
7. Secure outside lockers at Y3.1.03/04 using cables between the handles
8. Bring in items and furniture from outside (including the courtyard off the tea room and the courtyard between Buildings Yellow 3 and 4)

Green 4 – Exercise and Sports Science Lab

1. Turn off all equipment.
2. Ensure the majority of smaller equipment is packed away in the storeroom/ clinic area.
3. Take electrical leads off the ground, where possible.
4. Take the transformer box for the Humac Norm off the ground
5. Move equipment and furniture away from the windows and the roller doors, where possible.
6. Ensure gaps are filled appropriately when the roller doors are fully shut.

Pink 1 – Boatshed

1. Ensure the vehicles (boats, trailers and quad bikes) are moved into the boat shed.
2. Ensure the yard in the Pink 1 compound is free from debris.

Pink 4

1. Ensure the researchers in the area have been informed and list down their plans for the animals in the event of a cyclone.
2. Clear the cages outside, where possible.
3. Turn off all non-essential equipment.

Pink 5 – Field Equipment Store

1. Clear up around the outside of the building, placing items in field cages, storage cages and potting cage where appropriate.
2. Turn off all equipment.
3. Clear the surrounding of the shade houses.
4. Secure shade houses, where possible.

Purple 12, 2 & Pink 7 – SEIT

1. Unplug all computers in all the classrooms and labs in Purple 2, Purple 12 and Pink 7.
2. Unplug all equipment in corrosion lab Pink 7.1.18 and Gas lab Pink 7.1.19.
3. Ensure all labs in Purple 2 are locked including the wet bay (concrete-making area) and all concrete-making materials that belong to SEIT are kept and stored within the lab.
4. Ensure the Workshop in Purple 2 is locked and the machineries are unplugged.
5. Bring in the furniture from balcony areas of Purple 12 Level 2 and 3.

CLOSURE

1. Access to the campus to be requested from Security for the purpose of SEM probes cooling, when and where possible. During closure, security will impose a total shutdown and only key staff with approved access will be allowed to enter the campus – list down the key staff from your area (S)H, SEIT, SPCS and SENV) that is authorised to access the University.

SPECIAL CONSIDERATIONS
1. **Leaving work early:** In consultation with supervisor, individual staff may be excused from work early to meet personal obligations such as picking up children from school/child care, attending to visiting relatives etc.

2. **Staff on Leave:** are required to check with their supervisor via telephone prior to returning to work post-cyclone. Staff may or may not be required to return to work early to assist with post-event activity. Staff must also consult CDU website or listen to ABC Radio (primary source of information) or Territory FM (104.1) for latest information regarding the cyclone and any arrangements for CDU.

3. **Return to work:** GENERAL ADVICES FOR UNIVERSITY STAFF RE: RETURN TO WORK WILL NORMALLY BE BROADCAST BY ABC RADIO.

As soon as practicable after a storm, staff are to communicate with their supervisor(s) to confirm availability to return to work. Normally the communication will be to the supervisors work telephone number. However it may be more appropriate in some circumstances to make other arrangements and this is left to the discretion of individual units.

Communication for re-opening is to be done via top-down approach and staff will be given a 4-hour notice in advance on the re-opening. Technical Services Manager will inform all technical staff directly, or via the leaders. Examples

   a. If the notice of re-opening comes out at 0800 hours, then the staffs are expected to return to work at 1200 hours.
   b. If the notice of re-opening comes out at 1200 hours, then the staffs are expected to return to work at 0800 hours the next day.