



Title: Cyclone Management Plan (Darwin)

DOCUMENT CONTROL			
Doc. Reference	PL-AUS-HSSEQ-009	Function	HSSEQ
Revision Date	30/8/21	Group Owner	Director Operations and Safety, Australia
Rev. Number	8	Group Approver	Global Head of HSSEQ

APPROVED VARIANCE

Variation to support [GOP-HSEQ-012](#) Emergency Response Planning.

DOCUMENT REFERENCES

Internal References	<ul style="list-style-type: none"> • ERP-AUS-HSEQ-001 - DMSB Emergency Response Plan • ERP-AUS-HSEQ-003 - DWSB Emergency Response Plan • FRM-GOP-HSEQ-042.01 - Plant/Site Inspection Checklist Form • FRM-PL-AUS-DAR-009.01 - Cyclone Procedure Checklist • GOP-HSEQ-046 - Service Improvement Process • PL-AUS-HSEQ-012 - Adverse Weather Management Plan • Darwin BU Security Plans (Site Specific)
External References	<ul style="list-style-type: none"> • AS/NZS 1170.0:2002 Structural Design Actions • Australian Standards AS3745 - 2010 Planning for Emergencies in Facilities • Darwin Port Act • Darwin Port Cyclone Plan 2020 - 2021 • Emergency Management Regulations 2006 • NT Disaster Act • The Australian Public Cyclone Shelter Guidelines • Work Health and Safety Act • Work Health and Safety Regulations

DOCUMENT SCOPE / PURPOSE

The Scope of this Plan is for ASCO operations within the Northern Territory Region of Western Australia.

REVISION HISTORY

Rev	Date	Comment
0	08/11/2016	Creation of procedure
1	29/06/2017	General Review and document template update
2	30/10/2017	Preparation review
3	25/06/2018	Amend internal references
4	28/09/2018	Review on readiness of Wet season 2018
5	03/09/2019	Review in readiness for wet season 2019
6	13/10/2020	Review in preparation for Wet Season / Cyclone Season 2020
7	15/2/21	Review in light of adverse weather/ Cyclone season 2021
8	30/8/21	General review in preparation of Wet Season



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1.0 Requirements of this Plan

There is a need for ASCO Darwin Business units to have a “Cyclone Plan” ready for implementation at the beginning of each Cyclone Season (1st November to 30th April) which will meet the needs of the Company and the clients we serve.

The purpose of this Cyclone Plan is to:

- Ensure the safety of workers and contractors
- Protect ASCO property and maintain operational activity
- Minimize disruption to normal service
- To assist the community if required.

This plan covers the following ASCO Darwin Business Units (BU):

- Darwin Supply Base (DWSB)
- Darwin Marine Supply Base (DMSB)

BU leaders from these BU's will have designated key roles and responsibilities throughout any declared cyclone watch or warning period, and these roles reflect, where possible, the nature of the work carried out normally by the person concerned.

2.0 Responsibility Summary

Director Operations and Safety (DoFS)

- Coordinate the Cyclone Planning Committee and communications between NT site locations.

Supply Base Manager

- Overall responsibility for the site/ operations
- Communication of this Plan to personnel, ensuring workers are aware of the requirements within
- Coordination of cyclone preparation and tie down activities, ensuring removal or restraint of loose objects and structures that may be loose/ become damaged
- Manage the activities onsite in the event of a cyclone, ensuring timely evacuation of personnel.

HSSEQ Advisors

- Ensure the plan is reviewed annually, in consultation with Supply Base Manager/s and DoFS
- Review inspection checklists to ensure adequacy for the workplace.

Site Administrator

- Maintain a hard copy file of emergency contacts for all personnel
- Ensure cyclone kit is readily available and in good working order at the commencement of cyclone season
- Display the cyclone status notifications from the Bureau of Meteorology on noticed boards.

All workers

- Review Cyclone Management Plan and ensure requirements understood
- Provide current contact/ emergency response contact to Site Administrator.

3.0 Cyclone Planning Committee

The Cyclone Planning Committee will be led by the Director of Operations and Safety (DoFS) or their Deputy in their absence, the Deputy to the DoFS will be either a Darwin BU Manager or Darwin HSSEQ Advisor to ensure readily available communications in the event of local communications failure.



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4.0 Communications

Communications will be the use of mobile phones, email, and land lines, in the event of communications failure the use of DWSB trunked 2-way radios will be utilised to ensure readily available communications between all business units.

Each BU will hold a battery powered radio to ensure if power failure is experienced updates can be received from local emergency channels:

- ABC Radio Darwin - 105.7FM.

In the event of a cyclone warning Business Unit management and staff contact details will be reviewed and each BU Manager will hold a current BU contact list to advise BU personnel of return to site.

DMSB Additional Controls

- The DMSB Manager will be responsible to ensure they are in constant contact to receive the latest updates regarding the cyclone, Darwin Port conflict vessel movements and DMSB/EAW facility conditions from the Darwin Port General Manager Operations and/or Deputy.
- Updates will then be passed onto the other BU personnel, DMSB clients and facility users.
- Vessels are required to be ready for departure at 4 hours' notice, the DMSB Manager/deputy are to contact clients to clarify if their vessels are still arriving into Darwin or will be delayed
- If arriving in Darwin, DMSB Manager/deputy are to check the tidal window to ensure that the vessel can depart at 4 hours' notice, if there are restrictions then the vessel is to be referred to EAW.
- Baker Hughes are to provide a list of Dangerous Goods stored on site; this is to be sent to Darwin Port
- After the cyclone has passed and Darwin Port has reopened the DMSB Manager/deputy are to contact the facility users, MSB Security and Baker Hughes to provide updates
- Electrical inspections are to be completed on site and Baker Hughes to ensure that the areas are safe

5.0 Cyclone Warning Updates

The below contact numbers, websites and radio stations can be utilised to monitor all cyclone warnings within the NT:



CONTACT TELEPHONE NUMBERS

Northern Territory Emergency Services	131 444
Fire	8922 1555
Police	8901 0208
Ambulance	131 444
Cyclone Update Information	08 8920 3800

WEB SITES

NT Weather & Warning Summary	www.bom.gov.au/nt/
Bureau of Meteorology	www.bom.gov.au/weather/radar
Emergency Services NT	www.ntgov.au/pfes
NT Work Safe	www.worksafe.nt.gov.au

RADIO STATIONS

ABC Radio Darwin	105.7FM
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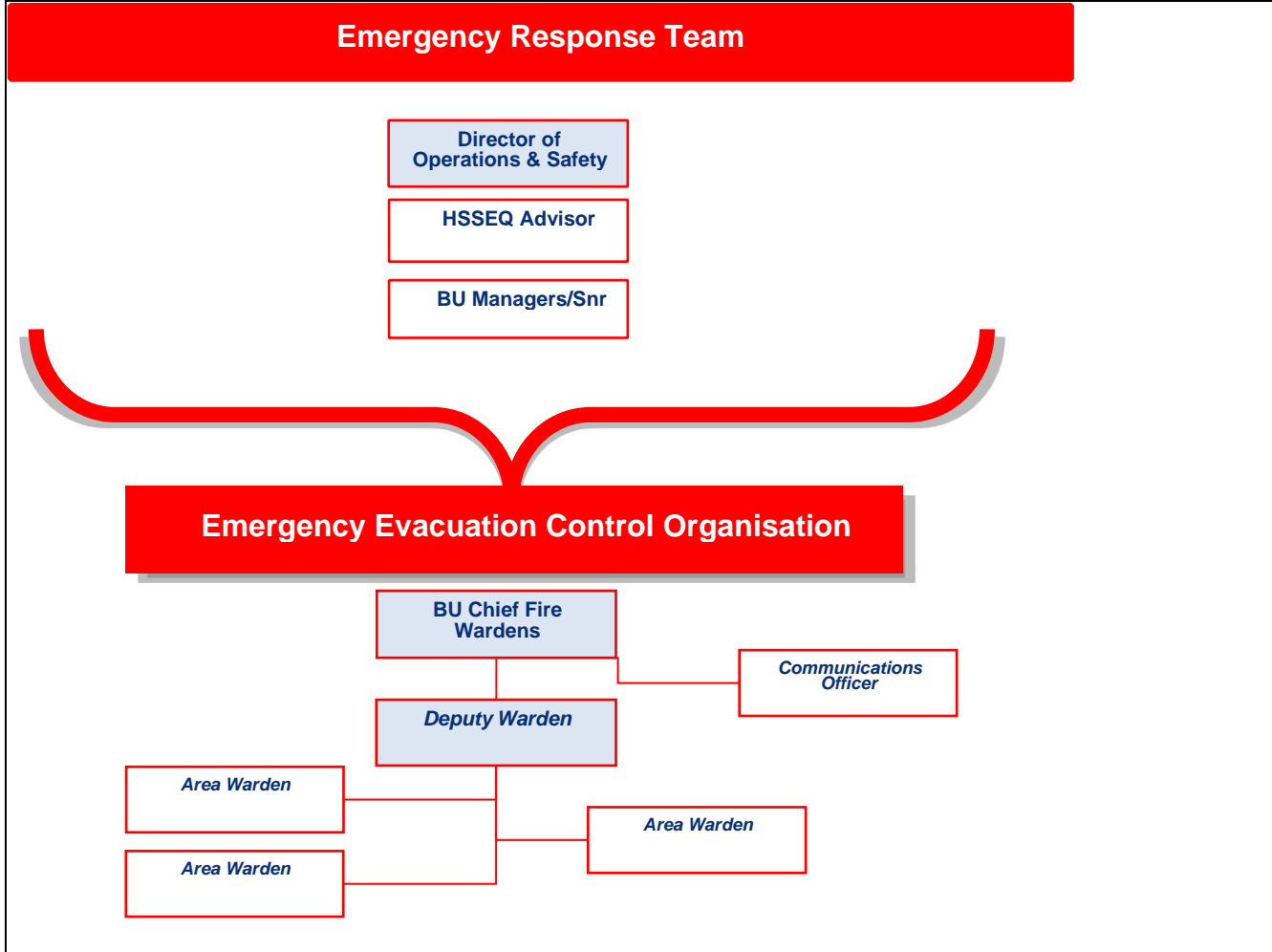
6.0 Current Darwin Cyclone Committee as of 1st October 2020

CYCLONE PLANNING COMMITTEE

- A. Coordinator, Cyclone Plan - DoFS
- B. Deputy Co-Ordinator - HSEQ Senior Supervisor and/or Advisor
- C. Co-Ordinator 1 - DMSB Manager or delegate
- D. Co-Ordinator 3 - DWSB Supervisor or delegate

Defined roles and responsibilities minimise the confusion and ensure all emergency response activities are carried out as planned and normal supply base activities can resume as quickly as possible after the conclusion of the emergency.

6.1 Business Unit Emergency Management Structure



7.0 Business Unit Site Preparation

Preparation - 1st May to 1st October

The off-season period will be spent evaluating lessons learnt from the previous season, selecting the cyclone committee and BU Emergency Response Teams for the upcoming season, and to ensure site readiness. As a minimum, monthly inspections will be undertaken, all actions from site inspections will be actioned as per business unit action registers.



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All BU's will undergo site readiness inspections no later than the first Monday of September by the Darwin HSSEQ department to ensure compliance against Darwin Cyclone plan.

All inspections will be recorded utilising the ASCO [FRM-GOP-HSEQ-042.01](#) Plant/Site Inspection Checklist Form and following guidance as per the planned inspection procedure.

8.0 Load Securement

All loads left in external areas if weighing below the 5 tonne thresholds will be secured by tie down blocks to ensure security during cyclonic event, containers of blocks over the 5-tonne threshold can be used as securement points for tie down purposes.

Tie down and planning review will be undertaken by the Cyclone committee by no later than August end of each year as part of Cyclone preparation monthly inspections

BU Managers/Cyclone Committee with review the following:

- Required number of tie downs required for each BU
- Required number of chains and or lashings
- Planned location to undertake lashings
- Required training for personnel undertaking tie down of material
- All actions will be added to BU Action Registers until resolve (no later than the 1st of October).

Additional DMSB Cyclone controls include:

- If a cyclone watch (48hrs notice) is declared the DMSB Manager/delegate is to contact the stevedores requesting that their crane booms are lowered and secured
- All safe man huts, gangways, metre marks, bins and other loose items are stowed away in the warehouse and secured

9.0 Business Unit Lockdown

All BU's will follow direction as per the BU Security Plan to ensure site integrity during a cyclonic event. Business unit Security and Emergency plans will be reviewed in line with this cyclone procedure to ensure compliance.

Additional DMSB Cyclone controls include:

- The DMSB Manager/delegate, DMSB Security and Baker Hughes Manager are to complete the final walk through the site to check that all items are secured
- The DMSB security phone number is to be on forwarded to the DMSB Managers mobile
- Once the final checks are completed and the DMSB is closed, the DMSB Security mobile and office keys are to be handed into DP Security

10.0 Fuelling of Vehicles

When a cyclone watch is declared, all BU's will ensure refuelling of:

- Standby Generators
- Forklifts
- Company vehicles
- Essential plant and equipment



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11.0 Cyclone Severity Categories

Category	Maximum Wind Gust	Typical Effects
1 - Tropical Cyclone	Less than 125km/h Gales	Minimal house damage. Damage to some crops, trees and caravans. Boats may drag moorings.
2 - Tropical Cyclone	125 - 164km/h Destructive Winds	Minor house damage. Significant damage to signs, trees and caravans. Risk of power failure. Small boats may break moorings. e.g. Cyclone Helen - Channel Point 2008
3 - Severe Tropical Cyclone	165 - 224 km/h Very destructive winds	Some roof and structural damage. Some caravans destroyed. Power failure likely. Boats will break moorings.
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 failure. e.g. Cyclone Tracy - Darwin 1974
5 - Severe Tropical Cyclone	More than 280 km/h Extremely destructive winds	Extremely dangerous with widespread destruction.



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12.0 Cyclone Management Stages		
RESPONSE STAGES	NT GOVERNMENT EMERGENCY RESPONSE GROUP STAGES	ASCO PREPARATIONS FOR STAGES
Business Unit Season Readiness		<ul style="list-style-type: none"> Cyclone response plans reviewed and updated. Pre-season NTG briefings attended by appropriate Darwin BU personnel.
Stage 1 - Cyclone Watch (48hr)	Stage 1 - Declared when a tropical low or cyclone exists, and gale force winds are likely to affect Greater Darwin within the next 48hrs but not before 24 hours.	Cyclone Watch issued if gale force (or stronger) winds from a cyclone are unlikely to affect an area within 24 hours but may develop within 48 hours. Regular updates will be provided to BU personnel from Cyclone Committee: Cyclone plan will be initiated <ul style="list-style-type: none"> Notification to all on site staff Contact list validated Notifications are to be made to BU client lists and the following: Perth Head Office and Director of Operations Cyclone updates are to be transmitted to staff and contractors as required All external plant and equipment to be moved to internal locations or prepared for tie down and securement Refer to Appendix B Cyclone Checklist for further instruction Monitoring of cyclone or tropical low is undertaken.
Stage 2 - Cyclone Warning (24hr)	Stage 2 - Declared when a tropical low or tropical cyclone is expected to cause gale force wind in Greater Darwin within 24hrs.	<ul style="list-style-type: none"> Continual monitoring of Cyclone Preparation of cyclone impact to greater Darwin Notification to all on site staff Contact list re validated Notifications are to be made to BU client lists and the following: Perth Head Office and Director of Operations Cyclone updates are to be transmitted to staff and contractors as required Continuation of plant and equipment relocation to internal locations or continuation of external items tie down and securement Refer to Appendix B Cyclone Checklist for further instructions Monitoring of cyclone or tropical low is undertaken.
Stage 3 - Cyclone Warning (12hr)	Stage 3 - Declared when available information suggests that destructive winds are likely to affect Greater Darwin within the next 6-12 hours.	ESSENTIAL PERSONNEL ONLY <ul style="list-style-type: none"> Notifications are to be made to Client and the following: Perth Head Office and Director of Operations All operations are to cease, final tie-downs and yard clean-up completed Refer to appendix B Cyclone Checklist for further instructions. BU Manager's will have the discretion to relative BU non-essential personnel no greater than a 24 hr pre-destructive winds arrival to greater Darwin to go home. ASCO Darwin Employees with cyclone management responsibilities are required to remain at work, until they have completed their responsibilities under this plan
Stage 4 - Safety Management and Lockdown	Stage 4 - At this time an official announcement is made by Northern Territory Emergency Services advising all persons in Greater Darwin to TAKE SHELTER.	<ul style="list-style-type: none"> Advise all personnel in Greater Darwin Area to take shelter. Vehicles to be moved into Warehouse with a vehicle backed up onto each roller door to assist with the door not blowing inwards due to wind pressure
Stage 5 - Destructive winds reach Greater Darwin	Stage 5 - Declared when destructive winds have reached the boundary of Greater Darwin.	<ul style="list-style-type: none"> Destructive winds have reached Greater Darwin area.
All clear pending	Declared when winds no longer pose a threat to communities within Greater Darwin. Note that the all clear is not declared at this time and a Stage 5 may be re-declared if necessary.	<ul style="list-style-type: none"> ASCO to wait until all clear.
Stage 6 - All Clear	Stage 6 - Declared when it is considered safe for the public to leave shelter.	<ul style="list-style-type: none"> No one is expected to leave their family or property unprotected during a cyclone. After the cyclone has passed, having tidied up matters at home, accommodation for dependents, and the safeguarding of property, Cyclone Plan Committee members are required back to work. All staff are required back to work during normal hours. If it is obvious that Darwin has suffered considerable damage during a weekend or holiday, only Cyclone Plan Committee members are requested to return to work and undertake a BU Post Cyclone Review. If BU personnel are unable to return to active duties communications with BU Managers must be undertaken as soon as practicable.
Post Cyclone Recovery	RECOVERY - The recovery phase is managed by the Chief Minister's Department and is aimed at returning Greater Darwin back to normal.	<ul style="list-style-type: none"> All post event BU reviews will be undertaken applying the principles of ASCO Task Based Risk Assessment procedure. A risk assessment will be undertaken to determine any and all risks and required controls for returning to a BU.
Stand Down	Stand down - Declared when the Greater Darwin Controller considers that no further counter disaster measures are necessary.	



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13.0 Non-Conformances			
All Non-Conformances, in relation to this procedure will be investigated utilising the ASCO Service Improvement Process (GOP-HSEQ-046) to ensure all non-conformances are investigated and suitable measures imposed to ensure satisfactory outcome.			
14.0 Assessment Audit and Review			
This plan must be kept under constant review to ensure that its provisions are reflective of reality. It is the responsibility of all staff to highlight any omissions or apparent weaknesses in the plan. This plan will be the subject of formal management review at intervals not exceeding 12 months but shall also be subject to review after any emergency response, whether planned or otherwise, legislative changes and workers feedback to ensure its suitability.			
15.0 Emergency Contact List			
Company	Name	Position	Mobile
Darwin Marine Supply Base (DMSB)	John Cowan	DMSB Manager	0448 148 957
	Gareth Felton	Facilities Management Coordinator	0427 709 097
	Kelly Barbetti	DMSB Supply Base Co-ordinator	0418 759 776
	MSB Security	Guard on Duty	0455 481 169
Darwin Supply Base (DWSB)	John Cowan	DMSB Manager	0448 148 957
	Jesse Nudl	Operations Supervisor	0428 444 037
ASCO Head Office (West Perth)	Michael Fulham	Chief Executive Officer	0448 033 769
	James (Jock) Stuart	Operations Director	0448 127 563
Wilson Security	Susan King	State Manager	0412 021 717
	Vincent Tarrant	Client Services Manager	0456 159 890
Baker Hughes	Kevin Smith	Facilities Manager	0419 817 613
Darwin Port	Captain Ian Niblock	GM Operations (Vessel Ops)	0419 840 041
	Gary Bawden	Deputy Operations Manager	0438 425 394
16.0 Document Review			
This Plan will be reviewed annually as per Document Control and Control of Records WA-GOP-HSEQ-006.01			