



Joint Resources Safety and WorkSafe Safety Bulletin Mines Safety Bulletin No. 79

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Subject: Cyclone – emergency preparation, planning and preparedness

Hazard

Recent tragic events at a rail construction camp near Port Hedland in the Pilbara region of Western Australia highlight the ferocity and damage nature is able to create in communities and mine sites in the region.

On Friday 9 March 2007 Cyclone George, a category 4 cyclone, crossed the Pilbara coast of Western Australia and caused devastation to a rail construction camp approximately 105 kilometres inland south of Port Hedland in the early hours of the morning. This resulted in two deaths and numerous injuries to rail construction personnel while they were sheltering in their accommodation units, more commonly known in the mining industry as dongas.

Heavy rainfall from the cyclone also caused substantial flooding, which made regional roads impassable and interrupted communication systems, hampering rescue operations in the area. The State Emergency Services including police and medical staff were airlifted by helicopter from Karratha to the rail construction camp to assist in the recovery.

Contributory factors

It is too early to comment on the contributory factors that caused this incident as the investigation by WA Police and WorkSafe is continuing. However, while the findings may not be released for some time, it is appropriate to issue this safety bulletin to remind workplaces in the region of the potential hazard and consequences associated with cyclones. It is important for every employer located in a cyclone sensitive region to prepare a comprehensive emergency management plan which addresses risks associated with cyclones. Preliminary findings from the investigation associated with Cyclone George have led to the following recommendations.

Recommendations

Given the uncertainty and unpredictability of damage created by individual cyclones, employers in cyclone sensitive regions are urged to apply extreme caution with regard to exposing employees to the dangers associated with cyclones.

1. In accordance with Regulation 4.30 of the Mines Safety and Inspection Regulations 1995 and Regulation 3.10 of the Occupational Safety and Health Regulations 1996, every employer must develop emergency procedures and plans in conjunction with advice from FESA and other regional emergency planning groups where their sites are located.
2. The emergency plans should include details for making the site safe and ensuring the safety of personnel as far as is practicable. This should include the removal or restraint of loose objects and structures and evacuation of personnel.
3. Every accommodation unit or donga and every transportable building on worksites and camps in cyclone sensitive regions should be adequately secured.
4. During the Blue and Yellow Alert Cyclone Warning phase a safe and orderly evacuation of non-essential personnel from the worksite or camp should be considered prior to high intensity cyclones passing in close proximity to the site.
5. Employees remaining on site during the cyclone should be moved to a designated appropriate shelter well in advance of the arrival of the cyclone to avoid being injured during the transfer to the shelter.
6. Where employees are required to stay on site, adequate stocks of food and other essential items should be available during the period when the site may be cut off due to high winds or flooding.
7. During the Red Alert Cyclone Warning phase when all power has to be isolated or in the eventuality of damage or interruption occurring to the power supply or telephone and internet connections, an adequate means of reliable emergency backup communication should be available on site to make contact with external emergency services should help or assistance be required.
8. Each site should continuously monitor cyclone warnings issued on radio, television or via the internet connection to the Bureau of Meteorology or FESA websites. In the event of power interruptions on site, battery powered radios should be available.

All employers in a cyclone sensitive region are requested to review their cyclone procedures as a result of this bulletin and the recommendations made above.

Additional information covered in this safety bulletin on preparing for cyclones can be found on the following websites or locations:

- Bureau of Meteorology www.bom.gov.au
- Fire and Emergency Services Authority www.fesa.wa.gov.au
- Building Code of Australia www.aib.org.au/buildingcodes/bca.htm

Martin J Knee
STATE MINING ENGINEER

Nina Lyhne
WORKSAFE COMMISSIONER