

SAFETY BULLETIN

DATE: NOVEMBER 2021

Summer - severe weather season

This safety bulletin provides safety advice for the NSW mining industry.

Background

Large parts of New South Wales have experienced significant rainfall over the past 18 months leading to a decline in the areas classified as drought affected. With a potential La Niña weather pattern likely, further severe storms and above average rainfall are forecast for much of NSW. While drought conditions have eased, bushfires and grass fires continue to pose a risk to mining operations.

Severe weather events often involve destructive winds, lightning strikes, hail, and heavy rain with some areas of NSW having already experienced tornadoes, severe storms as well as significant rainfall and flooding.

Severe weather events can disrupt mining operations as well as impact safe access and egress from mines. This safety bulletin serves as a reminder to persons conducting a business or undertaking as a mine operator or contractor, to consider the risks posed by fires and severe weather events as we move into the summer storm season.

Additionally, the hazard to workers posed by hotter days and working conditions is well known. Consequences such as dehydration, heat stress and heat stroke are very real and can affect both surface and underground workers.

Hazards

As summer approaches the hazard of heat and worker exposure to heat increases. Factors that may increase worker exposure include:

- elevated ambient heat, direct sunlight and workplace generated heat such as machinery
- reduced cooling effect of airflow and ventilation of work areas
- dehydration and impaired fitness for work.

The potential risks that fires, severe storms, heavy rain and flooding can present to mine and petroleum sites are many. These may include:

- impacts on safe access and egress from site and workings
- loss of communication systems
- instability of highwalls, extraction faces, stockpiles, emplacement areas, dam and pond walls
- road and ramp instability
- damage or destruction to buildings and infrastructure - this includes temporary site structures such as container/igloos shelters
- ground water flows that exceed storage limits of dams and ponds
- ingress of water and other materials into workings – this can affect both surface and underground parts of mines
- submersion of mobile and fixed plant – electrical installations may be energised and pose an electric shock hazard
- inundation of water into explosives magazines, blast holes and sleeping shots
- loss of power to underground and remote mine infrastructure and equipment such as pumps, ventilation fans, gas control devices and data and communication systems
- water and/or material flows from the mine or petroleum site that may have an impact on public safety.

Figure 1: NSW in February 2020. Incident after 160 millimetres of rain event (IncNot0036687)



Recommendations

Prepare before the event. The time to prepare for severe weather is now. Establishing resilient infrastructure, developing plans, establishing contingencies and training workers is generally not possible during a severe weather event. Mine operators should:

- review systems in place to manage heat stress and worker exposure
- train workers in managing hydration and the symptoms and treatment for heat stress and heat stroke
- ensure the risk of severe weather has been considered as part of their health and safety management system
- review emergency plans to confirm any changes to the mine site and infrastructure are considered and plans remain current and relevant
- review communication methods available in the event of severe weather impacts
- review the sites preparedness for fires, storm events and high winds
- confirm adequate response capabilities are in place at the mine
- when severe weather conditions are forecast review planned work and consider if all risks related to the expected conditions or weather event are considered
- train workers in relevant Trigger Action Response Plans (TARP's) that severe weather events may trigger
- refer to previous [Safety bulletin SB20-04](#) for further information on preparedness.

NOTE: Please ensure all relevant people in your organisation receive a copy of this safety bulletin and are informed of its content and recommendations. This safety bulletin should be processed in a systematic manner through the mine's information and communication process. It should also be placed on the mine's common area, such as your notice board where appropriate.

Visit our [website](#) to:

- find more safety alerts and bulletins
- use our searchable safety database
- sign-up to receive Mine Safety News.

Other websites to visit:

- [Resilience NSW](#)
- [NSW Health – Beat the heat](#)
- [NSW Rural Fire Service](#)
- [Fire Rescue NSW](#)
- [NSW State Emergency Service](#)

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