

Emergency Preparedness

Small Mines Roadshow 2023

February to March 2023

regional.nsw.gov.au



What is emergency planning?



An emergency at a mine occurs when the mine's controls are no longer able to effectively control the risks to people's health, safety and welfare from the hazard(s).

An emergency plan enables a mine to respond and re-establish control of hazards in an emergency.

Ref: NSW CODE OF PRACTICE | WHS LEGISLATION

Emergency planning for mines

Who has duties for an emergency plan?

All PCBUs (mine operators) at a mine have the duty to ensure an emergency plan is prepared for their workplace:

WHS Regulations

Part 3.2 General workplace management - Division 4 Emergency plans

43 Duty to prepare, maintain and implement emergency plan

A person conducting a business or undertaking at a workplace must ensure that an emergency plan is prepared for the workplace...

WHS(M&PS) Regulations

Division 7 Emergency management -Subdivision 1 Emergency plans

91 Duty to prepare emergency plan

The operator of a mine or petroleum site must prepare an emergency plan for the mine or petroleum site...

WHS(M&PS) Regulations

91(2)(c) Duty to prepare emergency plan

In addition to the matters required by the WHS Regulations, clause 43(1) the emergency plan must include all matters specified in Schedule 7



Before an emergency plan is developed, the context or factors affecting it should be established by the mine operator, including, but not limited to

- the nature, complexity and risks of the mining operations – number of people, nature of hazards, type of work, etc
- potential emergencies that determine the level of detail in the plan – injuries, incidents, natural disasters, medical emergencies (heart attack), hazards, etc
- the emergency plan and its relationship to other required plans, as part of the mine safety management – links to PMHP or PCP
- the relationship between WHS legislation and emergency management legislation – storing explosives, dangerous goods, pollution reporting requirements
- relevant legislation for emergencies that may apply to the mine – provide training, testing, resourcing, inspecting & maintaining equipment, etc



What's in plan?

An emergency plan is a written set of instructions that outlines what workers and others at the workplace should do in an emergency

EMERGENCY PROCEDURES

**FOR ALL EMERGENCY SERVICES
DIAL 000 - Police • Fire • Ambulance**

Referenced: Planning for emergencies in facilities - A.S. 3745-2010

FIRE / SMOKE EMERGENCY

MEDICAL EMERGENCY

INTERNAL EMERGENCIES

EXTERNAL EMERGENCY

EVACUATION PROCEDURES

ARMED HOLD UP / PERSONAL THREAT

BOMB THREAT / SUSPECT OBJECT

FIRE EQUIPMENT USAGE CHART

FIRE EMERGENCY

R REMOVE PEOPLE FROM DANGER AREA.
Safety to self, scene and survivors in that order.

A ALERT OCCUPANTS + RAISE AN ALARM.
Ensure the Fire Brigade are notified - DIAL 000

C CONFINE THE SMOKE and FIRE.
Restrict the spread of the fire. Attempt to extinguish the fire, if safe and if trained to do so. Work in pairs.

E EVACUATE TO A SAFE AREA.
Evacuate the building via the nearest safe exit route and wait for assistance from responding emergency services.



An emergency plan must provide for the following:

emergency procedures, including:

- an effective response to an emergency
- evacuation procedures
- notifying emergency service organisations at the earliest opportunity
- medical treatment and assistance, and
- effective communication between the person authorised to coordinate the emergency response and all people at the workplace
- testing of the emergency procedures – including the frequency of testing, and information, training and instruction to relevant workers in relation to implementing the emergency procedures.



Compliance Priority Project – Emergency preparedness – small mines

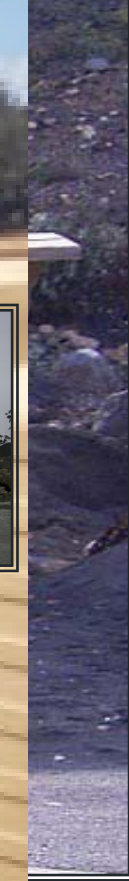
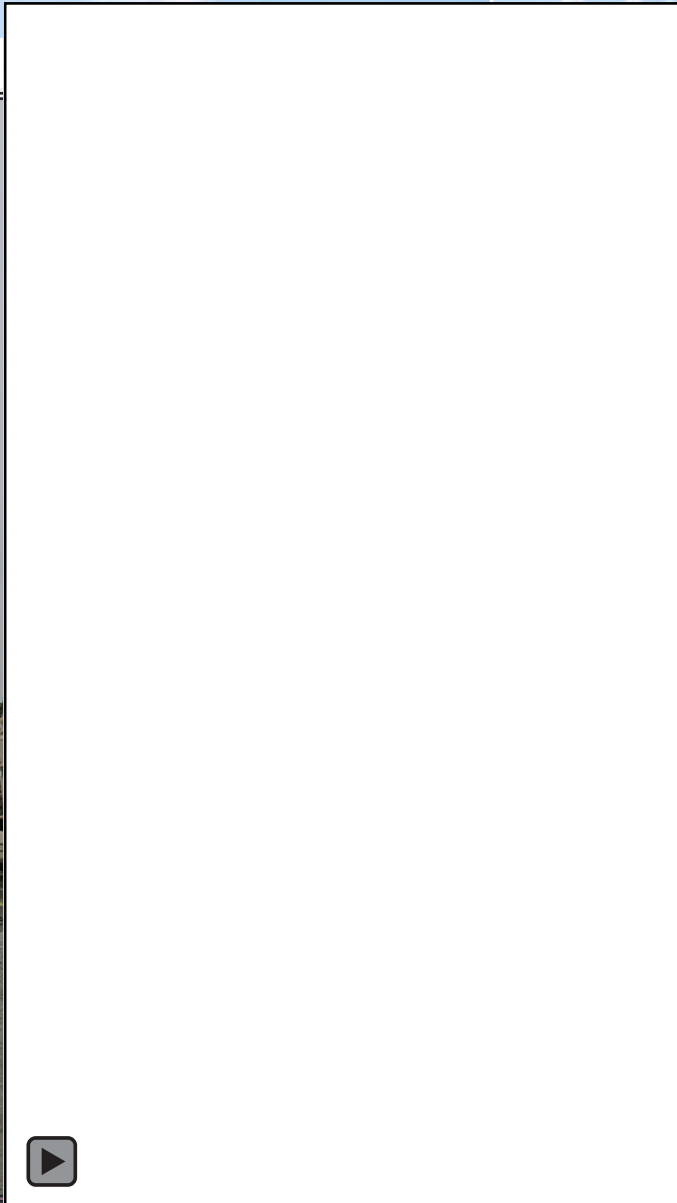
What potential
emergencies
should I plan
for?



Workplace Injuries



Explosions



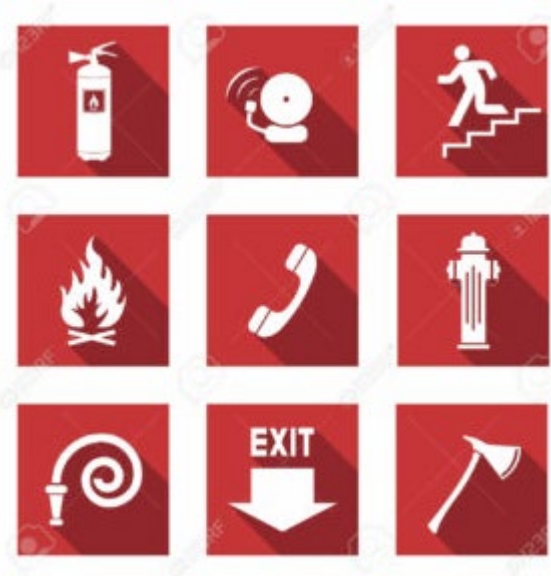
Electrical or Mechanical Equipment
Structural Failure
Explosives, etc

The mine operator must develop written procedures as determined by risk assessments to manage the different types of emergencies that could arise and to meet the requirements in the WHS legislation

Procedures should be developed for both the management of an emergency, and the action by all people at the mine if an emergency occurs.

Emergency procedures related to the legislative requirements may include, but are not limited to, the following:

- management structure for emergency control
- response to a fire
- transport of injured people
- evacuation or withdrawal procedures, including emergency assembly areas
- notification of emergency services
- medical treatment and assistance
- communication protocols
- bushfire procedures
- vehicle rescue procedures
- emergency training procedures



The emergency plan must be used as the primary means of response.

Considerations for determining whether a mine is prepared for an emergency may include:

- plan is prepared and readily accessible
- training and general emergency response awareness throughout the mine site
- procedures and/or duty cards established and issued so command structure is established
- emergency plan assessments completed, as well as training and test exercises carried out
- communication system(s) established and regularly tested
- evacuation plans in place and tested
- warning systems in place and tested
- resources in place and checked and audited regularly e.g. first aid, including any special facilities and equipment such as air bags to release people



This response is based on being prepared and being able to respond in order to reinstate safe operations for people working in the mine

Considerations for determining whether a mine is capable of responding effectively to an emergency should include:

- activating exercises to test the emergency plan and procedures
- duty cards ready to be issued and people trained in them and their overall role in activating the emergency control room or control centre
- mobilising internal and external resources in a timely, efficient and coordinated manner
- providing medical assistance with first aid and the ability to provide further medical assistance
- providing immediate relief, search and rescue
- notifying public authorities



Notification	Q5	Does the site have an appropriate notification process for managing an emergency?



Compliance Priority Project – Emergency preparedness – small mines

The duty to inform, train and instruct should result in mine workers being competent to carry out their role that is stated within the emergency plan.

In the event an emergency
KEEP CALM

DIAL 000 or 112(mobile)

- Tell the operator which service you require and provide them with the site's details.
- If possible send a person to the front gate to direct Ambulance or Emergency Services.

Address: _____
Nearest cross road: _____
Contact name: _____
Contact number: _____
Further information: _____
GPS coordinates Lat: _____ Long: _____
Ambulance phone: _____ Fire brigade phone: _____

FIRE	MEDICAL	OTHER
Type of fire	Number of people injured	
Size of fire	Type of emergency	
Ensure people are accounted for	Injuries	
If safe, remove all plant from the area	Ensure area is safe before giving help	
Contact management	Contact management	
Only attempt to extinguish fire if safe	Once area is safe complete DRISABC and give help	
Isolate mobile plant for 24 hours	Send escort for emergency services	
Preserve the scene	Preserve the scene	
Contact the regulator	Contact the regulator	
Investigate (program 12)	Investigate (program 12)	

REMEMBER
QUICK RESPONSE CAN SAVE LIVES

Training may include practising evacuations, identifying assembly points, location of emergency equipment, first aid arrangements and how to safely shut down machinery.

In determining training requirements, the following should be considered:

- inclusion of emergency procedure training in induction courses for new workers
- provision of refresher training for existing workers
- provision of training for short-term contractors or visitors at the workplace (this may not need to be as extensive as may be required for workers)
- provision of specific training for individuals who have a formal role in an emergency for example fire wardens, floor wardens, first aid officers.
- provision of training for 1st aid, fire fighting and specific rescue equipment





The emergency plan must be tested every 12 months

The objectives of testing the emergency plan for the mine operator may be to:

- safely test the emergency facilities and strategies in place at the mine that are designed to manage emergencies in all circumstances
- test the competency of people in using those facilities and implementing the strategies enhance the confidence and ability of people to respond in an emergency
- identify opportunities for improvement
- improve coordination and sharing of resources with involved emergency service organisations and other mines
- if possible, share the learning outcomes with others in the mining industry.

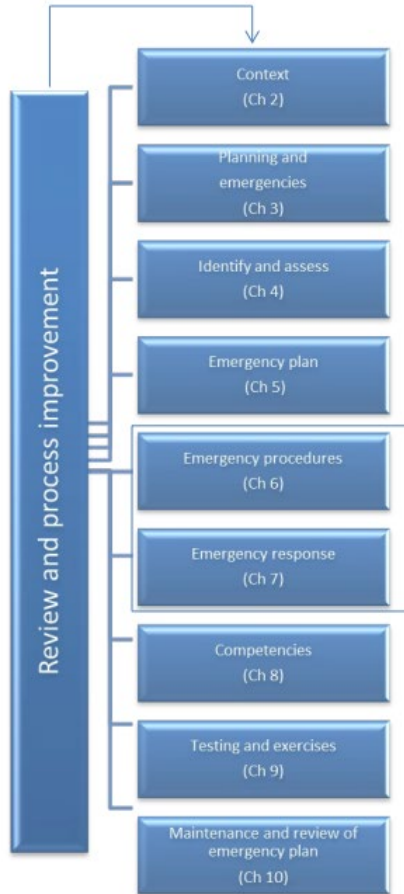
For certain exercises, the mine operator may consult with external organisations to see if they may participate, especially in the case where procedures include their involvement.

One way the mine operator may test the plan is through a scheduled exercise (a drill or simulation of an emergency) to ensure it is effective and maintained ready for any emergency situation.

For less complex mines with few employees, the exercise may consist of simple walk throughs of potential emergency scenarios with at least one other person discussing the appropriate actions to take, checking the emergency equipment and reviewing the emergency procedures.



Emergency Response
Maintenance



Once the emergency plan has been implemented and initial testing completed, the mine operator needs to maintain and review the plan.

The purpose of the review is to check the continuing suitability, adequacy and effectiveness of the emergency plan in managing emergencies and how it can be improved.

In undertaking the review, the mine operator must consult with workers and, as far as is reasonably practicable, their health and safety representatives.

Consideration should also be given to consulting the emergency services organisations that were part of developing the plan.

The mine operator must carry out audits of the emergency plan, as part of the mine safety management system

Reviews need to be undertaken at intervals of no more than **12 months**, and as soon as reasonably practicable after there has been a significant change to the mining operations





Summary the assessment findings from the compliance priority program which targeted emergency preparedness

Covered 28 quarries during the period from June 2022 to November 2022. Key findings were

- Emergency plans did not consider all legislative requirements in both the Work Health and Safety Regulation and the Work Health and Safety (Mines and Petroleum Sites) Regulation.
- Emergency plans and associated emergency procedure documents did not contain adequate document history or version control leading to confusion over what was the most recent version.
- The review frequency of the emergency plan was not in accordance with requirements in legislation.
- A lack of regular testing of emergency procedures and the subsequent review of their effectiveness
- Inadequate identification of all reasonably foreseeable emergency scenarios, This included scenarios being grouped inappropriately under one overarching scenario such as “fire” when the emergency response would be different depending upon the nature of the fire (e.g. bush fire, fire on mobile equipment, fire in office, explosives fire, etc).
- A lack of appropriate consultation with stakeholders including the primary emergency services for the area.
- A lack of training for workers in the site emergency procedures and competency in the use of emergency equipment.

NOTICE TYPE	TOTAL ISSUED	NUMBER OF MINES
s.195 prohibition notice	-	-
s.191 improvement notice	8	8
s.23 notice of concerns	16	16
Total	24	24



Any questions ?