Queensland

Mining and Quarrying Safety and Health Act 1999

Mining and Quarrying Safety and Health Regulation 2017

Current as at 1 June 2025

Queensland

Mining and Quarrying Safety and Health Regulation 2017

Contents

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Mining and Quarrying Safety and Health Regulation 2017

Chapter 1 Preliminary

1 Short title

This regulation may be cited as the *Mining and Quarrying Safety and Health Regulation 2017*.

2 Commencement

This regulation commences on 1 September 2017.

3 Definitions

The dictionary in schedule 7 defines particular words used in this regulation.

Chapter 2 Ways of achieving an acceptable level of risk

Part 1 Preliminary

4 Ways of achieving an acceptable level of risk

(1) The relevant provisions prescribe ways of achieving an acceptable level of risk at a mine in the circumstances mentioned in the provisions.

(2) However, the relevant provisions do not deal with all circumstances that expose someone to risk at a mine.

(3) A person may discharge the person's safety and health obligation in the circumstances mentioned in the relevant provisions only by following the ways prescribed.

Note—

See section 31 of the Act for the penalty for failing to discharge the obligation.

(4) In this section—

relevant provisions means—

(a) this chapter other than sections 60B(1), 60C(2), 87(5), 120(1) and (2), 131(6), 145J(1) and (3) and 145K(1) and (2); and

(b) schedule 2E other than schedule 2E, sections 6(1), 13(1), 19(1), 23(2), 24(3), 26(4) and 29(1).

Part 2 Safety and health risk management

Division 1 Risk management practices and procedures

5 Risk management practices and procedures

The site senior executive for a mine must ensure the mine's risk management practices and procedures are—

(a) established in consultation with the mine workers; and

(b) compatible with, and coordinated throughout the mine for, all operations at the mine.

Division 2 Risk management process

6 Hazard identification

(1) A person who has an obligation under the Act to manage risk at a mine must identify hazards in the person's own work and activities at the mine.

(2) The operator must ensure hazard identification for the mine's operations is done during the operations' planning and design.

(3) The site senior executive for a mine must ensure hazard identification for the mine's operations is done—

(a) when the operations start; and

(b) during the operations; and

(c) when the operations change in size, nature, complexity or another way; and

(d) for a hazard caused by a hazardous chemical or dangerous good—periodically at intervals not longer than 5 years.

(4) For hazards caused by hazardous chemicals or dangerous goods, the site senior executive for a mine must ensure the identification includes the following—

(a) hazardous chemicals or dangerous goods being processed or used for processing;

(b) hazardous chemicals or dangerous goods that are a product, by-product or waste product of operations;

(c) hazardous chemicals or dangerous goods occurring in—

(i) the natural environment; or

(ii) plant or facilities; or

(iii) energy sources.

7 Risk analysis

(1) A person who has an obligation under the Act to manage risk at a mine must analyse risk in the person's own work and activities to decide whether the risk is at an acceptable level.

(2) The person must have regard to the following in analysing the risk—

(a) the results of hazard identification, risk monitoring and incident investigations carried out for the mine;

(b) the work environment and work methods for the mine's operations;

(c) the interaction of hazards present at the mine;

(d) the effectiveness and reliability of hazard controls in use at the mine;

(e) other reasonably available relevant information and data from, and practices in, other industries and mining operations.

8 Risk reduction

(1) A person who has an obligation under the Act to manage risk at a mine must, as far as reasonably practicable, apply hazard controls in the following order—

(a) elimination of the hazard;

(b) substitution with a lesser hazard;

(c) separation of persons from the hazard;

(d) engineering controls;

Examples—

1 using fans and ducting to remove dust

2 using guards on conveyors

(e) administrative controls;

Examples—

1 a restriction on the time a worker is exposed to a hazard

2 a procedure or standard work instruction

(f) personal protective equipment.

(2) The site senior executive for a mine must ensure hazard controls used to reduce risk in the mine's work and local environments are appropriate having regard to the following—

(a) the interaction of hazards present in the environments;

(b) the effectiveness and reliability of the controls;

(c) other reasonably available relevant information and data from, and practices in, other industries and mining operations.

9 Risk monitoring

(1) A person who has an obligation under the Act to manage risk at a mine must monitor risk in the person's own work and activities at the mine.

(2) The site senior executive for a mine must ensure risk in the mine's work and local environments caused by the mine's operations is monitored—

(a) when the operations start; and

(b) at appropriate intervals or stages during operations at the mine; and

(c) when the mine's risk management practices or procedures change significantly.

(3) Monitoring must include the following things—

(a) the occurrence of incidents, injuries and ill health;

(b) the level of hazards present in the mine's work environment;

(c) for monitoring under subsection (2)—the level of hazards from the mine's operations present in the mine's local environment.

(4) If it is appropriate, having regard to the nature and level of a hazard present in the work environment, the monitoring must include 1 or more of the following things—

(a) personal monitoring to decide a worker's level of exposure to the hazard;

Example—

monitoring a worker using a dosimeter or other instrument to measure the worker's level of exposure to noise

(b) self-monitoring to detect effects of the hazard;

Example—

self-recognition of physical symptoms of heat stress or fatigue

(c) biological monitoring to decide a worker's level of exposure to the hazard;

Example—

biological monitoring to determine a worker's blood lead level

(d) health surveillance under schedule 2E.

Division 3 Records about risk management

10 Risk management record

(1) This section applies to a risk management process carried out at a mine—

(a) because the process is essential for managing risk from a hazard that is present, or is likely to be present in proposed operations, at the mine; or

Example—

a risk management process carried out under section 32

(b) under—

(i) a guideline; or

(ii) a directive given by an inspector or inspection officer under part 9 of the Act.

(2) The site senior executive for the mine must ensure a record of the process is made containing the following details—

(a) the names of the persons involved in the risk assessment and their respective positions in the mine's management structure;

(b) a description of the hazard to which the process relates;

(c) the method used for assessing the likelihood and consequences of the risk;

(d) the controls proposed to reduce the risk.

(3) The site senior executive for the mine must ensure the record is kept at the mine until the hazard to which the process relates is no longer present at the mine.

11 Risk monitoring record

(1) The site senior executive for a mine must ensure a record of monitoring carried out under section 9(2) is made and kept for the following period—

(a) for a hazard with a cumulative or delayed effect—30 years;

Example—

silica, noise or vibration

(b) for another hazard—7 years.

(2) If the mine ceases operations in the period the record is required to be kept under subsection (1), the site senior executive must ask for, and comply with, the CEO's directions about the record's storage.

Part 2A Safety and health fee

11A Definitions for part

In this part—

reporting period, for a mine, means—

(a) if the responsible person for the mine chooses under section 11DA(2) to give a safety and health census for the mine for a financial year—the financial year; or

(b) otherwise—each quarter.

responsible person, for a mine, means the responsible person for the mine within the meaning of section 11B.

safety and health census see section 11D(1).

safety and health fee see section 11C(1).

11B Meaning of *responsible person*

(1) A person is the ***responsible person*** for a mine if the person is—

(a) for a mine operated under a mining tenure, other than a mining tenure that is a prospecting permit or mining claim—

(i) if the operator for the mine is an individual—the holder of the mining tenure for the mine; or

(ii) if the operator for the mine is a corporation—the operator for the mine; or

(b) for a quarry—the operator for the mine; or

(c) for a place that is a mine under section 9(1)(c) of the Act—the person in control of the mine.

(2) However, if the mining tenure mentioned in subsection (1)(a)(i) is held by more than 1 person, for the purpose of giving or receiving notices under this part, including for giving a safety and health census under section 11D, the responsible person for the mine is—

(a) if a person has been specified under the *Mineral Resources Act 1989* as the person on whom any notice may be served on behalf of the holders of the mining tenure—the person specified; or

Note—

See the *Mineral Resources Act 1989*, sections 61(1)(c), 133(c), 183(1)(c) and 245(1)(c).

(b) otherwise—any person who is a holder of the mining tenure.

11C Payment of safety and health fee

(1) The responsible person for a mine must pay a fee (a ***safety and health fee***) for each reporting period to cover the cost of activities carried out for the purposes of safety and health for operations.

(2) The amount of the safety and health fee for a reporting period for a mine is stated in schedule 6, part 2.

(3) The amount of the safety and health fee for a reporting period for a mine must be worked out using information included in the safety and health census given to the CEO by the responsible person for the mine under section 11D for the reporting period.

(4) Subsection (5) applies if the responsible person for the mine gives the CEO a safety and health census under section 11D for a reporting period for the mine.

(5) The CEO must give the responsible person for the mine an invoice for the amount of the safety and health fee for the reporting period for the mine—

(a) if the reporting period is a financial year—before 30 August of the year; or

(b) if the reporting period is a quarter ending on 30 September of a year—before 30 November of the year; or

(c) if the reporting period is a quarter ending on 31 December of a year—before 1 March of the following year; or

(d) if the reporting period is a quarter ending on 31 March of a year—before 31 May of the year; or

(e) if the reporting period is a quarter ending on 30 June of a year—before 30 August of the year.

(6) The invoice must state a day for payment that is at least 30 days after the day the CEO gives the responsible person for the mine the invoice.

(7) The responsible person for the mine must pay the safety and health fee for the reporting period on or before the day for payment stated in the invoice.

Maximum penalty—100 penalty units.

(8) Subsection (5) does not apply if the CEO reasonably believes, based on information available to the CEO, that—

(a) a safety and health census received is incomplete or contains information that is incorrect; or

Note—

See section 11E.

(b) no safety and health fee for the reporting period for the mine is payable under schedule 6, part 2.

(9) Subsection (10) applies if—

(a) the responsible person for a mine gives the CEO a safety and health census for a reporting period for the mine after the end of the period within which the census was required to be given under section 11D; and

(b) the CEO has not given the responsible person for the mine a notice mentioned in section 11E(2) relating to the census.

(10) The CEO must give the responsible person for the mine an invoice for the amount of the safety and health fee for the reporting period for the mine within 40 days after receiving the census.

(11) The CEO's failure to give an invoice within a period mentioned in subsection (5) or (10) does not affect the validity of an invoice given under this section.

11D Safety and health census to be given at the end of each reporting period

(1) The responsible person for a mine must give the CEO, within 20 days after the end of each reporting period, a notice (a ***safety and health census***) stating the number of workers working at the mine during the reporting period.

Maximum penalty—100 penalty units.

(2) Despite subsection (1), the responsible person may give the safety and health census after the 20-day period mentioned in the subsection ends if, before the period ends—

(a) the responsible person applies to the CEO in writing to extend the period to give the safety and health census; and

(b) the CEO gives the responsible person a notice stating that the responsible person may give the safety and health census before the end of a day stated in the notice for that purpose.

(3) If the responsible person is given notice under subsection (2)(b), the responsible person must give the CEO the safety and health census before the end of the day stated in the notice for giving the census.

Maximum penalty—100 penalty units.

(4) The safety and health census must be in the approved form.

11DA Reporting period for mine with 5 or fewer workers

(1) This section applies if the number of workers working at a mine is 5 or fewer.

(2) Subject to subsection (6), the responsible person for the mine may choose to give a safety and health census for the mine for a financial year, rather than for each quarter of a financial year.

(3) The responsible person for the mine may choose to give a safety and health census for a financial year regardless of

whether the person has already given a safety and health census for the mine for an earlier quarter of the financial year.

(4) Subsection (5) applies if the responsible person for the mine—

(a) chooses to give a safety and health census for the mine for a financial year; and

(b) has already paid a safety and health fee for the mine for an earlier quarter of the financial year.

(5) The CEO must credit the amount of the fee already paid to the amount of the safety and health fee payable for the mine using the safety and health census for the financial year.

(6) The CEO may, by written notice to the responsible person for the mine, require the person to give a safety and health census for the mine for each quarter of the current financial year and subsequent financial years.

(7) The CEO may cancel the requirement under subsection (6) by subsequent written notice given to the responsible person for the mine.

11DB Effect of notice or increase in worker numbers

(1) This section applies if—

(a) the responsible person for a mine has chosen to give a safety and health census for the mine for a financial year under section 11DA(2); and

(b) during the financial year—

(i) the CEO gives the responsible person a notice under section 11DA(6) requiring a safety and health census for the mine for each quarter of the financial year; or

(ii) the number of workers working at the mine increases to more than 5.

(2) Despite section 11A, definition *reporting period*, the reporting period for the mine is each quarter of the financial year.

(3) The responsible person must give the CEO a safety and health census for the mine for the current quarter and each earlier quarter of the financial year, not previously given to the CEO, on or before the required day.

(4) Section 11D applies in relation to a safety and health census mentioned in subsection (3)—

(a) as if the reference in section 11D(1) to within 20 days after the end of each reporting period were a reference to on or before the required day; and

(b) with any other necessary changes.

(5) Section 11F applies in relation to a safety and health census mentioned in subsection (3)—

(a) as if the reference in section 11F(1)(b) to the day that is 21 days after the end of the reporting period were a reference to the day after the required day; and

(b) with any other necessary changes.

(6) Subsection (2) stops applying if the requirement mentioned in subsection (1)(b)(i) is cancelled under section 11DA(7).

(7) If subsection (1)(b)(ii) applies, the responsible person for the mine may not choose under section 11DA(2) to give a safety and health census for the mine for the financial year, even if the number of workers decreases to 5 or fewer.

(8) In this section—

required day means—

(a) if the CEO has stated a day by which a safety and health census must be given in a notice under section 11DA(6)—the day stated in the notice; or

(b) otherwise—the day that is 20 days after the end of the current quarter.

11DC Records of information included in safety and health census

(1) This section applies to a responsible person for a mine who is required to give the CEO a safety and health census.

(2) The responsible person must keep records enabling the accuracy of the information required to be included in the safety and health census to be verified.

Maximum penalty—100 penalty units.

(3) Without limiting subsection (2), the responsible person must keep records enabling the accuracy of the following information required to be included in the safety and health census to be verified—

(a) the number of workers working at the mine;

(b) the number of full-time workers, and non full-time workers, working at the mine;

(c) the number of hours worked by workers working at the mine.

(4) The responsible person must keep the records in a way that—

(a) enables the responsible person to give the CEO the records within 14 days after the CEO asks for the records; and

(b) enables the CEO to easily verify the accuracy of the information included in the safety and health census.

Maximum penalty—100 penalty units.

(5) If the CEO asks the responsible person to give the CEO the records, the responsible person must give the CEO the records—

(a) within 14 days after the CEO asks for the records; or

(b) if the CEO agrees in writing with the responsible person to another period—within the other period.

Maximum penalty—100 penalty units.

(6) The responsible person must keep the records for 7 years after the day the responsible person is required to give the CEO the safety and health census.

Maximum penalty—100 penalty units.

11E Notice may be given if safety and health census not given or is inadequate

(1) This section applies if the CEO reasonably believes, based on information available to the CEO, the responsible person for a mine—

(a) has not given a safety and health census under section 11D; or

(b) has given an incomplete safety and health census; or

(c) has given a safety and health census containing information that is incorrect.

(2) The CEO may give the responsible person a notice—

(a) stating the following information—

(i) the ground mentioned in subsection (1)(a), (b) or (c) on which the CEO reasonably believes this section applies in relation to the responsible person;

(ii) if the ground is the ground mentioned in subsection (1)(c)—the information the CEO reasonably believes is incorrect;

(iii) the amount of the safety and health fee the CEO reasonably believes is payable by the responsible person for the mine;

(iv) the facts and circumstances forming the basis for the beliefs mentioned in subparagraphs (i) to (iii); and

(b) inviting the responsible person to give the CEO, within the reasonable period stated in the notice, a written submission about why the responsible person for the

mine should not be invoiced for the amount mentioned in paragraph (a)(iii).

(3) The CEO must consider any submissions given by the responsible person within the period stated in the notice.

(4) If, after complying with subsection (3), the CEO is satisfied an amount of a safety and health fee is payable by the responsible person, the CEO may give the responsible person an invoice for the fee.

(5) Subsection (4) applies even if the responsible person has already been given an invoice for, or paid, a different amount for the fee.

(6) The responsible person must pay the amount of the safety and health fee stated in the invoice within 30 days after receiving the invoice.

11F Fee for late safety and health census

(1) This section applies if the responsible person for a mine does not give a safety and health census for a reporting period before either of the following days—

(a) if the CEO has given the responsible person a notice mentioned in section 11D(2)(b)—the day after the day stated in the notice for giving the safety and health census;

(b) otherwise—the day that is 21 days after the end of the reporting period.

(2) The obligation under section 11D to give a safety and health census continues to apply until that section is complied with.

(3) A late fee applies and is payable as well as any penalty imposed under section 11D(1) or (3).

(4) The amount of the late fee is stated in schedule 6, part 2.

11G Interest payable on unpaid fees

(1) This section applies if the responsible person for a mine does not pay an amount of a safety and health fee under section 11C or 11E.

(2) The responsible person must pay interest on the unpaid amount at the rate of 15% a year.

(3) The interest must be calculated as simple interest.

(4) The interest payable on the unpaid amount may be recovered by the CEO as a debt.

11H Refund of overpayment of safety and health fee

(1) If a safety and health fee is overpaid by the responsible person for a mine, the CEO must refund the amount of the overpayment to the responsible person.

(2) No interest is payable on the amount refunded.

Part 3 Accidents, incidents, diseases and injuries

12 First aid and medical treatment

The site senior executive for a mine must ensure a person who is injured, or whose health is affected, at the mine is given appropriate first aid or medical treatment.

12B Diseases that must be reported—Act, s 195AA

For section 195AA(5) of the Act, definition *reportable disease*, a disease mentioned in schedule 1 is prescribed.

13 Types of serious accidents and high potential incidents—Act, s 197

For section 197(1) of the Act, a type of serious accident or high potential incident mentioned in schedule 2 is prescribed.

14 Reporting accidents and high potential incidents

A mine's safety and health management system must include procedures for workers reporting accidents and high potential incidents to the site senior executive for the mine.

15 Site senior executive's investigation of incidents

(1) In investigating the cause of an incident at a mine, the site senior executive for the mine must use techniques that—

(a) are appropriate for—

(i) the nature of the incident; and

(ii) the nature and level of the hazards involved; and

(b) are integrated with the risk management process; and

(c) involve appropriate participation by persons involved in the incident.

(2) A mine's safety and health management system must provide for documenting the techniques that must be used for investigating incidents.

16 Giving inspector details of accidents and high potential incidents

(1) This section applies if an accident or high potential incident happens at a mine.

(2) If requested by an inspector, the site senior executive for the mine must give the inspector a plan, of the type and at the scale required by the inspector, or photographs, showing relevant details about the accident or incident.

Part 4 Electrical

Note—

See also part 10.

Division 1 Controlling electrical work

17 Appointment of persons to control electrical work

If electrical work is, or is proposed to be, undertaken in operations at a mine, the site senior executive for the mine must appoint, in writing, 1 or more persons to control the electrical work.

18 Acknowledgement of appointment

(1) A person appointed to control electrical work at a mine must acknowledge the appointment by notice given to the site senior executive for the mine.

(2) For section 59(1)(e) of the Act, the notice is prescribed as a matter that must be included in the mine record.

Division 2 Notice of introduction or disconnection of electricity

19 Duty to give notice of proposed introduction or disconnection of electricity

Before an electricity supply exceeding 75kW capacity is introduced to, or permanently disconnected from, a mine, the site senior executive for the mine must notify an inspector of the proposed introduction or disconnection.

Division 3 Operating electrical equipment

20 Electrical plans and data

(1) The site senior executive for a mine must ensure the following are kept at the mine for the safe operation of each electrical installation at the mine—

(a) up-to-date plans identifying and showing the location of electrical installations at the mine, including buried electrical services;

(b) electrical safety data including equipment ratings and protection settings for circuit protection devices.

(2) In this section—

protection setting, for a circuit protection device, means the current, voltage or operating time at which the device is set to trip when the device detects an electrical fault in the circuit.

21 Working on electrical equipment that has explosion-protection

(1) A person must not carry out work on electrical equipment that has explosion-protection, unless the person has the competencies to carry out the work.

(2) In this section—

explosion-protection means a technique of protection applied to the design of electrical equipment, components and systems to prevent the electrical energy from becoming an ignition source in the presence of flammable vapours or gases or combustible dusts in hazardous areas.

Division 4 Control and protection for electrical equipment

22 General

The operator or site senior executive must ensure—

(a) switchgear used at the mine allows for reliable circuit interruption, under fault conditions, at all points in the mine's electrical distribution system; and

(b) each electrical circuit at the mine is protected against overload, short circuit and earth fault under all operating conditions to effectively—

(i) interrupt the electricity supply; and

(ii) isolate faults.

23 Interrupting electricity supply to particular plant

The operator or site senior executive must ensure the electricity supply to the following plant at the mine is capable of interruption from an accessible position remote from the plant—

(a) a stacker, reclaimer, dredge, floating treatment plant and underground electrical installation;

(b) other plant identified by a risk assessment as needing its electricity supply to be capable of interruption from an accessible position remote from the plant to ensure an acceptable level of risk.

24 Automatic control

The operator or site senior executive must ensure—

(a) each automatic, programmable or computerised electrical control system at the mine operates safely under all operating conditions, including power supply instability or failure; and

(b) the emergency stopping systems and safety alarms at the mine remain effective if there is a fault or failure in a system mentioned in paragraph (a).

25 Earthing

The operator or site senior executive must ensure each earthing system at the mine is installed and maintained at sufficiently low impedance and has sufficient capacity to ensure—

(a) reliable operation of electrical protective systems and devices; and

(b) adequate protection against contact with conductive parts that have become live under fault conditions.

26 Earth leakage protection

(1) The operator or site senior executive must ensure the mine has earth leakage protection for each electrical circuit exceeding extra low voltage that—

(a) is in an underground mine; or

(b) is in a portable, transportable or mobile apparatus; or

(c) has an outlet for, or supplies electricity to, a trailing cable or flexible lead.

(2) Subsection (1) does not apply to the following circuits—

(a) an electrical circuit—

(i) isolated from earth; or

(ii) that uses the earth to carry all or part of the normal current of a circuit; or

(iii) for which continuity of supply is necessary to maintain safety;

(b) a control or lighting circuit of less than 120V a.c.

26A Basic safety principle

(1) A person carrying out or preparing to carry out work on or near electrical equipment must treat each exposed electrical conductor as live until the equipment is—

(a) isolated and proved to be de-energised; and

(b) if the equipment is a high voltage conductor—earthed.

(2) In this section—

electrical equipment means an item used for generating, converting, transmitting, distributing or using electrical energy.

high voltage means a voltage of more than 1200V.

27 Isolation facilities

(1) The operator or site senior executive must ensure each item of electrical equipment used at the mine has a full current isolation facility in a location that is easily accessible by a person required to carry out the isolation.

(2) The operator or site senior executive must also ensure the isolator is—

(a) clearly marked or labelled as the isolator for the plant; and

(b) compatible with the mine's isolation and lock-out procedures.

28 Protection for transportable and mobile equipment

(1) This section applies if transportable or mobile equipment used at a mine is supplied with electricity exceeding extra low voltage by a trailing or reeling cable, other than a low voltage cable that has—

(a) no joining plugs or sockets; and

(b) earth leakage protection with a rated tripping current of not more than 30mA; and

(c) individually screened power conductors.

(2) The site senior executive for the mine must ensure the equipment has earth continuity protection to—

(a) isolate the electricity supply to the equipment immediately after the earthing circuit is broken or the cable is disconnected or decoupled; and

(b) prevent a person inadvertently contacting live parts of the equipment.

29 Protection from live parts of electrical equipment

The operator or site senior executive must ensure electrical equipment exceeding extra low voltage used at the mine has a device or feature for preventing a person inadvertently contacting live parts of the equipment.

Example of a device or feature—

an enclosure, shield, insulation, interlocking device or automatic disconnection device

30 Prospective touch voltage

(1) The operator or site senior executive must ensure the prospective touch voltage at the mine is limited to a level necessary to achieve an acceptable level of risk.

(2) In this section—

prospective touch voltage means the highest voltage a person is liable to be exposed to if the person contacts simultaneously accessible parts in an electrical installation during an electrical fault.

31 Voltage rise

The operator or site senior executive must ensure voltage rise in an electrical installation at the mine caused by lightning strike, static electricity, voltage surges and other transient voltages is limited to a level necessary to achieve an

acceptable level of risk, having regard to the ways stated in a guideline for limiting voltage rise.

Part 5 Emergencies

32 Risk management for emergencies

(1) The site senior executive for a mine must ensure the risk management process mentioned in part 2, division 2 is carried out for reasonably foreseeable emergencies at the mine to decide the resources, facilities and procedures necessary to—

(a) prepare the mine for managing and controlling the hazards causing the emergencies; and

(b) detect the emergencies; and

(c) respond appropriately to the emergencies.

(2) The resources, facilities and procedures considered in the risk management process must deal with the following matters—

(a) coordinating control of emergencies;

(b) giving notice, information and warnings about emergencies;

(c) the immediate availability of trained rescue persons or emergency services;

(d) locating, and accounting for, persons;

(e) controlling or re-establishing control of the hazard causing the emergency;

(f) isolating the area of the incident, including, for example, by cutting off the supply of energy to the area;

(g) emergency egress and evacuation, including refuges;

(h) first aid and persons trained in giving first aid;

(i) liaising with, and using, local or state emergency services;

(j) backup services and facilities for the emergency.

33 Emergency preparedness—general

The site senior executive for a mine must ensure the mine has the resources and facilities decided as necessary under section 32 for the mine's preparedness for reasonably foreseeable emergencies.

35 Emergency response plan

(1) A mine's safety and health management system must include an emergency response plan developed having regard to the risk management process carried out under section 32.

(2) The site senior executive for a mine that is not required to have a safety and health management system under section 38(3) or 39(2) of the Act must ensure the mine has an emergency response plan developed having regard to the risk management process carried out under section 32.

(3) The operator of a mine mentioned in subsection (2) must provide adequate resources at the mine to ensure the effectiveness and implementation of the emergency response plan.

Note—

See section 38(1)(f) of the Act for the operator's obligation about resources for a mine that is required to have a safety and health management system.

36 Evacuation

(1) This section applies to a mine if resources, facilities or procedures for evacuating persons are decided as necessary for the mine under section 32.

(2) The site senior executive for the mine must ensure the mine has the following things as are appropriate, having regard to the nature and complexity of the mine's operations—

(a) a normal way of access;

(b) signed escape ways independent of the normal way of access;

(c) assembly areas;

(d) equipment and training for self-rescue;

(e) resources, facilities and procedures for tracing persons involved in an incident at the mine;

(f) a way of knowing the names and approximate location of all persons underground.

(3) If an emergency happens at the mine and creates, or is likely to create, an unacceptable level of risk, the site senior executive for the mine must ensure—

(a) persons who are, or may be, harmed or affected as a result of the emergency are evacuated from the area of unacceptable risk; and

(b) persons, other than those required to handle the emergency, are prevented from entering the area.

36A Escapeways from underground

(1) The underground mine manager or, if there is no underground mine manager, the site senior executive for a mine, must ensure that, before stoping operations start at the mine, the mine has at least 2 trafficable egresses (the ***escapeways***), complying with subsection (2), accessible from all stoping operations to the surface.

(2) The escapeways must—

(a) be located strategically to manage risk; and

(b) allow for the passage of rescue persons and rescue equipment, including stretchers; and

(c) be separated in a way that an event happening in 1 of the escapeways would not prevent persons escaping through the other escapeway.

(5) The underground mine manager or, if there is no underground mine manager, the site senior executive for the mine, must ensure each of the escapeways is—

(a) maintained in a safe, accessible and usable condition; and

(b) adequately marked or signposted, having regard to the potential for reduced visibility in an emergency.

37 Refuges

(1) This section applies to a mine if refuges for emergencies are decided as necessary for the mine under section 32.

(2) The site senior executive for the mine must ensure the mine has the following things as are appropriate, having regard to the nature and complexity of the mine's operations—

(a) fresh air bases;

(b) self-contained refuge chambers;

(c) secure areas where persons can be protected against the hazard causing the incident.

(3) A person must seek refuge until rescued if—

(a) an emergency happens at a mine and creates, or is likely to create, an unacceptable level of risk for the person; and

(b) the person can not be evacuated promptly from the area of unacceptable risk.

38 Rescue

(1) This section applies to a mine if facilities or procedures for rescuing persons in emergencies are decided as necessary for the mine under section 32.

(2) The site senior executive for the mine must ensure the mine has the following things as are appropriate, having regard to the nature and complexity of the mine's operations—

(a) facilities or procedures for—

(i) persons, and using equipment, on-site; and

(ii) liaising with, and using, local or state emergency services;

(b) if the nature or remoteness of the mine's operations limit the effectiveness of local or state emergency services—

(i) the availability of suitably trained site-based persons and suitable rescue equipment; and

(ii) facilities and procedures for liaising with, and using, persons and equipment from other operations and agencies for carrying out a rescue.

(3) The site senior executive must ensure reasonable action is taken to rescue persons from an area of unacceptable risk, or a refuge, at the mine.

(4) In deciding what action is reasonable for subsection (3), the site senior executive must have regard to the risk to persons in carrying out the rescue.

39 Resources for first aid and medical treatment

(1) This section applies to a mine if facilities or procedures for first aid or medical treatment for emergencies are decided to be necessary for the mine under a risk management process carried out under section 32.

(2) The site senior executive must, if it is appropriate having regard to the nature and complexity of the mine's operations, ensure the mine has the following things—

(a) adequate supplies of first aid and trauma kits;

(b) basic life support training for workers;

(c) equipment appropriate for controlling the on-site hazards identified by the risk management process;

(d) facilities and procedures for liaising with, and using, local and state emergency services;

(e) if the nature or remoteness of the mine's operations limit the effectiveness of local or state emergency services—

(i) the availability of suitably trained site-based personnel and suitable first aid and medical equipment; and

(ii) facilities and procedures for evacuating persons from the site for medical treatment.

40 Maintaining and improving emergency response capability

(1) The site senior executive for a mine must ensure the mine's emergency response facilities and equipment are inspected regularly and maintained in a fully operational condition.

(2) The site senior executive for a mine must also ensure the mine's emergency response plan is—

(a) tested and reviewed as often as appropriate, having regard to the nature and complexity of the mine's operations, but at least once a year; and

(b) amended, if necessary, to achieve an acceptable level of risk.

41 Mine rescue plan

(1) The site senior executive for a mine must ensure the mine has a current rescue plan showing the mine's emergency facilities, including relevant services reticulation and communication arrangements.

(2) For an underground mine, the plan must also show the following things—

(a) the direction and quantity of the ventilating airflow;

(b) the location of ventilation controls.

(3) In an emergency, the site senior executive must make available to the persons carrying out the rescue a sufficient number of copies of the plan at a scale suitable for use by the persons in the emergency.

Part 6 Facilities and processes

42 Dredging

If a dredge is used at a mine, the site senior executive for the mine must ensure the mine has a written procedure for the following things—

(a) ways of preventing—

(i) the dredge capsizing or sinking; and

(ii) persons falling overboard;

(b) emergency rescue procedures for an event mentioned in paragraph (a).

43 Excavations

(1) If an excavation exists on a mine site, the site senior executive for the mine must ensure appropriate facilities are provided to minimise the risk to persons from falling into the excavation.

Example of appropriate facilities—

a fence, barricade, bund wall or signage

(2) In this section—

excavation includes a shaft, stope, pass, winze, mine or quarry face, trench, costean and pit.

44 Ground control

(1) A person who has an obligation under the Act to manage risk in relation to ground control at a mine during the mine's design, operation or abandonment must ensure appropriate measures are taken to prevent or control local and area failures in ground integrity.

(2) The person must have regard to the following matters in deciding the appropriate measures—

(a) local geological structure and rock properties and their influence on rock stability;

(b) the size and geometry of the mine's openings;

(c) the presence of previously excavated or abandoned underground workings;

(d) water inflow, drainage patterns, groundwater regimes and mine dewatering procedures and their influence on rock stability over time;

(e) the analysis and interpretation of relevant geotechnical data, including the monitoring of openings and excavations.

(3) The measures must include the following things—

(a) the minimisation of rock damage, from blasting, at the excavation perimeter;

(b) the use of appropriate equipment and procedures for scaling;

(c) the proper design, installation and quality control of rock support;

(d) the timing of ground support to take account of rock conditions and behaviour.

45 Mine layout, design and construction

A person who has an obligation under the Act to manage risk at a mine in relation to mine layout, design and construction must ensure the layout, design and construction is carried out having regard to the following matters—

(a) relevant geological, geotechnical, meteorological and topographical data;

(b) other relevant information, including information about the following things—

(i) access and travel-ways;

(ii) accommodation;

(iii) extraction processes and facilities;

(iv) fixed emergency facilities;

(v) ground control;

(vi) hazardous chemicals at the mine;

(vii) noise and dust;

(viii) stockpiles, dumps, tailings dams;

(ix) treatment processes and facilities;

(x) underground and surface water;

(xi) vehicle interaction;

(xii) ventilation.

46 Mine roads

(1) A person who has an obligation under the Act to manage risk at a mine in relation to the design and construction of the mine's roads must ensure the specification for the design and construction enables the safe movement of vehicles about the mine.

(2) The specification must have regard to the particular conditions at the mine, including the following matters—

(a) the characteristics of the mine vehicles;

(b) the types of materials used for road construction;

(c) the mine's operations.

47 Rail haulage

If rail mounted locomotive haulage is used at a mine, the site senior executive for the mine must ensure the mine has a written procedure for its safe operation.

48 Ventilation

A person who has an obligation under the Act to manage risk in relation to ventilation at a mine must ensure appropriate measures are taken to ensure the ventilating air in a place

where a person may be present at the mine is of a sufficient volume, velocity and quality to achieve a healthy atmosphere.

49 Working at heights

The site senior executive for a mine must ensure that, when a person works at a height of more than 2.4m, appropriate facilities are provided to minimise the risk to persons from falling.

Example of appropriate facilities—

a fence, barricade, scaffold, hand rail, bund wall, safety harness, safety restraint or fall arrest equipment

Part 7 Hazardous chemicals and dangerous goods

Division 1 Provisions applying to all hazardous chemicals and dangerous goods

Subdivision 1 Preliminary

49A Definitions for division

In this division—

ADG Code means the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition, approved by the Transport and Infrastructure Council.

Note—

The ADG Code is accessible at www.ntc.gov.au.

dangerous goods see section 51.

GHS means the Globally Harmonised System of Classification and Labelling of Chemicals, Third revised

edition, published by the United Nations as modified under schedule 2A.

Note—

The schedule 2A tables replace some tables in the GHS.

hazardous chemical see section 50.

research chemical means a substance or mixture that—

(a) is manufactured in a laboratory for genuine research; and

(b) is not for use or supply for a purpose other than analysis or genuine research.

safety data sheet means—

(a) for a hazardous chemical that is not a research chemical, waste product or sample for analysis, or for dangerous goods—a document that complies with schedule 2B, section 1; or

(b) for a hazardous chemical that is a research chemical, waste product or sample for analysis—a document that complies with schedule 2B, section 2.

Transport and Infrastructure Council means the council of Commonwealth, New Zealand and State Ministers, established on 11 June 1993 and known as the Transport and Infrastructure Council, but constituted so that it consists of only 1 Minister representing each of the Commonwealth and the States.

Note—

The Transport and Infrastructure Council was previously known as the Australian Transport Council.

50 Meaning of *hazardous chemical*

A ***hazardous chemical*** is a substance, mixture or article that satisfies the criteria for a hazard class in the GHS (including a classification mentioned in schedule 2A), but does not include a substance, mixture or article that satisfies the criteria solely for 1 of the following hazard classes—

(a) acute toxicity—oral—category 5;

(b) acute toxicity—dermal—category 5;

(c) acute toxicity—inhalation—category 5;

(d) skin corrosion/irritation—category 3;

(e) serious eye damage/eye irritation—category 2B;

(f) aspiration hazard—category 2;

(g) flammable gas—category 2;

(h) acute hazard to the aquatic environment—category 1, 2 or 3;

(i) chronic hazard to the aquatic environment—category 1, 2, 3 or 4;

(j) hazardous to the ozone layer.

Note—

The schedule 2A tables replace some tables in the GHS.

51 Meaning of *dangerous goods*

Dangerous goods means anything defined under the ADG Code as—

(a) dangerous goods; or

(b) goods too dangerous to be transported.

Subdivision 2 Information about hazardous chemicals and dangerous goods

52 Register of hazardous chemicals and dangerous goods

(1) The site senior executive for a mine must ensure the following things are recorded in a register at the mine—

(a) a hazardous chemical used, handled, stored or produced at the mine;

(b) dangerous goods used, handled, stored or produced at the mine;

(c) the current safety data sheet for a hazardous chemical mentioned in paragraph (a) or dangerous goods mentioned in paragraph (b).

(2) The site senior executive must ensure the register is readily accessible by each worker required to use, handle, store or produce a hazardous chemical, or dangerous goods, at the mine.

52A Manufacturers, importers and suppliers must mark or label substances

(1) This section applies to a manufacturer, importer or supplier of a substance for use at a mine as mentioned in section 43(2)(a) of the Act.

(2) Without limiting section 43(2)(a) of the Act, the manufacturer, importer or supplier must ensure the substance is correctly marked or labelled when the substance is provided for use at the mine.

(3) A substance is ***correctly marked or labelled*** if the mark or label complies with applicable requirements relating to the mark or label stated in—

(a) the GHS; or

(b) a guideline; or

(c) the ADG Code.

53 Labelling and giving information about hazardous chemicals and dangerous goods

(1) The site senior executive for a mine must ensure the following things are correctly marked or labelled—

(a) a hazardous chemical used, handled, stored or produced at the mine;

(b) dangerous goods used, handled, stored or produced at the mine;

(c) any thing containing, or being used to transport, a hazardous chemical mentioned in paragraph (a) or dangerous goods mentioned in paragraph (b).

(2) A hazardous chemical, dangerous goods, or a thing mentioned in subsection (1)(c) is ***correctly marked or labelled*** if a mark or label—

(a) warns persons of the presence of the chemical or goods; and

(b) identifies the chemical or goods; and

(c) to the extent necessary for managing risk, provides basic information about using, handling, storing, producing or transporting the chemical or goods.

(3) If it is not practicable to mark or label a hazardous chemical mentioned in subsection (1)(a), or dangerous goods mentioned in subsection (1)(b), the site senior executive must ensure a notice that gives the warning, identification and basic information mentioned in subsection (2)(c) is placed in a conspicuous place as near as practicable to the chemical or goods.

(4) Also, the site senior executive must ensure a mark, label or notice under this section complies with applicable requirements relating to the mark, label or notice stated in—

(a) the GHS; or

(b) a guideline; or

(c) the ADG Code; or

(d) AS 1345.

(5) This section does not apply in relation to a mineral or quarry material.

(6) In this section—

AS 1345 means the Australian Standard for the identification of the contents of piping, conduits and ducts as in force from

time to time under that designation (regardless of the edition or year of publication of the standard).

quarry material see the *Forestry Act 1959*, schedule 3.

Subdivision 3 Dealing with hazardous chemicals and dangerous goods

54 Selecting hazardous chemicals and dangerous goods

The site senior executive for a mine must ensure a hazardous chemical, or dangerous goods, selected for use at the mine does not create an unacceptable level of risk to a person when used, handled or stored under standard work instructions.

55 Standard work instructions for using, handling and storing hazardous chemicals and dangerous goods

(1) The site senior executive for a mine must ensure the mine has standard work instructions for using, handling or storing a hazardous chemical, or dangerous goods, at the mine.

(2) In developing a standard work instruction under subsection (1), the site senior executive must ensure regard is had to the safety data sheet for the chemical or goods.

56 Handling or storing hazardous chemicals and dangerous goods

(1) This section applies to a person who has an obligation under the Act to manage risk at a mine in relation to handling or storing a hazardous chemical or dangerous goods.

(2) The person must ensure the chemical or goods are handled or stored at the mine in a way that is appropriate to the nature of the chemical or goods, so the chemical or goods are—

(a) protected against damage and deterioration; and

(b) secured to prevent loss, misuse and theft; and

(c) for a liquid—bunded to contain spillage.

(3) In managing the risk mentioned in subsection (2), the person must have regard to—

(a) the hazardous properties of the chemical or goods; and

(b) any chemical or physical reaction between the chemical or goods and another substance or mixture, including a substance that may be generated by the reaction and that could be hazardous; and

(c) the nature of the work to be carried out with the chemical or goods; and

(d) any structure, plant or system of work—

(i) that is used in the use, handling, storage or production of the chemical or goods; or

(ii) that could interact with the chemical or goods at the mine.

57 Monitoring, and taking action about, hazardous chemicals and dangerous goods

(1) The site senior executive for a mine must ensure appropriate monitoring in relation to a hazardous chemical, or dangerous goods, at the mine is carried out to—

(a) check the location and amount of the chemical or goods on-site; and

(b) check for deterioration of the chemical or goods, or any packaging of the chemical or goods; and

(c) ensure the chemical or goods are fit for intended use; and

(d) detect leaks, spills and unintended emissions of the chemical or goods; and

(e) detect misuse, theft or other loss of the chemicals or goods.

(2) The monitoring must be carried out under any standard work instruction or other procedure that applies to the monitoring.

(3) The site senior executive for the mine must ensure a hazardous chemical is, or dangerous goods are, disposed of under section 59 if the monitoring shows—

(a) deterioration of the chemical or goods; or

(b) unfitness for use of the chemical or goods.

58 Standard work instruction for dealing with leaks and spills

(1) The site senior executive for a mine must ensure the mine has a standard work instruction for dealing with leaks and spills of a hazardous chemical, or dangerous goods, at the mine.

(2) In developing a standard work instruction under subsection (1), the site senior executive must ensure regard is had to the safety data sheet for the chemical or goods.

59 Disposal

(1) This section applies to—

(a) a hazardous chemical, or dangerous goods, at a mine if the chemical or goods are—

(i) deteriorated; or

(ii) past the use-by date; or

(iii) no longer required for use at the mine, including, for example, because the mine is to be abandoned; and

(b) a thing contaminated by a hazardous chemical, or dangerous goods, mentioned in paragraph (a).

(2) The site senior executive for the mine must ensure the chemical, goods or thing is disposed of—

(a) in accordance with—

(i) the safety data sheet for the chemical or goods; or

(ii) information provided, under section 43(2)(a) of the Act, by the manufacturer, importer or supplier of the chemical or goods; and

(b) in a way that does not create an unacceptable level of risk during operations at the mine, after the mine's operations stop or after the mine is abandoned.

(3) The site senior executive for the mine must ensure the following things are shown on the plans of the mine workings under section 58 of the Act—

(a) a permanent disposal facility for a hazardous chemical or dangerous goods;

(b) another disposal area for a hazardous chemical or dangerous goods.

Subdivision 4 Major hazard facilities

60 Meaning of *major hazard facility*

(1) A mine is a ***major hazard facility*** if—

(a) operations carried on at the mine involve, temporarily or permanently, a quantity of material (other than material in transit) exceeding the corresponding threshold or aggregate quantity for the material worked out under the major hazard facilities standard, schedule 1; and

(b) a hazardous materials emergency at the mine could pose an unacceptable level of risk to persons, property or the environment outside the mine.

(2) In this section—

combustible liquid means a combustible liquid under the flammable and combustible liquids standard.

flammable and combustible liquids standard means AS 1940 'The storage and handling of flammable and combustible liquids', as in force from time to time.

hazardous material—

1 A *hazardous material* is a substance with potential to cause harm to persons, property or the environment because of 1 or more of the following—

(a) the chemical properties of the substance;

(b) the physical properties of the substance;

(c) the biological properties of the substance.

2 Without limiting paragraph 1, *hazardous material* includes all dangerous goods, combustible liquids and chemicals.

hazardous materials emergency, at a mine, means a situation involving hazardous materials or suspected hazardous materials at the mine that includes a loss of control, or an imminent risk of loss of control, of the materials or a loss of control of anything that may impact on the materials if the loss of control causes, or the loss of control or imminent risk of loss of control has the potential to cause, material harm to persons, property or the environment.

60A Meaning of *possible major hazard facility*

(1) A mine is a ***possible major hazard facility*** if relevant operations carried on, or intended to be carried on, at the mine involve or are likely to involve, temporarily or permanently, a quantity of material (other than material in transit) exceeding the corresponding threshold or aggregate quantity for the material worked out under the major hazard facilities standard, schedule 1.

(2) In this section—

relevant operations means operations other than the preparation and use of explosives at a blast site.

60B Notifying chief inspector if mine is a major hazard facility or a possible major hazard facility

(1) The site senior executive for a mine that is a major hazard facility or possible major hazard facility must notify the chief inspector about the mine—

(a) in the approved form; and

(b) at least 6 months before the mine starts operations.

Maximum penalty—200 penalty units.

(3) Subsection (1) is not a safety and health obligation for the Act.

60C Notifying chief inspector of certain upgrades of mines

(1) This section applies to a mine, other than a mine that is a major hazard facility, if there is a change in relation to the mine involving the mine becoming a major hazard facility or a possible major hazard facility.

(2) The site senior executive for the mine must notify the chief inspector about the mine—

(a) in the approved form; and

(b) at least 6 months before the mine starts operations as an upgraded mine.

Maximum penalty—200 penalty units.

(4) Subsection (2) is not a safety and health obligation for the Act.

(5) In this section—

upgraded mine means a mine that, as a result of a change in relation to the mine, is a major hazard facility or a possible major hazard facility.

60D Notifying chief inspector of certain downgrades of mines

(1) This section applies to a mine if—

(a) under section 60B or 60C, a notification (the ***original notice***) has been given about the mine; and

(b) a change proposed in relation to the mine will result in the mine being downgraded, for at least 6 months, from its classification as a major hazard facility or possible major hazard facility stated in the original notice.

(2) The site senior executive for the mine may, in the approved form, notify the chief inspector about the change.

(3) Despite sections 60 and 60A, until the chief inspector is given a notification under subsection (2), the mine is taken to continue to be a major hazard facility or possible major hazard facility as stated in the original notice.

60E Safety and health management system for mine that is a major hazard facility

(1) The site senior executive for a mine that is a major hazard facility must ensure the mine's safety and health management system complies with—

(a) the Act and this regulation; and

(b) the national standard safety and health provisions—

(i) to the extent the provisions are consistent with the Act and this regulation; and

(ii) as if a reference in the provisions—

(A) to the relevant public authority were a reference to the chief inspector of mines; and

(B) to the operator, employer, occupier or person who has overall management and control of a major hazard facility were a reference to the site senior executive; and

(C) to the safety management system were a reference to the safety and health management system.

(2) In this section—

national standard safety and health provisions means the major hazard facilities standard, sections 6 to 13.

60F Safety report to chief inspector

(1) The site senior executive for a mine that is a major hazard facility must give a written report (a ***safety report***) to the chief inspector as required under subsection (2).

(2) The safety report must—

(a) comply with the major hazard facilities standard, section 7; and

(b) be given within 16 months after a notice, identifying the mine as a major hazard facility, is given to the chief inspector under section 60B(1) or 60C(2).

Subdivision 5 Miscellaneous

62 First aid measures and personal protective equipment

The site senior executive for a mine must ensure the mine has the first aid measures, and personal protective equipment, recommended in the safety data sheet for each hazardous chemical, or dangerous goods, at the mine.

63 Records

(1) The site senior executive for a mine must ensure a record is kept at the mine of each of the following things relating to a hazardous chemical, or dangerous goods, at the mine—

(a) quantity and location on site;

(b) date of receipt or production;

(c) use, sale or disposal, if any;

(d) deterioration or product failure, if any;

(e) leak, spill, unintended emission, misuse, theft or other loss, if any.

(2) The site senior executive must ensure a record about the disposal of a hazardous chemical, or dangerous goods, on site—

(a) is kept at the mine until the mine's operations stop; and

(b) after the mine's operations stop, is given to the CEO.

(3) The site senior executive must ensure a record under subsection (1) about a matter other than a matter mentioned in subsection (2) is kept at the mine until the hazardous chemical, or dangerous goods, to which the record relates have been used, disposed of, or removed from site.

Division 2 Explosives

Note—

See also division 1.

Subdivision 1 General

64 Persons who may handle explosives

(1) A person must not handle an explosive at a mine unless the person—

(a) is authorised in writing by the mine's site senior executive or underground mine manager (the ***authorising person***) to carry out the handling activity; or

(b) carries out the handling activity under the direct supervision of a person authorised under paragraph (a).

(2) A person may be authorised under subsection (1)(a) only if—

(a) the person holds a current shotfirer licence under the *Explosives Act 1999* that is applicable to the mine's operations; or

(b) the authorising person is satisfied the person—

(i) has the competency accepted by the committee as qualifying the person to carry out the handling activity; or

(ii) has satisfactorily completed a competency-based training program for carrying out the handling activity and is competent to carry it out.

(3) The authorisation must state the handling activities the person is authorised to carry out.

(4) For section 59(1)(e) of the Act, a copy of each authorisation given under subsection (1) is prescribed as a matter that must be included in the mine record.

(5) In this section—

handle, an explosive, includes manufacture, possess, store, transport, prepare for use, use, or dispose of, the explosive.

handling activity, for an explosive, includes the manufacture, possession, storage, transportation, preparation for use, use, or disposal, of the explosive.

65 Selecting explosives

A person who has an obligation under the Act to manage risk at a mine in relation to selecting explosives for use at the mine must ensure the explosives are—

(a) stable; and

(b) fit for their intended use; and

(c) as insensitive as reasonably practicable to shock, sparks, friction and the environment in which they will be stored, transported and used; and

(d) as far as reasonably practicable, simple to store, use, transport and control.

66 Warning about explosives

(1) If explosives are used at a mine, the site senior executive for the mine must ensure—

(a) suitable signs are in place to warn of the explosives' presence; and

(b) vehicles carrying explosives at the mine are easily identified other than by signs.

Example of identification other than a sign—

a flashing light of a distinctive colour

(2) The site senior executive must ensure the signs and other methods of identification are suitable for each person at the mine to readily identify that explosives are present or being transported.

67 Storing, transporting, using and disposing of explosives

(1) A mine's safety and health management system must provide for—

(a) the safe and secure storage and transport of explosives at the mine; and

(b) the safe use and disposal of the explosives.

(2) However, if the mine is not required to have a safety and health management system under the Act, the site senior executive for the mine must ensure the mine has a procedure or standard work instruction for the matters mentioned in subsection (1)(a) and (b).

68 Mine vehicles and equipment used for manufacturing, storing and transporting explosives

(1) The site senior executive for a mine must ensure mine vehicles and equipment used to manufacture, store or transport explosives at the mine are equipped, maintained and inspected to manage the risk of fire or explosion.

(2) The site senior executive for a mine must also ensure mine vehicles and equipment used to manufacture, store or transport explosives at the mine are—

(a) in sound mechanical condition and repair; and

(b) designed, maintained and used in a way that protects the explosives against friction, heat, incompatible materials, pressure, shock, sparks and extraneous electricity; and

(c) designed and maintained to provide adequate segregation of detonators from other explosives during manufacture, storage or transport.

(3) The site senior executive for a mine must also ensure that, before a mine vehicle or equipment that has been used to manufacture, store or transport explosives at the mine is repaired on-site or sent off-site for repair, the vehicle or equipment is—

(a) thoroughly cleaned; and

(b) inspected by a person who has the necessary competence; and

(c) certified to be free of explosive residues.

(4) In this section—

Australian explosives code means the third edition of the 'Australian Code for the Transport of Explosives by Road and Rail' approved by the Workplace Relations Ministers' Council.

mine vehicle means a vehicle at a mine, other than—

(a) a road vehicle or vehicle as defined under the ADG Code; or

(b) a special vehicle or vehicle as defined under the Australian explosives code.

Subdivision 2 Blasting procedures

69 Identifying interaction hazards before explosives are used

(1) The site senior executive for a mine must ensure that, before explosives are used at the mine, a risk management process is carried out to identify the hazards that may arise or interact from the use.

(2) Without limiting subsection (1), the process must consider the following matters—

(a) ground at elevated temperature;

(b) radiation;

(c) reactive ground;

(d) lightning;

(e) extraneous electricity;

(f) sympathetic detonation;

(g) the triggering of secondary dust or gas explosions;

(h) unstable ground;

(i) energy originating from friction, impact, static and heat;

(j) unusual applications.

Example of an unusual application—

clearing an accretion in a smelter

(3) Section 10 applies to the risk management process if the mine is required to have a safety and health management system under the Act.

70 Blasting procedures

(1) If blasting is carried out at a mine, the site senior executive for the mine must ensure the mine has written procedures for the blasting.

(2) The procedures must provide for the following matters—

(a) ensuring equipment used for charging and firing is maintained in a good operating condition;

(b) cleaning blast holes before charging;

(c) blast times;

(d) warning and guarding persons against entering an unsafe area during a blast;

(e) removing persons who may be injured by a blast to a safe place before firing takes place;

(f) the ability for each person involved in firing the blast to reach a safe position, by walking at normal walking pace, before the blasting happens;

(g) firing a blast from a position that is safe from the effects of the blast;

(h) deciding when it is safe to re-enter the blasted area;

(i) examining the blasted area and blast hole remnants safely;

(j) communicating, from 1 shift to another, information about charging and blasted locations.

(3) The procedures must provide for the following additional matters, as are appropriate, having regard to the nature, size and complexity of the blasting—

(a) keeping air blast, air overpressure, dust generation, flyrock, ground vibration and noise within acceptable limits;

(b) keeping the effect on ground stability to as low as practicable;

(c) keeping blast times within worker and community expectations for blasting;

(d) finalising blast design and firing sequence;

(e) recording the results of blast monitoring at the mine, including the monitoring of ground vibration.

71 Blasting in hot material

(1) This section applies if blasting is carried out at a mine in material that is at least 55ºC or in known, or potential, reactive ground.

Example of reactive ground—

ground containing sulphides that oxidise easily

(2) Before the blasting is carried out, the site senior executive for the mine must ensure the mine has a written procedure or standard work instruction to ensure—

(a) heat-induced initiation does not happen before firing; or

(b) each person involved in loading or firing the blast has time to reach a safe place before heat-induced initiation happens.

72 Misfires

The site senior executive for a mine must ensure the mine has a written procedure or standard work instruction for the earliest practicable—

(a) detection, recording, dealing with and treatment of misfires at the mine; and

(b) warning of the misfire and presence of explosives.

73 Disposing of explosives

(1) The site senior executive for a mine must ensure the disposal of explosives on the surface of the mine complies with AS 2187.

(2) The site senior executive for a mine must also ensure explosives disposed of underground at the mine are disposed of other than by burning or burying.

(3) Before operations cease at the mine, the site senior executive must ensure all explosives at the mine are—

(a) located and accounted for; and

(b) either removed from site or disposed of under subsection (1) or (2).

(4) For subsection (3)(a), accounting for all explosives at the mine includes detailing, through appropriate record keeping, what has happened to all explosives that have been transported to the mine or manufactured at the mine.

Subdivision 3 Storing explosives underground at underground mines

74 Underground storage

(1) The underground mine manager, or, if there is no underground mine manager, the site senior executive for a mine, must ensure explosives stored underground at the mine are stored in an underground magazine or underground temporary storage.

(2) The person must also ensure—

(a) the quantity of explosives stored is as low as reasonably practicable for the operations in which they are to be used; and

(b) blasting agents and detonator sensitive explosives are stored in areas segregated from each other; and

(c) detonators are segregated from other explosives; and

(d) only things associated with storing the explosives are stored in the underground storage.

(3) This section does not apply to explosives stored in an adit, drive or similar underground excavation that is separate from, or not integrated with or connected to, an underground mining operation in which explosives are used.

75 Underground storage location

The underground mine manager, or, if there is no underground mine manager, the site senior executive for a mine, must

ensure an underground magazine at the mine is located away from the following things at the mine—

(a) major access routes;

(b) emergency escape routes or emergency refuges;

(c) high occupancy areas;

(d) other hazardous chemicals;

(e) major service facilities;

(f) known micro-seismic areas.

76 Underground magazine design

The underground mine manager, or, if there is no underground mine manager, the site senior executive for a mine, must ensure each underground magazine at the mine is designed and maintained to ensure—

(a) explosives in the magazine are—

(i) protected against friction, impact, static and heat; and

(ii) adequately ventilated to keep them cool and dry; and

(iii) secured against theft; and

(b) detonators in the magazine are adequately segregated from other explosives; and

(c) when a person is present in the magazine, the atmospheric contaminants in the magazine do not exceed the general exposure limits for the contaminants; and

(d) equipment used for moving or storing explosives can be manoeuvred safely in the magazine.

77 Underground temporary storage

(1) The underground mine manager, or, if there is no underground mine manager, the site senior executive for a mine, must ensure an underground temporary storage area at the mine is located near where the explosives stored in the area are to be used.

(2) The person must also ensure the underground temporary storage area is maintained and operated to ensure—

(a) explosives in the storage area—

(i) do not exceed the quantity needed for the operations in which they are to be used; and

(ii) are protected against accidental impact; and

(b) detonators in the storage area are—

(i) stored in a locked containers; and

(ii) adequately segregated from other explosives; and

(c) containers in which explosives are stored are—

(i) constructed to protect the explosives against impact, squeezing and theft; and

(ii) cleaned of residual explosives before being reused; and

(d) explosives are removed from the storage area and the storage area closed when the blasting operations for which the explosives were stored stop.

78 Record of underground storages

The underground mine manager, or, if there is no underground mine manager, the site senior executive for a mine, must ensure an up-to-date record of the number and location of underground magazines and underground temporary storages is—

(a) kept at the mine; and

(b) made available to an inspector at the inspector's request.

Subdivision 4 Miscellaneous

79 Theft or other loss of explosives

(1) The site senior executive for a mine must ensure the mine has a system or written procedure for—

(a) detecting theft or other loss of an explosive during any part of its life cycle; and

(b) reporting the theft or loss under section 195 of the Act.

(2) The site senior executive must ensure the system or procedure provides for recording the following information about the theft or loss—

(a) the type of explosive stolen or lost;

(b) the date and time of the theft or loss;

(c) any identifying characteristic of the explosive.

79A Accountability for explosives

(1) A person at a mine who has the immediate custody or control of any explosives, whether for the purpose of storing, transporting, using or disposing of the explosives or for another purpose, must ensure the following requirements are complied with—

(a) if the person takes the explosives from storage at the mine, the person must—

(i) deliver the explosives to a person authorised to receive them, and account for them on delivery; or

(ii) use the explosives, and account for their use;

(b) if the person transports the explosives at the mine, the person must deliver the explosives to a person designated to receive the explosives, and must account for the explosives both when received for transport and when delivered;

(c) if the person uses the explosives, the person must—

(i) account for the explosives; and

(ii) return all explosives that are surplus to what is required to their storage location, and account for the explosives;

(d) the person must account for the explosives if the explosives are destroyed or disposed of.

(2) If the person can not properly account for any of the explosives in accordance with subsection (1), the person must report the failure, using the system or written procedure established under section 79.

(3) In this section—

account for, in relation to explosives, means—

(a) accurately detail, through appropriate record keeping, what happens to the explosives; and

(b) provide enough information for detecting theft or other loss under the system or written procedure established under section 79.

Part 8 Mine plans

80 Survey grid system

The site senior executive for a mine must ensure—

(a) a datum station is established near the mine for mine surveys and referenced to GDA and AHD; and

(b) if a local grid system is used for the surveys, the relationship between the grid system and GDA is established and shown on the survey plans.

81 Protecting survey data against loss, damage or unauthorised access

The site senior executive for a mine must ensure the mine's current survey data is kept in a secure way to protect the data against loss, damage or unauthorised access.

82 Plans of mine workings

(1) The site senior executive for a mine must ensure survey plans of the mine workings include the following matters if they may affect the safety and health of a person in the workings—

(a) the location of natural and artificial features;

(b) surface drill holes.

(2) The site senior executive must also ensure the plans are sufficient to correlate separate sets of workings at the mine, including abandoned workings, to allow the safe management of interfacing between the workings.

83 Plans of operations undertaken at abandoned mine

(1) This section applies to a person who is required, under section 58(3) of the Act, to give the chief inspector plans showing the extent of operations at an abandoned mine.

(2) The person must ensure the plans are in the format and of the quality required by the chief inspector.

Example of quality for subsection (2)—

the quality of paper or ink used for the plans

Part 9 Persons on site

Division 1 Fitness

84 Alcohol and drugs

(1) A person must not carry out operations at a mine, or enter an operating part of a mine, if the person is under the influence of alcohol, or is impaired by a drug, to the extent the alcohol or drug impairs, or could impair, the person's ability to safely carry out the person's duties at the mine.

(2) A person must not consume alcohol at a mine other than in—

(a) an accommodation facility; or

(b) a recreation area designated, in writing, by the site senior executive for the mine for the purpose under a written procedure for designating the area.

85 Fitness of workers

The site senior executive for a mine must ensure a worker at the mine does not carry out work at the mine unless the worker's fitness level has been decided under section 87 as adequate for the work.

86 Worker's self-assessment of fitness level

Each worker at the mine must periodically conduct a self-assessment of the worker's condition, including, for example, for effects of heat strain or fatigue, to decide if the worker is in a fit condition to carry out the worker's duties at the mine without creating an unacceptable level of risk.

87 Assessing workers to decide fitness level

(1) The site senior executive for a mine must ensure—

(a) each worker at the mine is assessed to decide if the worker's fitness level is adequate to enable the worker to carry out work at the mine without creating an unacceptable level of risk; and

(b) a record of the assessment (a ***fitness assessment record***) is kept.

(2) The assessment must be carried out in an appropriate way, including, for example, by a medical examination, having regard to the nature of the work.

(3) The assessment must be carried out—

(a) before the worker first starts work at the mine; and

(b) whenever the worker's duties change; and

(c) periodically, as necessary, to assess—

(i) changes in the worker's fitness for the work; or

(ii) the adequacy of the worker's fitness level for the work.

(4) If the site senior executive considers the assessment needs to be carried out by a medical examination, the site senior executive must arrange for the assessment to be done by, or under the supervision of, an appropriate doctor.

(4A) The appropriate doctor must give—

(a) the site senior executive a fitness assessment report; and

(b) the worker a copy and explanation of the report.

(5) The worker's employer must pay for the assessment and fitness assessment report.

Maximum penalty—30 penalty units.

(6) Subsection (5) is not a safety and health obligation for the Act.

88 Fitness of visitors

(1) The site senior executive for a mine must ensure a visitor does not enter an operating area at the mine unless, having regard

to conditions prevailing in the area, the visitor's fitness level is adequate to visit the area.

(2) The site senior executive for a mine must also ensure—

(a) the visitor's fitness level is assessed in an appropriate way, including, for example, by a questionnaire, to decide if the visitor's fitness level is adequate to visit the area; and

(b) a record of the assessment (also a ***fitness assessment record***), including, for example, a copy of the questionnaire, is kept.

89 Work hours and rest breaks

A mine's safety and health management system must provide for controlling risk at the mine arising out of personal fatigue caused by excessive work hours or insufficient rest periods.

90 Amenities for workers' fitness and health

(1) The site senior executive for a mine must ensure the mine has appropriate amenities for use by workers to maintain their fitness and health.

(2) Without limiting subsection (1), the amenities must include the following things, as appropriate, having regard to the nature of the mine's operations—

(a) food storage and consumption facilities;

(b) supplies of cool drinking water;

(c) washing and bathing facilities;

(d) toilet facilities;

(e) refuse disposal.

(3) Also, if a worker remains on site between shifts, the amenities must include the following things—

(a) facilities for rest, sleep and recreation;

(b) food;

(c) provision for washing clothes;

(d) an appropriate and effective communication system.

(4) The site senior executive must also ensure the amenities are—

(a) within a reasonable distance of each workplace at the mine; and

(b) kept in a hygienic condition.

Division 2 Training and assessment

91 Induction training and assessment

The site senior executive for a mine must ensure each worker at the mine, and each operational ROC worker for the mine, is given appropriate induction training and periodically assessed to ensure the worker has adequate knowledge of the following matters, having regard to the work to be carried out, or carried out, by the worker at the mine or for the mine—

(a) the nature and layout of the mine's operations;

(b) the mine's organisational structure and communication procedures;

(c) the mine's site procedures and practices;

(d) the risk management process mentioned in part 2, division 2;

(e) emergency procedures and basic first aid;

(f) the Act and this regulation.

92 Persons who have not completed induction training

The site senior executive for a mine must ensure a person who has not completed induction training under section 91 is—

(a) supervised by a worker who has completed the induction training when the person is in a workplace at the mine; and

(b) given sufficient information on, and instruction in, the following matters to enable the person to respond appropriately in an emergency situation—

(i) the mine's work practices and emergency procedures;

(ii) the use of protective and emergency equipment; and

(c) made aware of the person's safety and health obligations under section 36 of the Act.

93 Training

(1) The site senior executive for a mine must ensure each worker at the mine, and each operational ROC worker for the mine, is trained, if necessary, and periodically assessed, to ensure the worker has—

(a) adequate knowledge and understanding of the processes to be carried out, and the materials and plant to be used, for the worker's duties at the mine or for the mine; and

(b) adequate skill to carry out the processes, handle the materials and operate the plant; and

(c) adequate ability to access and understand the procedures and standard work instructions for the worker's duties.

Note—

The safety and health management system includes obligations relating to critical control management—see section 55(5)(e) of the Act.

(2) The training must be carried out in an appropriate way, including, for example, by formal training courses or informal on-the-job instruction.

(3) The assessment must be carried out in an appropriate way, including, for example, by examination, test or proof of relevant prior learning.

(4) The site senior executive for a mine must also ensure a person being trained or assessed does not carry out work at the mine

unless the person is adequately supervised to prevent creating an unacceptable level of risk.

(5) Subsection (4) does not apply to work carried out by the person in an emergency.

94 Record of training

The site senior executive for a mine must ensure a record is kept, in the mine record, of the training given to, and assessment of, each worker under this division.

Division 3 Carrying out tasks

95 Time and resources for carrying out tasks

(1) The site senior executive for a mine must ensure time is allocated, and the mine's resources are distributed, to enable each worker at the mine to carry out the worker's tasks without creating an unacceptable level of risk.

(2) Without limiting subsection (1), the site senior executive must ensure the worker is given the supervision, and help from other competent persons, necessary to achieve an acceptable level of risk.

(3) In this section—

resources includes the following things—

(a) access and transport;

(b) communication methods;

(c) facilities, materials and plant;

Examples—

consumable items, spare parts and personal protective equipment

(d) leadership, guidance and training;

(e) procedures, including procedures for coordinating activities, and standard work instructions and other relevant information.

95A Supervisor's responsibilities

A supervisor for a mine has the following responsibilities—

(a) ensuring each worker for whom the supervisor has responsibilities is given the supervision and help mentioned in sections 95(2) and 96;

(b) observing each worker for whom the supervisor has responsibilities perform tasks;

(c) carrying out inspections of workplaces at the mine as required under the mine's safety and health management system;

(d) recording reports of, and findings and recommendations resulting from, inspections mentioned in paragraph (c) in the mine record;

(e) implementing and monitoring hazard controls and risk controls as required under the mine's safety and health management system.

96 Supervising workers

(1) Without limiting section 95(2), the site senior executive for a mine must ensure the mine's activities and workers are supervised to the extent necessary to ensure each worker—

(a) is not likely to be exposed to conditions beyond the worker's capabilities; and

(b) is not likely to be affected by the conditions in which the worker is working in a way that adversely affects the worker's fitness to perform critical tasks; and

(c) has the resources necessary to carry out the worker's tasks without being exposed to an unacceptable level of risk; and

(d) is working within the limits of the worker's fitness and competence; and

(e) complies with the worker's safety and health obligations.

(2) The supervision must include communication, including direct contact, at appropriate intervals by the worker's supervisor.

97 Communicating with workers working alone underground

(1) This section applies to a worker who is working alone underground at a mine and is not in frequent communication with, or within easy hearing of, another person at the mine.

(2) The site senior executive for the mine must ensure the worker is communicated with at intervals of not more than 2 hours.

(3) This section does not apply at a mine where only 1 person works.

98 Checking work quality

(1) This section applies to work carried out at a mine and for which checking the quality of output from the work is necessary for managing risk at the mine.

(2) The site senior executive must ensure the output is checked by a person other than the person who carried out the work, to confirm the output is suitable for use.

Example of checking the output of work—

x-raying a weld in a pressure vessel or checking design calculations

Division 4 Miscellaneous

99 Entering a workplace

Each supervisor for a workplace at a mine must ensure a person does not enter the workplace unless the supervisor

reasonably believes the person is capable, having regard to the conditions prevailing in the workplace and the person's level of supervision, to respond appropriately to—

(a) the normal activities in the workplace; and

(b) any incident or emergency likely to occur.

Part 10 Plant generally

Note—

See also part 4 for provisions about electrical equipment and part 13 for provisions about winding equipment.

Division 1 Selection and design

100 Selection and design

(1) A person who has an obligation under the Act to manage risk at a mine in relation to the selection and design of plant must ensure—

(a) the plant—

(i) is fit for its intended use and use in its intended work environment, including, for example, a hazardous area; and

(ii) is ergonomically compatible with persons operating or maintaining the plant; and

(iii) has appropriate provision for safe access, egress and maintenance; and

(b) if it is necessary for managing risk from the plant and it is reasonably practicable, the plant—

(i) fails to safety; and

(ii) does not fail catastrophically or by common mode or cascade failure; and

(iii) incorporates appropriate engineering controls to protect the plant operator and other persons; and

Example of engineering controls—

guards on moving parts, rollover protection, falling object protection, noise insulation or seatbelts

(iv) incorporates appropriate backup systems to ensure plant remains under control if its primary system fails; and

Example of a backup system—

a vehicle's parking brake to backup its service brake

(v) is designed so its condition and performance can be monitored and incipient failures detected.

(2) In this section—

hazardous area means an area in which an explosive atmosphere is present, or is likely to be present, in quantities requiring special precautions for the construction, installation and use of potential ignition sources.

Examples of potential ignition sources—

electrical equipment, naked flames, sparks from grinding and welding operations, and hot surfaces

101 Instrumentation and warning devices

A person who has an obligation under the Act to manage risk at a mine in relation to the selection and design of plant must ensure the plant that is likely to cause a hazard has adequate—

(a) instrumentation to enable monitoring of the plant's operation and condition; and

(b) warning devices to warn persons near the plant of its start-up, operation or failure.

102 Plant controls and control systems

(1) A person who has an obligation under the Act to manage risk at a mine in relation to plant controls and control systems must, as far as reasonably practicable, ensure—

(a) the controls—

(i) have a standard method of operation or are marked or labelled to state their method of operation; and

(ii) are easily identifiable, including, for example, by a label, as the controls for the plant, or part of plant, they control; and

(b) the control systems provide for—

(i) effective communication between persons involved in the plant's operation or maintenance; and

(ii) shutting the plant down or otherwise bringing the plant to a safe state in an emergency.

(2) The person must also ensure—

(a) a remote control system is capable of being disabled at the plant; and

(b) an automatic control system is capable of being disabled at the plant and overridden manually.

(3) If, having regard to the nature and level of risk from plant used at the mine, it is necessary for managing the risk, the person must also ensure—

(a) a remote control system for the plant shuts the plant down safely if communication with the system is lost; and

(b) an automatic control system for the plant shuts the plant down safely if the control system fails; and

(c) the control systems shut the plant down or otherwise bring the plant to a safe state if—

(i) the plant operates outside its design parameters; or

(ii) an engineering control for the plant fails.

103 Isolation facility

(1) If, having regard to the nature and level of risk from plant used at a mine, it is necessary for managing the risk, the site senior executive for the mine must ensure the plant has a facility for—

(a) preventing its operation; or

(b) preventing or controlling the release of its stored energy; or

(c) isolating its energy supply.

(2) The site senior executive must ensure the facility is capable of being locked-out and tagged or otherwise secured.

Division 2 Other provisions about plant

104 Manufacture, construction, storage, transport and installation

(1) The operator or site senior executive for a mine must ensure plant used, or intended for use, at the mine is manufactured, constructed, stored, transported and installed in accordance with any applicable specifications and instructions.

(2) For fixed plant, the operator or site senior executive must also ensure—

(a) the plant is installed in a location and environment that is compatible with the plant and its use; and

(b) the mine layout incorporates appropriate facilities and adequate space for—

(i) access to and egress from the plant during emergencies; and

(ii) the plant's operation, monitoring, servicing and maintenance.

105 Commissioning

(1) The operator or site senior executive for a mine must ensure plant is commissioned in its operating environment at the mine before the plant is used to ensure the following matters—

(a) its integration into the operating environment and associated systems;

(b) the plant performs within its specifications, if any, held at the mine under section 112;

(c) hazard controls for the plant are adequate and operating within the specifications mentioned in paragraph (b);

(d) mine workers who are required to operate the plant are competent to operate the plant safely.

(2) The operator or site senior executive must ensure—

(a) the commissioning is carried out in accordance with the manufacturer's instructions; and

(b) adequate precautions are taken to protect the safety and health of persons if—

(i) the plant fails during commissioning; or

(ii) it is necessary to commission the plant without all hazard controls for the plant operating effectively.

106 Operating plant

A person who has an obligation under the Act to manage risk at a mine in relation to the operation of plant must ensure the plant is not operated—

(a) in a way that creates an unacceptable level of risk; or

(b) if inspections, tests or monitoring show the plant is unfit for use; or

(c) if the plant is locked-out and tagged.

107 Isolating, locking-out and tagging plant

(1) A mine's safety and health management system must provide for the following matters—

(a) isolating plant, including effectively isolating plant to control the risk from a release of energy;

(b) taking plant out of service;

(c) testing plant or its energy source for zero potential;

(d) returning plant to service.

(2) The site senior executive for a mine that is not required to have a safety and health management system under the Act must ensure the mine has a standard work instruction for the activities mentioned in subsection (1)(a) to (d).

(3) If the safety or health of a person is directly affected by the operation or non-operation of plant, the system or standard work instruction must also provide for locking-out and tagging the plant.

108 Monitoring

(1) A person who has an obligation under the Act to manage risk at a mine in relation to monitoring plant must monitor the plant's use, condition and performance to—

(a) detect any deterioration causing an unacceptable level of risk; and

(b) decide if the plant is likely to operate without causing an unacceptable level of risk until the plant is next monitored; and

(c) provide information for preventive maintenance.

(2) The person must ensure the monitoring is carried out—

(a) during the plant's use at scheduled intervals or continuously, or after scheduled periods of use; and

(b) otherwise as necessary.

109 Service and maintenance

(1) The operator or site senior executive for a mine must ensure plant in use at the mine is serviced and maintained so the plant—

(a) is capable of performing its intended functions; and

(b) is within the condition and performance limits of its specifications.

(2) If a breakdown of the plant is likely to cause an unacceptable level of risk, the operator or site senior executive must ensure the servicing and maintenance is based on a preventive strategy.

(3) If the plant can not be serviced and maintained under subsection (1), the operator or site senior executive must ensure the plant is taken out of service.

110 Repair or modification

If plant at a mine is repaired or modified in a way that could affect the plant's fitness for use for its intended purpose, the site senior executive for the mine must ensure sections 100 to 105 are complied with.

111 Dismantling or demolition

The site senior executive for a mine must ensure—

(a) as far as reasonably practicable, sources of energy and hazardous chemicals are removed from plant before the plant is dismantled or demolished; and

(b) the dismantling or demolition is carried out in accordance with any relevant instructions for the plant's safe dismantling or demolition.

Division 3 Information and records

112 Specifications, instructions and other information about plant

(1) If, having regard to the nature and level of risk from plant used at a mine, it is necessary for managing the risk, the site senior executive for the mine must ensure—

(a) the mine has written specifications for the plant and instructions for its use; and

(b) a copy of the specifications is available to, and readily accessible by, each worker required to use the plant at the mine; and

(c) a copy of the instructions is available to, and readily accessible by, each worker required to carry out the activity to which the instructions relate at the mine.

(2) The specifications must include the following matters, as appropriate, having regard to the nature and level of risk from the plant—

(a) the plant's intended use and environment;

(b) its design envelope, including limits for its normal and abnormal use and life;

(c) its condition and performance limits;

(d) hazards associated with the plant and its materials;

(e) its failure modes;

(f) its safeguards and protective systems;

(g) design drawings and calculations, and specifications for its materials and parts;

(h) the knowledge and competency requirements for persons installing, commissioning, operating, monitoring, servicing, maintaining and disposing of the plant.

(3) The instructions for using the plant must deal with the following matters for the plant, as appropriate, having regard to the nature and level of risk from the plant—

(a) transport, storage and installation;

(b) commissioning;

(c) operation;

(d) monitoring;

(e) servicing and maintenance;

(f) dismantling and demolition.

(4) Also, if, having regard to the nature and level of risk from the plant, it is necessary for managing the risk, the site senior executive must ensure hazard warnings, operating limitations, instructions for use and other critical information are marked on the plant or displayed near the plant.

113 Records

(1) If, having regard to the nature and level of risk from plant used at a mine, it is necessary for managing the risk, the site senior executive for the mine must ensure a record is kept at the mine about—

(a) the plant's—

(i) manufacture, construction, storage, transport, and installation; and

(ii) commissioning; and

(iii) use; and

(iv) servicing and maintenance; and

(v) repair and modification; and

(vi) inspection, testing and monitoring, and any action taken as a result of the inspection, testing and monitoring; and

(b) incidents, damage and operation happening outside the plant's design envelope.

(2) For ropes used in winding operations in which a winder of at least 30kW capacity is used, the site senior executive must ensure a record is kept of the matters stated in subsection (1) regardless of the nature and level of risk from the ropes.

(3) The site senior executive must ensure the records are—

(a) kept for the life of the plant or until its earlier permanent decommissioning or disposal; and

(b) available to, and readily accessible by, each worker using the plant at the mine.

Part 11 Procedures and standard work instructions

114 Procedures and standard work instructions for particular operations

(1) This section applies to operations at a mine if, having regard to the nature and level of risk from the operations, it is necessary for managing the risk for the operations to be—

(a) uniform and consistent in their performance or results; or

(b) compatible with other operations at the mine.

(2) The site senior executive for the mine must ensure the mine has a written procedure or standard work instruction for carrying out the operations.

115 Accessing current procedures and standard work instructions

The site senior executive for a mine must ensure—

(a) the issue and availability of the mine's written procedures and standard work instructions are controlled to ensure only current versions are in use; and

(b) each worker at the mine, and each operational ROC worker for the mine, is aware of the current written procedures and standard work instructions for the part of the mine's operations in which, or for which, the worker works; and

(c) copies of the current procedures and instructions are available to each worker to whom the procedures and instructions apply.

116 Written procedures

The site senior executive for a mine must ensure each written procedure for an activity carried out at the mine includes the following information—

(a) the procedure's purpose;

(b) the activity to which the procedure applies;

(c) the responsibilities of persons involved in the activity;

(d) a description of how the activity must be carried out;

(e) a reference to relevant standard work instructions and other relevant written procedures;

(f) an appropriate identification, including the procedure's version number and date of issue.

117 Standard work instructions

(1) The site senior executive for a mine must ensure each standard work instruction for a task at the mine is—

(a) in a form suitable for use at the site where the task is carried out; and

(b) easily understandable by persons carrying out the task; and

(c) as brief and concise as is reasonable.

(2) The site senior executive must ensure the standard work instruction includes the following information—

(a) the purpose of the task;

(b) a description of how the task must be carried out;

(c) a reference to relevant written procedures and other relevant standard work instructions;

(d) an appropriate identification, including the instruction's version number and date of issue.

Part 12 Records generally

118 Way records must be kept

The site senior executive for a mine must ensure records required to be kept at the mine under the Act are kept in an appropriate way, having regard to the nature and extent of the mine's operations.

119 Period for which particular records must be kept

(1) The site senior executive for a mine must ensure the following records about a worker are kept at least until the worker ceases to be employed, or carry out work, at the mine—

(a) each health assessment record and health assessment report;

(b) each fitness assessment record and fitness assessment report;

(c) each personal exposure limit set under section 133.

(2) The site senior executive for a mine must also ensure the following records about a visitor are kept at least until the visitor leaves the mine—

(a) each health assessment record;

(b) each fitness assessment record.

120 Confidentiality of worker's medical record

(1) A site senior executive for a mine may only obtain a worker's medical record with the worker's written consent.

Maximum penalty—30 penalty units.

(2) The site senior executive must not disclose the contents of the worker's medical record to another person other than—

(a) the worker; or

(b) a person with the worker's written consent; or

Example of a person who may have the worker's written consent—

the worker's representative at the workplace

(c) the chief inspector to the extent the contents of the worker's medical record are part of a notification under schedule 2E, sections 23(2), 24(3) or 26(4); or

(d) a person under section 195AA of the Act.

Maximum penalty—30 penalty units.

(3) Subsections (1) and (2) are not safety and health obligations for the Act.

Part 13 Winding operations

Division 1 Preliminary

121 Application of part

This part applies only to winding operations in which a winder of at least 30kW capacity is used.

Division 2 Controlling winding operations

122 Appointment of persons to control winding operations

The site senior executive for a mine must appoint, in writing, 1 or more persons to control winding operations at the mine.

123 Acknowledgement of appointment

(1) A person appointed to control winding operations at a mine must acknowledge the appointment by notice given to the site senior executive for the mine.

(2) For section 59(1)(e) of the Act, the notice is prescribed as a matter that must be included in the mine record.

Division 3 Safety provisions for winding equipment

124 Control measures to protect against persons and things falling into shafts

The site senior executive for a mine must ensure control measures are in place at the mine to—

(a) prevent persons, rock, material and other things from falling down a shaft, winze or raise used in winding operations at the mine; and

(b) protect, as far as reasonably practicable, persons in the shaft, winze or raise against falling rock, material and other things.

125 Conveyances

The site senior executive for a mine must ensure a conveyance used in winding operations at the mine—

(a) is not unintentionally obstructed in its passage in the shaft during the operations; and

(b) is prevented from colliding with other things in the shaft during the operations; and

(c) has ways of preventing persons, rock, material and other things from unintentionally protruding from, or moving in, the conveyance.

126 Winders

(1) The site senior executive for a mine must ensure a winder used at the mine has ways of—

(a) preventing overwind, overspeed and uncontrolled movement of a conveyance; and

(b) stopping the winder if—

(i) for a drum winder—slack rope happens; or

(ii) for a friction winder—excessive rope slip happens.

(2) The site senior executive must ensure the winder has a backup system for preventing overwind and overspeed of a conveyance.

(3) The site senior executive for a mine must also ensure a winder operating automatically is capable of being stopped from each of the following places—

(a) in the conveyance;

(b) at the brace level;

(c) at each plat;

(d) at each skip loading pocket and skip dump;

(e) at each place where ropes are changed.

127 Other safety provisions for winding equipment

(1) The site senior executive for a mine must ensure winding equipment used at the mine includes—

(a) as far as reasonably practicable, arrestors or other devices to mitigate the effects of an overwind; and

(b) ways for persons to escape from a stalled conveyance.

(2) The site senior executive must also ensure each rope used for winding—

(a) has an appropriate safety factor, having regard to the operation for which the rope is used; and

(b) is regularly tested to ensure its safe performance.

Division 4 Miscellaneous

128 Monitoring and maintaining winding equipment

The site senior executive for a mine must ensure the mine has written procedures for monitoring and maintaining winding equipment in use at the mine.

129 Testing winding equipment after particular events

(1) This section applies if a following event happens at a mine—

(a) winding equipment is repaired to an extent that may affect the equipment's safe operation;

(b) a rope used in winding operations is recapped;

(c) the winder is stopped for more than 8 consecutive hours;

(d) a seismic event that may affect the safety of winding operations.

(2) The site senior executive for the mine must ensure a person is not carried in a conveyance, other than a stage, in the winding operations until—

(a) the conveyance has made 1 trip up and down the shaft through its normal working range at full operating speed; and

(b) the winding equipment has been found to operate safely.

130 Signalling and communication

(1) The site senior executive for a mine must ensure the mine has a system for effective communication between persons involved in operating, monitoring or using winding equipment at the mine.

(2) If the communication system involves the use of a signals code, the site senior executive must ensure—

(a) each person involved in winding operations at the mine is familiar with the code; and

(b) a copy of the code is displayed—

(i) in view of the winder driver; and

(ii) at each entrance to the shaft.

Part 14 Work environment

Division 1 Managing risk from exposure to hazards generally

Subdivision 1 Health assessments

131 Health assessment of workers

(1) This section applies if a hazard with potential to cause a significant adverse effect on the safety or health of a person is identified at a mine.

(2) The site senior executive for the mine must ensure—

(a) the physical and medical condition of each worker at the mine is assessed to check, as far as reasonably practicable, for any condition that may impair the worker's ability to tolerate the hazard without harming the worker or the worker's future children; and

(b) a record of the assessment (a ***health assessment record***) is kept.

(3) The assessment must be carried out in an appropriate way, including, for example, by a medical examination, having regard to the nature of the hazard.

(4) The assessment must be carried out—

(a) before the worker is exposed to the hazard at the mine; and

(b) periodically, as necessary, to assess changes in the worker's ability to tolerate the hazard.

(5) If the site senior executive considers the assessment needs to be carried out by a medical examination, the site senior executive must arrange for the assessment to be done by, or under the supervision of, an appropriate doctor.

(5A) The appropriate doctor must give—

(a) the site senior executive a health assessment report; and

(b) the worker a copy and explanation of the report.

(6) The worker's employer must pay for the worker's assessment and the health assessment reports.

Maximum penalty—30 penalty units.

(7) Subsection (6) is not a safety and health obligation for the Act.

132 Health assessment of visitors

The site senior executive for a mine must ensure—

(a) the physical and medical condition of each visitor to the mine is assessed in an appropriate way, including, for example, by a questionnaire, to decide if the visitor has any condition that may impair the visitor's ability to tolerate a hazard to which the visitor may be exposed at the mine; and

(b) a record of the assessment (also a ***health assessment record***), including, for example, a copy of the questionnaire, is kept.

Subdivision 2 Limiting exposure to hazards

133 Exposure limits for workers

(1) This section applies if an assessment of a worker's health under section 131 shows the worker has an unacceptable level of risk from a hazard at a lower level of exposure than the general exposure limit for the hazard, including, for example, because a personal factor of the worker impairs the worker's ability to tolerate the hazard.

Example of a personal factor—

fitness, diet, pregnancy, physical disability, allergy or phobia

(2) The site senior executive for the mine must ensure a personal exposure limit is set for the worker for the hazard to reduce the risk to an acceptable level.

134 Adjusting exposure limits for hazards for workers

(1) This section applies if a hazard is in a mine's work environment and at least 1 of the following apply to a worker at the mine—

(a) the worker's work cycle does not conform to the standard work cycle used in establishing the general exposure limit for the hazard;

(b) the worker's work cycle decreases the rate at which the worker recovers from adverse effects of the hazard;

(c) the effects of a hazard on the worker may increase if the worker does heavy strenuous work or works under adverse climatic conditions.

(2) The site senior executive for the mine must ensure the exposure limit applying to the worker for the hazard is

adjusted to account for the circumstances mentioned in subsection (1).

(3) If the national standard for the hazard or the airborne contaminants guide states a way of adjusting the general exposure limit for the hazard in the circumstances, the site senior executive must ensure the exposure limit applying to the worker for the hazard is adjusted in the stated way.

(4) If the work environment at a mine contains hazards that interact with each other to increase their adverse effects on a worker, the site senior executive must ensure the exposure limits that apply to the worker for the hazards are adjusted to account for the interaction.

(5) In this section—

standard work cycle, generally, means a work cycle consisting of—

(a) a shift of not longer than 8 hours a day; and

(b) not more than 5 shifts a week; and

(c) at least 16 hours between consecutive shifts.

135 Limiting workers' exposure

(1) The site senior executive for a mine must ensure a worker's exposure to a hazard at the mine—

(a) does not exceed the exposure limit applying to the worker for the hazard; and

(b) is as low as reasonably achievable.

(2) This section does not apply to the worker's exposure to the hazard during an emergency evacuation.

136 Monitoring workers' exposure

(1) This section applies to a hazard at a mine—

(a) that has the potential to exceed the exposure limit applying to a worker for the hazard; or

(b) for which the level of risk may vary.

(2) The site senior executive for the mine must ensure the worker's exposure to the hazard is monitored, and the monitoring results are analysed, regularly.

(3) If a relevant Australian standard or national standard states a way of carrying out the monitoring or analysis, the site senior executive must ensure the monitoring or analysis is done in the stated way.

Examples of a relevant Australian or national standard—

1 for inhalable dust—AS 3640 'Workplace atmospheres—Method for sampling and gravimetric determination of inhalable dust'

2 for respirable dust—AS 2985 'Workplace atmospheres—Method for sampling and gravimetric determination of respirable dust'

137 Tampering with monitoring samples and results

A person must not tamper, or allow another person to tamper, with a sample or the results of a sample taken to monitor a worker's exposure to a hazard at a mine.

140 Using personal protective equipment

(1) This section applies if a person's exposure to a hazard at a mine can not be prevented or reduced other than by using personal protective equipment.

(2) The site senior executive for the mine must ensure—

(a) the person is given suitable and effective personal protective equipment; and

(b) the person is competent in using the equipment; and

(c) the person's work load and work cycles are reduced to allow for the increased physical load of the equipment.

(3) A person who is given personal protective equipment under subsection (2) must use the equipment when the person's level of risk from the hazard is unacceptable.

Division 2 Managing risk from exposure to particular hazards

Subdivision 1 Hazards other than lead

141 Asbestos material installed in buildings and plant

(1) This section applies if asbestos material is installed in a building or plant at a mine.

(2) The site senior executive for the mine must ensure a standard work instruction or procedure is established—

(a) to prevent the exposure of persons to the asbestos material; or

(b) if the exposure can not be prevented, to minimise the exposure.

(3) The standard work instruction or procedure must include—

(a) the steps that must be taken to restrict access to, and prevent disturbance of, the asbestos material; and

(b) work practices in the vicinity of the asbestos material; and

(c) requirements for assessment of the asbestos material at regular intervals of at least 1 year and earlier if the nature or location of work in the vicinity of the asbestos material changes.

(4) If the asbestos material is friable, poorly bonded or unstable, for example, because of damage or deterioration, the site senior executive must ensure the asbestos material is enclosed, sealed or removed.

(5) If the asbestos material is to be removed, the site senior executive must ensure an asbestos removalist removes the asbestos material under NOHSC's document called 'Code of Practice for the Safe Removal of Asbestos [NOHSC:2002]'.

142 Asbestos, other than asbestos material installed in buildings and plant

(1) This section applies to asbestos occurring naturally at a mine.

(2) The site senior executive for the mine must ensure—

(a) action is taken to prevent the exposure of persons to the asbestos; or

(b) if the exposure can not be prevented, action is taken to protect the health of persons at the mine from the effect of the asbestos.

(3) The site senior executive must ensure monitoring or assessment of airborne asbestos is carried out under NOHSC's document called 'Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd edition [NOHSC:3003 (2005)]'.

143 Heat

(1) The site senior executive for a mine must ensure the mine has a system for managing the risk to persons from heat in places at the mine where the wet bulb temperature exceeds 27ºC.

(2) The system must provide for setting maximum wet and dry bulb temperature limits for the persons' exposure having regard to subsection (3) and any criteria stated in a guideline for managing heat.

(3) The site senior executive for a mine must also ensure a person is not exposed to a wet bulb temperature exceeding 34ºC at the mine unless the person is—

(a) engaged in work to reduce the temperature and authorised by the person's employer or supervisor to carry out the work; or

(b) a mines rescue member carrying out training or emergency response under procedures documented in the system; or

(c) being evacuated in an emergency.

144 Oxygen

(1) The site senior executive for a mine must ensure a person is not exposed to—

(a) an atmosphere in a confined space on the surface of the mine that has—

(i) an oxygen content of less than 19.5% by volume; or

(ii) an oxygen content of more than 23.5% by volume; or

(b) an atmosphere in any other part of the mine that has an oxygen content of less than 18% by volume.

(2) In this section—

confined space means a confined space as defined in AS 2865 'Confined Spaces'.

145 Radiation

(1) This section applies if a person in a mine's work or local environment is likely to be exposed, above acceptable limits, to radiation from a naturally occurring radioactive substance at the mine.

(2) The site senior executive for the mine must ensure—

(a) the mine has a system to provide for the safe management of the radiation; and

(b) the system is complied with.

Subdivision 2 Lead

145A Application of subdivision

This subdivision applies in relation to a mine at which a lead process is carried out.

145B Giving information about health risks of lead process

(1) A site senior executive for a mine must give information about a lead process carried out at the mine to a worker at the mine before the worker is first exposed to the lead process.

(2) If work is identified as a lead process after a worker is exposed to the work, the site senior executive must give information about the lead process to the worker as soon as practicable after the lead process is identified.

(3) The information that must be given is—

(a) information about the health risks and toxic effects associated with exposure to lead; and

(b) the need for, and details of, lead health surveillance and biological monitoring under schedule 2E, part 4.

145C Containment of lead contamination

A site senior executive for a mine must ensure, in a way that achieves an acceptable level of risk, that contamination by lead is confined to lead process areas at the mine.

145D Cleaning methods

(1) A site senior executive for a mine must ensure, in a way that achieves an acceptable level of risk, that each lead process area at the mine is kept clean.

(2) The site senior executive must ensure that the methods used to clean a lead process area at the mine—

(a) do not create an unacceptable level of risk to the health of persons in the immediate vicinity of the area; and

(b) do not have the potential to spread the contamination of lead.

145E Prohibition on eating, drinking and smoking

(1) A site senior executive for a mine must take all reasonable steps to ensure that a worker does not eat, drink, chew gum or smoke, or carry materials used for smoking, in a lead process area at the mine.

(2) The site senior executive must provide workers with an eating and drinking area that can not be contaminated with lead from a lead process carried out at the mine.

145F Provision of changing and washing facilities

(1) A site senior executive for a mine must provide and maintain in good working order changing rooms and washing, showering and toilet facilities at the mine so as to—

(a) minimise secondary lead exposure from contaminated clothing; and

(b) minimise ingestion of lead; and

(c) avoid the spread of lead contamination.

(2) The site senior executive must ensure workers at the mine remove clothing and equipment that is or is likely to be contaminated with lead, and wash their hands and faces, before entering an eating or drinking area at the mine.

145G Laundering, disposal and removal of personal protective equipment and other clothing

(1) A site senior executive for a mine must ensure that personal protective equipment that is likely to be contaminated with lead dust is not removed from a lead process area unless it is—

(a) decontaminated; or

(b) in a sealed container.

(2) Also, a site senior executive for a mine must ensure that personal protective equipment that is likely to be contaminated with lead dust is—

(a) if it is reasonably practicable to dispose of the equipment—disposed of, on the completion of work that is or is part of a lead process carried out at the mine, at a site equipped to accept lead-contaminated equipment; or

(b) if it is reasonably practicable to launder equipment that is clothing—laundered at a laundry, whether on-site or off-site, equipped to launder lead-contaminated clothing; or

(c) if it is not reasonably practicable to dispose of or launder the equipment—kept in a sealed container until it is re-used for work that is or is part of a lead process carried out at the mine.

Example of personal protective equipment to which paragraph (c) may apply—

work boots

(3) The site senior executive must take all reasonable steps to ensure that clothing that is not personal protective equipment and is likely to be contaminated with lead dust is—

(a) if it is reasonably practicable to launder, dispose of or decontaminate the clothing on-site—laundered, disposed of or decontaminated on-site before being removed from the mine; or

(b) otherwise—not removed from the mine unless it is in a sealed container and is to be—

(i) laundered at a laundry equipped to launder lead-contaminated clothing; or

(ii) disposed of at a site equipped to accept lead-contaminated clothing.

(4) The site senior executive must ensure that a sealed container mentioned in subsection (1) or (3) is decontaminated before being removed from the lead process area.

Note—

See also section 53 in relation to labelling containers containing a hazardous chemical or dangerous goods, including, for example, lead.

145H Review of measures to control health risks from exposure to lead

(1) A site senior executive for a mine must ensure that any measures implemented to control health risks from exposure to lead at the mine are reviewed and, as necessary, revised in the following circumstances—

(a) a worker is removed from carrying out a lead risk job at the mine under schedule 2E, section 24;

(b) the site senior executive receives a copy of a health surveillance report for a worker under schedule 2E that contains—

(i) test results that indicate the worker's blood lead level has reached or exceeded the level mentioned in schedule 2E, section 24(1)(a) for the worker; or

(ii) advice that test results indicate the worker has an injury or illness that may have been caused by carrying out the work in relation to which the health surveillance report was obtained; or

(iii) a recommendation that the site senior executive take remedial measures, including, for example, a recommendation that the worker be removed from carrying out a lead risk job at the mine;

(c) 1 or more of the measures do not control the risk they were implemented to control to an acceptable level of risk;

(d) before a change at the mine that is likely to give rise to a new or different risk to health or safety that the measures may not effectively control;

(e) a new relevant hazard or risk is identified;

(f) the results of consultation by the site senior executive under the Act or this regulation indicate a review is necessary;

(g) at least once every 5 years.

(2) Without limiting subsection (1)(d), a change at the mine includes—

(a) a change to the mine itself or any aspect of the work environment at the mine; and

(b) a change to the mine's operations or a process or a procedure at the mine.

145I Identifying lead risk jobs

(1) A site senior executive for a mine must assess each lead process carried out at the mine to determine if a lead risk job is carried out in the process.

(2) In assessing a lead process, the site senior executive must have regard to the following—

(a) past biological monitoring results of workers;

(b) airborne lead levels;

(c) the form of lead used;

(d) the tasks and processes required to be undertaken with lead;

(e) the likely duration and frequency of exposure to lead;

(f) possible routes of exposure to lead;

(g) any information about incidents, injuries or illnesses in relation to the use of lead at the mine.

(3) In assessing a lead process, the site senior executive must not have regard to the effect of using personal protective equipment on the safety and health of workers at the mine.

(4) If the site senior executive is unable to determine whether a lead risk job is carried out in a lead process at the mine, the process is taken to include a lead risk job until the site senior executive determines that a lead risk job is not carried out in the process.

145J Notification of lead risk jobs

(1) If a site senior executive for a mine determines that work at the mine is a lead risk job, the site senior executive must notify the chief inspector in the approved form within 28 days that the work is a lead risk job.

Maximum penalty—30 penalty units.

(2) An approved form under this section must include provision for the kind of lead process being carried out that includes the lead risk job to be stated.

(3) The site senior executive must—

(a) keep a copy of the approved form given to the chief inspector while the lead risk job is carried out at the mine; and

(b) ensure that a copy of the approved form is readily accessible to a worker who is likely to be exposed to lead at the mine.

Maximum penalty—30 penalty units.

(4) Subsections (1) and (3) are not safety and health obligations for the Act.

145K Changes to information in notification of lead risk jobs

(1) A site senior executive for a mine must notify the chief inspector in the approved form of any change in the information given in an approved form under section 145J before the change or as soon as practicable after the site senior executive becomes aware of the change.

Maximum penalty—10 penalty units.

(2) The site senior executive must—

(a) keep a copy of the approved form given to the chief inspector while the lead risk job is carried out at the mine; and

(b) ensure a copy of the approved form is readily accessible to a worker who is likely to be exposed to lead at the mine.

Maximum penalty—10 penalty units.

(3) Subsections (1) and (2) are not safety and health obligations for the Act.

Division 3 Managing risk through health surveillance

145L Requirements for health surveillance

The requirements for health surveillance stated in schedule 2E apply in relation to a mine.

Part 15 Miscellaneous

146 Access to Act and regulation

The site senior executive for a mine must ensure a copy of the Act and this regulation is kept at the mine in a location that is easily accessible by each person at the mine.

147 Workers' access to guidelines

The site senior executive for a mine must ensure a copy of the current guideline for work carried out at the mine is available to, and easily accessible by, each worker carrying out the work at the mine.

148 Prohibited substances

The site senior executive for a mine must ensure a prohibited substance mentioned in schedule 3, column 1 is not used at the mine for a prohibited purpose mentioned in schedule 3, column 2 opposite the name of the substance.

Chapter 2A Continuing professional development

148A Purpose of chapter

This chapter prescribes requirements for section 262(2)(i) of the Act.

148B Definitions for chapter

In this chapter—

CPD activity, in relation to a certificate of competency or site senior executive notice, see section 148E(1).

CPD hours, for a CPD activity that has been successfully completed by a relevant holder, means the number of hours worked out in accordance with the practising certificate scheme.

CPD period, for a relevant holder, means a period stated for the holder in the practising certificate scheme under section 148E(3)(d).

CPD total hours, for a relevant holder, see section 148E(3)(c).

practising certificate scheme see section 148E(2).

relevant holder means the holder of a certificate of competency or site senior executive notice.

148C Requirement to complete CPD

A relevant holder must complete, for each CPD period and in accordance with the practising certificate scheme—

(a) the CPD total hours for the relevant holder; and

(b) each CPD activity identified in the practising certificate scheme as mandatory for the relevant holder.

Maximum penalty—3 penalty units

148D Notice of completion

As soon as practicable after completing CPD hours for a CPD activity, a relevant holder must give the board of examiners—

(a) a notice stating the CPD activity for which the CPD hours were completed; and

(b) if required under the practising certificate scheme—evidence of the holder's successful completion of the CPD hours.

Maximum penalty—3 penalty units

148E Approval of CPD activities and publication of practising certificate scheme

(1) The board of examiners may approve an activity as a ***CPD activity*** for a certificate of competency or site senior executive notice if the board is satisfied the activity is relevant to the competencies required by a holder of the certificate or notice.

(2) The board of examiners must publish, on a Queensland Government website, a scheme (the ***practising certificate scheme***) setting out the continuing professional development required by the board for relevant holders.

(3) The practising certificate scheme must state the following matters—

(a) for each CPD activity for a certificate of competency or site senior executive notice—

(i) the name of the activity; and

(ii) whether the activity is mandatory for holders of the certificate or notice; and

(iii) the minimum and maximum number of CPD hours for the activity for a CPD period for a relevant holder; and

(iv) when a relevant holder may undertake the activity;

(b) in relation to a notice required under section 148D—

(i) how a relevant holder may give the notice; and

(ii) whether and, if so, how the holder must evidence successful completion of CPD hours for a CPD activity;

(c) the total number of CPD hours for CPD activities that a relevant holder must complete during each CPD period for the holder (***CPD total hours***);

(d) the first and last day of each CPD period for a relevant holder;

(e) provisions relating to the issue and renewal of practising certificates;

(f) any other information the board considers relevant to the continuing professional development of relevant holders.

148F Recognition of interstate certificates of competency

(1) This section applies if the board gives a notice of registration under a mutual recognition Act to a person who holds an interstate certificate of competency.

(2) The board may—

(a) allow the person to participate in the practising certificate scheme as if the person were a relevant holder; and

(b) may issue a practising certificate to the person as if the person were a relevant holder.

(3) In this section—

interstate certificate of competency means a document issued in another State or New Zealand equivalent to a certificate of competency.

Chapter 3 Miscellaneous

149 Declarations about mines—Act, s 9

(1) For section 9(1)(e) of the Act, each place mentioned in schedule 4, part 1 is declared to be a mine.

(2) For section 9(4) of the Act, each place mentioned in schedule 4, part 2 is declared to be a mine or part of a mine to which the Act does not apply.

150 Number of persons for giving facility description—Act, s 47

For section 47(1)(b) of the Act, the prescribed number of persons is—

(a) for section 47(1)(b)(i)—5; or

(b) for section 47(1)(b)(ii)—4.

150AA Information to be included in register—Act, s 185

For section 185(2)(c) of the Act, the following information is prescribed for a certificate of competency or a site senior executive notice—

(a) if the holder of the certificate or notice completes the holder's CPD total hours for a CPD period—the day the holder completed the CPD total hours;

(b) if the holder does not complete the holder's CPD total hours for a CPD period—that the holder did not complete the CPD total hours;

(c) if a practising certificate has been issued to the holder—the day the certificate was issued.

150A Civil penalties—Act, ss 246E and 246F

(1) For section 246E of the Act, definition *civil penalty obligation*, the safety and health obligations and other obligations mentioned in schedule 5A are prescribed.

(2) For section 246F(3) of the Act, the category of a civil penalty obligation is—

(a) for an obligation mentioned in schedule 5A, part 1—category 1; or

(b) for an obligation mentioned in schedule 5A, part 2—category 2; or

(c) for an obligation mentioned in schedule 5A, part 3—category 3.

151 Board of examiners' fees

The fees payable to the board of examiners under the Act are stated in schedule 6, part 1.

Chapter 4 Transitional provisions

Part 1 Transitional provisions for Mining and Quarrying Safety and Health Regulation 2017

152 Definition

In this chapter—

repealed regulation means the *Mining and Quarrying Safety and Health Regulation 2001*.

153 Documents

(1) A document, including an electronic document, made under the repealed regulation for a particular purpose that is still current and relevant for the same purpose is taken, for that purpose, to have been made under this regulation.

(2) If the context requires, the document is taken to have taken effect, to have been made, or to have been given or received, when the document took effect, was made or was given or received under the repealed regulation.

(3) In this section—

document includes—

(a) an acknowledgement; and

(b) an approved form; and

(c) an assessment; and

(d) an authorisation; and

(e) a certification; and

(f) a consent; and

(g) a delegation; and

(h) a direction; and

(i) a document of appointment; and

(j) a document that forms part of a mine record; and

(k) a document that forms part of a safety and health management system; and

(l) a notice; and

(m) a notification; and

(n) a plan; and

(o) a procedure; and

(p) a record; and

(q) a register; and

(r) a report; and

(s) the results of an examination; and

(t) a safety and health census.

154 Processes

(1) A process undertaken under the repealed regulation before the commencement is taken to be a process undertaken under this regulation.

(2) A process started under the repealed regulation that was not completed before the commencement may be continued under this regulation.

(3) In this section—

process includes—

(a) a practice; and

(b) a measure; and

(c) an investigation; and

(d) a risk management process; and

(e) an election process.

155 Safety and health fee

(1) After the commencement, the amount of the safety and health fee that accrued for a period before the commencement, is to be worked out using information included in a safety and health census under section 11D, as if the repeal had not happened.

(2) The amount of the safety and health fee that accrued under the repealed regulation is payable under section 11C as if the repeal had not happened.

156 Notice if safety and health census not given or is inadequate

The chief executive may give a notice under section 11E in relation to a safety and health census given, or not given, in relation to a period before the commencement.

157 Late or unpaid fees

Sections 11F and 11G apply to any amount that, immediately before the commencement, was unpaid under section 11F or 11G of the repealed regulation, including an amount that is unpaid because the safety and health census had not been given as required under section 11D or 11F.

158 Refund of overpayment of safety and health fee

Section 11H applies to any amount overpaid under the repealed regulation.

160 Exposure limits

An exposure limit in effect for a worker immediately before the commencement continues to apply to the worker on the commencement.

161 Obligation to do things within or for stated period

(1) This section applies if—

(a) before the commencement, a person was required to do something, under a provision of the repealed regulation, within or for a stated period; and

(b) immediately before the commencement, the stated period had not expired.

Example of a requirement for subsection (1)—

a requirement to keep a record or to give a safety and health census or a notice

(2) The provision of this regulation that corresponds to the provision of the repealed regulation applies to the doing of the thing as if the provision had been in force when the period started.

162 Obligation to do things indefinitely

(1) This section applies if, before the commencement, a person was required to do something under a provision of the repealed regulation for an indefinite period.

(2) The provision of this regulation that corresponds to the provision of the repealed regulation applies to the doing of the thing as if the provision had been in force when the period started.

163 References to repealed regulation

In an instrument, if the context permits, a reference to the repealed regulation is taken to be a reference to this regulation.

164 Obligations, accountabilities and directions

The repeal of the repealed regulation does not affect an obligation, accountability or direction held, acquired or received by a person under the repealed regulation.

165 Acts of persons

An act of a person under the repealed regulation is taken to be an equivalent act under this regulation.

Part 2 Transitional provisions for Mining Legislation (Classification of Chemicals) Amendment Regulation 2019

166 Definitions for part

In this part—

former, for a provision, means as in force before the commencement.

new, for a provision, means as in force from the commencement.

167 Existing hazardous substances and dangerous goods at mine

(1) This section applies in relation to—

(a) a hazardous substance, as defined under former schedule 7, at a mine before the commencement; and

(b) dangerous goods, as defined under former schedule 7, at a mine before the commencement; and

(c) any thing containing, or being used to transport at a mine—

(i) a hazardous substance mentioned in paragraph (a); or

(ii) dangerous goods mentioned in paragraph (b).

(2) The site senior executive for the mine must comply with former section 53 in relation to the substance, goods or thing as if the *Mining Legislation (Classification of Chemicals) Amendment Regulation 2019* had not commenced.

168 Existing standard work instruction relating to hazardous substances and dangerous goods

(1) This section applies to a standard work instruction—

(a) complying with former section 55 or 58; and

(b) in effect immediately before the commencement.

(2) During the transition period, the standard work instruction is taken to be a standard work instruction complying with new sections 55 and 58.

(3) However, a site senior executive for a mine to whom new section 55 applies must start to develop a standard work instruction complying with new section 55 no later than 2 months after the commencement.

(4) Also, a site senior executive for a mine to whom new section 58 applies must start to develop a standard work instruction complying with new section 58 no later than 2 months after the commencement.

(5) In this section—

transition period means the period—

(a) starting on the commencement; and

(b) ending 6 months after the commencement.

Part 3 Transitional provision for Natural Resources, Mines and Energy Legislation (Safety and Health) Amendment Regulation 2020

169 Requirement to keep records of information included in safety and health census

The requirements under section 11DC relating to the keeping of records of information included in a safety and health

census apply only if the safety and health census is for a reporting period that starts after the commencement.

Part 4 Transitional provisions for Mining Safety and Health Legislation (Health Surveillance) Amendment Regulation 2020

Note—

Some provisions in this part mention provisions of this regulation that were omitted and remade (with or without modification) by the *Mining and Quarrying Safety and Health (Lead) Amendment Regulation 2023*. See section 181 in relation to the application of this part.

170 Definition for part

In this part—

pre-amended regulation means this regulation as in force before the commencement.

171 Persons for whom health surveillance before commencement included respiratory health surveillance

(1) This section applies if—

(a) on or within 2 years after the commencement, section 145C applies in relation to a person; and

(b) health surveillance was carried out for the person under the pre-amended regulation; and

(c) the health surveillance included respiratory health surveillance.

(2) The health surveillance is taken to be respiratory health surveillance for the person for chapter 2, part 14, division 3, subdivision 3.

(3) The next respiratory health surveillance must be carried out for the person under chapter 2, part 14, division 3, subdivision 3 before the later of the following—

(a) 5 years after the health surveillance was carried out for the person under the pre-amended regulation;

(b) 2 years after the commencement.

172 Persons for whom health surveillance before commencement included some but not all respiratory health examinations

(1) This section applies if—

(a) on or within 2 years after the commencement, section 145C applies in relation to a person; and

(b) health surveillance was carried out for the person under the pre-amended regulation; and

(c) the health surveillance included 1 or more but not all of the respiratory health examinations.

(2) Respiratory health surveillance must be carried out for the person under chapter 2, part 14, division 3, subdivision 3 within 2 years after the commencement.

(3) A respiratory health examination carried out for the person within 3 years before the commencement is taken to have been carried out for the respiratory health surveillance under chapter 2, part 14, division 3, subdivision 3.

Example—

Health surveillance was carried out for a worker before the commencement and the health surveillance included all respiratory health examinations other than a further reading of a chest x-ray. The respiratory health examinations that were included in the health surveillance are taken to have been carried out for the respiratory health surveillance for the worker under chapter 2, part 14, division 3, subdivision 3. This means only a further reading of a chest x-ray is needed to be carried out under that subdivision.

(4) If respiratory health surveillance carried out for a person under subsection (2) does not include a respiratory health examination as provided under subsection (3), the person's

respiratory health surveillance under subsection (2) is taken to have been carried out when the first respiratory health examination forming part of the respiratory health surveillance was carried out.

173 Other persons to whom section 145C applies

(1) This section applies if—

(a) on or within 2 years after the commencement, section 145C applies in relation to a person; and

(b) neither section 171 nor section 172 applies to the person.

(2) Respiratory health surveillance must be carried out for the person under chapter 2, part 14, division 3, subdivision 3 within 2 years after the commencement.

174 Application of s 145H

Section 145H applies only to a person who permanently stops being a worker after the commencement.

175 Application of ch 2, pt 14, div 3, sdiv 4

Chapter 2, part 14, division 3, subdivision 4 applies to a person whether the person permanently stopped being a worker before or after the commencement.

Part 5 Transitional provision for Mining Legislation (Continuing Professional Development) Amendment Regulation 2022

176 Application of CPD requirements during transitional period

(1) Sections 148C and 148D do not apply to a holder of a certificate of competency or site senior executive notice during the transitional period.

(2) Subsection (1) does not prevent the holder doing any of the following things during the transitional period—

(a) obtaining a practising certificate;

(b) completing CPD activities for the holder's certificate of competency or site senior executive notice;

(c) giving the board of examiners notice, and evidence, of completed CPD activities as mentioned in section 148D.

(3) In this section—

transitional period means the period starting on the commencement and ending on the day that is 3 years after the commencement.

Part 6 Transitional provisions for Mining and Quarrying Safety and Health (Lead) Amendment Regulation 2023

177 Definition for part

In this part—

former, for a provision of this regulation, means the provision as in force from time to time before the commencement.

178 Giving information about health risks of lead process

(1) This section applies if, on the commencement, a person is carrying out work in a lead process at a mine.

(2) The site senior executive for the mine must give the information mentioned in section 145B(3) to the worker as soon as practicable after the commencement.

(3) However, the site senior executive need not give the information mentioned in section 145B(3)(a) to the worker if the same, or substantially the same, information has already been given to the worker.

179 Review of measures to control health risks from exposure to lead

(1) Section 145H applies in relation to circumstances mentioned in section 145H(1) that happen after the commencement.

(2) For applying section 145H(1)(g), the first 5-year period starts on the day this section commences.

180 Identifying and notifying lead risk jobs

(1) Sections 145I, 145J and 145K apply in relation to a lead process at a mine, even if the lead process started being carried out at the mine before the commencement.

(2) If, on the commencement, the site senior executive for the mine knows that work carried out in the lead process is a lead risk job, section 145J applies to the site senior executive as if the site senior executive determined the work is a lead risk job on the commencement.

181 Application of health surveillance requirements etc.

(1) A thing done or required to be done under or in relation to a former relevant provision is, from the commencement, taken to have been done or required to be done under or in relation to the corresponding new provision for the former relevant provision.

(2) Also, if the context permits, a reference in part 4 to a former relevant provision may be taken to be a reference to the corresponding new provision for the former relevant provision.

(3) In this section—

corresponding new provision, for a former relevant provision, means the provision of schedule 2E that corresponds, or substantially corresponds, to the former relevant provision.

former relevant provision means former section 139(2) or a provision of former chapter 2, part 14, division 3.

182 Biological monitoring for existing workers in blood lead exposure monitoring program

(1) This section applies in relation to a worker at a mine on the commencement if—

(a) the worker carries out work in a lead process at the mine; and

(b) health surveillance was provided for the worker, before the commencement, under a blood lead exposure monitoring program for the mine.

(2) Schedule 2E, section 21 does not apply in relation to the worker.

(3) However, biological monitoring of the worker after the commencement must be arranged under schedule 2E, section 22.

(4) For subsection (3), the first biological monitoring of the worker under schedule 2E, section 22 must be carried out on or before the due date for the next biological monitoring of the worker under the blood lead exposure monitoring program for the mine.

(5) In this section—

blood lead exposure monitoring program, for a mine, means a program for health surveillance of workers carrying out lead

risk jobs at the mine adopted in accordance with section 15 of the inorganic lead standard.

inorganic lead standard means the document declared by NOHSC called 'National Standard for the Control of Inorganic Lead at Work [NOHSC:1012(1994)]'.

183 Lead health surveillance and biological monitoring for other existing workers

(1) This section applies in relation to a worker at a mine on the commencement if—

(a) the worker carries out work in a lead process at the mine; and

(b) section 182 does not apply in relation to the worker.

(2) Schedule 2E, part 4, division 2 applies in relation to the worker.

(3) For subsection (2), lead health surveillance of the worker under schedule 2E, section 21 must be arranged—

(a) as soon as practicable after the commencement; and

(b) 1 month after the lead health surveillance of the worker under paragraph (a).

184 Removal of worker etc. if worker removed from lead risk job before commencement

(1) This section applies in relation to a worker at a mine on the commencement if—

(a) before the commencement—

(i) the worker carried out a lead risk job at the mine; and

(ii) the worker was removed from the lead risk job under former section 139(3)(a); and

(b) immediately before the commencement, the worker had not resumed the lead risk job under former section 139(3)(b).

(2) Schedule 2E, section 26 applies in relation to the worker as if the worker had been removed from carrying out a lead risk job under schedule 2E, section 24.

185 Removal of worker etc. if worker not removed from lead risk job before commencement

(1) This section applies in relation to a worker at a mine on the commencement if each of the following applied to the worker immediately before the commencement—

(a) the worker had been carrying out a lead risk job at the mine;

(b) the most recent health surveillance of the worker in relation to the lead risk job resulted in a circumstance mentioned in schedule 2E, section 24(1)(a), (b) or (c);

(c) the worker had not been removed from the lead risk job under former section 139(3)(a) or otherwise.

(2) Schedule 2E, part 4 applies in relation to the worker as if the health surveillance of the worker had been carried out under schedule 2E.

Schedule 1 Reportable diseases—Act, s 195AA

section 12B

1 a disease that test results indicate a relevant worker within the meaning of section 195AA of the Act may have contracted as a result of, or because of the contribution of, exposure to an airborne contaminant at a mine or a coal mine under the *Coal Mining Safety and Health Act 1999*, including, for example, the following diseases—

(a) asbestosis and benign asbestos-related pleural diseases, including, for example, diffuse pleural thickening, and benign asbestos-related pleural effusion;

(b) silicosis or benign silica-related pleural disease;

(c) coal workers' pneumoconiosis;

(d) other pneumoconioses, including, for example, hard-metal pneumoconiosis, baritosis and siderosis;

(e) occupational bronchiolitis obliterans;

(f) chronic obstructive pulmonary diseases, including, for example, chronic bronchitis and emphysema;

(g) diffuse dust-related pulmonary fibrosis;

(h) occupational lung cancer;

(i) other occupational cancers, including, for example, cancer of the pleura, pericardium and peritoneum (including, for example, mesothelioma);

(j) occupational asthma;

(k) occupational granulomatous disorders, including, for example, chronic beryllium disease;

(l) occupational auto-immune diseases, including, for example, scleroderma (systemic sclerosis) and rheumatoid arthritis;

(m) occupational hypersensitivity pneumonitis;

(n) occupational respiratory infections, including, for example, legionellosis, silico-tuberculosis and pneumococcal pneumonia

2 a disease (regardless of the seriousness of the disease) that test results indicate a relevant worker within the meaning of section 195AA of the Act may have contracted as a result of carrying out work for which lead health surveillance or biological monitoring under schedule 2E, part 4 is required

3 other occupational cancers, including, for example, bladder cancer, liver cancer, nasal cancer and skin cancer

Schedule 2 Types of serious accidents and high potential incidents for s 197(1) of Act

section 13

1 an incident causing the death of a person

2 an incident causing a person to be admitted to a hospital as an in-patient for treatment

3 an incident causing a person to suffer an injury causing, or likely to cause, a permanent injury to the person's health

4 an incident causing a person to become unconscious

5 theft or other loss of explosive

6 the entrapment of a person

7 an incident causing an emergency evacuation of the mine or part of it, other than as part of a training exercise

8 a catastrophic or major structural failure of plant

9 a fire

10 an inrush

11 damage to, or failure of, haulage winding or lifting equipment

12 an unplanned movement of, or a failure to stop, a vehicle

13 the exposure of a person to a hazardous chemical

14 an unplanned movement of earth or rock

15 a failure of ground control support or reinforcement

Schedule 2A Classification of mixtures

section 49A, definition *GHS*

1 Purpose of this schedule

The tables in this schedule replace some of the tables in the GHS.

Note—

See the definition of *GHS* in section 49A.

Table 1 Classification of mixtures containing respiratory or skin sensitisers

Cut-off values/concentration limits of ingredients of a mixture classified as either a respiratory sensitiser or a skin sensitiser that would trigger classification of the mixture.

Item	Ingredient classification	Mixture classification		
		Skin sensitiser	Respiratory sensitiser	
		All physical states	Solid / liquid	Gas
1	Skin sensitiser Category 1	≥ 1.0%		
2	Skin sensitiser Subcategory 1A	≥ 0.1%		
3	Skin sensitiser Subcategory 1B	≥ 1.0%		
4	Respiratory sensitiser Category 1		≥ 1.0%	≥ 0.2%
5	Respiratory sensitiser Subcategory 1A		≥ 0.1%	≥ 0.1%
6	Respiratory sensitiser Subcategory 1B		≥ 1.0%	≥ 0.2%

Note—

Table 1 replaces table 3.4.5 in the GHS, p. 151.

Table 2 Classification of mixtures containing carcinogens

Cut-off values/concentration limits of ingredients of a mixture classified as a carcinogen that would trigger classification of the mixture.

Item	Ingredient classification	Mixture classification	
		Category 1A carcinogen	Category 1B carcinogen
1	Category 1 carcinogen	≥ 0.1%	
2	Category 2 carcinogen		≥ 1.0%

Notes—

1 The concentration limits in table 2 apply to solids and liquids (w/w units) and gases (v/v units).

2 Table 2 replaces table 3.6.1 in the GHS, p. 166.

Table 3 Classification of mixtures containing reproductive toxicants

Cut-off values/concentration limits of ingredients of a mixture classified as a reproductive toxicant or for effects on or via lactation that would trigger classification of the mixture.

Item	Ingredient classification	Mixture classification		
		Category 1 reproductive toxicant	Category 2 reproductive toxicant	Additional category for effects on or via lactation
1	Category 1 reproductive toxicant	≥ 0·3%		
2	Category 2 reproductive toxicant		≥ 3·0%	

Item	Ingredient classification	Mixture classification		
		Category 1 reproductive toxicant	Category 2 reproductive toxicant	Additional category for effects on or via lactation
3	Additional category for effects on or via lactation			≥ 0·3%

Notes—

1 The concentration limits in table 3 apply to solids and liquids (w/w units) and gases (v/v units).

2 Table 3 replaces table 3.7.1 in the GHS, p. 180.

Table 4 Classification of mixtures containing specific target organ toxicants (single exposure)

Cut-off values/concentration limits of ingredients of a mixture classified as a specific target organ toxicant that would trigger classification of the mixture.

Item	Ingredient classification	Mixture classification	
		Category 1	Category 2
1	Category 1 specific target organ toxicant	Concentration ≥10%	1.0%≤ concentration < 10%
2	Category 2 specific target organ toxicant		Concentration ≥10%

Notes—

1 The concentration limits in table 4 apply to solids and liquids (w/w units) and gases (v/v units).

2 Table 4 replaces table 3.8.2 in the GHS, p. 192.

Table 5 Classification of mixtures containing specific target organ toxicants (repeated exposure)

Cut-off values/concentration limits of ingredients of a mixture classified as a specific target organ toxicant that would trigger classification of the mixture.

Item	Ingredient classification	Mixture classification	
		Category 1	**Category 2**
1	Category 1 specific target organ toxicant	Concentration ≥10%	1.0%≤ concentration < 10%
2	Category 2 specific target organ toxicant		Concentration ≥10%

Notes—

1 The concentration limits in table 5 apply to solids and liquids (w/w units) and gases (v/v units).

2 Table 5 replaces table 3.9.3 in the GHS, p. 203.

Schedule 2B Safety data sheets

section 49A, definition *safety data sheet*

1 Safety data sheet—content

(1) A safety data sheet for a hazardous chemical or dangerous goods must—

(a) contain unit measures expressed in Australian legal units of measurement under the *National Measurement Act 1960* (Cwlth); and

(b) state the date it was last reviewed or, if it has not been reviewed, the date it was prepared; and

(c) state the name, and the Australian address and business telephone number of—

(i) the manufacturer of the chemical or goods; or

(ii) the importer of the chemical or goods, who must be resident in Australia; and

(d) state an Australian business telephone number from which information about the chemical or goods can be obtained in an emergency; and

(e) be in English.

(2) A safety data sheet for a hazardous chemical or dangerous goods must state the following information about the chemical or goods—

(a) Section 1: Identification: Product identifier and chemical identity;

(b) Section 2: Hazard(s) identification;

(c) Section 3: Composition and information on ingredients, in accordance with schedule 2C;

(d) Section 4: First aid measures;

(e) Section 5: Firefighting measures;

(f) Section 6: Accidental release measures;

(g) Section 7: Handling and storage, including how the chemical or goods may be safely used;

(h) Section 8: Exposure controls and personal protection;

(i) Section 9: Physical and chemical properties;

(j) Section 10: Stability and reactivity;

(k) Section 11: Toxicological information;

(l) Section 12: Ecological information;

(m) Section 13: Disposal considerations;

(n) Section 14: Transport information;

(o) Section 15: Regulatory information;

(p) Section 16: Any other relevant information.

(3) The safety data sheet must use the headings and be set out in the order set out in subsection (2).

(4) The safety data sheet must be in English.

Note—

Section 49A, definition *safety data sheet* provides that section 2 will apply instead of section 1 in particular cases.

2 Safety data sheet—research chemical, waste product or sample for analysis

A safety data sheet for a hazardous chemical that is a research chemical, waste product or sample for analysis must—

(a) be in English; and

(b) state the name, Australian address and business telephone number of—

(i) the manufacturer of the chemical; or

(ii) the importer of the chemical, who must be resident in Australia; and

(c) state that full identification or hazard information is not available for the chemical, and in the absence of full identification or hazard information, a precautionary

approach must be taken by a person using, handling or storing the chemical; and

(d) state the chemical identity or structure of the chemical or its chemical composition, as far as is reasonably practicable; and

(e) state any known or suspected hazards related to the chemical; and

(f) state any precautions that a person using, handling or storing the chemical must take to the extent that the precautions have been identified.

Schedule 2C Disclosure of ingredients in safety data sheet

schedule 2B, section 1(2)(c)

1 Purpose of this schedule

This schedule sets out the way in which the ingredients of a hazardous chemical or dangerous goods must be disclosed in Section 3: Composition and information on ingredients, in accordance with schedule 2C, of a safety data sheet prepared under this regulation.

Note—

See schedule 2B, section 1(2)(c).

2 Identity of ingredients to be disclosed

(1) This section applies if an ingredient in a hazardous chemical or dangerous goods causes the correct classification of the chemical or goods to include a hazard class and hazard category mentioned in table 1.

(2) The identity of the ingredient must be disclosed in English on the safety data sheet for the chemical or goods.

Table 1

Column 1 Item	Column 2 GHS hazard class	Column 3 GHS hazard category
1	Acute toxicity—oral	Category 1
		Category 2
		Category 3
		Category 4

Column 1 Item	Column 2 GHS hazard class	Column 3 GHS hazard category
2	Acute toxicity—dermal	Category 1
		Category 2
		Category 3
		Category 4
3	Acute toxicity—inhalation	Category 1
		Category 2
		Category 3
		Category 4
4	Respiratory sensitiser	Category 1
5	Skin sensitiser	Category 1
6	Mutagenicity	Category 1A
		Category 1B
		Category 2
7	Carcinogenicity	Category 1A
		Category 1B
		Category 2
8	Toxic to reproduction	Category 1A
		Category 1B
		Category 2
		Additional category for effects on or via lactation
9	Target organ toxicity—single exposure	Category 1
		Category 2
		Category 3

Column 1 Item	Column 2 GHS hazard class	Column 3 GHS hazard category
10	Target organ toxicity—repeat exposure	Category 1
		Category 2
11	Aspiration hazards	Category 1
12	Skin corrosion or irritation	Category 1A
		Category 1B
		Category 1C
		Category 2
13	Serious eye damage or eye irritation	Category 1
		Category 2A

3 Generic names used to disclose identity of ingredients

(1) This section applies if an ingredient of a hazardous chemical or dangerous goods must be disclosed under section 2.

(2) The ingredient—

(a) may be disclosed by its generic name if—

(i) the ingredient causes the correct classification of the chemical or goods to include a hazard class and hazard category mentioned in table 2; and

(ii) the ingredient does not cause the correct classification of the chemical or goods to include any other hazard class and hazard category in section 2, table 1; and

(iii) the identity of the ingredient is commercially confidential; and

(iv) an exposure standard for the ingredient has not been established; or

(b) in any other case—must be disclosed by its chemical identity.

Table 2

Column 1 Item	Column 2 Hazard class and hazard category
1	Acute toxicity (category 4)
2	Aspiration hazard (category 1)
3	Serious eye damage or eye irritation (category 2A)
4	Skin corrosion or irritation (category 2)
5	Specific target organ toxicity (single exposure) (category 3)

(3) In this section—

exposure standard means an exposure standard in the airborne contaminants standards.

4 Disclosing proportions of ingredients

(1) This section applies if an ingredient of a hazardous chemical or dangerous goods must be disclosed under section 2.

(2) The proportion of the ingredient to the chemical or goods must be disclosed—

(a) if the exact proportion of the ingredient is not commercially confidential—as the exact proportion of the chemical, expressed as a percentage by weight or volume; or

(b) if the exact proportion of the ingredient is commercially confidential—as 1 of the following ranges within which the exact proportion fits, expressed as a percentage by weight or volume—

(i) < 10%;

(ii) 10–30%;

(iii) 30–60%;

(iv) > 60%;

(v) a range that is narrower than the range set out in subparagraph (i), (ii), (iii) or (iv).

Schedule 2D Correct classification of substance, mixture or article

schedule 7, definition *correct classification*

1 Correct classification of substance, mixture or article

(1) A substance or mixture (other than a research chemical, sample for analysis or waste product) is ***correctly classified*** if a determination is made about whether the substance or mixture can be classified into a hazard class under the GHS including a mixture classification mentioned in schedule 2A.

Note—

The schedule 2A tables replace some tables in the GHS.

(2) A substance or mixture that is a research chemical, sample for analysis or waste product is ***correctly classified*** if, so far as is reasonably practicable having regard to the known or suspected properties of the substance or mixture—

(a) a determination is made about the identity of the substance or mixture; and

(b) a determination is made about whether the substance or mixture can be classified into a hazard class under the GHS.

(3) An article that contains a substance or mixture that may be released during the use, handling or storage of the article is ***correctly classified*** if the substance or mixture is correctly classified.

Schedule 2E Health surveillance

section 145L

Part 1 General

1 What is a *health surveillance report*

(1) A ***health surveillance report*** is a document about the health surveillance or part of health surveillance of a person that includes—

(a) either or both of the following—

(i) advice about the effects on the person's health related to the person's exposure to a hazard at a mine;

(ii) recommendations about the need for remedial action, or further monitoring, arising from the health surveillance; and

(b) if a reportable disease is identified—

(i) the reportable disease identified; and

(ii) when the person was first diagnosed with the reportable disease, if known; and

(c) the name of the appropriate doctor.

(2) A ***health surveillance report*** relating to a person's exposure to lead at a mine may include, either in addition to or instead of the matters mentioned in subsection (1)(a), biological monitoring results or clinical findings relating to the person's exposure to lead at the mine.

2 Application of health surveillance requirements

(1) A health surveillance requirement applies in relation to a person in addition to a requirement for a health assessment applying in relation to the person.

(2) If more than 1 health surveillance requirement applies in relation to a person, each health surveillance requirement must be complied with.

(3) In this section—

health assessment means an assessment under section 131.

health surveillance requirement means a requirement under this schedule to arrange health surveillance or a part of health surveillance of a person.

3 Requirements about health surveillance

(1) This section applies to health surveillance or part of health surveillance of a person required under this schedule.

Examples of a part of health surveillance—

a particular type of examination, biological monitoring

(2) The person who arranges the health surveillance or part of health surveillance must ensure the health surveillance or part of health surveillance is done by or under the supervision of an appropriate doctor.

(3) The appropriate doctor must give—

(a) a copy of the health surveillance report for the health surveillance or part of health surveillance to the person who arranged the health surveillance or part of health surveillance; and

(b) a copy and explanation of the health surveillance report for the health surveillance or part of health surveillance to—

(i) the person to whom the report relates; and

(ii) if requested by the person to whom the report relates—another person nominated by the person.

4 Removal of worker from work environment

(1) This section applies if, following health surveillance or part of health surveillance of a worker at a mine under this schedule, test results indicate the worker has effects from a hazard at the

mine exceeding the exposure limit applying to the worker for the hazard.

(2) The site senior executive for the mine must ensure the worker is removed from, and does not resume, work involving exposure to a level of the hazard that would increase the effects or prevent the effects decreasing.

Note—

See also part 4, division 3 in relation to workers who carry out a lead risk job.

Part 2 Health surveillance for exposure to hazard

5 Requirement to arrange health surveillance

A site senior executive for a mine must arrange for health surveillance of a worker at the mine if the site senior executive reasonably believes, or ought reasonably to believe—

(a) exposure to a hazard at the mine may cause, or result in, an adverse health effect; and

(b) the health effect may happen under the worker's work conditions; and

(c) either—

(i) a valid technique capable of detecting signs of the health effect exists; or

(ii) a valid biological monitoring procedure is available to detect changes from the current accepted values for the hazard.

Example of a change from current accepted values—

a raised biological mercury level caused by exposure to mercury vapour

6 Cost of health surveillance

(1) The employer of a worker must pay for—

(a) the worker's health surveillance under section 5; and

(b) the documents and information required to be given under section 3(3) for the health surveillance.

Maximum penalty—30 penalty units.

(2) Subsection (1) is not a safety and health obligation for the Act.

Part 3 Respiratory health surveillance

Division 1 Preliminary

7 Definitions for part

In this part—

additional examination means an examination mentioned in this section, definition *respiratory health examination*, paragraph (f).

chest examination means—

(a) an examination of chest expansion; and

(b) auscultation.

chest x-ray examination means an examination of an x-ray taken of a person's chest—

(a) to screen for indications of pneumoconioses or other respiratory diseases; and

(b) performed in compliance with the ILO guidelines.

comparative assessment, of a person's spirometry, means a comparison of the results of the person's spirometry with the results of the person's previous spirometries for the purpose of identifying trends.

former worker see section 14.

further reading, of an x-ray taken of a person's chest, means an examination of the x-ray—

(a) to screen for indications of pneumoconioses or other respiratory diseases; and

(b) performed in compliance with the ILO guidelines; and

(c) performed for the purpose of considering the classification of the x-ray under a previous chest x-ray examination and finally deciding the classification under the ILO guidelines.

further surveillance period, for a person who becomes or is a worker at a mine, means—

(a) within 5 years after the most recent respiratory health surveillance was carried out for the person; or

(b) if the most recent health surveillance report for the person, or an appropriate doctor in consultation with the site senior executive for the mine, recommends respiratory health surveillance be carried out for the person within a period of less than 5 years—

(i) the period recommended; or

(ii) if there are 2 or more recommendations—the shortest of the periods recommended.

ILO guidelines means the guidelines called 'Guidelines for the use of the ILO International Classification of Radiographs of Pneumoconioses' published by the International Labour Organization.

Note—

The ILO guidelines are available on the International Labour Organization's website.

respiratory health examination, for a person, means each of the following—

(a) a chest examination;

(b) a spirometry;

(c) a comparative assessment of the person's spirometry if the results of 1 or more previous spirometries for the person are available;

(d) a chest x-ray examination;

(e) a further reading of the chest x-ray the subject of the examination under paragraph (d);

(f) another examination the relevant appropriate doctor considers is necessary for the early detection of injury or illness to the person's respiratory system.

respiratory health surveillance means health surveillance that includes all of the respiratory health examinations.

Division 2 Respiratory health surveillance arranged by site senior executive

8 Requirement to arrange respiratory health surveillance

(1) A site senior executive for a mine must arrange for respiratory health surveillance of a person who becomes, is or stops being a worker at the mine at the times stated in this division.

(2) Subsection (1) does not apply to a person whose current or previous exposure to hazards is shown by a risk assessment to create a risk to the person's respiratory system so minimal that it can be managed effectively without respiratory health surveillance being carried out for the person.

9 General timing of respiratory health surveillance of a person who becomes a worker

(1) Respiratory health surveillance of a person who becomes a worker at a mine must be carried out—

(a) if respiratory health surveillance has not previously been carried out for the person—before the person becomes a worker at the mine; or

(b) if respiratory health surveillance has previously been carried out for the person—within the further surveillance period for the person.

(2) However, if the respiratory health surveillance is to include an additional examination and the additional examination can not be carried out within the period stated in subsection (1), the

additional examination must be carried out as soon as practicable after the end of the period.

10 General timing of respiratory health surveillance of a person who is a worker

(1) Respiratory health surveillance of a person who is a worker must be carried out within the further surveillance period for the person.

(2) However, if the respiratory health surveillance is to include an additional examination and the additional examination can not be carried out within the further surveillance period, the additional examination must be carried out as soon as practicable after the end of the period.

(3) Subsection (4) applies if the most recent health surveillance report for the person, or an appropriate doctor in consultation with the site senior executive for the mine, recommends a particular respiratory health examination be carried out for the person before respiratory health surveillance is carried out for the person under subsection (1).

(4) The respiratory health examination must be carried out within the period recommended by the report or appropriate doctor.

11 General timing of respiratory health surveillance of a person who stops being a worker

(1) This section applies to a person who—

(a) permanently stops being a worker; and

(b) was a worker for at least 3 years; and

(c) during the 3 years before the person stops being a worker, did not have respiratory health surveillance.

(2) The person may ask the person's employer or former employer for respiratory health surveillance to be carried out—

(a) during the 6-month period that begins 3 months before the person stops being a worker; and

(b) at a time, or times, during that period when the person is available for the surveillance.

(3) If the person asks for respiratory health surveillance under subsection (2), respiratory health surveillance of the person must be carried out—

(a) within the period mentioned in subsection (2)(a); and

(b) at the time or times mentioned in subsection (2)(b).

(4) In this section—

former employer, of a person who stops being a worker, means the person's employer immediately before the person stops being a worker.

12 Delaying respiratory health examination

(1) This section applies if an appropriate doctor considers the risk to any person from delaying a respiratory health examination to be lower than the risk to the person undergoing the examination of an adverse health effect of the examination.

Example—

An appropriate doctor may consider the risk to a pregnant worker from delaying a chest x-ray examination to be lower than the risk to the worker of an adverse health effect of the examination.

(2) Despite sections 9 to 11, the respiratory health examination may be carried out up to 1 year after the period provided for in those provisions.

(3) If a respiratory health examination is delayed under subsection (2), the last respiratory health surveillance is taken to have been carried out at the time of the respiratory health examinations that were not delayed.

(4) In this section—

risk, to a person, includes a risk to an unborn child of the person.

13 Cost of respiratory health surveillance

(1) The employer of a worker or the potential employer of a person who becomes a worker must pay for—

(a) the worker's or person's respiratory health surveillance and each respiratory health examination; and

(b) the documents and information required to be given under section 3(3) for the respiratory health surveillance.

Maximum penalty—30 penalty units.

(2) Subsection (1) is not a safety and health obligation for the Act.

Division 3 Respiratory health surveillance of former workers arranged by CEO

14 Application of division

This division applies in relation to a person (a ***former worker***) who—

(a) has permanently stopped being a worker; and

(b) was a worker for at least 3 years.

15 Request for respiratory health surveillance

(1) A former worker may ask the CEO for respiratory health surveillance of the former worker.

(2) However, a former worker may not ask for respiratory health surveillance until at least 5 years after the former worker's last respiratory health surveillance.

(3) Subsection (2) does not apply if—

(a) the most recent health surveillance report for the former worker recommends respiratory health surveillance be carried out within a period of less than 5 years; or

(b) the former worker gives the CEO a medical certificate signed by a doctor stating the former worker has symptoms that may indicate injury or illness to the former worker's respiratory system caused by exposure to a hazard at a mine.

16 General timing of respiratory health surveillance

If a former worker makes a request under section 15(1), the CEO must arrange for respiratory health surveillance of the former worker as soon as practicable after receiving the request.

17 Delaying respiratory health examination

(1) This section applies if an appropriate doctor considers the risk to a former worker of an adverse health effect from delaying a respiratory health examination to be lower than the risk to the former worker of an adverse health effect of the examination.

Example—

An appropriate doctor may consider the risk to a pregnant former worker of an adverse health effect from delaying a chest x-ray examination to be lower than the risk to the former worker of an adverse health effect of the examination.

(2) Despite section 16, the respiratory health examination may be carried out up to 1 year after the CEO receives the request.

(3) If a respiratory health examination is delayed under subsection (2), the last respiratory health surveillance is taken to have been carried out at the time of the respiratory health examinations that were not delayed.

(4) In this section—

risk, to a former worker, includes a risk to an unborn child of the former worker.

18 Additional documents to be given to CEO

If respiratory health surveillance of a former worker is carried out under this division, the appropriate doctor must give the

CEO the information or other documents on which the health surveillance report about the respiratory health surveillance of the former worker was based.

19 Cost of respiratory health surveillance

(1) If respiratory health surveillance of a former worker is carried out under this division, the CEO must pay for—

(a) the respiratory health surveillance; and

(b) the documents and information required to be given under section 3(3) for the respiratory health surveillance; and

(c) the documents mentioned in section 18.

(2) Subsection (1) is not a safety and health obligation for the Act.

Part 4 Lead health surveillance

Division 1 Preliminary

20 Definitions for part

In this part—

blood lead health examination means each of the following—

(a) biological monitoring;

(b) a medical examination;

(c) demographic, medical and occupational history.

lead health surveillance means health surveillance that—

(a) includes all of the blood lead health examinations; or

(b) is of a type that is—

(i) equal or better than the health surveillance mentioned in paragraph (a); and

(ii) recommended by an appropriate doctor.

Division 2 Lead health surveillance

21 Initial lead health surveillance

(1) A site senior executive for a mine must arrange for lead health surveillance of a worker at the mine—

(a) before the worker is first exposed to a lead process at the mine; and

(b) 1 month after the worker is first exposed to a lead process at the mine.

(2) If work is identified as a lead process after a worker is exposed to the work, the site senior executive must arrange for lead health surveillance of the worker—

(a) as soon as practicable after the lead process is identified; and

(b) 1 month after the lead health surveillance of the worker under paragraph (a).

22 Additional biological monitoring for lead risk jobs

(1) A site senior executive for a mine must arrange for biological monitoring of each worker who carries out a lead risk job at the mine to be carried out at the following times—

(a) for a person other than a female of reproductive capacity—

(i) if the last biological monitoring of the worker shows a blood lead level of less than 10µg/dL (0.48µmol/L)—6 months after the last biological monitoring of the worker; or

(ii) if the last biological monitoring of the worker shows a blood lead level of 10µg/dL (0.48µmol/L) or more but less than 20µg/dL (0.97µmol/L)—3 months after the last biological monitoring of the worker; or

(iii) if the last biological monitoring of the worker shows a blood lead level of 20µg/dL (0.97µmol/L) or more—6 weeks after the last biological monitoring of the worker;

(b) for a female of reproductive capacity—

(i) if the last biological monitoring of the worker shows a blood lead level of less than 5µg/dL (0.24µmol/L)—3 months after the last biological monitoring of the worker; or

(ii) if the last biological monitoring of the worker shows a blood lead level of 5µg/dL (0.24µmol/L) or more—6 weeks after the last biological monitoring of the worker.

(2) The site senior executive must increase the frequency of the biological monitoring of the worker if the worker carries out work that is likely to significantly change the nature, or increase the duration or frequency, of the worker's exposure to lead.

(3) Despite section 3(2), biological monitoring of a worker under this section does not need to be done by, or under the supervision of, an appropriate doctor.

(4) If biological monitoring of a worker under this section is carried out by a person who is not an appropriate doctor, and who is not carrying out the biological monitoring under the supervision of an appropriate doctor, sections 1(1)(c) and 3(3) apply to the person as if a reference in the sections to the appropriate doctor were a reference to the person.

(5) In this section—

last biological monitoring, of a worker, means the last biological monitoring of the worker that included testing of the worker's blood to determine the worker's blood lead level.

23 Notifying chief inspector about health surveillance report

(1) This section applies if a site senior executive for a mine receives a copy of a health surveillance report about the lead

health surveillance or biological monitoring of a worker arranged under this division.

(2) The site senior executive must notify the chief inspector about the report—

(a) in the approved form; and

(b) within 28 days after the site senior executive receives a copy of the report.

Maximum penalty—60 penalty units.

(3) Subsection (2) is not a safety and health obligation for the Act.

Division 3 Removal of worker from lead risk job

24 Removal of worker from lead risk job

(1) This section applies in relation to a worker who carries out a lead risk job at a mine if, following lead health surveillance or biological monitoring of the worker arranged under this part—

(a) test results indicate the worker's blood lead level has reached or exceeded—

(i) for a person other than a female of reproductive capacity—30µg/dL (1.45µmol/L); or

(ii) for a female of reproductive capacity—10µg/dL (0.48µmol/L); or

(b) an appropriate doctor recommends the worker be removed from carrying out the lead risk job; or

(c) there is an indication that a measure implemented to control health risks from exposure to lead at the mine has failed and, as a result, the worker's blood lead level is likely to reach or exceed the level mentioned in paragraph (a).

(2) The site senior executive for the mine must immediately remove the worker from carrying out a lead risk job.

(3) The site senior executive must notify the chief inspector in the approved form as soon as practicable after the worker is removed from carrying out a lead risk job under subsection (2).

Maximum penalty—60 penalty units.

(4) Subsection (3) is not a safety and health obligation for the Act.

25 Arranging lead health surveillance if worker removed from lead risk job

(1) This section applies if a worker is removed from carrying out a lead risk job at a mine under section 24.

(2) The site senior executive for the mine must arrange for lead health surveillance of the worker within 7 days after the day the worker is removed under section 24.

26 Return to lead risk job after removal

(1) This section applies if—

(a) a worker is removed from carrying out a lead risk job at a mine under section 24; and

(b) the site senior executive for the mine expects the worker to return to carrying out a lead risk job at the mine.

(2) The site senior executive must arrange for biological monitoring of the worker at a frequency decided by an appropriate doctor to determine whether the worker's blood lead level is low enough for the worker to return to carrying out a lead risk job.

(3) The site senior executive must ensure that the worker does not return to carrying out a lead risk job until—

(a) the worker's blood lead level is less than—

(i) for a person other than a female of reproductive capacity—20µg/dL (0.97µmol/L); or

(ii) for a female of reproductive capacity—5µg/dL (0.24µmol/L); and

(b) an appropriate doctor is satisfied that the worker is fit to return to carrying out a lead risk job.

(4) The site senior executive must notify the chief inspector in the approved form as soon as practicable if a worker returns to carrying out a lead risk job under subsection (3).

Maximum penalty—60 penalty units.

(5) Subsection (4) is not a safety and health obligation for the Act.

27 Removal of pregnant or breastfeeding worker from lead risk job

(1) This section applies if a site senior executive for a mine is advised or otherwise knows a worker who carries out a lead risk job at the mine—

(a) is pregnant or may be pregnant; or

(b) is breastfeeding.

(2) The site senior executive must immediately remove the worker from carrying out a lead risk job.

28 Return to lead risk job after pregnancy or breastfeeding

(1) This section applies if—

(a) a worker is removed from carrying out a lead risk job at a mine under section 27; and

(b) the site senior executive for the mine expects the worker to return to carrying out a lead risk job at the mine.

(2) The site senior executive must ensure that the worker does not return to carrying out a lead risk job until the worker is not pregnant or breastfeeding.

Division 4 Miscellaneous

29 Cost of lead health surveillance

(1) The employer of a worker must pay for—

(a) any lead health surveillance or biological monitoring of the worker arranged under this part; and

(b) the documents and information required to be given under section 3(3) for lead health surveillance or biological monitoring mentioned in paragraph (a).

Maximum penalty—30 penalty units.

(2) Subsection (1) is not a safety and health obligation for the Act.

Part 5 Keeping health surveillance reports

30 Keeping health surveillance reports

(1) A site senior executive for a mine must ensure a copy of a health surveillance report obtained under this regulation is kept for at least the following period after the report is received—

(a) for a hazard with a cumulative or delayed effect—30 years;

Examples—

lead, silica, noise or vibration

(b) for another hazard—7 years.

(2) If the mine ceases operations in the period the copy of the health surveillance report is required to be kept under subsection (1), the site senior executive must ask for, and comply with, the CEO's directions about the copy's storage.

Schedule 3 Prohibited substances

section 148

Column 1 Prohibited substance	Column 2 Prohibited purpose
amosite, crocidolite, fibrous anthophyllite, tremolite or actinolite	all uses, other than sampling, analysis, maintenance, removal, disposal, encapsulation or enclosure
chrysotile, other than chrysotile occurring in a product or item exempted under NOHSC's document called 'National Model Regulations for the Control of Workplace Hazardous Substances [NOHSC:1005 (1994)]', schedule 2	all uses, other than research, analysis, removal or disposal
compressed natural gas, hydrogen, liquid petroleum gas, petrol	use underground in an internal or external combustion engine

Schedule 4 Declarations about mines

section 149

Part 1 Places declared to be mines

University of Queensland mine located at 40 Isles Road, Indooroopilly

Part 2 Mines or parts of mines to which Act does not apply

1 a part of a mine where electrical works owned by an electricity entity, other than RTA Weipa Pty Ltd ABN 54 137 266 285, are located

2 a part of a mine on or adjacent to mining lease 8058, held by Mount Isa Mines Limited ACN 87 009 661 447, where the Mount Isa Water Board carries out activities in connection with providing water for the City of Mount Isa or operations on or adjacent to the mining lease

Note—

The area where the Mount Isa Water Board carries out the activities is shown outlined in red on Mount Isa Mines Limited plan number MIWB DME 1 held by the department.

Schedule 5 General exposure limits for hazards

schedule 7, definition *general exposure limit*

Column 1 Hazard	Column 2 General exposure limit
airborne contaminant other than welding fumes, diesel particulate matter or respirable crystalline silica	the exposure standard assigned to the contaminant in the airborne contaminants standards
inhalable dust to which an exposure standard is not assigned in the airborne contaminants standards	10mg/m^3
ionising radiation	the dose limit stated in NOHSC's document called 'National Standard for Limiting Occupational Exposure to Ionizing Radiation [NOHSC:1013 (1995)]', schedule 1
noise	the dose limit stated in NOHSC's document called 'National Standard for Occupational Noise 2nd edition [NOHSC:1007 (2000)]'
respirable crystalline silica (quartz, cristobalite and tridymite)	0.05mg/m^3
respirable dust to which an exposure standard is not assigned in the airborne contaminants standards	5mg/m^3
welding fumes	5mg/m^3

Schedule 5A Civil penalties

section 150A

Part 1 Category 1 obligations

1 the safety and health obligation under section 39(1)(c) of the Act to develop a safety and health management system for a mine at which more than 10 workers are employed

Part 2 Category 2 obligations

1 the safety and health obligation under section 136(2) of this regulation (relating to monitoring for exposure to hazards)

Part 3 Category 3 obligations

1 the safety and health obligation under section 39(1)(c) of the Act to implement a safety and health management system for a mine that includes the procedures or standard work instructions mentioned in sections 42, 47, 55, 58, 70, 71, 72, 79, 128 and 141 of this regulation

2 the obligations under section 131 and schedule 2E, sections 5, 6, 8, 13, 21, 22, 25, 29 and 30 of this regulation (relating to health assessments and health surveillance)

3 the obligations under section 195 of the Act (relating to notification of accidents, incidents, or deaths)

4 the obligations under section 195AA(1) of the Act (relating to notification of diseases)

Schedule 6 Fees

sections 11C, 11F and 151

Part 1 Board of examiners' fees

		Fee units
1	Application for assessment for a first class certificate of competency	44.95
2	Issuing a duplicate certificate of competency to replace a lost, destroyed or defaced certificate	8.70

Part 2 Other fees

		Fee units
1	Safety and health fee, for a mine, for a reporting period that is a quarter (s 11C(2))—	
	(a) if the number of workers working at the mine during the quarter is 5 or fewer	nil
	(b) if the number of workers working at the mine during the quarter is more than 5 but not more than 10—for each worker working at the mine during the quarter	32.00
	(c) if the number of workers working at the mine during the quarter is more than 10 but not more than 19—for each worker working at the mine during the quarter	128.00
	(d) if the number of workers working at the mine during the quarter is more than 19 but not more than 99—for each worker working at the mine during the quarter	239.75

		Fee units
	(e) if the number of workers working at the mine during the quarter is more than 99—for each worker working at the mine during the quarter	319.75
2	Safety and health fee, for a mine, for a reporting period that is a financial year (s 11C(2))—	
	(a) if the number of workers working at the mine during the financial year is 5 or fewer	nil
	(b) if the number of workers working at the mine during the financial year is more than 5 but not more than 10—for each worker working at the mine during the financial year	128.00
	(c) if the number of workers working at the mine during the financial year is more than 10 but not more than 19—for each worker working at the mine during the financial year	512.00
	(d) if the number of workers working at the mine during the financial year is more than 19 but not more than 99—for each worker working at the mine during the financial year	959.00
	(e) if the number of workers working at the mine during the financial year is more than 99—for each worker working at the mine during the financial year	1,279.00
3	Fee for late safety and health census (s 11F(4))	121.40

Schedule 7 Dictionary

section 3

accredited laboratory, in relation to biological monitoring, means an Australian laboratory accredited by NATA as competent to perform the biological monitoring.

additional examination, for schedule 2E, part 3, see schedule 2E, section 7.

ADG Code, for chapter 2, part 7, see section 49A.

AHD means the Australian height datum adopted by the National Mapping Council of Australia for referencing a level or height back to a standard base level.

airborne contaminants guide means the document called 'Guidance on the interpretation of workplace exposure standards for airborne contaminants' published by Safe Work Australia.

airborne contaminants standards means the document called 'Workplace exposure standards for airborne contaminants' published by Safe Work Australia.

appropriate doctor, for health surveillance or a health assessment of a person, means a doctor who—

(a) is appropriately qualified; and

(b) has demonstrated knowledge of the risks associated with activities performed by workers at the mine at which the person becomes, is or stops being a worker.

AS or ***AS/NZS*** means a standard published by Standards Australia Limited ACN 087 326 690.

AS 2187 means AS 2187 'Explosives—Storage, transport and use'.

asbestos means the asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including the following minerals—

(a) actinolite asbestos;

(b) grunerite (or amosite) (brown) asbestos;

(c) anthophyllite asbestos;

(d) chrysotile (white);

(e) crocidolite (blue);

(f) tremolite asbestos;

(g) a mixture containing 1 or more of the minerals mentioned in paragraphs (a) to (f).

Note—

Paragraphs (a), (b), (c) and (f) mention mineral silicates that use the same mineral term for both the asbestiform and nonasbestiform varieties. The word 'asbestos' has been included when listing these minerals to emphasise that only the asbestiform habit of these minerals is regulated as asbestos.

asbestos material means installed thermal or acoustic insulation material comprising or containing asbestos.

biological monitoring means testing by an accredited laboratory for the presence of a hazardous chemical, its metabolites or a biochemical change in a person's body tissue, exhaled air or fluid resulting from exposure to the hazardous chemical.

Example—

testing a person's blood to determine the person's blood lead level

blasting explosive means an explosive that contributes the majority of the blasting work in mining or quarrying.

blood lead level means the concentration of lead in whole blood expressed in micrograms per decilitre (µg/dL) or micromoles per litre (µmol/L).

chemical identity means a name, in accordance with the nomenclature systems of the International Union of Pure and Applied Chemistry or the Chemical Abstracts Service, or a technical name, that gives a chemical a unique identity.

chest examination, for schedule 2E, part 3, see schedule 2E, section 7.

chest x-ray examination, for schedule 2E, part 3, see schedule 2E, section 7.

comparative assessment, of a person's spirometry, for schedule 2E, part 3, see schedule 2E, section 7.

conveyance includes a skip, cage, kibble or stage.

correct classification means the set of hazard classes and hazard categories assigned to a hazardous chemical, or dangerous goods, when they are correctly classified under schedule 2D.

CPD activity, in relation to a certificate of competency or a site senior executive notice, see section 148E(1).

CPD hours, for a CPD activity that has been successfully completed by the holder of a certificate of competency or site senior executive notice, see section 148B.

CPD period, for the holder of a certificate of competency or site senior executive notice, see section 148B.

CPD total hours, for the holder of a certificate of competency or site senior executive notice, see section 148E(3)(c).

dangerous goods see section 51.

detonator means a capsule or case containing an explosive of high sensitivity used for initiating another explosive.

effect, of a hazard, means the hazard's effect on a person's safety or health.

electrical work means electrical work within the meaning of the *Electrical Safety Act 2002*.

electrical works, for schedule 4, part 2, means electrical equipment and electric line associated equipment within the meaning of the *Electrical Safety Act 2002*.

electricity entity, for schedule 4, part 2, has the meaning given by the *Electrical Safety Act 2002*.

emergency response plan means an emergency response plan developed under section 35.

employer, for a worker, means the operator or contractor who employs the worker.

explosive means—

(a) a blasting explosive; or

(b) a detonator.

exposed, to a hazard that is a substance, for a person, means the person has absorbed, or is likely to absorb, the substance—

(a) by ingestion or inhalation; or

(b) through the skin or mucous membrane.

exposure limit, applying to a worker for a hazard, means—

(a) if the worker does not have a personal exposure limit for the hazard—the general exposure limit for the hazard or, if the general exposure limit has been adjusted for the worker under section 134, the limit as adjusted; or

(b) if the worker has a personal exposure limit for the hazard—the personal exposure limit or, if the personal exposure limit has been adjusted for the worker under section 134, the limit as adjusted.

extra low voltage means a voltage of less than 50V a.c. or 120V d.c., ripple free.

extraneous electricity, for blasting, means an unintended electrical current from a source other than the firing device which could initiate a detonator.

Examples—

stray currents, induced currents, static electricity and radio-frequency energy

female of reproductive capacity means a female other than a female who provides information stating the female is not of reproductive capacity.

fitness assessment record see sections 87(1) and 88(2).

fitness assessment report, for a worker, means written information, other than a medical record, about the worker's fitness for work.

former worker, for schedule 2E, part 3, see schedule 2E, section 14.

further reading, of an x-ray taken of a person's chest, for schedule 2E, part 3, see schedule 2E, section 7.

further surveillance period, for a person, for schedule 2E, part 3, see schedule 2E, section 7.

GDA means Geocentric Datum of Australia which is a system of earth-centred datum used for mapping.

general exposure limit, for a hazard mentioned in schedule 5, column 1, means the exposure standard, dose limit or other limit stated opposite the hazard in schedule 5, column 2.

GHS see section 49A.

hazard category means a division of criteria within a hazard class in the GHS.

hazard class means the nature of a physical, health or environmental hazard under the GHS.

hazardous chemical see section 50.

health assessment record see sections 131(2) and 132(b).

health assessment report, for a worker, means written information, other than a medical record, about the worker's ability to tolerate a hazard without harming the worker or the worker's children.

health surveillance means the monitoring, including biological monitoring, medical examination and medical assessment, of a person to check for changes in the person's health because of exposure to a hazard.

health surveillance report, for schedule 2E, see schedule 2E, section 1.

identify, for a hazard, means establish the presence of the hazard by a risk management process.

ILO guidelines, for schedule 2E, part 3, see schedule 2E, section 7.

inhalable dust see the airborne contaminants guide, chapter 5.

in transit, for material at a mine, means—

(a) at the mine for not more than 5 days; and

(b) not used or to be used at the mine; and

(c) if supplied in tanks or packages, supplied in tanks or packages that are not opened.

lead means lead metal, lead alloys, inorganic lead compounds and lead salts of organic acids.

lead health surveillance, for schedule 2E, part 4, see schedule 2E, section 20.

lead process means a process that consists of any of the following processes—

(a) work that exposes a worker to lead dust or lead fumes arising from the handling of dry lead compounds;

(b) work in connection with the assembly, handling or repair of batteries, or parts of batteries, containing lead that involves the manipulation of dry lead compounds, or pasting or casting lead;

(c) spraying molten lead metal or alloys containing more than 5% by weight of lead metal;

(d) melting or casting lead alloys containing more than 5% by weight of lead metal in which the temperature of the molten material exceeds 450°C;

(e) recovering lead from its ores, oxides or other compounds by thermal reduction process;

(f) dry machine grinding, discing, buffing or cutting by power tools alloys containing more than 5% by weight of lead metal;

(g) dry machine grinding, discing, buffing or cutting by power tools of dry lead compounds containing more than 1% by weight of lead metal;

(h) machine sanding or buffing surfaces coated with paint containing more than 1% by dry weight of lead;

(i) a process by which electric arc, oxyacetylene, oxy gas, plasma arc or a flame is applied for welding, cutting or cleaning to the surface of metal coated with lead or paint containing more than 1% by dry weight of lead metal;

(j) radiator repairs that may cause exposure to lead dust or lead fumes;

(k) fire assays if lead, lead compounds or lead alloys are used;

(l) hand grinding and finishing lead or alloys containing more than 50% by dry weight of lead;

(m) spray painting with lead paint containing more than 1% by dry weight of lead;

(n) melting lead metal or alloys containing more than 50% by weight of lead metal if the exposed surface area of the molten material exceeds 0.1m^2 and the temperature of the molten material does not exceed 450°C;

(o) using a power tool, including abrasive blasting and high pressure water jets, to remove a surface coated with paint containing more than 1% by dry weight of lead and handling waste containing lead resulting from the removal;

(p) any other work that exposes a worker to lead dust or lead fumes during operations.

lead process area means a part of a mine at which a lead process is carried out.

lead risk job, for a worker, means work carried out in a lead process that causes, or is likely to cause, the worker's blood lead level to exceed—

(a) for a person other than a female of reproductive capacity—20µg/dL (0.97µmol/L); or

(b) for a female of reproductive capacity—5µg/dL (0.24µmol/L).

local environment, of a mine, means the area outside the mine site affected, or reasonably likely to be affected, by operations at the mine.

lock-out, plant, means attach a lock to the plant or an enclosure in which the plant is located.

major hazard facilities standard means NOHSC's document called 'National Standard for the Control of Major Hazard Facilities [NOHSC:1014 (2002)]'.

major hazard facility see section 60.

manufacture an explosive, means manufacture the explosive within the meaning of the *Explosives Act 1999*.

medical record, of a person, means personal medical results or clinical findings obtained from a fitness or health assessment or health surveillance of the person.

NATA means the National Association of Testing Authorities, Australia ACN 004 379 748.

NOHSC means the National Occupational Health and Safety Commission under the *National Occupational Health and Safety Commission Act 1985* (Cwlth).

occupational asthma, in relation to a person, means asthma caused or exacerbated by the person's work or environmental factors at the person's workplace.

occupational cancer, in relation to a person, means cancer caused, wholly or partly, by the person's work or environmental factors at the person's workplace.

personal exposure limit, for a person, means the personal exposure limit set for the person under section 133(2).

possess an explosive, means possess the explosive within the meaning of the *Explosives Act 1999*.

possible major hazard facility see section 60A.

practising certificate scheme, for chapter 2A, see section 148E(2).

quarter means a 3 month period ending on 30 September, 31 December, 31 March or 30 June.

relevant holder, for chapter 2A, see section 148B.

reporting period, for a mine, for chapter 2, part 2A, see section 11A.

research chemical see section 49A.

respirable dust see the airborne contaminants guide, chapter 5.

respiratory health examination, for a person, for schedule 2E, part 3, see schedule 2E, section 7.

respiratory health surveillance, for schedule 2E, part 3, see schedule 2E, section 7.

responsible person, for a mine, for chapter 2, part 2A, see section 11B.

safety and health census, for chapter 2, part 2A, see section 11D(1).

safety and health fee see section 11C(1).

safety data sheet see section 49A.

Safe Work Australia means Safe Work Australia as established under the *Safe Work Australia Act 2008* (Cwlth), section 5.

store an explosive, means store the explosive within the meaning of the *Explosives Act 1999*.

tag, plant or a part of plant, means attach a tag to the plant or part or an enclosure in which the plant is located.

underground magazine means an underground magazine as defined in AS 2187.

Note—

AS 2187.0—

underground magazine—An enclosed cavity formed in underground rock, or a magazine constructed in accordance with AS 2187.1 for underground use, which is used for the storage of explosives and detonators.

underground temporary storage means an area that is—

(a) underground at a mine; and

(b) set aside temporarily for storing explosives for imminent use in operations that are in progress near the temporary storage.

visitor means a person other than a worker.

winder means a winding engine for raising or lowering a conveyance in a shaft, winze or raise.

winding equipment includes the following things—

(a) a winder;

(b) a conveyance;

(c) a counterweight for the conveyance;

(d) ropes and attachments associated with the winding process;

(e) a headframe;

(f) guides;

(g) equipment for loading and unloading the conveyance.

work environment, at a mine, includes the mine site and plant at the site.