

Work Health and Safety (Mines and Petroleum Sites) Regulation 2022

[2022-509]



Status information

Currency of version

Current version for 26 August 2022 to date (accessed 1 November 2022 at 07:32) Legislation on this site is usually updated within 3 working days after a change to the legislation.

Provisions in force

Some, but not all, of the provisions displayed in this version of the legislation have commenced. See Historical Notes

Does not include amendments by-

Sch 14 to this Regulation (Sch 14 ams sec 81 on 1.9.2028)

Staged repeal status

This legislation is currently due to be automatically repealed under the *Subordinate Legislation Act 1989* on 1 September 2027

Authorisation

This version of the legislation is compiled and maintained in a database of legislation by the Parliamentary Counsel's Office and published on the NSW legislation website, and is certified as the form of that legislation that is correct under section 45C of the *Interpretation Act 1987*.

File last modified 1 September 2022.

Work Health and Safety (Mines and Petroleum Sites) Regulation 2022

[2022-509]



Contents

Part 1 Preliminary	10
1 Name of Regulation	10
2 Commencement	10
3 Interpretation	10
4 Meaning of "principal hazard"	10
Part 2 Mine and petroleum site operators—the WHS (MPS) Act, ss 7A and 7C	11
Division 1 Mines	11
5 Appointment of mine operator	11
6 Notification of mine operator to regulator	12
7 Mine operator to notify regulator of change to contact details	13
8 Additional requirements for opal mine holders and operators	13
9 Regulator may direct mine operators to be appointed	14
Division 2 Petroleum sites	15
10 Appointment of petroleum site operator	15
11 Notification of petroleum site operator to regulator	16
12 Petroleum site operator to notify regulator of change to contact details	17
13 Regulator may direct petroleum site operators to be appointed	17
Part 3 Managing risks—the WHS Act, Sch 3, cl 5	18
Division 1 General requirements	18
Subdivision 1 Control of risk	18
14 Management of risks to health and safety	18
15 Review of control measures	19
16 Record of certain reviews of control measures—operator	20
17 Record of certain reviews of control measures—other persons conducting a business or undertaking	j 20

Subdivision 2 Safety management systems	21
18 Duty to establish and implement safety management system	21
19 Content of safety management system	22
20 Performance standards and audit	24
21 Maintenance of safety management system	25
22 Review of safety management system	25
Subdivision 3 Provision of information	25
23 Duty to provide information to operator of adjoining mine or petroleum site	25
24 Duty on operator to provide information to contractor	26
25 Duty on contractor to provide information to operator	26
26 Contractor to prepare plan or use safety management system	26
Division 2 Principal hazard management plans and principal control plans	27
27 Identification of principal hazards and conduct of risk assessments	27
28 Preparation of principal hazard management plan	28
29 Review of principal hazard management plan	29
30 Principal control plans	29
Division 3 Specific control measures for all mines and petroleum sites	31
Subdivision 1 Operational controls	31
31 Communication between outgoing and incoming shifts	31
32 Movement of mobile plant	31
33 Explosives and explosive precursors	32
34 Electrical safety	32
35 Notification of high risk activities	35
36 Prohibited items and substances	36
37 Closure, suspension or abandonment of mine or petroleum site	36
38 Minimum age to work at mine or petroleum site	37
39 Inspections	38
Subdivision 2 Air quality and monitoring	38
40 Temperature and moisture content of air	38
41 Ensuring exposure standards for dust and diesel particulate matter and carbon dioxide not exceeded	38
42 Monitoring exposure to airborne dust and diesel particulate matter and carbon dioxide	39
43 Use of air monitoring devices	40
44 Use of air monitoring signage	40
Subdivision 3 Fitness for work	40
45 Fatigue, alcohol and drugs	40

Division 4 Specific control measures for all mines	41
46 Operation of belt conveyors	41
47 Mining induced seismic activity	
Division 5 Specific control measures for underground mines	42
Subdivision 1 Operational controls for underground mines	42
48 Inrush hazards	42
49 Connecting workings	43
50 Winding systems	44
51 Ropes	45
52 Operation of shaft conveyances	46
53 Dust explosion	47
54 Communication systems	47
55 Ground and strata support	48
56 Exhaust emissions and fuel standards	48
Subdivision 2 Air quality and ventilation for underground mines	49
57 Airborne contaminants	49
58 Minimum standards for ventilated air	49
59 Air quality	50
60 Requirements if air quality and air safety standards not met	51
61 Records of air monitoring	52
62 Ventilation systems	53
63 Monitoring and testing of ventilation system	54
64 Modelling to take place before changes to ventilation system	55
65 Duty to prepare ventilation control plan	55
66 Review of ventilation control plan	56
67 Ventilation plan	56
Subdivision 3 Other measures for underground coal mines	57
68 Coal dust explosion	57
69 Spontaneous combustion	60
70 Subsidence	61
71 Sealing	61
72 Light metal alloys	62
73 Goaf areas and abandoned or sealed workings	62
74 Ventilation	63
75 Minimum standards for ventilated air	65
76 Control and monitoring of methane levels	65
77 Gas monitoring	68
78 Portable gas detectors	69

79 Requirements if air quality or safety standards not met	70
80 Post incident monitoring	71
81 Use of plant in hazardous zone—explosion-protection required	72
82 Exceptions to explosion-protection requirements	75
83 Use of cables in hazardous zone	75
84 Internal combustion engines	77
85 Electrical safety—testing circuits in hazardous zone	77
86 Electrical safety—static charges	77
87 Persons required to be on duty	78
Division 6 Other specific control measures	78
88 Inspection plan	78
89 Sampling and analysis of airborne dust	82
90 Ventilation and belt conveyor components to be FRAS	82
Division 7 Emergency management	83
Subdivision 1 Emergency plans	83
91 Duty to prepare emergency plan	83
92 Consultation in preparation of emergency plan	
93 Implementation of emergency plan	
94 Copies to be kept and provided	85
95 Resources for emergency plan	85
96 Testing of emergency plan	85
97 Review of emergency plan	86
98 Training of workers	86
Subdivision 2 Underground mines	87
99 Emergency exits	87
100 Safe escape and refuge	88
101 Signage for emergency refuge	90
102 Signage for caches, refill stations and change-over stations	90
103 Self-rescuers	91
104 Personal protective equipment in emergencies	92
105 Competent persons at surface	92
Division 8 Information, training and instruction	93
106 Duty to inform workers about safety management system	93
107 Duty to provide information, training and instruction	94
108 Duty to provide induction for workers	95
109 Information for visitors	95
110 Review of information, training and instruction	95
111 Record of training	95

Part 4 Health monitoring—the WHS Act, Sch 3, cll 1(3) and 6	96
112 Regulator may direct health monitoring be provided to workers	96
113 Person conducting business or undertaking to give health monitoring report to operator of mine or pe	troleum site
	97
Part 5 Consultation and workers' safety role	97
114 Safety role for workers in relation to principal hazards—the WHS Act, s 276(3)(h) and Sch 3, cl 5	97
115 Duty to consult with workers—the WHS Act, ss 49 and 276(3)(h)	97
Part 6 Survey plans and mine plans—the WHS Act, Sch 3, cl 6(3) and (4)	98
116 Survey plan must be prepared	98
117 Preparation of survey plan	98
118 Review of survey plan	100
119 Survey plan to be available	101
120 Security of survey data	101
121 Survey plan to be provided to regulator	101
122 Other mine plans	102
Part 7 Provision of information to regulator—the WHS Act, Sch 3, cl 6(4)	103
123 Report on decommissioned wells	103
124 Duty to notify regulator of certain incidents	103
125 Duty to notify regulator of other matters	105
126 Work health and safety reports	108
127 Ancillary reports	108
128 Duty to notify operator of notifiable incident	109
Part 8 Mine and petroleum site records—the WHS Act, Sch 3, cl 6(2)	109
129 Mine and petroleum site records	109
130 Record keeping	110
Part 9 Statutory functions—the WHS Act, Sch 3, cl 7	111
Division 1 Preliminary	111
131 Definition	111
Division 2 Statutory functions at mines	111
132 Statutory functions	111
133 Obligations on mine operator	111
134 Obligations on nominee	112
Division 3 Statutory functions at petroleum sites	112
135 Statutory functions	112
136 Obligations on operator of petroleum site	113

137 Obligations on nominee	113
Division 4 Practising certificates	113
138 Eligibility for practising certificate	113
139 Application for practising certificate	114
140 Grant of practising certificate	114
141 Interstate practising certificates	114
142 Conditions of practising certificates	114
143 Suspension or cancellation of practising certificate	115
144 Suspension of practising certificate for investigation	116
145 Notice of suspension or cancellation of practising certificate	116
146 Register of practising certificates	117
Division 5 Certificates of competence	118
147 Eligibility for certificate of competence	118
148 Application for certificate of competence	119
149 Grant of certificate of competence	119
150 Condition of certificate of competence	119
151 Cancellation of certificate of competence	120
152 Register of certificates of competence	120
Part 10 Licensed activities—the WHS Act, Sch 3, cl 7	121
153 Activities to which Part applies	
154 Activity not to be carried out without licence	121
155 Plant not to be used unless overhaul or repair work carried out under licence	
156 Eligibility for licence	
157 Application for licence	122
158 Grant of licence	
159 Licence conditions	
160 Suspension or cancellation of licence	
161 Voluntary surrender of licence	
162 Minor amendments to licence	124
Part 11 Mine Safety Advisory Council—the WHS (MPS) Act, ss 61 and 62	124
163 Definitions	124
164 Membership of Council	124
165 Functions of Council	125
166 Procedure of Council	125
Part 12 Mining and Petroleum Competence Board—the WHS (MPS) Act, Part	8, Div 2 126
167 Definition	126
168 Membership of Board—the WHS (MPS) Act, s 65	126
169 Chairperson of Board—the WHS (MPS) Act, s 65	127

170 Functions of Board—the WHS (MPS) Act, s 67	127
171 Committees of Board—the WHS (MPS) Act, s 66	128
Part 13 Safety and health representatives at coal mines	128
172 Qualifications of safety and health representatives—the WHS (MPS) Act, ss 28(1) and 38(1) and (2)	128
173 Election and removal of mine safety and health representatives—the WHS (MPS) Act, s 39(1)	128
174 Offences relating to elections—the WHS (MPS) Act, s 39(1)	129
175 Safety and health representatives taken to be health and safety representatives—the WHS (MPS) Act, S	ch 2, cl
176 Training of mine safety and health representatives—the WHS (MPS) Act, s 45	130
Part 14 Exemptions—the WHS Act, s 276(3)(e) and (f) and Sch 3, cl 7(1)(c)	131
177 Exemptions for mines and petroleum sites where only non-mechanical exploration occurs	131
178 Exemptions for certain gemstone mines, tourist mines and tier-3 quarries	132
179 Exemption from compliance with standards	132
180 Exemption for quarry managers from meeting requirements for nomination	133
181 Exemption for tier-3 quarry managers from meeting requirements for nomination	134
182 Exemptions from certain notification requirements	135
Part 15 Miscellaneous	135
183 Tourist mines—the WHS (MPS) Act, s 6	135
184 Removal of gas from underground coal mines—the WHS (MPS) Act, ss 7 and 7B	135
185 Government officials—the WHS (MPS) Act, s 18(3)(d)	135
186 Reviewable decisions—the WHS Act, Sch 3, cl 14	136
187 Registration of plant designs and items of plant—the WHS Act, s 42	137
188 Shotfiring apparatus to be overhauled or repaired by accredited person—the WHS Act, Sch 3, cl 2	138
189 Serious injury or illness—the WHS (MPS) Act, s 14	139
190 Dangerous incidents—the WHS (MPS) Act, s 14	139
191 Prohibition notices—the WHS (MPS) Act, s 50(2)	141
192 Corresponding WHS laws—the WHS Act, s 4	141
193 Fees—the WHS Act, s 276(3)(g)	141
194 Savings	141
Schedule 1 Principal hazard management plans	141
Schedule 2 Principal control plans	147
Schedule 3 High risk activities	153
Schedule 4 Prohibited items and substances	167
Schedule 5 Water barriers in underground coal mines	169
Schedule 6 Sampling airborne dust at mines	170

Schedule 7 Emergency plans	. 173
Schedule 8 Notification of incidents	. 175
Schedule 9 Work health and safety reports	. 177
Schedule 10 Statutory functions at mines	. 178
Schedule 11 Statutory functions at petroleum sites	. 186
Schedule 12 Membership of Mine Safety Advisory Council	. 187
Schedule 13 Penalty notice offences	. 188
Schedule 14 Amendment of this Regulation	. 189
Schedule 15 Dictionary	. 190
Historical notes	. 195

Work Health and Safety (Mines and Petroleum Sites) Regulation 2022



Part 1 Preliminary

1 Name of Regulation

This Regulation is the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022.

2 Commencement

This Regulation commences as follows—

- (a) for section 89(1)(b)—1 September 2023,
- (b) for Schedule 14—1 September 2028,
- (c) otherwise—1 September 2022.

Note— This Regulation replaces the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*, which is repealed on 1 September 2022 by the *Subordinate Legislation Act 1989*, section 10(2).

3 Interpretation

(1) The Dictionary in Schedule 15 defines words used in this Regulation.

Note— The WHS Act, the WHS (MPS) Act and the *Interpretation Act* 1987 contain definitions and other provisions that affect the interpretation and application of this Regulation.

(2) The expressions *mine*, *mining activities*, *mining operations*, *petroleum site*, *petroleum activities* and *petroleum operations* when used in the WHS Regulations have the same meaning as in the WHS (MPS) Act or this Regulation, unless otherwise defined.

4 Meaning of "principal hazard"

In this Regulation, a *principal hazard* is an activity, process, procedure, plant, structure, substance, situation or other circumstance relating to the carrying out of mining operations or petroleum operations that has a reasonable potential to result in multiple deaths in a single incident or a series of recurring incidents in relation to—

- (a) for mining operations—one or more of the following—
 - (i) ground or strata failure,
 - (ii) inundation or inrush of a substance,

- (iii) mine shafts and winding systems,
- (iv) gas outbursts,
- (v) spontaneous combustion,
- (vi) subsidence,
- (vii) roads or other vehicle operating areas,
- (viii) air quality or dust or other airborne contaminants,
- (ix) fire or explosion,
- (x) a hazard identified by the mine operator under the WHS Regulations, clause 34, or
- (b) for petroleum operations—one or more of the following—
 - (i) roads or other vehicle operating areas,
 - (ii) air quality or dust or other airborne contaminants,
 - (iii) fire or explosion,
 - (iv) a hazard identified by the petroleum site operator under the WHS Regulations, clause 34.

Part 2 Mine and petroleum site operators—the WHS (MPS) Act, ss 7A and 7C

Division 1 Mines

5 Appointment of mine operator

- (1) The mine holder of a mine may appoint a person to be the mine operator only if—
 - (a) the person is conducting a business or undertaking and is appointed in accordance with this section to carry out mining operations at the mine on behalf of the mine holder, and
 - (b) the person has the skills, knowledge, experience and resources to exercise the functions of the mine operator, and
 - (c) the mine holder authorises the person to have management or control of the mine and to discharge the duties of the mine operator under the WHS laws.
- (2) An appointment of a person to be the mine operator of a mine must—
 - (a) be written, and
 - (b) be made in the approved way and form, and
 - (c) include a signed statement that the person to be appointed as mine operator agrees to the appointment, and
 - (d) specify—

- (i) the name and contact details of the mine operator, including postal and business addresses, and
- (ii) when the appointment takes effect, and
- (e) describe the location of the mine, including—
 - (i) the boundaries of all mineral exploration sites and mineral extraction sites, and
 - (ii) land title identification.
- (3) A person (the *prospective mine holder*) who proposes to become the mine holder of a mine may appoint a person to be the mine operator of the mine in accordance with subsections (1) and (2).
- (4) An appointment of a person by a prospective mine holder under subsection (3) takes effect when the prospective mine holder becomes the mine holder of the mine, but only if, at the time, the person is still eligible to be appointed as the mine operator.
- (5) The mine holder must give the mine operator all relevant information held by or under the control of the mine holder that may reasonably be required by the mine operator to discharge the duties imposed on the mine operator under the WHS laws.

Example— A survey plan of the mine prepared under section 116.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (6) The mine operator of a mine who ceases or intends to cease being the mine operator must, as far as reasonably practicable, ensure all records the mine operator kept under the WHS laws are given to the mine holder of the mine, or the person who is to become the new mine operator, before the new mine operator commences in the role.

Example— A mine record kept under section 129.

Maximum penalty (subsection (6))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

6 Notification of mine operator to regulator

(1) The mine holder of a mine must give notice to the regulator in accordance with this section.

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (2) If the mine holder of a mine is the mine operator, the mine holder must give the regulator notice of this fact before mining operations commence at the mine.

- (3) If the mine holder of a mine is not the mine operator, the mine holder must give the regulator notice of the appointment of the mine operator of the mine.
- (4) A notice under subsection (2) or (3) must—
 - (a) be written, and
 - (b) be made in the approved way and form, and
 - (c) describe the location of the mine, including—
 - (i) the boundaries of all mineral exploration sites and mineral extraction sites, and
 - (ii) land title identification.
- (5) A notice under subsection (3) must be accompanied by a copy of the appointment document.
- (6) The mine holder must give written notice to the regulator of a change to the appointment of a mine operator or the termination of the appointment.
- (7) The mine holder must take all reasonable steps to ensure a notice under subsection (3) or (6) is given before the appointment or the change or termination takes effect.

7 Mine operator to notify regulator of change to contact details

A mine operator must notify the regulator of a change to the mine operator's contact details as soon as practicable, and no later than 28 days, after the change.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

8 Additional requirements for opal mine holders and operators

- (1) A person may be appointed to be a mine operator of an opal mine under section 5 only if the person has, within the period of 5 years before the appointment, undertaken safety training.
- (2) A mine holder of an opal mine who is the mine operator of the mine must have undertaken safety training within the period of 5 years before carrying out mining operations as the mine operator of the mine.
- (3) Subsections (1) and (2) do not apply to a person who, immediately before 13 April 2018, was the mine operator of an opal mine.
- (4) A person who, immediately before 13 April 2018, was the mine operator of an opal mine must undertake safety training before 13 April 2023.
- (5) A mine operator of an opal mine must undertake safety training at least once every 5 years after having completed the safety training referred to in subsection (1), (2) or (4).
- (6) A mine holder of an opal mine who is not the mine operator of the mine must ensure a person appointed as the mine operator of the mine undertakes safety training as required under this section.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (7) A mine holder of an opal mine who is the mine operator of the mine must not carry out mining operations at the mine if the mine holder has not undertaken safety training as required under this section

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (8) If a person required to undertake safety training under this section is a body corporate, the body corporate complies with the requirement if the individual responsible for supervising mining operations at the mine undertakes the safety training.
- (9) In this section—

safety training means a course of training specified by the regulator relating to health and safety at opal mines.

9 Regulator may direct mine operators to be appointed

- (1) The regulator may, by written notice given to a mine holder of a mine, direct the mine holder to—
 - (a) appoint a mine operator for the mine, or
 - (b) appoint more than 1 mine operator for different parts of the mine, or
 - (c) appoint a single mine operator for both the mine and another mine of the mine holder, but only if the mines are geographically close to one another.
- (2) A mine holder who is given notice under this section must comply with the notice.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) If more than 1 mine operator is appointed for different parts of a mine under this section, each of the parts is taken to be a separate mine for the purposes of this Regulation.
- (4) If a single mine operator is appointed for more than 1 mine under this section, the mines are taken to be a single mine for the purposes of this Regulation.
- (5) The regulator must ensure the mine holder is given reasonable time to comply with the notice, including reasonable time to address possible non-compliance with the WHS laws that may result from the mine holder complying with the notice.

- (6) The regulator must take the following into account in determining whether to give notice under this section—
 - (a) the objects of the WHS laws,
 - (b) the nature, size and complexity of the mine or mines to which the notice relates,
 - (c) the difficulty for the mine holder or mine operator to exercise functions under the WHS laws,
 - (d) whether the giving of the notice is likely to result in safety management systems that better ensure the health and safety of workers and other persons.

Division 2 Petroleum sites

10 Appointment of petroleum site operator

- (1) The petroleum site holder of a petroleum site may appoint a person to be the operator of the petroleum site only if—
 - (a) the person is conducting a business or undertaking and is appointed in accordance with this section to carry out petroleum operations at the petroleum site on behalf of the petroleum site holder, and
 - (b) the person has the skills, knowledge, experience and resources to exercise the functions of the operator of the petroleum site, and
 - (c) the petroleum site holder authorises the person to have management or control of the petroleum site and to discharge the duties of the operator of the petroleum site under the WHS laws.
- (2) An appointment of a person to be the operator of a petroleum site must—
 - (a) be written, and
 - (b) be made in the approved way and form, and
 - (c) include a signed statement that the person to be appointed as operator agrees to the appointment, and
 - (d) specify—
 - (i) the name and contact details of the operator, including postal and business addresses, and
 - (ii) when the appointment takes effect, and
 - (e) describe the location of the petroleum site, including—
 - (i) the boundaries of all petroleum exploration sites and petroleum extraction sites, and
 - (ii) land title identification.
- (3) A person (the *prospective petroleum site holder*) who proposes to become the petroleum site

- holder of a petroleum site may appoint a person to be the operator of the petroleum site in accordance with subsections (1) and (2).
- (4) An appointment by a prospective petroleum site holder under subsection (3) takes effect when the prospective petroleum site holder becomes the petroleum site holder of the petroleum site, but only if, at the time, the person is still eligible to be appointed as the operator.
- (5) The petroleum site holder must give the operator all relevant information held by or under the control of the petroleum site holder that may reasonably be required by the operator to discharge the duties imposed on the operator under the WHS laws.

Example— A survey plan of the petroleum site prepared under section 116.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (6) The operator of a petroleum site who ceases or intends to cease being the operator must, as far as reasonably practicable, ensure all records the operator kept under the WHS laws are given to the petroleum site holder of the petroleum site, or the person who is to become the new operator, before the new operator commences in the role.

Example— A petroleum site record kept under section 129.

Maximum penalty (subsection (6))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

11 Notification of petroleum site operator to regulator

(1) The petroleum site holder of a petroleum site must give notice to the regulator in accordance with this section.

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (2) If the petroleum site holder of a petroleum site is the operator of the petroleum site, the holder must give the regulator notice of this fact before petroleum operations commence at the petroleum site.
- (3) If the petroleum site holder of a petroleum site is not the operator of the petroleum site, the petroleum site holder must give the regulator notice of the appointment of the operator of the petroleum site.
- (4) A notice under subsection (2) or (3) must—
 - (a) be written, and

- (b) be made in the approved way and form, and
- (c) describe the location of the petroleum site, including—
 - (i) the boundaries of all petroleum exploration sites and petroleum extraction sites, and
 - (ii) land title identification.
- (5) A notice under subsection (3) must be accompanied by a copy of the appointment document.
- (6) The petroleum site holder must give written notice to the regulator of a change to the appointment of an operator of the petroleum site or the termination of the appointment.
- (7) The petroleum site holder must take all reasonable steps to ensure a notice under subsection (3) or (6) is given before the appointment or the change or termination takes effect.

12 Petroleum site operator to notify regulator of change to contact details

An operator of a petroleum site must notify the regulator of a change to the operator's contact details as soon as practicable, and no later than 28 days, after the change.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

13 Regulator may direct petroleum site operators to be appointed

- (1) The regulator may, by written notice given to a petroleum site holder of a petroleum site, direct the holder to—
 - (a) appoint an operator for the petroleum site, or
 - (b) appoint more than 1 operator for different parts of the petroleum site, or
 - (c) appoint a single operator for both the petroleum site and another petroleum site of the holder, but only if the petroleum sites are geographically close to one another.
- (2) A petroleum site holder who is given notice under this section must comply with the notice.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) If more than 1 operator is appointed for different parts of a petroleum site under this section, each of the parts is taken to be a separate petroleum site for the purposes of this Regulation.
- (4) If a single operator is appointed for more than 1 petroleum site under this section, the petroleum sites are taken to be a single petroleum site for the purposes of this Regulation.
- (5) The regulator must ensure the petroleum site holder is given reasonable time to comply with the notice, including reasonable time to address possible non-compliance with the WHS laws that

may result from the petroleum site holder complying with the notice.

- (6) The regulator must take the following into account in determining whether to give notice under this section—
 - (a) the objects of the WHS laws,
 - (b) the nature, size and complexity of the petroleum site or petroleum sites to which the notice relates,
 - (c) the difficulty for the petroleum site holder or operator of the petroleum site to exercise functions under the WHS laws,
 - (d) whether the giving of the notice is likely to result in safety management systems that better ensure the health and safety of workers and other persons.

Part 3 Managing risks—the WHS Act, Sch 3, cl 5

Division 1 General requirements

Subdivision 1 Control of risk

14 Management of risks to health and safety

- (1) A person conducting a business or undertaking at a mine or petroleum site must manage risks to health and safety associated with mining operations or petroleum operations at the mine or petroleum site in accordance with the WHS Regulations, Part 3.1.
- (2) A person conducting a business or undertaking at a mine or petroleum site must ensure a risk assessment is conducted in accordance with this section by a person who is competent to conduct the risk assessment having regard to the nature of the hazard.

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (3) In conducting a risk assessment, the person must have regard to the following—
 - (a) the nature of the hazard,
 - (b) the likelihood of the hazard affecting the health or safety of a person,
 - (c) the severity of the potential health and safety consequences.
- (4) Subsection (3) does not limit the operation of another requirement to conduct a risk assessment under this Regulation.
- (5) A person conducting a business or undertaking at a mine or petroleum site, who is the operator of the mine or petroleum site or who is a contractor, must keep a record of the following—
 - (a) each risk assessment conducted under this section and the name and competency of the person who conducted the risk assessment,

- (b) the control measures implemented to eliminate or minimise a risk that was identified by the risk assessment.
- (6) A person conducting a business or undertaking at a mine or petroleum site is not required to keep a record of a risk assessment if—
 - (a) the risk assessment is required to be carried out by an individual before the worker commences a task that forms part of an activity, and
 - (b) the person keeps a record of risk assessments that addresses the overall activity being undertaken, of which the task forms a part.
- (7) A record kept under subsection (5) by an operator of a mine or petroleum site forms part of—
 - (a) the safety management system of the mine or petroleum site, and
 - (b) the records of the mine or petroleum site.
- (8) A record, kept under subsection (5) by a contractor who has prepared a contractor health and safety management plan, forms part of the plan.

15 Review of control measures

- (1) A person conducting a business or undertaking at a mine or petroleum site must review and as necessary revise control measures implemented under section 14(5)(b) in the following circumstances—
 - (a) an audit of the effectiveness of the safety management system for the mine or petroleum site indicates a deficiency in a control measure,
 - (b) a worker is moved from a hazard or assigned to different work in response to a recommendation contained in a health monitoring report provided under Part 4,
 - (c) an incident referred to in section 124 occurs,
 - (d) another incident occurs that is required to be notified to the regulator under the WHS laws.
- (2) The operator of a mine or petroleum site must ensure a control measure the subject of a request under the WHS Regulations, clause 38(4) is reviewed and as necessary revised, whether the request is made—
 - (a) to the operator by a health and safety representative, or
 - (b) notified to the operator under subsection (3).
- (3) A person conducting a business or undertaking at the mine or petroleum site who is not the operator of the mine or petroleum site must immediately notify the operator of a request made to the person under the WHS Regulations, clause 38(4).

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

(4) A health and safety representative for workers at a mine or petroleum site may request a review of a control measure under the WHS Regulations, clause 38(4) as if the circumstances referred to in subsection (1) were included as a circumstance in the WHS Regulations, clause 38(4)(a).

16 Record of certain reviews of control measures—operator

- (1) This section applies to an operator of a mine or petroleum site who has, under the WHS Regulations, clause 38, reviewed a control measure in response to—
 - (a) a notifiable incident, or
 - (b) an incident referred to in section 124.
- (2) The operator of a mine or petroleum site must keep a record of the following—
 - (a) the causes, or likely causes, of the incident,
 - (b) the work health and safety matters arising from the incident,
 - (c) recommendations arising from consideration of the incident, including recommendations directed at preventing a repeat of the type of incident in the future,
 - (d) the outcome of a review or revision of the control measures or a part of the safety management system,
 - (e) a summary of changes to—
 - (i) the safety management system for the mine or petroleum site, and
 - (ii) the affected principal hazard management plan or principal control plan for the mine or petroleum site.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The operator of a mine or petroleum site must, if required by the regulator by written notice, provide the records kept under this section to the regulator, in the way and within the period specified in the notice.

Maximum penalty (subsection (3))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

17 Record of certain reviews of control measures—other persons conducting a business or undertaking

- (1) This section applies to a person conducting a business or undertaking at a mine or petroleum site.
- (2) This section does not apply to the operator of the mine or petroleum site, who has, under the WHS Regulations, clause 38, reviewed a control measure in response to—

- (a) a notifiable incident, or
- (b) an incident referred to in section 124.
- (3) A person must keep a record of the following—
 - (a) the causes, or likely causes, of the incident,
 - (b) the work health and safety matters arising from the incident,
 - (c) recommendations arising from consideration of the incident, including a recommendation directed at preventing a repeat of the type of incident in the future,
 - (d) the outcome of a review or revision of the control measures.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) A person must, if required by the regulator by written notice, provide the records kept under this section to the regulator, in the way and within the period specified in the notice.

Maximum penalty (subsection (4))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Subdivision 2 Safety management systems

18 Duty to establish and implement safety management system

(1) The operator of a mine or petroleum site must establish a safety management system for the mine or petroleum site, in accordance with this Subdivision.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The operator must, as far as reasonably practicable, implement the safety management system for the mine or petroleum site.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The operator must ensure no mining operations or petroleum operations take place during a time at which a part of the safety management system relevant to the mining operations or petroleum operations is not established and implemented at the mine or petroleum site in accordance with this Subdivision.

- (4) The safety management system must form part of an overall management system that is in place at the mine or petroleum site.
- (5) The safety management system must be designed to be used by the operator as the primary means of ensuring, as far as reasonably practicable—
 - (a) the health and safety of workers at the mine or petroleum site, and
 - (b) the health and safety of other persons is not put at risk from the mine or petroleum site or work carried out as part of mining operations or petroleum operations.
- (6) Subject to subsection (7), the safety management system must provide a comprehensive and integrated system for the management of all aspects of risks to health and safety in relation to the operation of the mine or petroleum site.
- (7) The safety management system must comply with subsection (6) to the extent appropriate to the mine or petroleum site having regard to—
 - (a) the nature, complexity and location of the mining operations or petroleum operations, and
 - (b) the risks associated with the operations.

Maximum penalty (subsection (7))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

19 Content of safety management system

- (1) The safety management system for a mine or petroleum site must be documented (a *safety management system document*).
- (2) The safety management system document for a mine or petroleum site must set out the following—
 - (a) the health and safety policy of the operator of the mine or petroleum site, including broad aims in relation to the safe operation of the mine or petroleum site,
 - (b) the arrangements for managing risks in accordance with section 14,
 - (c) the systems, procedures, plans and other control measures that will be used to control risks to health and safety associated with mining operations or petroleum operations at the mine or petroleum site, including the following—
 - (i) the principal hazard management plans for the mine or petroleum site prepared under Division 2,
 - (ii) the principal control plans for the mine or petroleum site,
 - (iii) for an underground mine—the ventilation control plan and ventilation plan prepared for the mine under Division 5, Subdivision 2,
 - (iv) for an underground coal mine—the matters required under Division 5, Subdivision 3,

- (v) for coal mines and other mines—the matters required under Division 6.
- (d) the management structure for the management of work health and safety at the mine or petroleum site, including the following—
 - (i) arrangements for filling temporary and permanent vacancies,
 - (ii) requirements relating to acting positions in the structure,
 - (iii) the competency requirements for positions in the structure,
 - (iv) the positions within the management structure that have responsibility for the management of work health and safety at the mine or petroleum site, including mining supervisors, and the names of the relevant persons,
 - (v) for persons nominated to exercise key statutory functions at the mine or petroleum site—the responsibilities of each person, including the supervision of workers at the mine or petroleum site,
- (e) the arrangements between persons conducting a business or undertaking at the mine or petroleum site, for consultation, co-operation and the co-ordination of activities in relation to compliance with their duties under the WHS laws,
- (f) if a contractor is working or likely to work at the mine or petroleum site—the control measures that will be used to control risks to health and safety associated with the contractor's work at the mine or petroleum site, including the following—
 - (i) a contractor health and safety management plan prepared by the contractor under section 26.
 - (ii) how the contractor health and safety management plan will be integrated with the safety management system for the mine or petroleum site,
 - (iii) the process for assessing health and safety policies and procedures, including competency requirements, of the contractor and integrating the policies and procedures into the safety management system,
 - (iv) the arrangements for monitoring and evaluating compliance by the contractor with the health and safety requirements of the safety management system,
- (g) the emergency procedures and all other matters in the emergency plan for the mine or petroleum site,
- (h) the procedures and conditions under which persons at the mine or petroleum site or a part of the mine or petroleum site must be withdrawn to a place of safety and to remain withdrawn as a precautionary measure where a risk to health and safety warrants the withdrawal,
- (i) the arrangements for the provision of information, training and instruction required under the WHS Regulations, clause 39,
- (j) the induction procedures for workers at the mine or petroleum site,
- (k) the arrangements for the supervision needed to protect workers and other persons at the

mine or petroleum site from risks to their health and safety from work carried out at the mine or petroleum site,

- (l) the arrangements for health monitoring under Part 4,
- (m) the consultation and safety role for workers developed under Part 5,
- (n) the procedures for notifiable incident response and investigation at the mine or petroleum site.
- (o) the procedures for the response to, and investigation of, incidents referred to in section 124,
- (p) the procedures for the review of control measures,
- (q) the procedures for records management for the mine or petroleum site to ensure compliance with the WHS laws,
- (r) the arrangements for the effective communication of relevant information across shifts by workers, supervisors and other relevant persons and the procedures for documenting the communications,
- (s) the arrangements for all other monitoring and assessment and regular inspection of the working environment of the mine or petroleum site to be carried out for the purposes of the WHS laws.
- (t) the performance standards under section 20,
- (u) the resources that will be applied for the effective implementation and use of the safety management system.
- (3) The safety management system document must—
 - (a) deal with the matters referred to in subsection (2) in as much as detail as is appropriate to the mine or petroleum site, having regard to—
 - (i) the nature, complexity and location of the mining operations or petroleum operations, and
 - (ii) the risks associated with the operations, and
 - (b) as far as reasonably practicable, be set out and expressed in a way that is readily understandable by persons who use it.
- (4) If a matter referred to in subsection (1) is addressed in a plan or other document prepared under the WHS laws for a mine or petroleum site, it is sufficient if the safety management system for the mine or petroleum site refers to the plan or document.

20 Performance standards and audit

The safety management system for a mine or petroleum site must include the following—

(a) performance standards for measuring the effectiveness of all aspects of the safety management system that—

- (i) are sufficiently detailed to show how the operator will ensure the effectiveness of the safety management system, and
- (ii) include steps to be taken to continually improve the safety management system,
- (b) the way in which the performance standards must be met,
- (c) a system for auditing the effectiveness of the safety management system for the mine or petroleum site against the performance standards, including the methods, frequency and results of the audit process.

21 Maintenance of safety management system

The operator of a mine or petroleum site must maintain the safety management system for the mine or petroleum site so that the safety management system remains effective.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

22 Review of safety management system

- (1) The operator of a mine or petroleum site must ensure the safety management system for the mine or petroleum site is reviewed, to ensure it remains effective—
 - (a) within 12 months of the commencement of mining operations or petroleum operations at the mine or petroleum site, and
 - (b) at least once every 3 years after the commencement.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) If a control measure is revised under the WHS Regulations, clause 38 or this Regulation, section 15, the operator must also ensure the safety management system for the mine or petroleum site is reviewed and as necessary revised in relation to all aspects of risk control addressed by the revised control measure.

Maximum penalty (subsection (2))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Subdivision 3 Provision of information

23 Duty to provide information to operator of adjoining mine or petroleum site

The operator of a mine or petroleum site must, as soon as reasonably practicable and on request, provide the following information to the operator of an adjoining mine or petroleum site—

- (a) information about conditions, activities or proposed activities at the mine or petroleum site that could create a risk to the health and safety of persons at the adjoining mine or petroleum site,
- (b) a survey plan of the mine or petroleum site, or a mine plan of the mine, prepared under Part 6, to the extent the plan is relevant to the health and safety of persons at the adjoining mine or petroleum site.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

24 Duty on operator to provide information to contractor

The operator of a mine or petroleum site must, as far as reasonably practicable, ensure a contractor who is to carry out mining operations or petroleum operations at the mine or petroleum site is given all relevant information and access to the mine or petroleum site to enable the contractor to identify risks associated with the proposed operations.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

25 Duty on contractor to provide information to operator

A contractor who is to carry out mining operations or petroleum operations at a mine or petroleum site must, as far as reasonably practicable, ensure the operator of the mine or petroleum site is given all relevant information to enable the operator to identify risks associated with the proposed operations.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

26 Contractor to prepare plan or use safety management system

- (1) A contractor must not carry out mining operations or petroleum operations at a mine or petroleum site unless the contractor has—
 - (a) prepared a plan (a *contractor health and safety management plan*) in accordance with subsection (3), and
 - (b) provided a copy of the plan to the operator of the mine or petroleum site, and
 - (c) obtained written notice from the operator that the operator has reviewed the plan and reasonably believes the plan is consistent with the safety management system for the mine or petroleum site, and
 - (d) as far as reasonably practicable, implemented the plan.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) Subsection (1) does not apply if the contractor has—
 - (a) reviewed the relevant parts of the safety management system for the mine or petroleum site, and
 - (b) given the operator of the mine or petroleum site written notice that—
 - (i) the contractor has conducted the review, and
 - (ii) the contractor reasonably believes the safety management system is consistent with the contractor's arrangements to manage the risks to health and safety from mining operations or petroleum operations carried out by the contractor at the mine or petroleum site in accordance with section 14 and other requirements under the WHS laws that relate to the operations.
- (3) A contractor health and safety management plan must—
 - (a) set out the means by which the contractor will manage the risks to health and safety from mining operations or petroleum operations carried out by the contractor at the mine or petroleum site in accordance with section 14 and other requirements under the WHS laws that relate to the operations, and
 - (b) be designed to be used by the contractor as the primary means of—
 - (i) ensuring, as far as reasonably practicable, the health and safety of the contractor's workers at the mine or petroleum site, and
 - (ii) ensuring, as far as reasonably practicable, the health and safety of other persons is not put at risk from work carried out as part of the contractor's business or undertaking at the mine or petroleum site, and
 - (c) be documented, and
 - (d) as far as reasonably practicable, be set out and expressed in a way that is readily understandable by persons who use it.

Division 2 Principal hazard management plans and principal control plans

27 Identification of principal hazards and conduct of risk assessments

(1) The operator of a mine or petroleum site must identify all principal hazards associated with mining operations or petroleum operations at the mine or petroleum site.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

(2) The operator must conduct, in relation to each principal hazard identified, a risk assessment that involves a comprehensive and systematic investigation and analysis of all aspects of risk to health and safety associated with the principal hazard.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The operator, in conducting a risk assessment under subsection (2), must—
 - (a) use investigation and analysis methods appropriate to the principal hazard being considered, and
 - (b) consider the principal hazard individually and also cumulatively with other hazards at the mine or petroleum site.

28 Preparation of principal hazard management plan

(1) The operator of a mine or petroleum site must prepare a principal hazard management plan for each principal hazard associated with mining operations or petroleum operations at the mine or petroleum site in accordance with this section and Schedule 1.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) A principal hazard management plan must—
 - (a) provide for the management of all aspects of risk control in relation to the principal hazard, and
 - (b) as far as reasonably practicable, be set out and expressed in a way that is readily understandable by persons who use it.
- (3) A principal hazard management plan must—
 - (a) describe the nature of the principal hazard, and
 - (b) describe how the principal hazard relates to other hazards associated with mining operations or petroleum operations at the mine or petroleum site, and
 - (c) describe the analysis methods used in identifying the principal hazard, and
 - (d) include a record of the most recent risk assessment conducted in relation to the principal hazard, and
 - (e) describe the investigation and analysis methods used in determining the control measures to be implemented, and
 - (f) describe all control measures to be implemented to manage risks to health and safety associated with the principal hazard, and

- (g) describe the arrangements in place for providing the information, training and instruction required by the WHS Regulations, clause 39 in relation to the principal hazard, and
- (h) refer to the design principles, engineering standards and technical standards relied on for control measures for the principal hazard, and
- (i) set out the reasons for adopting or rejecting each control measure considered.
- (4) The operator of a mine or petroleum site must consider the following when preparing a principal hazard management plan for a principal hazard at the mine or petroleum site—
 - (a) the matters set out in Schedule 1 for the principal hazard,
 - (b) other matters relevant to managing the risks associated with the principal hazard.
- (5) The operator of a mine or petroleum site at which there is a principal hazard must ensure no mining operations or petroleum operations are carried out at the mine or petroleum site that may give rise to the hazard before the principal hazard management plan for the hazard has been prepared in accordance with this section.

Maximum penalty (subsection (5))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

29 Review of principal hazard management plan

(1) The operator of a mine or petroleum site must ensure a principal hazard management plan is reviewed and as necessary revised if a control measure specified in the plan is revised under the WHS Regulations, clause 38, or this Regulation, section 15.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) If a principal hazard management plan is revised, the operator must make a written record the revisions, including the revision of a risk assessment, in the plan.

Maximum penalty (subsection (2))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

30 Principal control plans

(1) The operator of a mine or petroleum site must comply with the requirements for principal control plans specified in this section and Schedule 2.

Maximum penalty—

(a) for an individual—60 penalty units, or

- (b) for a body corporate—300 penalty units.
- (2) A principal control plan must—
 - (a) be documented, and
 - (b) as far as reasonably practicable, be set out and expressed in a way that is readily understandable by persons who use it.
- (3) The operator of a mine or petroleum site must prepare a health control plan for the mine or petroleum site that sets out the means by which the operator will manage the risks to health associated with mining operations or petroleum operations at the mine or petroleum site in accordance with section 14.
- (4) The operator of a mine or petroleum site at which there is a risk to health and safety associated with the mechanical aspects of plant and structures at the mine or petroleum site must—
 - (a) prepare and implement a mechanical engineering control plan for the mine or petroleum site that sets out the means by which the operator will manage the risks in accordance with section 14, and
 - (b) ensure the plan is developed and periodically reviewed by a person who is, or who is under the supervision of—
 - (i) the individual nominated to exercise the statutory function of mechanical engineering manager or mechanical engineer at the mine or petroleum site, or
 - (ii) if no person is required to hold either of the positions at the mine or petroleum site—a competent person.
- (5) The operator of a mine or petroleum site at which there is a risk to health and safety associated with electricity at the mine or petroleum site must—
 - (a) prepare and implement an electrical engineering control plan for the mine or petroleum site that sets out the means by which the operator will manage the risks in accordance with section 14, and
 - (b) ensure the plan is developed and periodically reviewed by a person who is, or who is under the supervision of—
 - (i) the individual nominated to exercise the statutory functions of electrical engineering manager or electrical engineer at the mine or petroleum site, or
 - (ii) if no person is required to hold either of the positions at the mine or petroleum site—a competent person.
- (6) The operator of a mine or petroleum site at which there is a risk to health and safety associated with explosives or explosive precursors at the mine or petroleum site must prepare an explosives control plan for the mine or petroleum site that sets out the means by which the operator will manage the risks in accordance with section 14.
- (7) The operator of a petroleum site at which there is a risk to health and safety associated with well integrity must prepare a well integrity control plan for the petroleum site that sets out the means

by which the operator will manage the risks in accordance with section 14.

Division 3 Specific control measures for all mines and petroleum sites Subdivision 1 Operational controls

31 Communication between outgoing and incoming shifts

The operator of a mine or petroleum site at which more than one shift is worked each day must implement a system that ensures, as soon as reasonably practicable at the commencement of each shift—

- (a) the supervisor of each outgoing shift provides a written report to the supervisor of the incoming shift in relation to the following—
 - (i) the workings at the mine or petroleum site,
 - (ii) the state of plant,
 - (iii) other matters that relate to work health or safety, and
- (b) the supervisor of the outgoing shift—
 - (i) gives a written acknowledgment to the supervisor of the incoming shift the accuracy of the report, and
 - (ii) signs, or electronically signs, the acknowledgment, and
- (c) the supervisor of the incoming shift communicates the content of the report to the workers on the incoming shift, and
- (d) the supervisor of the incoming shift—
 - (i) gives a written acknowledgment to the supervisor of the outgoing shift that the content of the report has been communicated to workers on the incoming shift, and
 - (ii) signs, or electronically signs, the acknowledgment.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

32 Movement of mobile plant

- (1) In complying with section 14, the operator of a mine or petroleum site must manage risks to health and safety associated with the movement of mobile plant at the mine or petroleum site.
- (2) In managing risks to health and safety associated with the movement of mobile plant at the mine or petroleum site, the operator must have regard to all relevant matters including the following—
 - (a) the design, layout, construction and maintenance of all roads and other areas at the mine or petroleum site used by mobile plant, including the drainage system for the road or area,

- (b) risks associated with the terrain or nature of land adjacent to the road or area,
- (c) interactions between mobile plant, especially between large and small mobile plant,
- (d) interactions between mobile plant and fixed plant or structures,
- (e) interactions between mobile plant and pedestrians, including the use of pre-movement warnings for mobile plant in mine or petroleum site workings,
- (f) the operation of remotely controlled mobile plant,
- (g) the maintenance, testing and inspection of brakes, steering, lights and other safety features of the mobile plant.

33 Explosives and explosive precursors

- (1) In complying with section 14, the operator of a mine or petroleum site must manage risks to health and safety associated with explosives and explosive precursors at the mine or petroleum site.
- (2) In managing risks to health and safety associated with explosives and explosive precursors at the mine or petroleum site, the operator must—
 - (a) ensure explosives and explosive precursors to be used at the mine or petroleum site are—
 - (i) safe to handle, and
 - (ii) fit for their intended use, and
 - (iii) as insensitive as reasonably practicable to shock, sparks, friction and the environment in which they will be stored, transported and used, and
 - (iv) as far as reasonably practicable, simple to store, use, transport and control, and
 - (b) ensure dealing with an explosive or explosive precursor at the mine or petroleum site complies with the *Explosives Act 2003* and Australian Standard AS 2187 *Explosives—Storage, transport and use*, and
 - (c) ensure, for an underground coal mine, shotfiring does not occur in a part of the mine where—
 - (i) the concentration of methane in the general body of the air is greater than 0.5% by volume, or
 - (ii) the amount of incombustible material contained in roadway dust is less than 85%, or
 - (iii) the ventilation is not sufficient to adequately dilute the atmospheric contaminants caused by the shotfiring.

34 Electrical safety

(1) In complying with section 14, the operator of a mine or petroleum site must manage risks to health and safety associated with electricity at the mine or petroleum site.

- (2) In managing risks to health and safety associated with electricity at the mine or petroleum site, the operator must ensure the following—
 - (a) electrical installation work at the surface is carried out in accordance with the Wiring Rules,
 - (b) before a circuit is first energised at the mine or petroleum site, or is first energised following the circuit being recommissioned—
 - (i) the circuit is tested in accordance with the Wiring Rules by a competent person, and
 - (ii) there is a process in place whereby the operator, or an individual nominated to exercise the statutory functions of electrical engineering manager or electrical engineer at the mine or petroleum site, can be adequately notified about the testing as soon as reasonably practicable after the testing occurs,
 - (c) adequately rated switchgear is provided that—
 - (i) permits power to be safely switched off and safely restored, and
 - (ii) does not permit automatic restoration of power if there is a risk of electric shock, fire, explosion or unplanned operation of plant,
 - (d) arrangements are in place for switching the power off or restoring power as part of normal operations in the event of a fault or an emergency,
 - (e) for electrical plant at the mine or petroleum site, other than plant connected and near, to a wall socket with a switch—
 - (i) an isolation facility is provided, and
 - (ii) the electrical plant is clearly identified as being isolated from electricity by the facility, and
 - (iii) the facility is clearly identified as the isolator for the electrical plant, and
 - (iv) persons required to work with the electrical plant are competent in the correct use of the facility,
 - (f) plans of the electrical installations at the mine or petroleum site showing the following matters are kept and maintained as required and are easily accessible by each worker required to access them—
 - (i) the location of each main electricity reticulation line,
 - (ii) the location of all high voltage cables, aerials and switchgear,
 - (iii) the location, rating, identifying label and purpose of each main isolator, substation and high voltage switchboard,
 - (iv) information required to perform switching programs,
 - (v) the location of all known buried electrical services at the mine or petroleum site,
 - (vi) for a mine or petroleum site, other than an underground mine, the general location of

each item of high voltage mobile plant supplied with electricity by a trailing cable,

- (vii) for an underground mine, the location of each fixed communication device at the mine,
- (g) arrangements are in place so that mobile electrical plant fed by a flexible reeling or trailing cable—
 - (i) is not connected to power if there is an earth fault in the cable, and
 - (ii) has its power interrupted automatically if the continuity of the connection to earth is interrupted,
- (h) arrangements are in place to ensure mains-powered hand-held electrical equipment used at the mine or petroleum site operates at no more than 250 volts and has an earth leakage of not more than 30 milliamperes sensitivity,
- (i) an effective earth system is provided at the mine or petroleum site to minimise, as far as reasonably practicable—
 - (i) touch, transfer and step potential, and
 - (ii) the effects of lightning causing the ignition of methane, the ignition of explosives or detonators or the creation of dangerous touch voltages,
- (j) all electrical installations, other than isolated circuits, have a continuous and effective connection to the earth system,
- (k) all isolated circuits comply with the Wiring Rules, section 7.4,
- (l) the electricity supply to all electrical plant at an underground mine, and all mobile plant fed via flexible reeling or trailing cables in any other mine or petroleum site, is designed so that—
 - (i) the magnitude of earth fault currents to the plant is limited, in order to control step and touch potentials, and
 - (ii) so far as is reasonably practicable, the most likely type of electrical fault is a low energy earth fault, in order to minimise the amount of energy released,
- (m) the reliability of electrical safeguards provided to control the risk from both electrical and non-electrical hazards is sufficient for the level of risk being controlled,
- (n) short circuit protection and over current protection is provided on all circuits, including subcircuits,
- (o) except for circuits that are isolated from earth, or that have a supply voltage that is extra-low voltage—
 - (i) earth leakage protection is provided on sub-circuits, and
 - (ii) earth fault protection is provided on all distribution and control circuits.
- (3) In this section—

competent person means a person who has the qualifications to be nominated to exercise the statutory function of qualified electrical tradesperson at the mine.

Wiring Rules means Australian and New Zealand Standard AS/NZS 3000:2018 *Electrical installations*, known as the Australian/New Zealand Wiring Rules.

35 Notification of high risk activities

- (1) The operator of a mine or petroleum site must ensure a high risk activity identified in Schedule 3 is not carried out at or in relation to the mine or petroleum site unless—
 - (a) the operator has given notice of the activity to the regulator, and
 - (b) the waiting period specified in Schedule 3 in relation to the activity has lapsed, subject to—
 - (i) a waiver or reduction of the period under subsection (6), or
 - (ii) an extension of the period under subsection (9), and
 - (c) the activity is carried out in the way specified in the notice, or in the notice as amended under subsection (8).
- (2) The notice must be given in the approved way and form and must include the following—
 - (a) the nature of the proposed high risk activity, including particulars of how the activity must be carried out,
 - (b) the proposed commencement date for the activity,
 - (c) the location of the activity,
 - (d) information or documents required by Schedule 3 in relation to the activity,
 - (e) the hazards identified as having the potential to arise from the activity,
 - (f) an assessment of the risks associated with the activity,
 - (g) the relevant parts of the safety management system for the mine or petroleum site that describe the systems, procedures, plans and other control measures that will be used to control risks to health and safety associated with the carrying out of the activity.
- (3) The operator of a coal mine must ensure a copy of a notice given to the regulator under this section, including under subsection (8), is also given, as soon as reasonably practicable, to an industry safety and health representative and a site safety and health representative for the mine.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) If the regulator reasonably believes a notice about a proposed high risk activity is inadequate, the regulator may inform the operator by a written notice that—
 - (a) the notice given to the regulator is inadequate, and

- (b) the notice must be resubmitted before the high risk activity can be carried out.
- (5) A notice to the regulator is—
 - (a) taken to have been given when it is received by the regulator, or
 - (b) if the regulator informs an operator of a mine or petroleum site that the notice is inadequate—taken not to have been given.
- (6) The regulator may waive or reduce the waiting period in relation to a particular high risk activity.
- (7) A waiver or reduction under subsection (6) may only occur in relation to a coal mine if the industry safety and health representative who has been notified of the activity is consulted by the regulator in relation to the proposed waiver or reduction.
- (8) A notice given to the regulator under this section may be amended by the operator giving further written notice to the regulator.
- (9) The giving of a further notice under subclause (8) does not cause the waiting period to change unless the regulator extends the waiting period by a reasonable time to allow the regulator time to consider the notice as amended.
- (10) Nothing in this section affects an obligation that a person may have under the WHS laws in relation to the carrying out of a high risk activity.

36 Prohibited items and substances

The operator of a mine or petroleum site must take all reasonable steps to ensure an item or substance specified in Schedule 4 is not used in a place or for a purpose that is prohibited or restricted by the Schedule.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

37 Closure, suspension or abandonment of mine or petroleum site

(1) If the operator of a mine or petroleum site closes the mine or petroleum site, the operator must, at the time of the closure, ensure as far as reasonably practicable that the mine or petroleum site is safe, including by being secure against unauthorised entry by a person.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) If mining activities or petroleum activities at a mine or petroleum site are suspended, the operator must, as far as reasonably practicable, ensure the mine or petroleum site is safe, including by being secure against unauthorised entry by a person during the period of suspension.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) For subsection (1) or (2), a mine or petroleum site is not secure against unauthorised entry by a person unless every shaft or outlet to the mine or petroleum site—
 - (a) is permanently sealed or filled, or
 - (b) is provided with a barrier that is properly maintained.
- (4) The operator of a mine or petroleum site must not abandon the mine or petroleum site.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (5) In this section—

operator of—

- (a) a mine includes the mine holder of the mine, or
- (b) a petroleum site includes the petroleum site holder of the petroleum site.

38 Minimum age to work at mine or petroleum site

- (1) The mine operator of a mine must take all reasonable steps to ensure—
 - (a) a person under the age of 16 years is not engaged to carry out mining operations work of a kind referred to in the WHS (MPS) Act, section 7(1)(a), (b) or (d), and
 - (b) a person over the age of 16 years and under the age of 18 years is not engaged to carry out work at an underground mine unless the person is an apprentice or a trainee under direct supervision in relation to the work.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (2) The operator of a petroleum site must take all reasonable steps to ensure a person under the age of 16 years is not engaged to carry out petroleum operations work of a kind referred to in the WHS (MPS) Act, section 7B(1)(a), (b) or (d).

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (3) The mine operator of an underground mine must ensure the following records are kept for the mine for each person under the age of 18 years engaged to carry out work at the mine—

- (a) the date of birth of the person, and the means by which the date of birth was proven to the satisfaction of the mine operator,
- (b) the date on which the person commenced working at the mine.

39 Inspections

(1) The mine operator of a mine must ensure arrangements are in place for the regular inspection of the working environment of the mine for the purposes of the WHS laws.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator must ensure, in the making of the arrangements, the following are taken into account—
 - (a) the procedures for conducting inspections,
 - (b) when inspections must be carried out,
 - (c) the persons competent to conduct inspections,
 - (d) the number of competent persons required to conduct each inspection.
- (3) The mine operator of a mine must ensure a risk assessment is conducted on all areas of the mine when taking account of the matters set out in subsection (2)(a)–(d).

Subdivision 2 Air quality and monitoring

40 Temperature and moisture content of air

In complying with section 14, the operator of a mine or petroleum site must—

- (a) manage risks to health and safety associated with extremes of either or both the temperature and moisture content of air, and
- (b) if risks associated with extreme heat exist at an underground mine—implement control measures, including monitoring, to manage heat stress in places at the mine where—
 - (i) persons work or travel, and
 - (ii) the wet bulb temperature is more than 27°C.

41 Ensuring exposure standards for dust and diesel particulate matter and carbon dioxide not exceeded

- (1) The operator of a mine or petroleum site must—
 - (a) as far as reasonably practicable, minimise the exposure of persons at the mine or petroleum site to dust and diesel particulate matter, and
 - (b) ensure no person at the mine or petroleum site is exposed to 8-hour time-weighted average

atmospheric concentrations of airborne dust and diesel particulate matter that is more than—

- (i) for respirable dust—3mg per cubic metre of air, or for a coal mine, 1.5mg per cubic metre of air, or
- (ii) for inhalable dust—10mg per cubic metre of air, or
- (iii) for diesel particulate matter—0.1mg per cubic metre, measured as sub-micron elemental carbon.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) Without limiting subsection (1), the operator of an underground coal mine must—
 - (a) as far as reasonably practicable, minimise the exposure of persons to carbon dioxide in the mine, and
 - (b) must ensure no person in the mine is exposed to an 8-hour time-weighted average atmospheric concentration of carbon dioxide that is more than—
 - (i) for short term exposure limits—30,000 parts per million, or
 - (ii) otherwise—12,500 parts per million.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The *Workplace Exposure Standards for Airborne Contaminants* apply in relation to a concentration referred to in subsection (1) or (2) as if the concentration were an exposure standard referred to in the document.
- (4) In this section—

8-hour time-weighted average has the same meaning as in the *Workplace Exposure Standards* for *Airborne Contaminants*.

short term exposure limit has the same meaning as in the *Workplace Exposure Standards for Airborne Contaminants*.

42 Monitoring exposure to airborne dust and diesel particulate matter and carbon dioxide

The WHS Regulations, clause 50 applies to—

(a) the operator of a mine or petroleum site in relation to airborne dust and diesel particulate matter as if the concentrations referred to in section 41(1) were exposure standards to which the WHS Regulations, clause 50 applies, and

(b) the operator of an underground coal mine in relation to carbon dioxide as if the concentrations referred to in section 41(2) were exposure standards to which the WHS Regulations, clause 50 applies.

43 Use of air monitoring devices

The operator of a mine or petroleum site who uses air monitoring devices to comply with air monitoring requirements under the WHS Regulations, clause 50 and under this Regulation must ensure—

- (a) the devices are suitable and effective having regard to—
 - (i) the nature of the monitoring being carried out, and
 - (ii) the substance being monitored, and
- (b) the devices are positioned to ensure they work to best effect.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

44 Use of air monitoring signage

The operator of a mine or petroleum site, in complying with air monitoring requirements under the WHS Regulations, clause 50 and under this Regulation, must ensure signs are erected at the mine or petroleum site that explain—

- (a) the meaning of a warning produced by an air monitoring device, and
- (b) what persons must do in response to the warning.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

Subdivision 3 Fitness for work

45 Fatigue, alcohol and drugs

In complying with section 14, the operator of a mine or petroleum site must manage risks to health and safety associated with the following—

- (a) worker fatigue,
- (b) the consumption of alcohol by workers,
- (c) the use of drugs by workers.

Division 4 Specific control measures for all mines

46 Operation of belt conveyors

- (1) In complying with section 14, the mine operator of a mine must manage risks to health and safety associated with the operation of belt conveyors at the mine.
- (2) In managing risks to health and safety associated with the operation of belt conveyors at the mine, the mine operator must do the following—
 - (a) ensure all belt conveyors are fitted with an emergency stop system,
 - (b) have regard to all matters relevant to risks associated with the operation of belt conveyors,
 - (c) ensure belt conveyors are regularly inspected by a competent person,
 - (d) for an underground coal mine—ensure each belt conveyor in operation is inspected by a competent person—
 - (i) at least once every shift, and
 - (ii) to detect the presence of overheating, smouldering or other condition likely to cause a fire—as soon as reasonably practicable after the belt conveyor is shut down for a period.

47 Mining induced seismic activity

- (1) In complying with section 14, the mine operator of a mine must manage risks to health and safety associated with mining induced seismic activity at the mine.
- (2) In managing risks to health and safety associated with mining induced seismic activity at the mine, the mine operator must, as far as reasonably practicable, do the following—
 - (a) ensure appropriate equipment and procedures are used for the monitoring, recording, interpretation and analysis of data relating to mining induced seismic activity and the behaviour of the mine with the activity, commensurate with the level of risk,
 - (b) adopt an effective seismic monitoring plan which contains trigger or action points to ensure actions or procedures are undertaken on the occurrence of certain criteria specified in the plan,
 - (c) ensure the design of the mine mitigates the damage arising from the sudden release of energy from the build-up of mining-induced stresses,
 - (d) ensure geotechnical engineered ground support systems are installed and the systems take into account the following—
 - (i) the intended life of the excavation,
 - (ii) the mining-induced stress changes and potential cycles of loading and unloading,
 - (iii) blast vibrations during development mining and from surrounding stopes,
 - (iv) the potential impact of voids and the management of voids,

- (v) the tolerance for stability problems and rehabilitation,
- (vi) the potential for rockburst,
- (e) ensure the ground support system is designed to contain events that have already been recorded or expected by appropriate modelling, allowing for an appropriate factor of safety,
- (f) ensure mining by remote methods is implemented when mining areas at risk of high or unpredictable mining induced seismic activity,
- (g) ensure mine design, mining methods and sequences, ground support design and assumptions and modelling are documented and reviewed on an on-going basis and, where necessary, revised.

Division 5 Specific control measures for underground mines

Subdivision 1 Operational controls for underground mines

48 Inrush hazards

- (1) The mine operator of an underground mine must implement a system for the mine that ensures the following—
 - (a) the identification of all reasonably foreseeable inrush hazards at the mine,
 - (b) the determination of the presence and location of an inrush hazard by exploratory boreholes, including a way of sealing or otherwise controlling a bore-hole to prevent inrush, or other exploratory methods,
 - (c) communication of the location of identified inrush hazards, including inrush hazards being approached, to all affected persons,
 - (d) the determination of whether or not an identified inrush hazard is a principal hazard,
 - (e) if an identified inrush hazard is a principal hazard—the identification, establishment and maintenance of an inrush control zone for the inrush hazard in accordance with the WHS laws.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) An inrush control zone must be located near the inrush hazard and—
 - (a) if the exact location of the inrush hazard is known—extend at least 50m from the location of the inrush hazard, or
 - (b) if the exact location of the location of the inrush hazard is not known—extend more than 50m from the suspected location of the inrush hazard, as determined by a risk assessment conducted under section 27.
- (3) The mine operator must ensure, in relation to each inrush control zone, control measures and

procedures are implemented to control the risk of inrush.

- (4) The mine operator must ensure an inrush control zone is not mined before—
 - (a) control measures and procedures have been implemented under subsection (3), and
 - (b) the persons who will work in the zone have been trained in relation to the implementation of the control measures and procedures.
- (5) If an identified inrush hazard is not at an accessible place at the mine, it is sufficient to control the risk from inrush by—
 - (a) providing adequate separation of solid rock between the mine workings and the assessed worst case position of the potential source of inrush, and
 - (b) complying with the requirements of an applicable principal hazard management plan prepared for inrush hazards.
- (6) The mine operator of an underground mine, before connecting an underground mine workings at the mine to other workings, including disused workings, must—
 - (a) ensure the other workings are inspected for water, gas and other circumstance that may be an inrush hazard, and
 - (b) if it is not possible to safely gain access to the workings to be connected—ensure exploratory bore-holes or other exploratory methods are used to determine the location of the other workings.

Maximum penalty (subsection (6))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

49 Connecting workings

(1) The mine operator of an underground mine must ensure, if 2 working faces are approaching each other at an underground mine, 1 of the workings is stopped, made safe and barricaded as soon as reasonably practicable before the distance separating the faces creates a risk to health or safety.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground mine, before connecting underground mine workings to other workings, including disused workings, must ensure the other workings are inspected for the following—
 - (a) water,
 - (b) gas,
 - (c) misfires,

- (d) butts,
- (e) other circumstances that may be a risk to the health or safety of a person at the mine, other than a risk associated with an inrush hazard.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The requirements of subsection (2) are satisfied in circumstances where there is no safe access to the workings to be connected, if the mine operator ensures, before the workings are connected, exploratory bore holes or other exploratory methods are used to identify circumstances that may be a risk to the health and safety of a person at the mine.

50 Winding systems

- (1) The mine operator of an underground mine must ensure every winding system used or that may be put into use at the mine includes the following—
 - (a) ropes and devices that can withstand all forces reasonably expected to be borne by the ropes and devices.
 - (b) control measures to prevent, as far as reasonably practicable, a shaft conveyance from overwind, moving at an unsafe speed, excessive acceleration and deceleration and uncontrolled movement.
 - (c) at least 2 braking systems that—
 - (i) ensure the winding system remains under control in the event of a failure in 1 of the systems, or
 - (ii) for a winding system used or that may be put into use at a small gemstone mine—are designed to incorporate a fail safe and consist of at least 1 brake and 1 emergency arresting device,
 - (d) a device that safely attaches ropes to conveyances,
 - (e) for an underground small gemstone mine, control measures that detect one or more of the following malfunctions that may be present—
 - (i) slack rope,
 - (ii) broken rope,
 - (iii) rope detaching from a conveyance or winding drum,
 - (iv) unsafe coiling of rope,
 - (f) for an underground mine other than a small gemstone mine, control measures that detect 1 or more of the following malfunctions that may be present—
 - (i) slack rope,

- (ii) rope slip,
- (iii) unsafe balance rope conditions,
- (iv) unsafe coiling of rope,
- (g) control measures that cause the winding system to be brought to a safe state when a condition or malfunction referred to in paragraph (e) or (f) is detected,
- (h) warning systems to alert persons at the mine to an emergency in a winding system,
- (i) if it is reasonably practicable, remote monitoring of the functions of the system,
- (j) an effective means of communication—
 - (i) between the surface and a shaft conveyance used for carrying persons, and
 - (ii) between the point of control of the winding system and the entry to every shaft that is in use,
- (k) for multi-rope winding systems—devices that load the ropes as uniformly as possible.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) Subsection (1)(h)–(k) does not apply to an underground small gemstone mine.
- (3) The mine operator must ensure the condition and performance of the winding system, and its components, are tested and monitored at intervals to ensure the safe performance of the system.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The mine operator must ensure energy lockout devices are fitted to all mechanical and electrical plant associated with a shaft at the mine, including mechanical and electrical plant associated with the operation, maintenance or use of the shaft.

Maximum penalty (subsection (4))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

51 Ropes

- (1) The mine operator of an underground mine, other than an underground small gemstone mine, must ensure—
 - (a) each rope used for the purposes of a winding system or slope haulage is regularly inspected and tested to ensure it is safe to use for the purposes of a winding system or slope haulage,

and

(b) criteria are established to determine when a rope is no longer suitable for those purposes.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground small gemstone mine must ensure each rope used for the purpose of a winding system is regularly inspected and tested to ensure it is safe to use for the purpose of a winding system.

Maximum penalty (subsection (2))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

52 Operation of shaft conveyances

- (1) The mine operator of an underground mine must ensure material or plant being carried in a shaft conveyance—
 - (a) does not protrude from the shaft conveyance while it is moving and make contact with a wall of the shaft or anything in the shaft, and
 - (b) is so secured to the shaft conveyance that it cannot leave the shaft conveyance except by being deliberately removed.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground mine must ensure persons being carried in a shaft conveyance are adequately protected from the following—
 - (a) another shaft conveyance in the same shaft,
 - (b) material or plant being carried by the other shaft conveyance,
 - (c) the wall of the shaft or anything in the shaft.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine operator of an underground mine must ensure, if a shaft conveyance that combines a cage and skip is used, material is not carried in the skip while persons are being carried in the cage.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The mine operator of an underground mine must ensure control measures are implemented to prevent a shaft conveyance from falling down the shaft.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (5) The mine operator of an underground mine must, as far as reasonably practicable, ensure control measures are implemented to prevent persons, rock, material and plant from falling down a shaft.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (6) In this section—

shaft conveyance means a conveyance that is connected to a winding system.

53 Dust explosion

- (1) In complying with section 14, the mine operator of an underground mine must manage risks to health and safety associated with an explosion associated with dust at the mine.
- (2) In managing risks to health and safety associated with dust at the mine, the mine operator must implement control measures that, as far as reasonably practicable, do the following—
 - (a) minimise the generation of potentially explosive dusts,
 - (b) suppress, collect and remove potentially explosive airborne dusts,
 - (c) suppress dust explosion,
 - (d) restrict the propagation of a dust explosion so that other areas are not affected.

54 Communication systems

The mine operator of an underground mine must maintain a system for effective communication throughout the mine and between the surface and locations at the underground mine.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

55 Ground and strata support

The mine operator of an underground mine, which has an area of unsupported ground or strata that is required to be supported to ensure compliance with section 14, must ensure—

- (a) no person enters the area when there is no ground or strata support, and
- (b) no person enters the area to install ground or strata support unless sufficient temporary ground or strata support is provided, and
- (c) plans of the proposed support arrangements for the area are prepared and displayed in locations readily accessible to workers at the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

56 Exhaust emissions and fuel standards

- (1) The mine operator of an underground mine must ensure the following—
 - (a) exhaust emissions from diesel engines located underground are regularly sampled and analysed every 6 months by a qualified person,
 - (b) the results of the sampling and analysis by the qualified person are compared with the baseline exhaust emissions for the particular diesel engine when the engine was new, or as new,
 - (c) the engine is regularly maintained so that emissions from the engine are as low as reasonably practicable, having regard to the baseline exhaust emissions.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground mine must ensure fuel used at the mine is supplied in accordance with—
 - (a) the *Fuel Quality Standards Act 2000* of the Commonwealth (the *Commonwealth Act*) and the *Fuel Quality Standards (Automotive Diesel) Determination 2019* made under the Commonwealth Act, or
 - (b) a fuel standard that has been varied by an approval under the Commonwealth Act by the Minister administering the Commonwealth Act.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

(3) The mine operator of an underground mine must ensure fuel supplied in accordance with subsection (2)(b) or fuel additives used at the mine do not increase the health and safety risks to workers at the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) For subsection (3), comparison load testing on underground diesel engines at various load points must be used to determine whether a fuel or fuel additive increases the health and safety risks to workers at the mine.
- (5) In this section—

qualified person means a person—

- (a) holding a licence under Part 10, or
- (b) if the underground mine is not an underground coal mine, a person who, in the mine operator's opinion—
 - (i) is suitably qualified and experienced, and
 - (ii) will be supervised by a competent person, and
 - (iii) will use equipment and facilities suitable for carrying out sampling and analysis.

Subdivision 2 Air quality and ventilation for underground mines

57 Airborne contaminants

(1) The mine operator of an underground mine must ensure, in an accessible place at the mine, the concentration of an airborne contaminant, including an asphyxiant or flammable gas, is as low as reasonably practicable.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator must comply with subsection (1)—
 - (a) as far as reasonably practicable, by using suppression or the installation of a ventilation or exhaust extraction system, or
 - (b) if this is not reasonably practicable—by some other suitable means.
- (3) This section does not limit the WHS Regulations, clause 49 or this Regulation, section 41.

58 Minimum standards for ventilated air

(1) The mine operator of an underground mine must ensure the ventilation system for the mine

provides air that is of sufficient volume, velocity and quality to ensure the general body of air in the areas in which persons work or travel—

- (a) has a concentration of oxygen that is at least 19.5% by volume under normal atmospheric pressure, and
- (b) has dust levels that—
 - (i) are as low as reasonably practicable, and
 - (ii) are not more than the relevant levels specified in section 41(1)(b)(i) and (ii), and
- (c) if diesel engines are used underground—has a concentration of diesel emissions that—
 - (i) for diesel particulate matter—is as low as reasonably practicable and is not more than the relevant level specified in section 41(1)(b)(iii), and
 - (ii) for other diesel emissions, including known harmful emissions from diesel engine systems—is as low as reasonably practicable.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) In addition to subsection (1), the mine operator of an underground mine must ensure the ventilation system for the mine provides for air that is of sufficient quality to ensure the general body of air in the areas in which persons work or travel has a level of contaminants that—
 - (a) is as low as reasonably practicable, and
 - (b) is not more than the exposure level for that contaminant specified in the relevant exposure standard referred to in the WHS Regulations, clause 49.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) This section does not apply in relation to an area of the mine—
 - (a) that is required to be entered in an emergency or for a mines rescue purpose or to rectify a failure of the ventilation system, and
 - (b) in which all persons are using self-contained breathing apparatus.

59 Air quality

The mine operator of an underground mine must ensure air monitoring is carried out at the mine in the following circumstances—

(a) in relation to an underground mine other than an underground coal mine—if the mine operator is not certain on reasonable grounds whether or not section 58 is being complied with,

(b) in relation to an underground coal mine—at intervals that ensure compliance with clauses 58(1), 74 and 76.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

60 Requirements if air quality and air safety standards not met

- (1) This section applies if monitoring reveals that—
 - (a) at an underground mine other than an underground coal mine—
 - (i) the oxygen level specified in section 58(1)(a) is not met, or
 - (ii) a dust level referred to in section 58(1)(b)(ii) is exceeded, or
 - (iii) an exposure level referred to in section 58(2)(b) is exceeded, or
 - (b) at an underground coal mine—
 - (i) the oxygen level specified in section 58(1)(a) is not met, or
 - (ii) a dust level referred to in section 58(1)(b)(ii) is exceeded, or
 - (iii) an exposure level referred to in section 58(2)(b) is exceeded, or
 - (iv) the concentration of methane referred to in section 76(1)(b) is exceeded.
- (2) The mine operator of an underground mine must immediately notify an affected workers or other persons at the mine of the relevant circumstances referred to in subsection (1).

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine operator of an underground mine must have the air quality at the mine retested by a competent person as soon as reasonably practicable.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The mine operator of an underground mine must ensure procedures are in place to ensure, if the ventilation in an area of the mine is inadequate—
 - (a) the person responsible for the area of the mine is notified, and
 - (b) no person gains access to, or remains in, the area of the mine until adequate ventilation is restored.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (5) The mine operator of an underground mine satisfies the requirements of subsection (4) if the mine operator ensures procedures are in place at the mine to require—
 - (a) the person with responsibility for an area of the mine to be informed as soon as reasonably practicable after a person finds the ventilation is inadequate in the area, and
 - (b) the person with responsibility for the affected area to do the following—
 - (i) immediately take measures available to the person to restore adequate ventilation to the area,
 - (ii) if the mine is an underground coal mine—notify an individual nominated to exercise the statutory function of ventilation officer at the mine of the matter,
 - (iii) ensure no person gains access to, or remains in, the area until adequate ventilation is restored,
 - (iv) provide a written report to the mine operator of the measures that have been taken to restore adequate ventilation.

61 Records of air monitoring

(1) The mine operator of an underground mine must keep a record of air monitoring carried out at the mine under section 59.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (2) A record of air monitoring must include the following—
 - (a) the results of the monitoring,
 - (b) details of the dates, location and frequency of the monitoring,
 - (c) the sampling method and equipment used.
- (3) A record of air monitoring carried out under this Regulation must be kept for 7 years after the record is made.
- (4) The mine operator must keep a record of air monitoring available for inspection under the WHS laws.

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.

(5) The mine operator must keep a record of air monitoring readily accessible to workers and other persons at the mine.

Maximum penalty (subsection (5))—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

62 Ventilation systems

(1) The mine operator of an underground mine must ensure air supplied to the ventilation system at the mine is obtained from the purest source available.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator must ensure the following—
 - (a) ventilation circuits at the mine do not allow uncontrolled recirculation of air,
 - (b) plant and structures that regulate airflow are maintained in good working order,
 - (c) unventilated headings are not entered unless—
 - (i) the purpose of entry is to establish ventilation, and
 - (ii) adequate ventilation is provided to the person entering the heading,
 - (d) an auxiliary fan or scrubber fan used at the mine is located and operated in a way that prevents uncontrolled recirculation of air through the fan,
 - (e) a ventilation fan installed at the surface for the purpose of ventilating the underground mine is placed in a position and under conditions that ensure the least amount of damage as possible is caused to the fan in the event of an explosion, or other overpressure event, at the underground mine,
 - (f) a procedure is in place for starting each type of fan, including the main fan,
 - (g) no person deals with a main fan or auxiliary fan ventilating an underground mine unless the person is authorised by the mine operator to do so,
 - (h) no person starts or stops a fan ventilating an underground mine unless each person likely to be adversely affected by the starting or stopping has been notified.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine operator must ensure, at every point in areas of the mine where persons work or travel,

the ventilation system for the mine provides at least 1m³ of air per second.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) Subsection (3) does not apply in relation to a person entering an unventilated heading to establish ventilation.

63 Monitoring and testing of ventilation system

- (1) The mine operator of an underground mine must ensure—
 - (a) the main ventilation fans of the mine are monitored at all times, and
 - (b) an alarm is triggered on the surface if a main ventilation fan stops.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground mine must monitor and test all aspects of the operation of the ventilation system at intervals that ensure the system complies with sections 58 and 62.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine operator of a mine must keep a record of all monitoring and testing of the ventilation system at the mine for at least 7 years.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (4) The mine operator must keep the record available for inspection under the WHS laws.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (5) The mine operator must keep the record readily accessible to workers and other persons at the mine.

Maximum penalty (subsection (5))—

(a) for an individual—36 penalty units, or

(b) for a body corporate—180 penalty units.

64 Modelling to take place before changes to ventilation system

(1) The mine operator of an underground mine must ensure, before a significant change is made to the ventilation system for the mine, modelling of the change is carried out.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) This section does not apply to—
 - (a) a mine, other than a coal mine, with less than 5 workers, or
 - (b) an opal mine.

65 Duty to prepare ventilation control plan

(1) The mine operator of an underground mine must ensure a plan is prepared to provide for the management of all aspects of ventilation at the mine (a *ventilation control plan*).

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The ventilation control plan must describe all control measures implemented in relation to ventilation at the mine.
- (3) Without limiting subsection (2), the ventilation control plan must include a description of the following, if applicable to the mine—
 - (a) the design and operation of the ventilation system, including the standards applying to the placement, operation, maintenance and monitoring of ventilation plant,
 - (b) arrangements for inspecting, monitoring, maintaining and testing the ventilation system,
 - (c) arrangements for managing risks to health and safety associated with potential inrush hazards and leakage into intake airways of atmospheric contaminants from goaf areas and abandoned sealed workings,
 - (d) arrangements for managing risks to health and safety associated with intake air travelling across the face of a permanent seal at the mine,
 - (e) arrangements, in the event of a loss of power supply, for an alternate and independent way of operating the main ventilation fans or for the withdrawal of persons from the mine,
 - (f) arrangements for managing risks to health and safety associated with ignition sources in the event that the main ventilation fans fail to adequately ventilate the mine,
 - (g) procedures to ensure the health and safety of persons at the mine in the event of a total or

partial ventilation failure,

- (h) for an underground coal mine—arrangements for sealing all, or part of, the mine,
- (i) procedures for ventilating the parts of the mine where persons work or travel,
- (j) how close ventilation ducting and brattice lines must be to a face,
- (k) arrangements for the installation of ventilation control devices,
- (1) arrangements for signage in relation to regulators, fans and doors at the mine notifying persons that interference with the regulator, fan or door by unauthorised persons is prohibited,
- (m) arrangements to prevent workers from inadvertently entering inadequately ventilated parts of the mine,
- (n) starting procedures for fans,
- (o) modelling of the ventilation processes when a significant change is made to the ventilation arrangements,
- (p) procedures to be followed in the event of the failure of the main ventilation system including details of the circumstances requiring the safe withdrawal of persons from the mine and the giving of an alarm at the surface if a main ventilation fan stops.

66 Review of ventilation control plan

The mine operator of an underground mine must ensure a ventilation control plan is reviewed and as necessary revised if a control measure specified in the plan is revised under the WHS Regulations, clause 38 or this Regulation, section 15.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

67 Ventilation plan

(1) The mine operator of an underground mine must ensure a plan of the ventilation system for the mine (the *ventilation plan*) is prepared.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The ventilation plan must show—
 - (a) the direction, course and volume of air currents, and
 - (b) the position of all air doors, stoppings, fans, regulators and other ventilation plant and structures and ventilation monitoring devices at the mine.

(3) The mine operator of an underground mine must ensure the ventilation plan is reviewed and revised as necessary.

Maximum penalty (subsection (3))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Subdivision 3 Other measures for underground coal mines

68 Coal dust explosion

- (1) In complying with section 14 in relation to coal dust explosion, the mine operator of an underground coal mine must do the following—
 - (a) limit coal dust generation, including its generation by mining machines, coal crushers and belt conveyors and at belt conveyor transfer points,
 - (b) suppress, collect and remove airborne coal dust,
 - (c) limit or remove coal dust accumulation on roadways and other surfaces in mine roadways to ensure the amount of incombustible material contained in roadway dust at the mine is kept at or above the following concentration levels—
 - (i) for dust in a panel roadway within 200m outbye the last completed line of cut-throughs in the panel—85%,
 - (ii) for dust in a 200m section of panel roadway within 400m of a longwall face—85%,
 - (iii) for dust in a return roadway to which subparagraphs (i) and (ii) do not apply—80%,
 - (iv) for dust in an intake roadway to which subparagraphs (i) and (ii) do not apply—70%,
 - (d) determine the stone dust or other explosion inhibitor application rate necessary to minimise the risk of a coal dust explosion and apply the rate,
 - (e) ensure stone dust used—
 - (i) is of a type or grade that is suitable for its proposed use, and
 - (ii) is white in colour, and
 - (iii) does not contain more than 3% by mass of free silica, and
 - (iv) at least 95% by mass of the stone dust is finer than 250 micrometres, and
 - (v) at least 60% and not more than 80% of the mass of the stone dust that is finer than 250 micrometres is finer than 75 micrometres.
 - (f) restrict the propagation of a coal dust explosion so that other areas are not affected,

Example— Use of explosion barriers.

(g) ensure explosion barriers are installed and maintained—

- (i) at roadways within a face zone, other than single entry roadways, that are return roadways or that contain belt conveyors, or
- (ii) in another place as required following a risk assessment under section 14,Example— A bleeder return from a goaf.
- (h) ensure stone dust or other explosion inhibitor is applied to a new section of roadway so that—
 - (i) no more than 30m of the new section is left without an application of stone dust or other explosion inhibitor while the section is being driven, and
 - (ii) no part of the new section is left without an application of stone dust or other explosion inhibitor for more than one day, not including a day on which no mining operations occur at the mine.
- (2) Subsection (1)(c) does not apply in relation to dust in a roadway if there is sufficient natural make of water associated with the mining operations to prevent a coal dust explosion.
- (3) The mine operator must also establish procedures in relation to the following—
 - (a) the regular inspection, sampling and analysis of roadway dust layers by an individual nominated to exercise the statutory function of roadway dust sampler at the mine,
 - (b) where laboratory analysis of roadway dust is required for incombustible material content—ensuring the analysis is carried out at a laboratory that is accredited by the National Association of Testing Authorities, Australia in relation to the incombustible material content of roadway dust,
 - (c) the application of stone dust or another explosion inhibitor for suppressing coal dust explosion,
 - (d) the intervals at which dust sampling and analysis referred to in paragraph (a) must be carried out.
 - (e) the keeping of records of samples taken at the mine that identifies the following in relation to each sample—
 - (i) the date it was taken,
 - (ii) the location at the mine from which it was taken,
 - (iii) the incombustible material content of the sample,
 - (iv) the methods used for analysing the sample,
 - (f) in each case that spot sampling is used—the keeping of records of the reasons why strip sampling was not used,
 - (g) the keeping of a plan of the mine that shows the percentage of incombustible material at various parts of the mine and revising the plan as soon as reasonably practicable after new sample results are obtained,

- (h) the treatment of float dust on structures and surfaces that have been dusted with stone dust.
- (4) Sampling referred to in subsection (3)(a) must—
 - (a) be carried out by using strip sampling or, if strip sampling is not reasonably practicable, spot sampling, and

Example— Strip sampling would not be reasonably practicable for a physical impediment such as rib mesh where it would not be possible to get representative and accurate samples using strip sampling.

- (b) as far as reasonably practicable, comply with the following—
 - (i) samples must be taken over a length of roadway of at least 45m,
 - (ii) samples must not be taken from a depth of more than 5mm,
 - (iii) the areas from which samples are taken must not be less than 1% of the total area to which the sampling relates,
 - (iv) samples must not be taken from points at which samples have been taken on a previous occasion,
 - (v) dust from a floor of a roadway must be sampled and tested separately from dust on the roof or sides of the roadway if it appears the dust on the floor contains a different incombustible content than dust on the roof or sides, and
- (c) take place at least once every—
 - (i) for a face zone—month, or
 - (ii) for an outbye return or a belt conveyor roadway—3 months, or
 - (iii) for another outbye roadway—6 months.
- (5) The mine operator of an underground coal mine must ensure, if a sample indicates that the amount of incombustible material at part of the mine is lower than that required for the part by subsection (1)(c), stone dust or another explosion inhibitor is applied to the part of the mine from which the sample was taken within the following periods, and a record is kept of the date and time of the application—
 - (a) for a sample that failed to meet the requirements of subsection (1)(c)(i) or (ii)—24 hours after the results are determined.
 - (b) for a sample that failed to meet the requirements of subsection (1)(c)(iii) or (iv)—7 days after the results are determined.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (6) In this section—

explosion barriers means—

- (a) water barriers installed in accordance with Schedule 5, or
- (b) bagged stone dust barriers installed in accordance with the manufacturer's or supplier's guidelines, or
- (c) barriers installed as a high risk activity.

float dust means coal dust that is finer than 75 micrometres that has been deposited on a surface that has received an application of stone dust or other explosion inhibitor.

intake roadway means a roadway used for the intake of air to mine workings.

return roadway means a roadway used for the removal of air and airborne contaminants from mine workings.

roadway dust means all dust in a roadway including coal dust and stone dust.

spot sampling means taking samples of dust from the floor, roof and sides of a roadway by collecting the dust from a series of spots that—

- (a) are identified on a plan before the sampling occurs, and
- (b) range in size from 0.1m^2 to 0.5m^2 , and
- (c) are equally distributed and alternating, and
- (d) do not overlap.

strip sampling means taking samples of dust from the floor, roof and sides of a roadway by collecting the dust from a series of transverse strips that—

- (a) are of equal width, and
- (b) are spaced apart by equal amounts of no more than 5m, and
- (c) do not overlap.

69 Spontaneous combustion

- (1) In complying with section 14, the mine operator of an underground coal mine must—
 - (a) manage risks to health and safety associated with spontaneous combustion at the mine, and
 - (b) implement procedures to minimise the potential exposure of persons to airborne contaminants produced by spontaneous combustion, and
 - (c) ensure gas analysis and sensory indicators of spontaneous combustion are developed specifically for the mine and are used as an internal standard against which the risk of spontaneous combustion is assessed, and
 - (d) ensure written records of all spontaneous combustion events at the mine are maintained for the life of the mine, and that the records specify the characteristics of each event and its location, in accordance with a survey plan of the mine.
- (2) The mine operator of an underground coal mine must ensure the procedures implemented under

subsection (1)(a) and (b) and the gas analysis and sensory indicators developed under subsection (1)(c) are set out in the principal hazard management plan relating to spontaneous combustion at the mine.

70 Subsidence

- (1) In complying with section 14, the mine operator of an underground coal mine must manage risks to health and safety associated with subsidence at the mine.
- (2) Without limiting subsection (1), the mine operator must ensure—
 - (a) as far as reasonably practicable, the rate, method, layout, schedule and sequence of mining operations do not put the health and safety of a person at risk from subsidence, and
 - (b) monitoring of subsidence is conducted, including monitoring of its effects on relevant surface and subsurface features, and
 - (c) an investigation of subsidence and an interpretation of subsidence information is carried out only by a competent person, and
 - (d) all subsidence monitoring data is provided to the regulator—
 - (i) in the approved way and form, and
 - (ii) at the times required by the regulator, and
 - (e) as far as reasonably practicable, procedures are implemented for the effective consultation, co-operation and co-ordination of action in relation to subsidence between the mine operator and relevant persons conducting business or an undertaking that is, or is likely to be, affected by subsidence.

71 Sealing

- (1) In complying with section 14, the mine operator of an underground coal mine must manage risks to health and safety associated with sealing at the mine.
- (2) Without limiting subsection (1), the mine operator must ensure the following—
 - (a) consideration is given to the conditions at the place in which the seal is to be installed, including the following—
 - (i) the presence of flammable gas,
 - (ii) the potential of ignition sources,
 - (iii) the possibility of pressure piling behind the seal,
 - (iv) how long the seal can be expected to remain in the condition in which it is installed,
 - (b) when the mine, or part of the mine, requires sealing in emergency conditions—
 - (i) the sealing is carried out in accordance with the ventilation control plan and the emergency plan for the mine, and
 - (ii) the risks to health and safety associated with the emergency sealing activities at the

mine are managed,

- (iii) notification regarding the emergency sealing is provided as soon as reasonably practicable to the regulator in the approved way and form,
- (c) the operation of each airlock installed at an entrance to the mine is tested to ensure its effectiveness at least once every 12 months or more if necessary,
- (d) the connection point for using inertisation equipment and each airlock and seal required to be used with the equipment at the mine are tested at appropriate intervals to ensure—
 - (i) they are fit for use in the event of an emergency, and
 - (ii) necessary facilities including water and cleared areas are available for use with the equipment, and
- (e) modelling is conducted at least once every 12 months to ensure the inertisation locations to be used at the mine are located effectively.
- (3) The testing referred to in subsection (2)(c) may, but need not, include pressure testing.

72 Light metal alloys

- (1) In complying with section 14, the mine operator of an underground coal mine must manage risks to health and safety associated with light metal alloys at the mine.
- (2) Without limiting subsection (1), the mine operator must ensure, having regard to incendive sparking and the explosive or combustible nature of exposed light metal alloy and accumulated light metal alloy dust—
 - (a) as far as reasonably practicable, items containing an exposed light metal alloy are not left underground unattended, and
 - (b) measures are implemented in relation to the underground storage, transport, handling and use of items made of, or containing, a light metal alloy, and the removal of the items from the mine.

73 Goaf areas and abandoned or sealed workings

- (1) In complying with section 14, the mine operator of an underground coal mine must manage risks to health and safety associated with goaf areas and abandoned or sealed workings.
- (2) Without limiting subsection (1), the mine operator must—
 - (a) as far as reasonably practicable, prevent intake air from travelling across the face of a permanent seal at the mine, and
 - (b) provide ways of minimising the risks of inrush and leakage into intake airways of atmospheric contaminants from goaf areas and abandoned or sealed workings, and
 - (c) determine, by a risk assessment, the level of monitoring appropriate for the goaf areas and abandoned or sealed workings and implement the monitoring.

74 Ventilation

- (1) The provisions of this section apply in addition to the provisions of Subdivision 2.
- (2) The mine operator of an underground coal mine must ensure the following—
 - (a) a main ventilation fan used at the mine is not located underground,
 - (b) the volume of air passing through each area at which longwall mining operations are taking place must not be less than 4m³ per second for each metre of extracted height,
 - (c) the volume of air passing through the area in which mining operations are taking place using a continuous miner must not be less than 0.3m³ per second for each square metre of the average cross sectional area of the roadway in which the continuous miner is operating,
 - (d) the percentage by volume of methane in the general body of the air is no greater than 0.25% at a point on the intake side that is 100m outbye of a longwall or shortwall face, but—
 - (i) only to the extent the intake airway is on the intake side of the face, and
 - (ii) not if the longwall face is an installation face at which the development of the face, and mining for development coal, have been completed and at which longwall mining has yet to commence,
 - (e) the ventilation control plan for the mine specifies the minimum quantity of ventilated air required for each part of the mine for power to continue to be supplied to the part of the mine.
 - (f) if the minimum quantity specified in the ventilation control plan is not supplied to a part of the mine, arrangements are in place to ensure—
 - (i) immediate action is taken to supply ventilated air to the part of the mine to above the minimum quantity as soon as possible, and
 - (ii) the supply of power to electrical plant, other than electrical plant referred to in section 81(2), is cut off by the quickest means available and will not be restored before the supply of ventilated air is above the minimum quantity,
 - (g) an auxiliary fan used at the mine is switched off by the quickest means available if the main ventilation system fails,
 - (h) the mine has a procedure in place for using the following fans as part of the mine's ventilation system—
 - (i) auxiliary fans, including auxiliary fans used for degassing places where methane has accumulated,
 - (ii) booster fans,
 - (iii) scrubber fans,
 - (i) an effective airlock is provided and maintained at each shaft or outlet that is—
 - (i) used for winding or for the transport of persons or materials, and

- (ii) connected to the main return of the mine,
- (j) every main ventilation fan has—
 - (i) a pressure gauge showing the pressure at all times, and
 - (ii) a device that indicates at all times, and records, the volume of air passing through the fan,
- (k) each fan installed on the surface, and each booster fan installed below ground, at the mine as part of its ventilation system is fitted with 1 or more devices that—
 - (i) continuously monitor the working condition of the fan, including its static pressure, and
 - (ii) trigger a visible alarm if there is a significant departure from the fan's normal operating parameters, and
 - (iii) record the date and time that an alarm is triggered or the power supply shut off, and
 - (iv) display the results of the monitoring and the visible alarm in a place that is easily accessible by a person whose tasks include checking the condition of the fan.
- (3) The mine operator of an underground coal mine must ensure, in part of the mine where persons work and travel and where one or more diesel engines are in operation, the ventilation system provides an average volume of air measured across the work or travel area of—
 - (a) if the design of each of the engines is registered under the WHS Regulations, Part 5.3 and a volume of air is specified for the engine under the registration—the greater of—
 - (i) the total volume of air so specified, or
 - (ii) 3.5m³ per second, or
 - (b) otherwise—the greater of—
 - (i) 0.06m³ per second for each kilowatt of the total maximum output of the engines, or
 - (ii) 3.5m³ per second.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The mine operator of an underground coal mine must ensure the effectiveness of the ventilation system and the ventilation control plan for the mine are audited at least once every 12 months by an individual nominated to exercise the statutory function of ventilation auditor at the mine.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

- (5) The individual conducting the audit under subsection (4) must, as soon as reasonably practicable after completing the audit, provide a report to the mine operator that sets out in detail—
 - (a) whether or not the ventilation system is being implemented in accordance with the ventilation control plan, and
 - (b) whether or not the ventilation system is achieving the objectives set by the ventilation control plan for the ventilation system, and
 - (c) how effective the system is in meeting the objectives of the ventilation control plan.
- (6) The mine operator of an underground coal mine must ensure the ventilation plan required under section 67 is reviewed and revised at least once a month and at other times as necessary.

Maximum penalty (subsection (6))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

75 Minimum standards for ventilated air

- (1) The mine operator of an underground coal mine must ensure the ventilation system for the mine provides air that is of sufficient volume, velocity and quality to ensure the general body of air in the areas in which persons work or travel has carbon dioxide levels that—
 - (a) are as low as reasonably practicable, and
 - (b) are not more than the relevant levels specified in section 41(2).

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) This section does not apply in relation to an area of the underground coal mine—
 - (a) that is required to be entered in an emergency or for a mines rescue purpose or to rectify a failure of the ventilation system, and
 - (b) in which all persons are using self-contained breathing apparatus.

76 Control and monitoring of methane levels

- (1) The mine operator of an underground coal mine must, in addition to complying with section 58(1), ensure the ventilation system for the mine provides for air that is of sufficient quality to ensure the general body of air in the areas in which persons work or travel has a concentration of methane that—
 - (a) is as low as reasonably practicable, and
 - (b) is not greater than 2% by volume.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground coal mine must—
 - (a) as far as reasonably practicable, determine the location of all hazardous zones at the mine and ensure workers are aware of the locations, and
 - (b) ensure control measures are implemented for each hazardous zone for the management of risks to health and safety associated with the ignition of methane at the mine.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine operator of an underground coal mine must ensure methane monitoring plant is provided at the mine that complies with the following—
 - (a) has detection heads at points most likely to detect the presence of methane,
 - (b) clearly displays the values of methane concentration at locations visible to persons having responsibility for monitoring the concentrations,
 - (c) gives audible or visible signals and alarms if concentrations exceed certain levels,
 - (d) provides for the capture, storage, retrieval and dissemination of information relating to methane concentrations detected,
 - (e) provides for the recording of events that cause a monitor to give an audible or visible signal or alarm or that cut the supply of power to a place or plant.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The mine operator of an underground coal mine must ensure an internal combustion engine that operates in a return airway is equipped with a continuous methane monitor that gives an audible or visible alarm when the concentration of methane in the general body of the air is 1% by volume or greater.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (5) The mine operator of an underground coal mine must ensure an internal combustion engine that operates in a return airway—
 - (a) is withdrawn from the return airway if the concentration of methane in the general body of

the air is 1% by volume or greater, but less than 1.25%, or

(b) is shut down if the concentration of methane in the general body of the air is 1.25% by volume or greater.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (6) The mine operator of an underground coal mine must ensure each face machine in use at the mine is equipped with a continuous methane monitor that—
 - (a) gives an audible or visible alarm if the concentration of methane in the general body of the air is 1% by volume or greater, and
 - (b) cuts the supply of power to the face machine if the concentration of methane in the general body of the air is 1.25% by volume or greater, and
 - (c) cuts the supply of power to the face machine if—
 - (i) the monitor is installed at or close to the heads of the face machine, and
 - (ii) the concentration of methane in the air close to the heads of the face machine is 2% by volume or greater.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (7) The mine operator of an underground coal mine must ensure each face at which longwall, shortwall or miniwall mining operations are taking place is equipped with a continuous methane monitor that—
 - (a) is located so that the monitor can accurately detect methane levels where the mining operations are taking place, and
 - (b) cuts the supply of power to the face if the concentration of methane in the general body of the air is 1.25% by volume or greater at the face.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (8) The mine operator of an underground coal mine must, as far as reasonably practicable, ensure a continuous methane monitor that malfunctions or fails—
 - (a) gives an audible or visible signal of the malfunction or failure, and
 - (b) cuts the supply of power to electrical plant it is monitoring.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

77 Gas monitoring

- (1) The mine operator of an underground coal mine must ensure the following—
 - (a) the gas content of the air at the mine is monitored,
 - (b) a gas content monitoring system is put into place that identifies the following—
 - (i) the locations at which the gas content of air is to be monitored,
 - (ii) sets out, for each type of gas being monitored, the gas concentration level (the *alarm level*) at which alarms will be activated or the supply of power will be cut to a place or plant or both,
 - (iii) who is authorised to set or change the alarm levels and how the alarm levels or changes to the alarm levels must be recorded,
 - (iv) who is responsible for acknowledging when the alarm levels are reached and recording the acknowledgments,
 - (v) who is responsible for communicating that an alarm level has been reached and initiating action as a result of reaching the level,
 - (vi) response plans to be activated as a result of an alarm level being reached,
 - (vii) how the actions of persons in response to an alarm level being reached, and the identities of the persons, must be recorded,
 - (c) the gas content monitoring system is documented,
 - (d) an accurate plan showing the location of all gas content monitoring plant in the mine is maintained,
 - (e) the safety management system for the mine specifies the alarm level for each type of gas,
 - (f) a record is kept of all events where an alarm level is reached,
 - (g) a recording barometer is provided at the surface,
 - (h) all gas content monitoring plant is calibrated and maintained,
 - (i) detection heads of gas content monitoring plant are positioned to maximise the likelihood of detecting the gas being monitored and producing accurate readings,
 - (j) gas monitoring plant has an alternative power supply to ensure, as far as reasonably practicable, the plant continues to function if the normal power supply fails,
 - (k) all gas content monitoring plant installed and operated underground is explosion-protected and meets 1 or more of the requirements set out in section 81(2)(b)(i)–(v),

(l) gas content monitoring plant automatically activates an alarm or cuts the supply of power if an alarm level is reached.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground coal mine must ensure the following take place continuously at the mine—
 - (a) gas content monitoring of the air at the mine that automatically detects and calculates the values and trends of the following—
 - (i) the ratio of carbon monoxide and oxygen deficiency (Graham's Ratio),
 - (ii) the ratio of carbon monoxide and carbon dioxide,
 - (iii) the ability of gas to form an explosive mixture with air,
 - (b) fixed real time monitoring of the products of combustion in the general body of the air at the return side of each belt conveyor drive head,
 - (c) gas content time monitoring of the return air at or near exhaust entries and outbye end of ventilation splits, unsealed goafs and waste workings,
 - (d) fixed real time monitoring of the concentration of methane by volume in—
 - (i) the general body of the air in each main return airway, and
 - (ii) the general body of the air in each return airway in a ventilation split, and
 - (iii) air passing through a main exhaust fan or a booster fan.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) For subsection (2)(c), gas content means the content in the air of each of the following—
 - (a) methane, carbon monoxide and oxygen,
 - (b) carbon dioxide, but only if the regulator has given a written direction to the mine operator to monitor carbon dioxide for the purposes of this section.

78 Portable gas detectors

- (1) The mine operator of an underground coal mine must ensure a portable gas detector that meets the requirements of this section is provided to—
 - (a) each mining supervisor, and
 - (b) each person identified in the safety management system for the mine as being a person who

requires a detector.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) A portable gas detector must be—
 - (a) fit for use at an underground coal mine, and
 - (b) capable of detecting—
 - (i) methane, carbon monoxide and oxygen, and
 - (ii) if the safety management system specifies additional gases, or additional gases in different circumstances—the specified gases.
- (3) The safety management system for a mine must specify the type of portable gas detector a person must have if the person is required to be provided with a portable gas detector.

79 Requirements if air quality or safety standards not met

- (1) In this section, a person has a reasonable belief about a risk if the person reasonably believes the air quality or air safety standards under this Regulation are not being met at an accessible place at an underground coal mine (the *place of risk*).
- (2) The mine operator of an underground coal mine must ensure the following—
 - (a) a worker who forms a reasonable belief informs a mining supervisor,
 - (b) a mining supervisor who is informed of a worker's reasonable belief takes reasonable steps to inspect the place of risk,
 - (c) a mining supervisor who forms a reasonable belief—
 - (i) directs all work to cease at the place of risk, and
 - (ii) directs all persons at the place of risk to withdraw from the place of risk, and
 - (iii) implements measures to prevent persons from entering the place of risk, and
 - (iv) takes reasonable steps to control the risk, including reporting to the mine operator the risk, the steps taken to control the risk and whether the risk has been eliminated or minimised by a control measure.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) If the mine operator of an underground coal mine has been informed that the risk has not been eliminated, the mine operator must ensure further control measures are implemented as are

reasonably practicable to control the risk.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) For the purposes of this section, an accessible place at an underground coal mine is taken to be a place of risk if—
 - (a) the percentage of methane in the general body of air in the place is found to be—
 - (i) greater than 2% by volume, or
 - (ii) if explosion-protected, electrical plant, electrical equipment or internal combustion engines are in use in the place—1.25% by volume or greater, or
 - (iii) if electrical plant, other than explosion-protected plant, is present in the place—greater than 0.25% by volume, or
 - (b) ventilation to the place is below that which is required by the ventilation control plan, or
 - (c) the oxygen level specified in section 58(1)(a) is not met, or
 - (d) a dust level referred to in section 58(1)(b)(ii) is exceeded, or
 - (e) an exposure level referred to in section 58(2)(b) is exceeded.

80 Post incident monitoring

- (1) The mine operator of an underground coal mine must ensure arrangements are developed and implemented in accordance with this section for the monitoring, as far as reasonably practicable, of the atmosphere of the mine following an explosion or fire that leads to—
 - (a) the withdrawal of persons from all or part of the mine, and
 - (b) the cutting of the supply of power to all or part of the mine.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) In developing and implementing the arrangements, the mine operator must ensure consideration is given to the following—
 - (a) the optimum locations for monitoring points,
 - (b) the gases to be monitored,
 - (c) the design of the post incident monitoring system to increase the likelihood of the system being able to continue operating after an incident,
 - (d) the need for and availability of external resources,

(e) the regular testing of the arrangements.

81 Use of plant in hazardous zone—explosion-protection required

- (1) The mine operator of an underground coal mine must ensure plant used in a hazardous zone—
 - (a) is explosion-protected, and
 - (b) if the plant is electrical plant, has an explosion-protection level suitable for use in a hazardous zone.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) For subsection (1)(b), electrical plant has an explosion-protection level suitable for use in a hazardous zone at a coal mine if—
 - (a) it has a valid certificate of conformity or is Departmental approved plant, and
 - (b) it meets at least 1 of the following requirements—
 - (i) intrinsically safe category 'Ex ia', as defined in Australian and New Zealand Standard AS/NZS 60079.11:2011 Explosive atmospheres—Part 11: Equipment protection by intrinsic safety 'i',
 - (ii) encapsulated level of protection 'Ex ma', as defined in Australian and New Zealand Standard AS/NZS 60079.18:2016 Explosive atmospheres—Part 18: Equipment protection by encapsulation 'm',
 - (iii) special protection 'Ex s' (Zone 0), as defined in Australian and New Zealand Standard AS/NZS 1826(Int):2006 *Electrical equipment for explosive gas atmospheres—Special protection—Type of protection* 's',
 - (iv) special protection 'Ex sa', as defined in Australian and New Zealand Standard AS/ NZS 60079.33:2012 Explosive atmospheres—Part 33: Equipment protection by special protection 's',
 - (v) for gas detectors and monitors using catalytic sensors—level of protection 'Ex da', as defined in Australian and New Zealand Standard AS/NZS 60079.1:2015 Explosive atmospheres—Part 1: Equipment protection by flameproof enclosures 'd',
 - (vi) for caplights, but only if the concentration of methane in the general body of the air in the hazardous zone is less than 2% by volume—conformity with—
 - (A) Australian and New Zealand Standard AS/NZS 60079.35.1:2011 Explosive atmospheres—Part 35.1: Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of explosion, or
 - (B) Australian and New Zealand Standard AS/NZS 62013.1:2001 Caplights for use in mines susceptible to firedamp—Part 1: General requirements—Construction and

testing in relation to the risk of explosion.

- (3) For subsection (1)(b), electrical plant has an explosion-protection level suitable for use in a hazardous zone at a coal mine, but only if the concentration of methane in the general body of the air in the zone is less than 1.25% by volume, if—
 - (a) it has a valid certificate of conformity or is Departmental approved plant, and
 - (b) it meets at least 1 of the following requirements—
 - (i) equipment protection level 'Mb', as defined in Australian and New Zealand Standard AS/NZS 60079.0:2019 Explosive atmospheres—Part 0: Equipment—General requirements,
 - (ii) plant that is intrinsically safe, Group II associated apparatus, as defined in Australian and New Zealand Standard AS/NZS 60079.0:2019 Explosive atmospheres—Part 0: Equipment—General requirements.
- (4) The mine operator of an underground coal mine must ensure electrical plant used in a hazardous zone is maintained in accordance with—
 - (a) Australian and New Zealand Standard AS/NZS 2290.1:2014 *Electrical equipment for coal mines—Introduction, inspection and maintenance—Part 1: For hazardous areas*, or
 - (b) Australian and New Zealand Standard AS/NZS 2290.1:2021 *Electrical equipment for coal mines—Introduction, inspection and maintenance—Part 1: For hazardous areas.*

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (5) A certificate of conformity in relation to restrained plugs and receptacles is not valid for the purposes of this section unless it attests to conformity with—
 - (a) Australian and New Zealand Standard AS/NZS 1299:2009 Electrical equipment for mines and quarries—Explosion-protected three-phase restrained plugs and receptacles for working voltages up to and including 3.3 kV, or
 - (b) Australian Standard AS 1299—1993 *Electrical equipment for coal mines—Flameproof restrained plugs and receptacles*.
- (6) A person (the *purchaser*) who conducts a business or undertaking at an underground coal mine must not purchase explosion-protected plant from another person (the *supplier*) unless the supplier provides the purchaser with the following—
 - (a) if the design of the plant is required to be registered under the WHS Regulations, Part 5.3 as the plant is to be used at an underground coal mine—evidence of the registration and drawings of the plant that—
 - (i) identify all features of the plant that form part of the explosion-protected properties, and
 - (ii) give sufficient details so that the plant may be verified as matching the drawings and

the design that was registered, and

- (iii) are copies of the drawings used for the purposes of obtaining the registration,
- (b) if the plant has a valid certificate of conformity—a copy of the certificate and drawings of the plant that—
 - (i) identify all features of the plant that form part of the explosion-protected properties, and
 - (ii) give sufficient details so that the plant may be verified as matching the drawings and the certificate of conformity, and
 - (iii) are traceable to the drawings used in testing and assessment for obtaining the certificate of conformity,
- (c) if the plant is Departmental approved plant—
 - (i) evidence that it is approved, and
 - (ii) and the documents and drawings identified on the website of the regulator in relation to the plant,
- (d) the information required to be given by the supplier under the WHS Act, section 25(4).

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (7) A reference in this section to an Australian Standard or an Australian and New Zealand Standard includes a reference to the following—
 - (a) an Australian and New Zealand Standard that replaces the Standard, and
 - (b) an International Electrotechnical Commission Standard that—
 - (i) is equivalent to the Standard, or
 - (ii) the regulator has declared by notice published in the Gazette to be equivalent to the Standard.
- (8) In this section—

certificate of conformity means a certificate of conformity issued under—

- (a) the *ANZEx scheme*, being the Australian/New Zealand certification scheme for explosion-protected electrical equipment, or
- (b) the *AusEx scheme*, being the Standards Australia Certification and ExMark Licensing Scheme, or
- (c) the *IECEx scheme*, being the International Electrotechnical Commission System for Certification to Standards Relating to Equipment for use in Explosive Atmospheres.

Departmental approved plant means plant that—

- (a) was manufactured before 1 October 2015, and
- (b) was specified in the *Explosion Protected Electrical Apparatus Approvals List* as issued by the Department of Trade and Investment, Regional Infrastructure and Services on 28 May 2012 and continues to be specified in the list as amended from time to time.

plant does not include cables.

Note— On 1 September 2028, Schedule 14 amends this section to remove Departmental approved plant as plant considered to have an explosion-protection level suitable for use in a hazardous zone at a coal mine.

82 Exceptions to explosion-protection requirements

- (1) Despite section 81(1), portable electrical plant may be used in the hazardous zone of an underground coal mine if—
 - (a) the concentration of methane in the general body of the air is 0.5% by volume or less, and
 - (b) the plant is powered by internal batteries, and
 - (c) the temperature of the surface of a component or part of the plant is not greater than—
 - (i) 150°C, or
 - (ii) if the surface is wholly internal to the plant and the plant has a level of ingress protection sufficient to prevent coal dust coming into contact with the surface—450°C, and
 - (d) the plant does not in normal operation produce hot surfaces or sparks that could ignite methane, and
 - (e) the mine operator has implemented control measures to manage the risk of the plant becoming an ignition source.
- (2) Despite section 81(1), electrical equipment associated with hot work may be used in the hazardous zone of an underground coal mine if the mine operator has complied with the requirements of section 35.
- (3) Despite section 81(1), insulation test instruments may be used in the hazardous zone of an underground coal mine if the instruments are used in accordance with the procedures for using the instruments developed under the electrical engineering control plan for the mine.

83 Use of cables in hazardous zone

(1) The mine operator of an underground coal mine must ensure no cable is used in a hazardous zone at the mine except as provided by this section.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

- (2) A cable may be used in a hazardous zone where the concentration of methane in the general body of the air is 1.25% by volume or greater only if—
 - (a) all circuits in the cable are intrinsically safe category 'Ex ia' as defined in Australian and New Zealand Standard AS/NZS 60079.11:2011 Explosive atmospheres—Equipment protection by intrinsic safety 'i', and
 - (b) the mine operator, in consultation with the individual nominated to exercise the statutory functions of electrical engineering manager at the mine, is satisfied the cable is fit for use in the hazardous zone.
- (3) A cable may be used in a hazardous zone where the concentration of methane in the general body of the air is less than 1.25% by volume only if the cable—
 - (a) is a cable referred to in subsection (2), or
 - (b) is a cable, other than a reeling or trailing cable, that conforms with Australian and New Zealand Standard AS/NZS 1972:2006 *Electric cables—Underground coal mines—Other than reeling and trailing*, or
 - (c) is a reeling or trailing cable that conforms with Australian and New Zealand Standard AS/NZS 1802:2018 *Electric cables—Reeling and trailing—For underground coal mining*, or
 - (d) is a cable that is determined as fit for use by the mine operator, in consultation with the individual nominated to exercise the statutory functions of electrical engineering manager at the mine.
- (4) A cable referred to in subsection (3)(d) must be used solely as—
 - (a) part of an intrinsically safe circuit, or
 - (b) an integral part of a cap lamp, or
 - (c) part of an engineered system.
- (5) A cable in subsection (4)(c) must be designed for use only within the engineered system.
- (6) A cable under subsection (4)(c) may only be determined as fit for use if the individual nominated to exercise the statutory functions of electrical engineering manager at the mine determines that the period in which the cable is in use will result in a standard of safety equivalent to the standard of safety that would be achieved by compliance with subsection (3)(b) or (c).
- (7) The mine operator must keep record of the information used by the individual to make a determination under subsection (6), including a risk assessment or engineering calculations, for the period in which the cable is in use as part of an engineered system.

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (8) In this section—

engineered system means a combination of items of plant and cables designed to work together to safely perform a specific function.

84 Internal combustion engines

The mine operator of an underground coal mine must ensure no internal combustion engine is permitted—

- (a) at the mine, unless the engine is explosion-protected or fire-protected, or
- (b) in a hazardous zone at the mine, unless the engine is explosion-protected.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

85 Electrical safety—testing circuits in hazardous zone

(1) The mine operator of an underground coal mine must ensure the testing of an electrical circuit in a hazardous zone is carried out in accordance with this section.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) Testing under this section must not reduce the level of safety of the explosion-protected properties of plant.
- (3) The person conducting the testing must be a competent person in maintaining electrical equipment in a hazardous zone.
- (4) Test equipment used to test an intrinsically safe circuit must—
 - (a) comply with the requirements set out in an applicable certificate of conformity for the circuit being tested, or
 - (b) be portable electrical plant that may be used in a hazardous zone under section 82(1).
- (5) In this section—

certificate of conformity has the same meaning as in section 81.

competent person means a person who has the qualifications to be nominated to exercise the statutory function of qualified electrical tradesperson at the mine.

86 Electrical safety—static charges

The mine operator of an underground coal mine must ensure compressed air equipment, a hose or a pipe is electrically bonded to earth if, under a risk assessment under section 14, the equipment, hose or pipe was assessed as likely to develop static electrical charges capable of causing—

(a) an electric shock to a person, or

(b) a spark during operation.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

87 Persons required to be on duty

The mine operator of an underground coal mine must ensure the following—

- (a) no extraction of coal or mineral occurs in a production area at the mine unless a mining supervisor for the mine is present in that area,
- (b) an individual nominated to exercise the statutory function of undermanager or mining engineering manager at the mine is on duty at all times during which—
 - (i) there are more than 15 persons underground, or
 - (ii) secondary extraction is occurring at the mine, or
 - (iii) major changes are being made to the ventilation system for the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Division 6 Other specific control measures

88 Inspection plan

- (1) The mine operator of a coal mine must ensure—
 - (a) an inspection plan for the mine is prepared in accordance with this section, and
 - (b) inspections of the mine are carried out in accordance with this section and the plan.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) As part of the inspection plan for the mine, the mine operator of a coal mine must ensure the following—
 - (a) the mine is divided into inspection areas, each being an area of a size no larger than that which may be reasonably inspected by a competent person within the time allocated to the person,
 - (b) for an underground coal mine—a production area is identified for each area of the mine at which coal or mineral is extracted, including—

- (i) the site of the extraction, and
- (ii) the parts of the mine within 100m of the site, and
- (iii) if the production area would be wholly within a hazardous zone—other parts of the mine as are necessary to ensure the production area starts outbye of the hazardous zone,
- (c) for a coal mine other than an underground coal mine—a production area is identified for each area of the mine at which coal or mineral is extracted that includes—
 - (i) areas where drilling is carried out, or
 - (ii) areas where haul roads, dumps or stockpiles are being used,
- (d) for an underground coal mine—an area of the mine is identified if the area—
 - (i) was a production area, and
 - (ii) is no longer treated as a production area because of a temporary cessation, of a period of at least one shift, in the extraction of coal or mineral,
- (e) a boundary of a production area that crosses a roadway on which persons normally travel is identified.
- (3) The mine operator of a coal mine must ensure the inspection plan for the mine makes provision for the following—
 - (a) the means by which concerns raised around the size of production areas, and the ability of persons responsible to adequately perform required inspections, must be resolved,
 - (b) how a concern arising from an inspection (a *safety concern*) must be brought to the attention of—
 - (i) persons whose health or safety may be affected, and
 - (ii) the person in the management structure of the mine whose area of responsibility and accountability includes the subject matter of the safety concern (the *relevant manager*),
 - (c) how a person more senior in the management structure of the mine than the relevant manager, must be notified of the remedial action taken, or not taken, by the relevant manager following a safety concern being raised (a *senior manager*)
 - (d) how concerns must be brought to the attention of the senior manager about the remedial action taken, or not taken, by the relevant manager following a safety concern being raised,
 - (e) for an underground coal mine, the action that may be taken as a result of an inspection including—
 - (i) making something safe, or
 - (ii) withdrawing persons from an unsafe part of the mine or preventing the entry of persons to the part,

- (f) the recording of the results of inspections carried out under the plan,
- (g) the regular and timely review by relevant managers of reports of inspections and other information provided by persons carrying out inspections.
- (4) An inspection of each production area at a coal mine, other than an underground coal mine, at which mining operations are taking place must be carried out under the inspection plan at least once every shift.
- (5) For an underground coal mine at which mining operations are taking place, inspections of the following must be carried out under the inspection plan—
 - (a) all production areas, including the following—
 - (i) inspection for the presence of flammable and toxic gas before connecting power to plant,
 - (ii) inspection, at least once every 2 hours, of each face area where coal or mineral is extracted.
 - (iii) inspection, at least once every 5 hours, of all other places where persons work,
 - (iv) inspection, at least once every 8 hours, of all safely accessible places in the production area,
 - (b) places other than production areas, including the following—
 - (i) inspection at least once every 8 hours of all places where persons work,
 - (ii) inspection at least once every 24 hours of all roadways where persons regularly travel,
 - (iii) inspection at least once every 7 days of all safely accessible places, including all safely accessible roadways, goaf edges, shafts and drifts,
 - (c) the presence of flammable gas before supplying electric power to an underground part of the mine,
 - (d) the presence of flammable gas or contaminants in the general body of the air,
 - (e) the adequacy of the following—
 - (i) ventilation,
 - (ii) the process of making roadway dust inert,
 - (iii) emergency, first aid and fire fighting equipment,
 - (f) the condition of the following—
 - (i) ventilation control devices,
 - (ii) auxiliary fans,
 - (iii) surfaces over which persons may travel or vehicles may be driven,

- (g) the support for the excavation,
- (h) the stability of roadways in the excavation,
- (i) heating of coal or other material or fire,
- (i) abnormal water inflow,
- (k) plant malfunction,
- (1) the functioning of communication and monitoring systems,
- (m) excessive accumulation of mud, water, rock or coal,
- (n) environmental conditions.
- (6) Inspections may be required more frequently than specified in subsection (4) or (5) dependent on the risks present at the particular mine.
- (7) The inspection of all safely accessible parts of each inspection area at a coal mine must be carried out by—
 - (a) for the inspection of an underground coal mine, other than a belt conveyor at the underground coal mine—a mining supervisor at the mine, or
 - (b) for the inspection of a production area, or former production area, of a coal mine that is not an underground coal mine—a mining supervisor at the mine, or
 - (c) otherwise—a competent person.
- (8) The mine operator of an underground coal mine must ensure—
 - (a) no person goes underground at the mine after mining operations at the mine have ceased, and
 - (b) all workers are withdrawn from the mine until each inspection area of the mine has been inspected in accordance with this section.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (9) The mine operator of a coal mine must ensure no person enters a production area after the regular routine of inspections for the area have been interrupted until the production area has been inspected in accordance with this section.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (10) Subsections (8) and (9) do not prevent a person going underground or entering an area to carry

out an inspection in accordance with this section.

- (11) The mine operator of a coal mine must ensure workers at the mine are permitted to examine a place where they will work for risks—
 - (a) before commencing work, and
 - (b) during the course of their work.

Maximum penalty (subsection (11))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

89 Sampling and analysis of airborne dust

- (1) This section applies to—
 - (a) a coal mine, or
 - (b) a mine other than a coal mine where respirable crystalline silica has been identified as a hazard as a result of air monitoring being carried out under the WHS Regulations, clause 50(1).
- (2) The mine operator of a mine must ensure sampling and analysis of airborne dust at the mine is carried out by a person who is independent of mining operations at the mine—
 - (a) in accordance with Schedule 6, and
 - (b) at other times as necessary.

Maximum penalty (subsection (2))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

90 Ventilation and belt conveyor components to be FRAS

- (1) This section applies to the following items of plant—
 - (a) a component of the ventilation system of an underground coal mine,
 - (b) conveyor belting and conveyor accessories used at an underground coal mine or in a reclaim tunnel at a coal mine.
- (2) The regulator may, by notice published in the Gazette, identify an item of plant to which this section applies and specify the testing and certification process for determining whether the item of plant is fire resistant anti-static (*FRAS*).
- (3) The mine operator of a coal mine must ensure an item of plant specified in a notice under this section is not used at the mine unless it has been tested and certified in accordance with the notice.

Maximum penalty (subsection (3))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Division 7 Emergency management

Subdivision 1 Emergency plans

91 Duty to prepare emergency plan

(1) The operator of a mine or petroleum site must prepare an emergency plan for the mine or petroleum site in accordance with this Subdivision.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) In addition to the matters required by the WHS Regulations, clause 43(1) the emergency plan must—
 - (a) address all aspects of emergency response, including by ensuring the following—
 - (i) the establishment of a system that enables all persons at the mine or petroleum site to be promptly located,
 - (ii) for a mine or petroleum site, other than an opal mine, a record of all persons underground at any given time, and each person's likely location, is accurately maintained and readily available in an emergency,
 - (iii) the provision of adequate rescue equipment,
 - (iv) an adequate number of persons trained in the use of rescue equipment are available to respond effectively to the emergency if a person is working at the mine or petroleum site,
 - (v) the provision of adequate patient transport if a person is working at a mine or petroleum site,
 - (vi) the provision of appropriate transportation, or suitable means of exit by walking, for persons at risk in an emergency to a place of safety, including during an emergency evacuation,
 - (vii) arrangements are in place for emergency sealing of all or part of an underground coal mine, and
 - (b) include a statement of potential triggers for the activation of the plan, and
 - (c) include all matters specified in Schedule 7, and
 - (d) as far as reasonably practicable, be set out and expressed in a way that is readily

understandable by persons who use it.

- (3) The emergency plan for a mine or petroleum site must contain an appropriate level of detail about the matters set out in subsection (2)(a)–(c) having regard to all relevant matters, including—
 - (a) the nature, complexity and location of the mining operations or petroleum operations, and
 - (b) the risks associated with the operations.
- (4) An emergency plan under this Regulation and the WHS Regulations may, for a mine or petroleum site, be referred to as an emergency response control plan.

92 Consultation in preparation of emergency plan

- (1) In preparing an emergency plan, the mine operator of a coal mine or an underground mine must, as far as reasonably practicable, consult with the following—
 - (a) the primary emergency services with responsibility for the area in which the mine is located,
 - (b) for a coal mine—another emergency service organisation, including the New South Wales Mines Rescue Brigade established under the *Coal Industry Act 2001*, that may be required to participate in implementing the emergency plan,
 - (c) in relation to the principal hazards that may cause or contribute to an incident that may adversely affect the health and safety of persons in the area surrounding the mine—the local authority for the local authority area in which the mine is located.
- (2) The mine operator must ensure the emergency plan addresses recommendations made by the emergency service organisations consulted under subsection (1) in relation to—
 - (a) the testing of the emergency plan, including the way in which it will be tested, the frequency of testing and whether or not the emergency service organisations will participate in the testing, and
 - (b) what incidents or events at the mine should be notified to the emergency service organisations.
- (3) The mine operator must have regard to other recommendation or advice given by a person consulted under subsection (1).
- (4) This section does not apply to—
 - (a) an underground mine, other than a coal mine, with less than 5 workers, or
 - (b) an opal mine.
- (5) In this section—

council has the same meaning as in the Local Government Act 1993.

local authority means—

(a) if the mine is located on land in a local government area—the council, or

(b) if the mine is located in an area within the Western Division that is not within the area of a council—the person nominated by the Minister from time to time for the purposes of this section.

93 Implementation of emergency plan

The operator of a mine or petroleum site must immediately implement the emergency plan for the mine or petroleum site in the event of an emergency.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

94 Copies to be kept and provided

(1) The operator of a mine or petroleum site must keep a copy of the emergency plan for the mine or petroleum site at the mine or petroleum site.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (2) The operator must ensure a copy of the emergency plan is available on request to an emergency service organisation consulted under section 92.

Maximum penalty (subsection (2))—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

95 Resources for emergency plan

The operator of a mine or petroleum site must ensure—

- (a) all resources, including rescue equipment, specified in the emergency plan for the mine or petroleum site are provided in accordance with the plan, and
- (b) all resources required for the effective implementation of the emergency plan are provided, and
- (c) all plant and equipment, including communications systems and rescue equipment, specified in the emergency plan is regularly inspected and maintained in good working order.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

96 Testing of emergency plan

(1) The operator of a mine or petroleum site must test the emergency plan for the mine or petroleum

site-

- (a) every 12 months, and
- (b) as soon as reasonably practicable after there has been a significant revision to the plan.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The test must address the recommendations made by an emergency service organisations consulted under section 92 in preparing the plan.

97 Review of emergency plan

- (1) The operator of a mine or petroleum site must ensure the emergency plan for the mine or petroleum site is reviewed and as necessary revised—
 - (a) at intervals of no more than 12 months, and
 - (b) as soon as reasonably practicable after there has been a significant change to the mining operations or petroleum operations at the mine or petroleum site.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) A review under subsection (1) must include a review of the training of workers under section 98 and a review of the testing of the plan.
- (3) If a control measure is revised under the WHS Regulations, clause 38, or this Regulation, section 15, the operator of the mine or petroleum site must ensure the emergency plan is reviewed and as necessary revised in relation to all aspects of risk control addressed by the revised control measure.

Maximum penalty (subsection (3))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

98 Training of workers

The operator of a mine or petroleum site must ensure workers at the mine or petroleum site are trained in relation to the emergency plan—

- (a) before commencing work at the mine or petroleum site, and
- (b) as soon as reasonably practicable after a significant revision to the plan.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Subdivision 2 Underground mines

99 Emergency exits

- (1) The mine operator of an underground mine must ensure all parts of the mine have at least 2 exits to the surface that—
 - (a) are trafficable by persons, and
 - (b) comply with subsections (2)–(4).

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) An exit must—
 - (a) be accessible from each level at the mine in which extraction operations are being carried out, and
 - (b) allow for the passage of rescue persons and rescue equipment, and
 - (c) be marked or signposted so that it may be readily located in an emergency, and
 - (d) be maintained so that it remains effective.
- (3) The exits at an underground coal mine must be located so as to ensure, as far as reasonably practicable, an incident or event that occurs in relation to 1 exit that prevents the exit from being used for the purpose of escape from the mine does not prevent persons from using the other exit to escape.
- (4) At least 1 of the exits at an underground coal mine must—
 - (a) be an intake airway or a combination of adjacent intake airways, and
 - (b) be designated as the primary exit, and
 - (c) be suitable for use by a vehicle.
- (5) The mine operator of an underground mine must ensure the following—
 - (a) the risk associated with fire affecting an exit is managed as far as reasonably practicable,
 - (b) fire fighting equipment is located on or near equipment installed in the primary exit and is appropriate for its proposed use,
 - (c) workers who may need to use exits are provided with sufficient training and instruction so as to be made familiar with the exits,

(d) the marking of exit paths makes it clear persons can, as far as reasonably practicable, safely travel on the paths in an emergency, including through conditions of reduced visibility or irrespirable or unsafe atmospheres.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (6) Subsection (1) does not apply to the mine operator of a mine if—
 - (a) a single entry drive or shaft is being developed, or
 - (b) the most distant area of the mine is no more than 250m from the mine entrance or a second exit.
- (7) The mine operator referred to in subsection (6) must ensure the mine has at least 1 trafficable exit to the surface that complies with subsection (2).

100 Safe escape and refuge

(1) The mine operator of an underground mine must provide adequate means of communicating with all affected persons when the emergency plan for the mine is implemented.

Example— An alarm system.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground mine must, as far as reasonably practicable, ensure the communication systems for the underground mine enables communication to be established—
 - (a) between persons underground in different parts of the mine, and
 - (b) between persons underground and persons at the surface in an emergency, and
 - (c) across strategic locations at the mine, being places critical for communicating with persons in an emergency, including refuge chambers, caches, refill stations, change-over stations and escape routes, and
 - (d) from places unaffected by hazards associated with an emergency to the places that are affected.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine operator of an underground mine must ensure power operated communication equipment used as part of a communication system for the mine, including the power supplied to

the equipment, incorporates a fail safe or back up power supply for the critical parts of the system.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The mine operator of an underground coal mine must ensure power operated communication equipment used as part of a communication system and installed underground is suitable for use in a place where the concentration of methane in the general body of the air is greater than 2% by volume.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (5) Subsection (4) does not apply if the power operated communication equipment is installed in a drift or shaft being driven from the surface in material other than coal.
- (6) The mine operator of an underground mine must provide adequate means of escape, including through conditions of reduced visibility or irrespirable or unsafe atmospheres, that—
 - (a) for an underground coal mine—enable persons to safely reach an exit, or
 - (b) for other underground mines—enable persons to safely reach an exit or a refuge chamber.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (7) The mine operator of an underground coal mine must, in conjunction with providing an adequate means of escape, ensure an overall emergency escape to the surface strategy is developed for the mine that takes into account the following—
 - (a) the distance persons will need to travel to reach the surface,
 - (b) the rate at which persons will need to travel to reach the surface safely,
 - (c) the location and size of each refill station, cache or change-over station,
 - (d) the provision of water and communications at refill stations and change-over stations,
 - (e) procedures, as far as reasonably practicable, for rehydration and communication in an irrespirable atmosphere,
 - (f) provisions for monitoring the respirable air both within and outside a change-over station,
 - (g) the escape apparatus and cache or refill station capacity that is required to allow the safe escape of all persons from the mine.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (8) The mine operator of an underground mine other than an underground coal mine must, in conjunction with providing an adequate means of escape, ensure an overall emergency escape to the surface or refuge strategy is developed for the mine that takes into account the following—
 - (a) the distance persons will need to travel to reach a refuge chamber or the surface,
 - (b) the rate at which persons will need to travel to reach a refuge chamber or the surface safely,
 - (c) the location, number, duration and capacity of refuge chambers including arrangements in relation to the provision of food, water, sanitation, communications and the potential for the generation of excess heat in the chamber,
 - (d) arrangements for the monitoring of the air both within and outside the refuge chamber,
 - (e) arrangements for locating refuge chambers by persons who may need to use them in circumstances of reduced visibility,
 - (f) limiting the number of persons in an area to the refuge chamber capacity,
 - (g) procedures to recover all persons who may need to use the refuge chamber as soon as possible in a safe manner.

Maximum penalty (subsection (8))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

101 Signage for emergency refuge

The mine operator of an underground mine that includes a refuge chamber must ensure signs are prominently displayed at the mine showing the location of, and direction to, each refuge chamber.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

102 Signage for caches, refill stations and change-over stations

The mine operator of an underground mine that includes a cache, refill station or change-over station must ensure signs are prominently displayed at the mine showing the location of each cache, refill station or change-over station.

Maximum penalty—

(a) for an individual—36 penalty units, or

(b) for a body corporate—180 penalty units.

103 Self-rescuers

(1) The mine operator of an underground mine, other than an opal mine, must ensure a person who is to go underground is provided with an appropriate self-rescuer if there is a risk of an irrespirable atmosphere at the underground mine, including during an emergency.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator must conduct a risk assessment to determine whether a self-contained self-rescuer should be provided to a person under subsection (1).

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine operator must ensure the person is trained in the use of, and is able to use, the self-rescuer provided.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The training for a worker must involve training the worker in a simulated work environment in the donning and change-over of each type of self-rescuer the worker may be required to use.
- (5) The training must be carried out—
 - (a) before the worker initially commences work at the mine, and
 - (b) every 6 months after the worker commences at the mine.
- (6) The training for a worker in an underground coal mine must also involve training the worker to operate an oxygen-generating self-contained self-rescuer the worker may be required to use while undertaking physical effort similar to an evacuation situation.
- (7) The additional training must be carried out—
 - (a) before the worker initially commences work at the mine, and
 - (b) every 3 years after the worker commences at the mine.
- (8) A simulator (live trainer) may be used instead of a self-rescuer for the purposes of subsection (6) if—
 - (a) the simulator delivers oxygen, and

- (b) the delivery of the oxygen is affected, in a similar way to the relevant self-rescuer, by the rate of the person's breathing, the person's work effort and environmental temperature, and
- (c) the simulator is worn and is operated in a similar way to the relevant self-rescuer.

104 Personal protective equipment in emergencies

- (1) This section applies in relation to a worker who is to enter an underground mine in an emergency to carry out first aid or rescue procedures.
- (2) The mine operator of the underground mine must ensure oxygen or air supplied respiratory equipment is available for use by, and is provided to, the worker in an emergency in which—
 - (a) the concentration of oxygen falls below a safe oxygen level, or
 - (b) the atmosphere at the underground mine has a harmful concentration of an airborne contaminant, or
 - (c) there is a serious risk of the atmosphere at the underground mine becoming affected in the way referred to in paragraph (a) or (b) while the worker is at the underground mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine operator must ensure suitable personal protective equipment is available for use by, and is provided to, the worker in an emergency.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The mine operator must, as far as reasonably practicable, ensure a worker uses the personal protective equipment provided under subsection (2) or (3).

Maximum penalty (subsection (4))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

105 Competent persons at surface

The mine operator of an underground mine must ensure the following if 1 or more persons are underground—

- (a) at least 1 person at the surface (the *surface contact*) is readily available to be contacted by the persons underground,
- (b) at least 1 of the surface contacts has the authority, the competence and is readily available to activate the emergency plan as necessary,

- (c) at least 1 of the surface contacts has the competence and is readily available to answer alarms as necessary,
- (d) at least 1 of the surface contacts has the competence and is readily available to switch off and switch on the supply of power to the underground parts of the mine as necessary.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Division 8 Information, training and instruction

106 Duty to inform workers about safety management system

- (1) The operator of a mine or petroleum site must ensure the following occurs before a worker commences work at the mine or petroleum site—
 - (a) the worker is given a summary of the safety management system for the mine or petroleum site that is relevant to the worker's work at the mine or petroleum site,
 - (b) the worker is informed of the right to see the documented safety management system for the mine or petroleum site prepared under section 18,
 - (c) the worker is given a summary of each principal hazard management plan prepared under section 28 that relates to the risks that may arise during the worker's work at the mine or petroleum site,
 - (d) the worker is informed of the right to see a principal hazard management plan prepared under section 28.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The operator must ensure the documented safety management system is available on request to a worker at the mine or petroleum site.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The operator of a mine or petroleum site must ensure the following plans, if required to be prepared in relation to the mine or petroleum site, are readily accessible to all workers at the mine or petroleum site—
 - (a) each principal control plan,
 - (b) the ventilation control plan,

(c) the emergency plan.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) If the safety management system is revised under section 22, the operator must, as far as reasonably practicable, ensure a worker at the mine or petroleum site is made aware of the revision if the revision is relevant to work being carried out by the worker.

Maximum penalty (subsection (4))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

107 Duty to provide information, training and instruction

- (1) This section applies in addition to the WHS Regulations, clause 39.
- (2) The operator of a mine or petroleum site must ensure each worker at the mine or petroleum site is provided with suitable and adequate information, training and instruction in relation to the following—
 - (a) hazards associated with the work being carried out by the worker,
 - (b) the implementation of control measures relating to the work being carried out by the worker, including control measures in relation to fatigue, the consumption of alcohol and the use of drugs,
 - (c) the content and implementation of the relevant parts of the safety management system for the mine or petroleum site,
 - (d) the emergency plan for the mine or petroleum site,
 - (e) the safety role for workers implemented under section 114.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) A person conducting a business or undertaking at a mine or petroleum site must ensure each worker engaged by the person is trained, and is competent, in basic risk management techniques used at the mine or petroleum site having regard to the nature of the work carried out by the worker.

Maximum penalty (subsection (3))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

108 Duty to provide induction for workers

The operator of a mine or petroleum site must ensure, before a worker commences work at the mine or petroleum site, the worker is given information, training and instruction on the safety management system for the mine or petroleum site that is designed to provide the worker with knowledge of all relevant aspects of the safety management system.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

109 Information for visitors

The operator of a mine or petroleum site must ensure a visitor who enters the mine or petroleum site with the authority of the operator is, as soon as reasonably practicable—

- (a) informed about risks associated with mining operations or petroleum operations to which the visitor may be exposed at the mine or petroleum site, and
- (b) instructed in health and safety precautions the visitor should take at the mine or petroleum site, and
- (c) instructed in the actions the visitor should take if the emergency plan for the mine or petroleum site is implemented while the visitor is at the mine or petroleum site.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

110 Review of information, training and instruction

The operator of a mine or petroleum site must ensure information, training and instruction provided to workers under sections 106–108 or to visitors under section 109 are reviewed and as necessary revised to ensure they remain relevant and effective.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

111 Record of training

The operator of a mine or petroleum site must—

- (a) make a record of training provided to a worker under section 107, and
- (b) keep the record while the worker remains engaged at the mine or petroleum site, and
- (c) ensure the record is made available on request to the worker.

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.

Part 4 Health monitoring—the WHS Act, Sch 3, cll 1(3) and 6

112 Regulator may direct health monitoring be provided to workers

- (1) A person conducting a business or undertaking at a mine or petroleum site must provide health monitoring to workers at the mine or petroleum site if directed to do so by the regulator by notice published in the Gazette or by notice given to the person.
- (2) The regulator may give a direction under this section (a *health monitoring direction*) to—
 - (a) a specified person or class of persons conducting a business or undertaking at a mine or petroleum site, or
 - (b) a person conducting a business or undertaking at a specified mine or petroleum site or at a mine or petroleum site of a specified class.
- (3) The regulator may give a health monitoring direction only if the regulator is satisfied that—
 - (a) there is a significant risk of an adverse effect on the health of a worker at the mine or petroleum site because of the worker's exposure to a hazard associated with mining operations or petroleum operations, and
 - (b) valid techniques are available to detect the adverse effect on the worker's health.
- (4) A health monitoring direction must specify the type of health monitoring that must be provided.
- (5) A health monitoring direction may contain one or more of the following—
 - (a) a requirement that the health monitoring be carried out by or under the supervision of a registered medical practitioner with experience in health monitoring,
 - (b) a requirement that the health monitoring be documented in a health monitoring report that is in a specified form and contains specified information,
 - (c) a requirement that a health monitoring report be provided to the worker or the regulator,
 - (d) a requirement that the person to whom the direction applies pays all expenses relating to the health monitoring,
 - (e) a requirement that information about health monitoring be provided to workers at the mine or petroleum site,
 - (f) other requirements the regulator considers reasonable in the circumstances.
- (6) A person to whom a health monitoring direction applies must comply with the direction.

Maximum penalty (subsection (6))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

113 Person conducting business or undertaking to give health monitoring report to operator of mine or petroleum site

- (1) This section applies to a person—
 - (a) conducting a business or undertaking at a mine or petroleum site, other than the operator of the mine or petroleum site, and
 - (b) who commissioned health monitoring for a worker at the mine or petroleum site, whether under this Part or the WHS Regulations.
- (2) A person must, on request, give a copy of the health monitoring report to the operator of a mine or petroleum site at which the worker carries out work.

Maximum penalty (subsection (2))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Part 5 Consultation and workers' safety role

114 Safety role for workers in relation to principal hazards—the WHS Act, s 276(3)(h) and Sch 3, cl 5

The operator of a mine or petroleum site must implement a safety role for the workers at the mine or petroleum site that enables the workers to contribute to—

- (a) the identification under section 27 of principal hazards that are relevant to the work the workers are or will be carrying out, and
- (b) the consideration of control measures for risks associated with principal hazards at the mine or petroleum site, and
- (c) the consideration of control measures for risks to be managed under principal control plans, and
- (d) the conduct of a review under section 29.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

115 Duty to consult with workers—the WHS Act, ss 49 and 276(3)(h)

For the WHS Act, section 49(f), the operator of a mine or petroleum site must consult with workers at the mine or petroleum site in relation to the following—

- (a) developing, implementing and reviewing the safety management system for the mine or petroleum site,
- (b) conducting risk assessments for principal hazard management plans,
- (c) conducting risk assessments for principal control plans,

- (d) preparing, testing and reviewing the emergency plan for the mine or petroleum site,
- (e) implementing the workers' safety role under section 114,
- (f) developing and implementing strategies to protect persons at the mine or petroleum site from a risk to health and safety arising from the following—
 - (i) the consumption of alcohol or use of drugs by a person,
 - (ii) worker fatigue.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Part 6 Survey plans and mine plans—the WHS Act, Sch 3, cl 6(3) and (4)

116 Survey plan must be prepared

- (1) A survey plan is required for the following—
 - (a) an underground mine,
 - (b) a coal mine,
 - (c) a petroleum site,
 - (d) a mine determined by the regulator to require a survey plan.
- (2) The regulator may give written notice to the mine operator of a mine that a survey plan is required for the mine.
- (3) A survey plan is also required for a mine, other than an underground mine or coal mine, if the mine operator determines a survey plan is necessary under subsection (4).
- (4) The mine operator of a mine, other than an underground mine or coal mine, must conduct a risk assessment to determine if a survey plan is necessary for the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (5) A survey plan is not required for the following—
 - (a) an opal mine,
 - (b) a tourist mine.

117 Preparation of survey plan

(1) The operator of a mine for which a survey plan is required must ensure—

- (a) a detailed survey plan of the mine is prepared, and
- (b) the survey plan is certified by an individual nominated to exercise the statutory function of mining surveyor for the mine.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The operator of a petroleum site must ensure—
 - (a) a detailed survey plan of the petroleum site is prepared, and
 - (b) the survey plan is certified by a surveyor registered under the *Surveying and Spatial Information Act 2002*.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The survey plan must reference the mine or petroleum site to the Geocentric Datum of Australia and the Australian Height Datum.
- (4) The survey plan of a mine must show the following, if present at the mine—
 - (a) the workings of the mine, including disused workings and bore holes,
 - (b) other disused workings that are attached to, or near, the mine,
 - (c) the location of high voltage electrical installations,
 - (d) the location of telephones and other fixed plant associated with the radio and telecommunications systems,
 - (e) water dams and tailings dams,
 - (f) natural features surrounding the mine,
 - (g) places for the storage of hydrocarbons or explosives,
 - (h) for an underground mine—points of entry and exit, including emergency exits,
 - (i) for an underground mine—refuge chambers,
 - (j) for an underground coal mine—caches, refill stations and change-over stations.
- (5) The survey plan of a petroleum site must show all wells present at the petroleum site, including wells that are suspended or decommissioned.
- (6) In complying with subsection (4), the mine operator of a mine must take all reasonable steps to obtain historical mine surveys of the mine to ensure the accuracy of the survey plan.

(7) An individual nominated to exercise the statutory function of mining surveyor at a mine must take all reasonable steps to ensure a survey plan prepared or verified by the individual is accurate.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (8) An individual nominated to exercise the statutory function of mining surveyor at a mine who has surveyed the mine must inform the mine operator of the mine of a variation between the mine workings at the mine and the current survey plan of the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (9) A mine operator of a mine must inform an individual nominated to exercise the statutory function of mining surveyor at the mine of a variation the mine operator is aware of between the mine workings at the mine and the current survey plan of the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (10) In this section—

Australian Height Datum means the Australian Height Datum described in the Division of National Mapping Technical Report No 12, The Adjustment of the Australian Levelling Survey, 1970–1971 (2nd edition, 1975).

Geocentric Datum of Australia has the same meaning as in the *Surveying and Spatial Information Act 2002*.

Note— Regulations made under the Surveying and Spatial Information Act 2002 apply to survey plans.

118 Review of survey plan

(1) The operator of a mine or petroleum site must review and as necessary revise the survey plan at least once every 12 months.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The operator of a mine or petroleum site must also review and as necessary revise the survey plan if—
 - (a) the survey plan no longer accurately reflects the workings that have been, or are proposed to

be, carried out at the mine or petroleum site, or

- (b) there are reasonable grounds to believe the survey plan is not accurate, or
- (c) directed by the regulator because the regulator believes the survey plan is not accurate.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) Subsection (1) does not apply if the mining operations or petroleum operations at the mine or petroleum site have been discontinued or suspended for more than 12 months.

119 Survey plan to be available

(1) The operator of a mine or petroleum site must keep the current survey plan and all previous versions of the plan available for inspection under the WHS laws.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (2) The operator of a mine or petroleum site must make the current survey plan available on request to workers at the mine or petroleum site.

Maximum penalty (subsection (2))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

120 Security of survey data

The operator of a mine or petroleum site must, as far as reasonably practicable, ensure all survey data at the mine or petroleum site is secured against loss, damage or unauthorised access.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

121 Survey plan to be provided to regulator

- (1) The operator of a mine or petroleum site must provide a copy of the survey plan of the mine or petroleum site to the regulator in the approved way and form—
 - (a) if required to do so by the regulator by notice published in the Gazette or by notice given to the operator, or
 - (b) for a closed mine—as soon as reasonably practicable after the closure of the mine, or

(c) for a decommissioned petroleum site—as soon as reasonably practicable after the decommissioning of the last well at the petroleum site.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) A survey plan of a closed mine must show the status of the mine workings immediately before the closure.
- (3) A survey plan of a decommissioned petroleum site must show all decommissioned wells at the site.
- (4) The regulator must keep a copy of each survey plan provided to the regulator under subsection (1)(b) or (c).
- (5) The regulator may make a copy of a survey plan available to a person for the purposes of the administration of the *Dams Safety Act 2015*, the *Coal Mine Subsidence Compensation Act 2017*, the *Mining Act 1992* or the *Petroleum (Onshore) Act 1991*.
- (6) The regulator may make a copy of a survey plan available to a person if the regulator is satisfied—
 - (a) the person has a legitimate concern about a risk to the health and safety of a person and making the survey plan available is likely to lessen the risk, or
 - (b) making the plan available is in the public interest.
- (7) The regulator may impose conditions about a survey plan being examined by, or provided to, a person under subsection (5) or (6).

122 Other mine plans

- (1) This section applies to a mine other than a mine for which a survey plan is required under section 116.
- (2) The mine operator of a mine must ensure a plan of the mine (a *mine plan*) is prepared by a competent person.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) The mine plan must show the following, if present at the mine—
 - (a) proposed workings of the mine,
 - (b) existing workings of the mine, including disused workings,
 - (c) other disused workings that are attached to, or near, the mine,

- (d) the location or estimated location of the boundary of adjacent mine workings or geological structures.
- (4) Sections 118 and 119 apply to a mine plan under this section in the same way as they apply to a survey plan.

Part 7 Provision of information to regulator—the WHS Act, Sch 3, cl 6(4)

123 Report on decommissioned wells

The operator of a mine or petroleum site must, as soon as practicable after decommissioning a well, provide to the regulator in the approved way and form a report that sets out—

- (a) the date on which the well was decommissioned, and
- (b) why the well was decommissioned, and
- (c) how the decommissioning took place.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

124 Duty to notify regulator of certain incidents

- (1) The operator of a mine or petroleum site must take all reasonable steps to ensure the regulator is notified in accordance with this section after becoming aware of an incident, other than a notifiable incident, arising out of the carrying out of mining operations or petroleum operations at the mine or petroleum site, but only if the incident—
 - (a) results in an illness or injury that requires medical treatment within the meaning of Schedule 9, section 12, or
 - (b) is a high potential incident.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The notification must also be made to an industry safety and health representative if the incident occurs at a coal mine.
- (3) The operator must ensure the regulator is notified as soon as reasonably practicable after becoming aware of the incident, but no later than the earlier of the following—
 - (a) 7 days after becoming aware of the incident,
 - (b) 48 hours after becoming aware the incident resulted in an illness or injury.
- (4) The notification must—

- (a) be written, and
- (b) be in the approved way and form, and
- (c) for an incident that results in an illness or injury—contain the details specified in Schedule 8.

(5) In this section—

8-hour time-weighted average has the same meaning as in section 41.

high potential incident means the following—

- (a) an event referred to in section 190(1) that would have been a dangerous incident if a person were reasonably in the vicinity at the time when the incident or event occurred and in usual circumstances a person could have been in the vicinity at the time,
- (b) the detection of a concentration of methane in the general body of the air at an underground coal mine, other than in a sealed area or goaf, that is greater than 2% by volume,
- (c) an unplanned fall of ground, roof or sides that impedes passage, extends beyond the bolted zone or disrupts production or ventilation,
- (d) a failure of ground support where persons may have been present,
- (e) the burial of machinery where it cannot be recovered under its own tractive effort,
- (f) progressive pillar failure or creep,
- (g) a sudden pillar collapse,
- (h) an electric arc occurring in the hazardous zone at an underground coal mine that is directly observed or that leaves visible evidence on an electric cable,
- (i) the failure of the explosion-protection characteristics of explosion-protected plant while the plant is in service at an underground coal mine,
- (j) a misfire or unplanned explosion of an explosive or explosive precursor, but not a misfire at a mine or petroleum site other than a coal mine if the misfired explosive may be fired without significant risk to a person,
- (k) an unplanned event that causes the emergency evacuation of more than 1 person from the mine or petroleum site or part of the mine or petroleum site,
- (l) an unplanned event that causes fewer than 2 exits from an underground mine to be available for use,
- (m) an indication from monitoring data of the development of subsidence that may result in damage to plant or structures or a failure of ground,
- (n) an injury to a person, supported by a medical certificate, that results in or is likely to result in the person being unfit, for a continuous period of at least 7 days, to perform the person's usual activities at the person's place of work,

- (o) the illness of a person, supported by a medical certificate, that is related to a work process and that results in or is likely to result in the person being unfit, for a continuous period of at least 7 days, to perform the person's usual activities at the person's place of work,
- (p) the presence of energised electrical plant that is not explosion-protected in a hazardous zone at an underground coal mine, except where the use of the plant is permitted under section 82,
- (q) a person is exposed to an 8-hour time-weighted average atmospheric concentration of airborne dust and diesel particulate matter that is more than the amounts specified in section 41(1)(b).
- (r) a person is exposed to an 8-hour time-weighted average atmospheric concentration of carbon dioxide that is more than the amounts specified in section 41(2)(b),
- (s) a person is exposed to an 8-hour time-weighted average atmospheric concentration of crystalline silica that is more than the exposure standard specified in the *Workplace Exposure Standards for Airborne Contaminants*,
- (t) electrical plant that is powered by an internal battery is lost or misplaced in an underground coal mine.
- (u) an uncontrolled fire on mobile plant that is in operation, whether operated directly, remotely or autonomously,
- (v) a loss of control of heavy earthmoving machinery that is operated remotely or autonomously, including a failure of braking or steering,
- (w) spontaneous combustion occurring at the surface of a coal mine, including an underground coal mine.

125 Duty to notify regulator of other matters

- (1) This section does not apply to an opal mine.
- (2) The operator of a mine or petroleum site must give notice of a reportable event for the mine or petroleum site—
 - (a) before the event occurs, and
 - (b) for the recommencement of normal mining operations at a mine following a significant interruption to, or suspension of, mining activities at the mine—as soon as reasonably practicable after the operator becomes aware that the mining operations will recommence.
- (3) A notice in relation to the reportable event of the commencement of mining operations at a mine must include the following—
 - (a) the date of the commencement of mining operations at the mine,
 - (b) the date mining operations at the mine are intended to conclude,
 - (c) the global positioning system coordinates of the area covered by the mine, not including the coordinates of the location of drill holes,

- (d) details of the scope, character and location of the mining operations at the mine,
- (e) details of the minerals sought, extracted or otherwise dealt with at the mine,
- (f) whether the mine has an underground mine,
- (g) identification details of the persons nominated to exercise key statutory functions at the mine and the competency of the persons to exercise the functions.
- (4) A notice in relation to the reportable event of the commencement of mining operations at a coal mine must include the following in addition to the matters set out in subsection (3)—
 - (a) the positions in the management structure that have responsibility for the management of work health and safety at the mine, including persons nominated to exercise a key statutory function at the mine, and the names of the persons and their contact details,
 - (b) a list of the principal hazards that are anticipated in the conduct of the mining operations at the mine,
 - (c) an outline of the contents of the safety management system for the mine,
 - (d) an outline of each principal hazard management plan and principal control plan, including a list of the codes, standards or guidelines referred to in the plans.
- (5) A notice in relation to the reportable event of the commencement of petroleum operations at a petroleum site must include the following—
 - (a) the date of the commencement of petroleum operations at the petroleum site,
 - (b) the date petroleum operations at the petroleum site are intended to conclude,
 - (c) the global positioning system coordinates of the area covered by the petroleum site and the coordinates of the location of all proposed wells,
 - (d) details of the scope, character and location of the petroleum operations at the petroleum site,
 - (e) details of the petroleum sought, extracted or otherwise dealt with at the petroleum site.
- (6) The regulator may require an operator of a mine or petroleum site to provide, by notice, additional particulars in relation to—
 - (a) a matter referred to in subsection (3), (4) or (5), or
 - (b) the performance of duties by the operator.
- (7) The operator of a mine must give notice of a proposed material change to information provided under subsection (3)(g) as soon as reasonably practicable after the mine operator becomes aware the change is proposed to occur.
- (8) The mine operator of a coal mine must give notice of a proposed material change to information provided under subsection (4) as soon as reasonably practicable after the mine operator becomes aware the change is proposed to occur.
- (9) A notice under this section must—

- (a) be written, and
- (b) be given to the regulator, and
- (c) for a coal mine—be given to an industry safety and health representative, and
- (d) be given in the approved way and form.
- (10) An operator of a mine or petroleum site is not required to give notice before the occurrence of a reportable event or proposed change if the operator—
 - (a) did not intend the occurrence of the event or change, and
 - (b) could not have reasonably foreseen the occurrence of the event or change, and
 - (c) gives notice as soon as reasonably practicable after the occurrence of the event or change.
- (11) An operator of a mine is not required to give notice in relation to a significant interruption to, or suspension of, mining activities at the mine if the operator has already notified the regulator of the interruption or suspension in relation to an incident referred to in section 124 or a notifiable incident.
- (12) The regulator may, on the application of an operator of a mine or petroleum site, waive or vary a requirement for the giving of notice under this section.
- (13) Before waiving or varying a requirement for a coal mine, the regulator must take reasonable steps to inform an industry safety and health representative of the proposed waiver or variation.
- (14) The operator of a mine or petroleum site must ensure a notice required by or under this section is given in accordance with this section.

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (15) In this section—

coal mine does not include a coal mine at which no mining activity takes place other than exploring for minerals.

reportable event, for a mine, means the following events—

- (a) the commencement of mining operations at the mine,
- (b) a significant interruption to, or suspension of, mining activities at the mine,
- (c) the recommencement of normal mining operations at the mine following an event referred to in paragraph (b),
- (d) the commencement of intermittent mining operations at the mine,
- (e) the connection of an electricity supply to the mine, but not if a person is nominated to exercise the statutory function of electrical engineering manager or electrical engineer at the

mine,

(f) the closure of the mine.

reportable event, for a petroleum site, means the following events—

- (a) the commencement of petroleum operations at the petroleum site,
- (b) the connection of an electricity supply to the petroleum site.

126 Work health and safety reports

(1) The mine operator of a mine must give the regulator a work health and safety report in accordance with this section.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The report must—
 - (a) be given at the times or intervals, including annually, required by the regulator, and
 - (b) be given in the approved way and form, and
 - (c) contain the information specified in Schedule 9.
- (3) This section does not apply to—
 - (a) a mine, other than a coal mine, at which the total number of hours worked by all workers at the mine during the reporting period is less than 10,000 hours, including additional hours and overtime, or
 - (b) a mine, including a mineral exploration site, at which no mining operations are carried out during the reporting period other than activities carried out for the purpose of exploring for minerals
- (4) In this section—

reporting period means the 12-month period ending on 30 June in each year.

127 Ancillary reports

- (1) The regulator may, by notice published in the Gazette, specify—
 - (a) classes of incidents that require an ancillary report to be provided to the regulator under this section, and
 - (b) the form of the ancillary report, and
 - (c) information or documents that must be included in the ancillary report.
- (2) A person who conducts a business or undertaking at a mine or petroleum site, including the operator of the mine or petroleum site, must provide an ancillary report of an incident to the

regulator if the incident is of a class specified in a notice under subsection (1).

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (3) An ancillary report under this section must—
 - (a) contain the information or documents specified in the notice, and
 - (b) be in the form specified in the notice, and
 - (c) be provided to the regulator no later than 30 days after the incident was required to be notified to the regulator.
- (4) In this section—

incident means a notifiable incident or an incident referred to in section 124.

128 Duty to notify operator of notifiable incident

A person who conducts a business or undertaking at a mine or petroleum site must ensure the operator is notified as soon as reasonably practicable of a notifiable incident that has been notified to the regulator under the WHS (MPS) Act, section 15(2).

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

Part 8 Mine and petroleum site records—the WHS Act, Sch 3, cl 6(2)

129 Mine and petroleum site records

(1) The operator of a mine or petroleum site must keep a record for the mine or petroleum site.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.
- (2) The record for the mine or petroleum site must contain the following—
 - (a) a record of notices issued in relation to the mine or petroleum site under the WHS Act, Part 10,
 - (b) copies of provisional improvement notices issued in relation to the mine or petroleum site under the WHS Act, Part 5, Division 7,
 - (c) a record of every incident notified to the regulator under the WHS (MPS) Act or under this Regulation, section 124,

- (d) a summary of all records kept under sections 16 and 17,
- (e) each report under section 31 by a shift supervisor at the mine or petroleum site,
- (f) a record of all first aid treatment provided at the mine or petroleum site,
- (g) other records the operator is required to keep for the mine or petroleum site under the WHS laws.

130 Record keeping

- (1) The operator of a mine or petroleum site must keep a record that forms part of the record for the mine or petroleum site for—
 - (a) 7 years from the date the record was made, or
 - (b) for a longer period required under the WHS laws for a particular record.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (2) The operator must keep the record for the mine or petroleum site available for inspection under the WHS laws.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (3) The operator must ensure the record for the mine or petroleum site is available and readily accessible to workers at the mine or petroleum site on request.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (4) For subsection (3), the operator is only required to make available a summary of a record referred to in section 129(2)(c).
- (5) Subsection (3) does not require or permit the operator to provide personal or medical information in relation to a worker without the worker's written consent unless the information is in a form that—
 - (a) does not identify the worker, and
 - (b) could not reasonably be expected to lead to the identification of the worker.

Part 9 Statutory functions—the WHS Act, Sch 3, cl 7

Division 1 Preliminary

131 Definition

In this Part—

interstate practising certificate means a practising certificate, issued under a corresponding WHS law, the regulator has declared by notice published in the Gazette to be equivalent to a practising certificate issued under this Regulation.

Division 2 Statutory functions at mines

132 Statutory functions

- (1) A function set out in Schedule 10 for a class of mine is a *statutory function* at a mine in that class
- (2) A statutory function may be exercised at the mine only by an individual nominated to exercise the function by the mine operator.
- (3) An individual may be nominated to exercise a statutory function at a mine by the mine operator only if the individual meets the requirements for nomination specified in Schedule 10.
- (4) An individual nominated to exercise a statutory function who ceases to meet the requirement for nomination—
 - (a) cannot exercise the statutory function, and
 - (b) is taken to no longer be nominated to exercise the statutory function.
- (5) More than 1 individual may exercise a statutory function, other than a key statutory function.
- (6) An individual may exercise more than 1 statutory function, including at different mines.

133 Obligations on mine operator

(1) The mine operator of a mine must ensure a statutory function is exercised at the mine only by an individual who meets the requirements for nomination specified in Schedule 10 for the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of a mine must ensure an individual nominated to exercise a statutory function at the mine is readily available to exercise, and is capable of exercising, the statutory function.

Maximum penalty—

(a) for an individual—60 penalty units, or

- (b) for a body corporate—300 penalty units.
- (3) The mine operator of a mine must ensure not more than 1 individual is nominated to exercise a key statutory function at the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (4) The mine operator of a mine must ensure mining activities, except exploring for minerals by means other than mechanical means that disturb the ground, do not take place at the mine if—
 - (a) a key statutory function is set out in Schedule 10 for the mine, and
 - (b) an individual is not currently nominated to exercise the key statutory function at the mine, and
 - (c) an individual has not been nominated to exercise the key statutory function at the mine for more than 7 days.

Maximum penalty (subsection (4))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

134 Obligations on nominee

An individual nominated to exercise a statutory function at a mine must, as soon as reasonably practicable, inform the mine operator of a matter that may interfere with the individual's ability to exercise the statutory function.

Maximum penalty—60 penalty units.

Example— The suspension or cancellation of a practising certificate.

Division 3 Statutory functions at petroleum sites

135 Statutory functions

- (1) A function set out in Schedule 11 is a *statutory function* at a petroleum site.
- (2) The statutory functions may be exercised at the petroleum site only by an individual nominated to exercise the function by the operator of the petroleum site.
- (3) An individual may be nominated to exercise a statutory function at a petroleum site by the operator of the petroleum site only if the individual meets the requirements for nomination specified in Schedule 11.
- (4) An individual nominated to exercise a statutory function who ceases to meet the requirement for nomination—
 - (a) cannot exercise the statutory function, and

- (b) is taken to no longer be nominated to exercise the statutory function.
- (5) More than 1 individual may exercise a statutory function.
- (6) An individual may exercise more than 1 statutory function, including at different petroleum sites.

136 Obligations on operator of petroleum site

(1) The operator of a petroleum site must ensure a statutory function is exercised at the petroleum site only by an individual who meets the requirements for nomination specified in Schedule 11 for the petroleum site.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The operator of a petroleum site must ensure an individual nominated to exercise a statutory function at the petroleum site is readily available to exercise, and is capable of exercising, the statutory function.

Maximum penalty (subsection (2))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

137 Obligations on nominee

An individual nominated to exercise a statutory function at a petroleum site must, as soon as reasonably practicable, inform the operator of the petroleum site of a matter that may interfere with the individual's ability to exercise the statutory function.

Example— The suspension or cancellation of a practising certificate.

Maximum penalty—60 penalty units.

Division 4 Practising certificates

138 Eligibility for practising certificate

- (1) An individual is eligible to hold a practising certificate for a statutory function if the regulator is satisfied the individual has the competence to exercise the statutory function.
- (2) The regulator may be satisfied an individual is competent to exercise a statutory function only if the individual—
 - (a) holds a certificate of competence or an interstate practising certificate for the statutory function, or
 - (b) meets other criteria specified by the regulator for the statutory function by notice published in the Gazette.
- (3) An individual is not eligible to hold a practising certificate if the individual is less than 21 years

of age.

139 Application for practising certificate

- (1) An application for a practising certificate must be made in the approved way and form.
- (2) An application must be accompanied by the fee determined by the regulator.

140 Grant of practising certificate

- (1) The regulator may grant a practising certificate unconditionally or subject to conditions.
- (2) The regulator must give an applicant written notice of a refusal to grant a practising certificate and the reasons for the refusal.
- (3) A practising certificate remains in force, unless sooner cancelled—
 - (a) for a period of 5 years commencing on the date on which it is granted, or
 - (b) for a shorter period specified in the practising certificate.
- (4) A practising certificate is not in force during a period in which it is suspended.
- (5) More than 1 practising certificate may be issued to an individual under this section, whether as—
 - (a) a replacement or renewal of an existing certificate, or
 - (b) a separate practising certificate authorising the individual to exercise another statutory function.

141 Interstate practising certificates

- (1) An interstate practising certificate that authorises an individual to exercise a statutory function in another jurisdiction is taken to be a practising certificate authorising the individual to exercise the statutory function in New South Wales, but only until—
 - (a) the individual obtains a practising certificate in New South Wales that authorises the individual to exercise the statutory function, or
 - (b) the interstate practising certificate ceases to be in force, or
 - (c) the individual has been exercising the statutory function in New South Wales for 6 months in reliance on the interstate practising certificate and during that time the majority of the individual's work has taken place in New South Wales.
- (2) The regulator may suspend or cancel an interstate practising certificate in the same way the regulator may cancel or suspend a New South Wales practising certificate.
- (3) The cancellation or suspension of an interstate practising certificate under subsection (2) has effect only in relation to the use of the interstate practising certificate in New South Wales.

142 Conditions of practising certificates

(1) The regulator may, by written notice to the holder of a practising certificate—

- (a) impose conditions on the practising certificate, or
- (b) vary or revoke a condition imposed by the regulator.
- (2) It is a condition of a practising certificate that the holder of the certificate must, if required by the regulator by written notice, do the following within the time specified in the notice—
 - (a) provide specified information relating to the individual's competency or other matters relating to the practising certificate,
 - (b) satisfy the regulator that the individual has a knowledge of law and ethics to the level necessary to hold the particular practising certificate,
 - (c) undertake and successfully complete specified training courses or other specified forms of training.
- (3) It is a condition of a practising certificate that the holder of the certificate must keep records that demonstrate the individual's eligibility to hold the certificate, including evidence of the completion of courses and time sheets.
- (4) The holder of a practising certificate must comply with the conditions imposed on the practising certificate.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (5) The regulator must, as soon as reasonably practicable after imposing a new condition or varying a condition of a practising certificate, issue the holder of the certificate with a replacement certificate.
- (6) This section applies to—
 - (a) a practising certificate, and
 - (b) an interstate practising certificate, but only to the extent the certificate is used in New South Wales

143 Suspension or cancellation of practising certificate

- (1) The regulator may, by written notice, suspend or cancel a practising certificate if satisfied of one or more of the following—
 - (a) the holder is not competent to perform a statutory function authorised by the practising certificate,
 - (b) the holder cannot be relied on to perform a statutory function authorised by the practising certificate without risking the health or safety of an individual,
 - (c) the holder has not complied with a condition of the practising certificate,
 - (d) the practising certificate was improperly obtained, whether on the basis of false or

misleading information or otherwise,

- (e) the practising certificate was issued in error,
- (f) the holder has contravened the WHS laws, a corresponding WHS law, the *Explosives Act* 2003, the *Radiation Control Act 1990* or a former law of this State dealing with work health and safety.
- (2) Subsection (1)(f) applies if the regulator is satisfied the contravention caused or could have caused a serious risk to the health or safety of a person.

144 Suspension of practising certificate for investigation

- (1) The regulator may also suspend a practising certificate—
 - (a) if the holder of the practising certificate has been charged with an offence under the WHS laws, a corresponding WHS law, the *Explosives Act 2003* or the *Radiation Control Act 1990*, or
 - (b) to enable the regulator to investigate whether there are grounds under this section or section 145 for suspending or cancelling the practising certificate.
- (2) The regulator may suspend a practising certificate under subsection (1)(b) if the regulator reasonably believes there are grounds under this section or section 145 for suspending or cancelling the practising certificate.
- (3) A suspension under subsection (1)(b) must not exceed 28 days.
- (4) The 28-day period may be extended on one occasion only, for an additional period of 28 days, if—
 - (a) the regulator has not completed the investigation, after having taken reasonable steps to do so, and
 - (b) the regulator still has reason to believe there are grounds for suspending or cancelling the practising certificate.

145 Notice of suspension or cancellation of practising certificate

- (1) The holder of a practising certificate must be given—
 - (a) written notice of the reasons for a cancellation or suspension of the practising certificate, and
 - (b) an opportunity to object to the cancellation or suspension.
- (2) The notice may be given—
 - (a) as part of a notice suspending a practising certificate, or
 - (b) as a separate notice before the suspension or cancellation takes effect.
- (3) A practising certificate must not be cancelled until—
 - (a) an individual has been given at least 28 days within which to lodge an objection, and

- (b) the regulator has taken into account the objection.
- (4) The regulator may revoke a suspension by written notice to the holder of the practising certificate.
- (5) The regulator must revoke a suspension as soon as reasonably practicable after being satisfied the suspension should not continue.
- (6) The suspension or cancellation of a practising certificate takes effect—
 - (a) when the notice is given to the individual, or
 - (b) on a later date specified in the notice.
- (7) A notice cancelling a practising certificate must specify—
 - (a) the reason the certificate is cancelled, and
 - (b) the way and time within which the practising certificate must be returned to the regulator.
- (8) The holder of a cancelled practising certificate must return the practising certificate to the regulator within the period specified in the notice of cancellation.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (9) If the regulator suspends or cancels a practising certificate, the regulator may disqualify the holder from applying for—
 - (a) a further practising certificate of the same type, or
 - (b) another practising certificate that enables the holder to exercise a statutory function that requires skills that are the same as or similar to the skills required to exercise the statutory function authorised by the suspended or cancelled practising certificate.

146 Register of practising certificates

- (1) The regulator must maintain a register of practising certificates (the *register*).
- (2) The purpose of the register is to provide a relevant person with information about the holders of practising certificates, including the following—
 - (a) the identifying details of the holder, including the name and contact details of the holder and the unique identifier of the holder's practising certificate,
 - (b) the qualifications and skills of the holder,
 - (c) the places at which the holder works and has worked,
 - (d) details of the practising certificate of the holder, including its expiry date and conditions of the practising certificate,

- (e) details of an action under the WHS laws in relation to the holder, including convictions or the suspension or cancellation of a current or previous practising certificate.
- (3) The regulator may collect, store, use and disclose information for the purposes of the register.
- (4) The regulator may disclose information on the register to a relevant person if the regulator considers it reasonably necessary to do so to reduce or control a risk to the health or safety of a person, including an individual outside New South Wales.
- (5) In this section—

certification agency means—

- (a) the Board, or
- (b) an agency in another Australian jurisdiction that exercises functions in relation to the certification of the competency of workers in mines, including the following agencies—
 - (i) Resources Safety & Health Queensland,
 - (ii) Government of Western Australia Department of Mines, Industry Regulation and Safety,
 - (iii) SafeWork SA,
 - (iv) the South Australian Department for Energy and Mining,
 - (v) NT WorkSafe,
 - (vi) WorkSafe ACT,
 - (vii) WorkSafe Tasmania,
 - (viii) the Victorian WorkCover Authority.

holder of a practising certificate includes a holder of an interstate practising certificate.

relevant person means the following—

- (a) a certification agency,
- (b) the operator of a mine or petroleum site,
- (c) an industry safety and health representative,
- (d) a mine safety and health representative,
- (e) a person exercising a function similar to a function described in paragraphs (a)–(d) in another jurisdiction.

Division 5 Certificates of competence

147 Eligibility for certificate of competence

(1) An individual is eligible to hold a certificate of competence for a statutory function if the

regulator is satisfied the individual is competent to exercise the function.

- (2) The regulator may require an individual to satisfy one or more of the following criteria before the regulator determines the individual is competent to exercise a particular statutory function—
 - (a) the individual must have completed a specified course or passed a specified examination,
 - (b) the individual must hold specified qualifications,
 - (c) the individual must have specified experience.
- (3) Additionally, the regulator may require an individual to be above a certain age.
- (4) In determining whether an individual is competent, the regulator must take into account any assessment of the individual carried out by the Board.

148 Application for certificate of competence

- (1) An application for a certificate of competence must be made in the approved way and form.
- (2) An application must be accompanied by the fee determined by the regulator.

149 Grant of certificate of competence

- (1) The regulator may grant a certificate of competence unconditionally or subject to conditions.
- (2) In granting a certificate of competence to an individual, the regulator must take into account recommendations made by the Board.
- (3) The regulator must give an applicant written notice of a refusal to grant a certificate of competence and the reasons for the refusal.
- (4) More than 1 certificate of competence may be issued to an individual under this section, whether as—
 - (a) a replacement or renewal of an existing certificate, or
 - (b) a separate certificate that demonstrates the individual is competent to exercise another statutory function.

150 Condition of certificate of competence

It is a condition of a certificate of competence that the holder of the certificate must, if required by the regulator by written notice—

- (a) provide the information specified in the notice relating to—
 - (i) the individual's competence, or
 - (ii) other matters relating to the certificate of competence, and
- (b) provide the information within the time specified in the notice.

151 Cancellation of certificate of competence

- (1) The regulator may cancel a certificate of competence if satisfied—
 - (a) the holder of the certificate is not eligible to hold the certificate, or
 - (b) the holder of the certificate has contravened a condition of the certificate, or
 - (c) the method by which the holder of the certificate was assessed as being competent was inadequate, or
 - (d) the certificate was improperly obtained, whether on the basis of false or misleading information or otherwise, or
 - (e) the holder of the certificate has contravened the WHS laws, a corresponding WHS law, the *Explosives Act 2003*, the *Radiation Control Act 1990* or a former law of this State dealing with work health and safety.
- (2) Subsection (1)(e) applies if the regulator is satisfied the contravention caused or could have caused a serious risk to the health or safety of a person.
- (3) Before cancelling a certificate of competence, the regulator must—
 - (a) notify the holder of the certificate, and
 - (b) give the holder of the certificate a reasonable opportunity to make representations to the regulator, and
 - (c) consider the representations.
- (4) The cancellation of a certificate of competence takes effect on—
 - (a) the date on which written notice of the cancellation is given to the holder of the certificate, or
 - (b) a later date specified in the notice.
- (5) A notice cancelling a certificate of competence must specify the reasons for the cancellation.

152 Register of certificates of competence

- (1) The regulator must maintain a register of certificates of competence.
- (2) The register must include the following—
 - (a) the name of the holder of each certificate of competence,
 - (b) the holder's gender,
 - (c) the holder's place and date of birth.

Part 10 Licensed activities—the WHS Act, Sch 3, cl 7

153 Activities to which Part applies

- (1) This Part applies to the activities of sampling or analysing airborne dust under Schedule 6 at or for—
 - (a) a coal mine, or
 - (b) a mine where respirable crystalline silica has been identified as a hazard as a result of air monitoring being carried out under the WHS Regulations, clause 50(1).
- (2) This Part also applies to the following activities if the activities are carried out at, or for, an underground coal mine—
 - (a) sampling or analysing diesel exhaust under section 56,
 - (b) overhauling or repairing activities that may affect the explosion-protection properties of explosion-protected plant,
 - (c) repairing flexible reeling, feeder or trailing cables for use in a hazardous zone,
 - (d) a polymeric process.
- (3) In this section—

polymeric chemical product means a chemical product that is polymerised at a mine other than polyester resin capsules used for strata support.

polymeric process means the injection or application of a polymeric chemical product.

154 Activity not to be carried out without licence

(1) A person must not carry out an activity to which this Part applies unless the activity is carried out under, and in accordance with, a licence.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (2) The mine operator of an underground coal mine must ensure no person carries out an activity to which this Part applies at, or for, the mine unless the activity is carried out under, and in accordance with, a licence.

Maximum penalty (subsection (2))—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

155 Plant not to be used unless overhaul or repair work carried out under licence

A person conducting a business or undertaking at a mine must not use the following plant unless the

person has taken all reasonable steps to ensure the overhaul or repair of the plant was carried out under, and in accordance with, a licence—

- (a) explosion-protected plant in an underground coal mine,
- (b) flexible reeling, feeder or trailing cables in a hazardous zone of an underground coal mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

156 Eligibility for licence

A person is eligible to hold a licence if the regulator is satisfied all activities carried out under the licence will—

- (a) be supervised by a competent person, and
- (b) be carried out by workers who have had training in safe working methods in relation to the activity, and
- (c) be carried out by workers who have—
 - (i) completed a course of training specified by the regulator in relation to the activity, or
 - (ii) appropriate experience or training in the carrying out of the activity, and
- (d) be carried out using procedures, equipment and facilities that are suitable for the activities.

157 Application for licence

- (1) An application for a licence must be made in the approved way and form.
- (2) An application must be accompanied by the fee determined by the regulator.

158 Grant of licence

- (1) The regulator may grant a licence unconditionally or subject to conditions.
- (2) The regulator must give an applicant written notice of a refusal to grant a licence and the reasons for the refusal.
- (3) A licence remains in force, unless sooner cancelled—
 - (a) for a period of 5 years commencing on the date on which it is granted, or
 - (b) for a shorter period specified on the licence.
- (4) A licence is not in force during a period in which it is suspended.

159 Licence conditions

(1) The regulator may, by written notice to a holder of a licence—

- (a) impose conditions on the licence, or
- (b) vary or revoke a condition imposed by the regulator.
- (2) It is a condition of a licence that a person who carries out an activity under a licence must display or have the licence available for inspection while the activity is being carried out.
- (3) It is a condition of a licence that no activity is to be carried out under the licence in a way that may expose a person to a health or safety risk that may reasonably be avoided.
- (4) It is a condition of a licence that work carried out under the licence will be carried out by a person who is competent to carry out the work.
- (5) It is a condition of a licence that work involving the repairing of flexible reeling, feeder or trailing cables is certified by an individual holding a cable repair signatory certificate of competence.
- (6) The holder of a licence must comply with the conditions of the licence.

Maximum penalty—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.
- (7) For Part 9, Division 5 and section 170, the function of certifying work involving the repairing of flexible reeling, feeder or trailing cables is taken to be a statutory function.

160 Suspension or cancellation of licence

- (1) The regulator may suspend or cancel a licence if satisfied the holder of the licence—
 - (a) is not eligible to hold the licence, or
 - (b) has contravened a condition of the licence, or
 - (c) has failed to comply with the requirements of an improvement notice or prohibition notice under the WHS laws, or
 - (d) has obtained the licence improperly, whether on the basis of false or misleading information or otherwise, or
 - (e) has been convicted of an offence under the WHS laws, a corresponding WHS law, the *Explosives Act 2003*, the *Radiation Control Act 1990* or a former law of this State dealing with work health and safety.
- (2) Before suspending or cancelling a licence, the regulator must—
 - (a) notify the holder of the licence, and
 - (b) give the holder of the licence a reasonable opportunity to make representations to the regulator, and
 - (c) consider the representations.

- (3) The suspension or cancellation of a licence takes effect on—
 - (a) the date on which written notice of the suspension or cancellation is given to the holder of the licence, or
 - (b) a later date specified in the notice.
- (4) The holder of a cancelled licence must destroy the licence within the period specified in the notice of cancellation.

Maximum penalty (subsection (4))—

- (a) for an individual—12.5 penalty units, or
- (b) for a body corporate—60 penalty units.

161 Voluntary surrender of licence

- (1) The holder of a licence may voluntarily surrender the licence to the regulator.
- (2) The licence expires on the surrender of the licence.

162 Minor amendments to licence

- (1) The regulator may make minor amendments to a licence, including an amendment—
 - (a) to correct an obvious error, or
 - (b) to change an address, or
 - (c) that does not impose a significant burden on the holder of the licence.
- (2) The regulator must not amend the period of a licence under this section.

Part 11 Mine Safety Advisory Council—the WHS (MPS) Act, ss 61 and 62

163 Definitions

In this Part—

Council means the Mine Safety Advisory Council.

member means member of the Council.

164 Membership of Council

- (1) The Council must consist of the following members appointed by the Minister—
 - (a) 1 or more persons nominated by each of the following bodies to represent employers—
 - (i) the NSW Minerals Council, for employers in the coal sector,
 - (ii) the NSW Minerals Council, for employers in the metalliferous sector,
 - (iii) Cement Concrete & Aggregates Australia,

- (b) 1 or more persons nominated by each of the following bodies to represent employees—
 - (i) the Construction, Forestry, Maritime, Mining and Energy Union (Mining and Energy Division),
 - (ii) the Australian Workers Union, New South Wales Branch,
- (c) the Secretary of the Department or a representative of the Department nominated by the Secretary,
- (d) 1 or more persons who, in the Minister's opinion—
 - (i) are independent of the bodies referred to in paragraph (a) or (b), and
 - (ii) have expertise that would assist the Council.
- (2) The Minister must appoint a person appointed under subsection (1)(d) as Chairperson of the Council.
- (3) The secretary of the Council must be an officer of the Department appointed by the Secretary.
- (4) Equal numbers of persons must be appointed under subsection (1)(a) and (b).
- (5) The Minister may refuse to accept the nomination of a candidate.
- (6) The Minister may appoint a person the Minister considers suitable to represent the interests of a body referred to in subsection (1)(a) or (b) as a member of the Council if the body—
 - (a) fails to nominate a candidate within 60 days after being requested by the Minister, or
 - (b) nominates a candidate within the 60-day period but the candidate's nomination is not accepted by the Minister.

165 Functions of Council

- (1) For the WHS (MPS) Act, section 61(b), the function of the Council is to advise the Minister on any matter relating to work health and safety in mines that—
 - (a) is referred to the Council by the Minister, or
 - (b) the Council considers relevant.
- (2) The Council does not have the function of advising the Minister on the Government's work health and safety policy.

166 Procedure of Council

- (1) The Council must, as soon as reasonably practicable, adopt a constitution that addresses each of the following matters—
 - (a) the procedure for calling of Council meetings and the frequency of the meetings,
 - (b) the procedure for the conduct of Council meetings,
 - (c) who must preside at Council meetings,

- (d) whether meetings can be transacted remotely, and if so, how this must occur,
- (e) the disclosure of pecuniary interests by members of the Council,
- (f) the establishment of, and procedure for, committees of the Council.
- (2) If there is no constitution in force, the procedures set out in the *Mining Regulation 2010*, Schedule 7, Part 2, as in force immediately before the repeal of that Regulation, apply as the procedures of the Council.

Part 12 Mining and Petroleum Competence Board—the WHS (MPS) Act, Part 8, Div 2

167 Definition

In this Part—

member means a member of the Board.

168 Membership of Board—the WHS (MPS) Act, s 65

- (1) Each member of the Board appointed by the Minister to represent the interests of employers in the mining industry must be selected from persons nominated by—
 - (a) the NSW Minerals Council, or
 - (b) Cement Concrete & Aggregates Australia.
- (2) Each member of the Board appointed by the Minister to represent the interests of workers in the mining industry must be selected from persons nominated by—
 - (a) the Construction, Forestry, Maritime, Mining and Energy Union (Mining and Energy Division), or
 - (b) the Australian Workers Union, New South Wales Branch.
- (3) Each member of the Board appointed by the Minister to represent the interests of employers in the petroleum industry must be selected from persons nominated by the Australian Petroleum Production and Exploration Association.
- (4) Each member of the Board appointed by the Minister to represent the interests of employees in the petroleum industry must be selected from persons nominated by a union selected by the Minister, being a union the Minister is satisfied has at least 50 members employed in the petroleum industry.
- (5) The Minister may refuse to accept the nomination of a candidate.
- (6) The Minister may appoint a person the Minister considers suitable to represent the interests of a body referred to in subsections (1)–(4) as a member of the Board if the body—
 - (a) fails to nominate a candidate within 60 days after being requested to do so by the Minister, or
 - (b) nominates a candidate within the 60-day period but the candidate's nomination is not

accepted by the Minister.

- (7) A member may be represented at a meeting by a delegate of the member who is taken to have all the functions of the member at the meeting.
- (8) A member may, by written instrument, appoint a person to be the member's delegate if—
 - (a) the person's nomination was not refused by the Minister, or
 - (b) if the person's nomination was refused by the Minister—the member has obtained the written consent of the Minister to appoint the person.

169 Chairperson of Board—the WHS (MPS) Act, s 65

The Chairperson of the Board vacates office as Chairperson if the person—

- (a) is removed from the office by the Minister, or
- (b) vacates the office by written notice given to the Minister, or
- (c) ceases to be a member of the Board.

170 Functions of Board—the WHS (MPS) Act, s 67

- (1) The Board has the following functions—
 - (a) to advise the regulator on the training, qualifications, experience, knowledge or skills required for the exercise of statutory functions,
 - (b) to advise the regulator on the conduct of assessments, including the nature, type and method of assessments.
 - (c) to make recommendations to the regulator in relation to conditions that may be imposed on a practising certificate,
 - (d) to ensure, as far as possible, the competency required under this Regulation for the exercise of a statutory function is consistent with the competency required in other Australian jurisdictions for the exercise of the statutory function,
 - (e) to recommend to the regulator requirements in relation to the maintenance of competency for holders of practising certificates.
- (2) The Board must, as far as reasonably practicable, exercise its functions consistently with bodies exercising similar functions in other Australian jurisdictions, including by—
 - (a) consulting with the bodies, and
 - (b) taking into consideration the effective movement of workers between jurisdictions.
- (3) The Board may consider the following when assessing whether a person is competent to exercise a statutory function—
 - (a) the person's qualifications,
 - (b) the person's learning and experience,

- (c) how the person performs in an exam,
- (d) the results of a previous assessment of the person.

171 Committees of Board—the WHS (MPS) Act, s 66

- (1) The Board may establish committees to assist the Board in the exercise of its functions.
- (2) Members of a committee are not required to be members of the Board.
- (3) Unless determined otherwise by the Board, the procedure of a committee must be the same as for the Board

Part 13 Safety and health representatives at coal mines

172 Qualifications of safety and health representatives—the WHS (MPS) Act, ss 28(1) and 38(1) and (2)

- (1) A person is eligible to be appointed as an industry safety and health representative if the person—
 - (a) holds the qualifications required to be nominated to exercise the statutory function of deputy or open cut examiner, and
 - (b) has completed a course of training accredited by the regulator for the purposes of the WHS (MPS) Act, section 45.
- (2) A person is eligible to be appointed as a site safety and health representative at a coal mine if the person—
 - (a) is a worker at the coal mine, and
 - (b) has worked at the coal mine or coal mines of that class for at least 3 years.
- (3) A person is eligible to be appointed as an electrical safety and health representative at a coal mine if the person—
 - (a) holds the qualifications required to be nominated to exercise the statutory function of electrical tradesperson, and
 - (b) has worked in coal mines for at least 5 years.

173 Election and removal of mine safety and health representatives—the WHS (MPS) Act, s 39(1)

- (1) This section sets out procedural requirements for the election of a mine safety and health representative for a coal mine for the purposes of the WHS (MPS) Act, section 39(1).
- (2) The mine operator of the mine, a union that represents workers at the mine and the majority of workers at the mine must determine how the election of mine safety and health representatives for the mine must be conducted.
- (3) The regulator may, if reasonably satisfied an agreement cannot be reached—
 - (a) give a direction as to how the election must be conducted, and

- (b) if necessary, direct the mine operator to appoint an independent person to conduct the election, being a person who—
 - (i) is specified in the direction, or
 - (ii) belongs to a class specified in the direction.
- (4) Each person conducting a business or undertaking at the mine must be informed of the date on which the election must be held as soon as reasonably practicable after the date is determined.
- (5) All workers at the mine must be given an opportunity to—
 - (a) nominate for the position to be elected, if eligible to be appointed to the position, and
 - (b) vote in the election.
- (6) All workers at the mine and all relevant persons conducting a business or undertaking at the mine must be informed of the outcome of the election.
- (7) For the WHS (MPS) Act, section 40(2)(d), the majority of the workers at a mine may remove a mine safety and health representative for the mine if the workers sign a written declaration that the representative should no longer represent the workers.
- (8) A worker nominated by the workers who signed the declaration must, as soon as reasonably practicable—
 - (a) inform the mine safety and health representative who has been removed, and
 - (b) inform the mine operator of the mine of the removal, and
 - (c) take all reasonable steps to inform all workers and persons conducting a business or undertaking at the mine of the removal.
- (9) The removal of the mine safety and health representative takes effect when the persons referred to in subsection (8)(a) and (b) have been informed of the removal.

174 Offences relating to elections—the WHS (MPS) Act, s 39(1)

- (1) The mine operator of a coal mine must—
 - (a) provide resources, facilities and assistance reasonably necessary to enable elections of mine safety and health representatives for the mine to be conducted, and
 - (b) if given a direction by the regulator under section 173(3)—
 - (i) appoint, in accordance with the direction, an independent person to conduct the election to which the direction relates, and
 - (ii) pay the costs of the person conducting the election.

Maximum penalty—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

(2) A person conducting a business or undertaking at a coal mine must not unreasonably delay the election of a mine safety and health representative for the mine.

Maximum penalty (subsection (2))—

- (a) for an individual—36 penalty units, or
- (b) for a body corporate—180 penalty units.

175 Safety and health representatives taken to be health and safety representatives—the WHS (MPS) Act, Sch 2, cl 2

- (1) A mine safety and health representative for a coal mine is taken, for the following provisions, to be a health and safety representative under the WHS Act for a work group at the mine, as if the work group comprised all the workers at the mine—
 - (a) the WHS Act, Part 5, Division 3, Subdivision 6,
 - (b) the WHS Act, sections 66, 80 and 106,
 - (c) a provision of the WHS Act or the WHS Regulations that requires a person to consult with or give a notice or information to the health and safety representative or that gives the health and safety representative a right to access information, including the following—
 - (i) the WHS Act, section 48(2),
 - (ii) the WHS Regulations, clause 263(3)(b), 403(3), 404(2), 427, 429, 430, 432, 465 or 475.
- (2) An industry safety and health representative is taken, for the WHS Act, section 72, to be a health and safety representative under the WHS Act for a work group, as if the work group comprised all workers at all coal mines.

176 Training of mine safety and health representatives—the WHS (MPS) Act, s 45

- (1) The regulator must not accredit a course of training for the WHS (MPS) Act, section 45 unless the regulator is satisfied the course comprises at least 5 days of training.
- (2) In accrediting a course of training, the regulator must take into account matters the regulator considers to be relevant, including—
 - (a) the content and quality of the course and its relevance to the functions of a safety and health representative, including functions under the WHS Act, and
 - (b) the qualifications, knowledge and experience of the person providing the course.
- (3) For the WHS Act, section 72(1)(b), the course of training under this section is a course of training that a mine safety and health representative or an industry safety and health representative is entitled to attend rather than a course of training specified in the WHS Regulations, clause 21.

Part 14 Exemptions—the WHS Act, s 276(3)(e) and (f) and Sch 3, cl 7(1)(c)

177 Exemptions for mines and petroleum sites where only non-mechanical exploration occurs

(1)	A mine at which the	only mining op	eration carrie	d out is non-	mechanical	exploration i	s exempt
	from the following p	provisions of thi	s Regulation-	_			

- (a) sections 5–9,
- (b) Parts 3–6,
- (c) sections 125 and 126,
- (d) Parts 8-10,
- (e) section 187,
- (f) Schedules 1–7, 9 and 10.
- (2) A petroleum site at which the only petroleum operation carried out is non-mechanical exploration is exempt from the following provisions of this Regulation—
 - (a) sections 10–13,
 - (b) Parts 3-6,
 - (c) section 125,
 - (d) Parts 8 and 9.
 - (e) section 187,
 - (f) Schedules 1-4, 7 and 11.
- (3) Mining operations or petroleum operations are, for section 125, taken to commence at a mine or petroleum site referred to in subsection (1) or (2) as soon as mining operations or petroleum operations other than non-mechanical exploration commence at the mine or petroleum site.
- (4) In this section—

non-mechanical exploration means exploring for minerals or petroleum, other than by mechanical means that disturb the ground, and includes the following—

- (a) geological mapping,
- (b) sampling and coring using hand-held equipment,
- (c) geophysical surveying, but not seismic surveying, and borehole logging,
- (d) access by vehicle, but not if access requires the construction of an access way that is a track or road,
- (e) shallow reconnaissance drilling involving no more than minimal site preparation,
- (f) minor excavations, but not costeaning or bulk sampling.

178 Exemptions for certain gemstone mines, tourist mines and tier-3 quarries

- (1) This section applies to the following mines—
 - (a) an opal mine,
 - (b) an underground mine that is a small gemstone mine,
 - (c) a tourist mine,
 - (d) a tier-3 quarry.
- (2) A mine to which this section applies is exempt from the following provisions of this Regulation—
 - (a) Part 3, Divisions 2 and 3,
 - (b) sections 19(2)(c), 58, 62(3), 63, 65, 66, 69, 103 and 126.
- (3) The safety management system document for a mine to which this section applies is not required to set out the matters in section 19(2)(c) but must instead set out the systems, procedures, plans and other control measures that will be used to control risks to health and safety at the mine associated with the following—
 - (a) ground or strata failure,
 - (b) inundation or inrush of a substance,
 - (c) mine shafts and winding systems,
 - (d) roads or other vehicle operating areas,
 - (e) air quality or dust or other airborne contaminants,
 - (f) the mechanical aspects of plant or structures,
 - (g) electricity,
 - (h) ventilation,
 - (i) a hazard identified by the mine operator under the WHS Regulations, clause 34 that has a reasonable potential to result in multiple deaths in a single incident or a series of recurring incidents.
- (4) Subsection (3)(c) and (h) does not apply to a tier-3 quarry.

179 Exemption from compliance with standards

- (1) The regulator may, unconditionally or subject to conditions, exempt a person, or class of persons, from a provision of this Regulation that requires compliance with an international or Australian standard, if the regulator is satisfied—
 - (a) the person or class of persons sufficiently demonstrates the way in which an outcome identified in the relevant standard may be achieved, even if the outcome is achieved in a way that is different to the way set out in the standard, and

- (b) the exemption will result in a level of risk that is at least equivalent to or less than the level of risk that would be achieved by compliance with the relevant standard.
- (2) The exemption may be granted on the regulator's own initiative or the written application of a person.
- (3) The WHS Regulations, Part 11.2, Division 4 applies to an exemption granted under this section in the same way it applies to an exemption granted under the WHS Regulations, clause 684.

180 Exemption for quarry managers from meeting requirements for nomination

- (1) A mine operator of a mine, other than an underground mine or coal mine, may nominate an individual to exercise the statutory function of quarry manager under section 132(2), despite the individual not meeting the requirements for nomination specified in Schedule 10, section 31, if the following apply—
 - (a) the individual will be nominated as quarry manager for no longer than 2 months in a calendar year,
 - (b) the mine operator is satisfied the individual is a competent person,
 - (c) the mine operator provides the relevant information to the regulator,
 - (d) based on the relevant information provided, the regulator is satisfied the individual is a competent person,
 - (e) the individual will not be nominated within 28 days of the date of the commencement of mining operations at the mine specified in the notice required under section 125(3),
 - (f) the mine will be managed by a quarry manager nominated under this section for no longer than 2 months in a calendar year.
- (2) The mine operator must notify the regulator as soon as possible if the mine operator believes, for any reason, the nominated individual is no longer a competent person.
- (3) Sections 125(3)(g), 132(3) and (4), 133(1) and 134 do not apply in relation to an individual nominated to exercise the statutory function of quarry manager in accordance with subsection (1).
- (4) An individual who, immediately before the commencement of this section, was exercising the statutory function of quarry manager under the *Quarry Manager Instrument of Exemption 2015*, 30 June 2015, published on the regulator's website under the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*, clause 185, is taken, on the commencement of this section, to be nominated to exercise the statutory function under this section on the same terms.
- (5) In this section
 - *competent person* means a person who has acquired through training, qualification or experience the knowledge and skills to carry out the task of supervising mining operations at a mine, other than an underground mine or coal mine, having regard to—
 - (a) the location of the mine, and

- (b) the complexity of the mining operations at the mine, and
- (c) the nature of the material mined.

relevant information means the following—

- (a) the name of the individual nominated to exercise the statutory function of quarry manager,
- (b) details of the mining operations taking place at the mine,
- (c) the individual's period of service at the mine or a similar mine,
- (d) the individual's relevant qualifications,
- (e) the relevant training completed by the individual,
- (f) the individual's relevant skills, knowledge and experience,
- (g) other information requested by the regulator.

181 Exemption for tier-3 quarry managers from meeting requirements for nomination

- (1) A mine operator of a tier-3 quarry mine may nominate an individual to exercise the statutory function of quarry manager under section 132(2), despite the individual not meeting the requirements for nomination specified in Schedule 10, section 31, if the mine operator is satisfied the individual is a competent person.
- (2) The following provisions do not apply in relation to an individual nominated to exercise the statutory function of quarry manager in accordance with subsection (1)—
 - (a) section 125(3)(g),
 - (b) section 125(7), to the extent that notice is required of a proposed material change to the details of an individual nominated to exercise the statutory function of quarry manager at a tier-3 quarry,
 - (c) section 132(3) and (4),
 - (d) section 133(1),
 - (e) section 134.
- (3) An individual who, immediately before the commencement of this section, was exercising the statutory function of quarry manager under the *Work Health and Safety (Mines and Petroleum Sites) Exemption (Tier-3 Quarry Managers) March 2020*, published in Gazette No 58 of 27 March 2020, page 1093 under the WHS Regulations, clause 684, is taken, on the commencement of this section, to be nominated to exercise the statutory function under this section on the same terms.
- (4) In this section—

competent person means a person who has acquired through training, qualification or experience the knowledge and skills to carry out the task of supervising mining operations at a mine, other than an underground mine or coal mine, having regard to—

- (a) the location of the mine, and
- (b) the complexity of the mining operations at the mine, and
- (c) the nature of the material mined.

182 Exemptions from certain notification requirements

- (1) This section applies to a mine or petroleum site if the only activity being undertaken at the mine or petroleum site is exploring for minerals or petroleum.
- (2) The operator of a mine or petroleum site to which this section applies is exempt from giving notice of the following reportable events for the mine or petroleum site under section 125—
 - (a) the commencement of intermittent mining operations at the mine site,
 - (b) the connection of an electricity supply to the mine or petroleum site.
- (3) The operator of a mine or petroleum site to which this section applies is exempt from the following provisions—
 - (a) section 125(3)(a) and (b) and (5)(a) and (b),
 - (b) section 125(5)(c), to the extent that a notice is required to include coordinates of the location of proposed wells.
- (4) A person who, immediately before the commencement of this section, was exempt under the Work Health and Safety (Mines and Petroleum Sites) Exemption (Notification of Other Matters for Exploration) 2019, published in Gazette No 165 of 6 December 2019, page 5416 under the WHS Regulations, clause 684, is taken, on the commencement of this section, to be exempt under this section on the same terms.

Part 15 Miscellaneous

183 Tourist mines—the WHS (MPS) Act, s 6

For the WHS (MPS) Act, section 6(2)(b), all principal hazards are prescribed as hazards.

184 Removal of gas from underground coal mines—the WHS (MPS) Act, ss 7 and 7B

For the WHS (MPS) Act, sections 7(1)(f) and 7B(2), drilling from the surface to extract gas, and the subsequent extraction of the gas, from a coal seam and surrounding strata for the purposes of ensuring safety at an underground coal mine are prescribed as mining operations and are declared not to be petroleum operations.

185 Government officials—the WHS (MPS) Act, s 18(3)(d)

For the WHS (MPS) Act, section 18(3)(d), the persons who hold tertiary qualifications in one or more of the following areas are prescribed as a class of persons—

- (a) engineering,
- (b) occupational health and safety,

- (c) law,
- (d) policing,
- (e) regulatory studies.

186 Reviewable decisions—the WHS Act, Sch 3, cl 14

The following decisions are reviewable under the WHS Regulations, Part 11.1 and the persons specified for the decisions are eligible persons for the purposes of Part 11.1—

- (a) a decision to give a notice under section 9(1)—the mine holder to whom the notice is given,
- (b) a decision to give a notice under section 13(1)—the petroleum site holder to whom the notice is given,
- (c) a decision of the regulator that a notice is inadequate under section 35(4)—the operator of the mine or petroleum site at which the high risk activity is to be carried out,
- (d) a decision of the regulator to extend the waiting period under section 35(9)—the operator of the mine or petroleum site at which the high risk activity is to be carried out,
- (e) a decision of the regulator to give a direction to a person conducting a business or undertaking at a mine or petroleum site to provide health monitoring to workers at the mine or petroleum site under section 112(1)—the person to whom the direction is given,
- (f) a decision of the regulator that a survey plan is required for a mine under section 116(1)(d)—the mine operator of the mine,
- (g) a decision of the regulator to refuse to grant a practising certificate or to grant a practising certificate subject to conditions under section 140—the applicant for the practising certificate,
- (h) a decision of the regulator to impose a condition on a practising certificate or to vary or revoke a condition of a practising certificate under section 142—the holder of the practising certificate,
- (i) a decision of the regulator to suspend or cancel a practising certificate under section 143—the holder of the practising certificate,
- (j) a decision of the regulator to refuse to grant a certificate of competence or to grant a certificate of competence subject to conditions under section 149—the applicant for the certificate of competence,
- (k) a decision of the regulator to cancel a certificate of competence under section 151—the holder of the certificate of competence,
- (l) a decision of the regulator to refuse to grant a licence or to grant a licence subject to conditions under section 158—the applicant for the licence,
- (m) a decision of the regulator to impose a condition on a licence or to vary or revoke a condition of a licence under section 159—the holder of the licence,
- (n) a decision of the regulator to suspend or cancel a licence under section 160—the holder of the licence,

(o) a decision of the regulator to grant an exemption or to grant an exemption subject to conditions under section 179—the applicant for the exemption.

187 Registration of plant designs and items of plant—the WHS Act, s 42

- (1) The design of the following items of plant must be registered under the WHS Regulations, Part 5.3 if they are used at an underground coal mine—
 - (a) diesel engine systems,
 - (b) booster fans,
 - (c) braking systems on plant used in underground transport,
 - (d) canopies on continuous miners,
 - (e) electrically powered hand-held plant used to determine or monitor the presence of gas,
 - (f) electrically powered fixed installations and installations on mobile plant used to determine or monitor the presence of gas, but not tube bundle systems where the analyser is installed at the surface,
 - (g) breathing apparatus to assist escape, including self-rescuers,
 - (h) shotfiring apparatus, including exploders and circuit testers,
 - (i) detonators,
 - (i) explosive-powered tools,
 - (k) conveyor belting.
- (2) The design of a winding system, other than a winding system at a small gemstone mine, must be registered under the WHS Regulations, Part 5.3 if the winding system is used at a mine.
- (3) Each of the following items of plant must be registered under the WHS Regulations, Part 5.3—
 - (a) a winding system, other than a winding system at a small gemstone mine, used at a mine,
 - (b) a diesel engine system or a booster fan used at an underground coal mine.
- (4) Despite the WHS Regulations, clause 272A, registration of an item required to be registered under subsection (3)—
 - (a) takes effect—
 - (i) on the date registration is granted by the regulator, or
 - (ii) on a later date specified by the regulator in the notice to the applicant under the WHS Regulations, clause 269(4), and
 - (b) expires 5 years after it takes effect.
- (5) The regulator may, by order published in the Gazette, specify standards for plant that is required to be registered, or the design of which is required to be registered, by subsections (1)–(3).

- (6) Plant or the design of the plant cannot be registered under the WHS Regulations, Part 5.3 if a standard is specified under subsection (5) and the plant or the design of the plant does not comply with the standard.
- (7) For the purposes of a registration required by this section, a reference in the WHS Regulations, Part 5.2 or 5.3 to the regulator is to be construed as a reference to the regulator under the WHS (MPS) Act.
- (8) A person who is a manufacturer, importer or supplier must not supply plant, the design of which is not registered under the WHS Regulations, Part 5.3, if—
 - (a) this section requires the design of the plant to be registered under the WHS Regulations, Part 5.3 if the plant is used at a mine or at a mine of a particular class, and
 - (b) the person knows, or reasonably suspects, the plant will be used at a mine or at a mine of a particular class.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (9) A person who conducts a business or undertaking that commissions plant must not commission an item of plant that has not been registered under the WHS Regulations, Part 5.3 if the item of plant—
 - (a) is to be used at a mine, and
 - (b) is required by this section to be registered under the WHS Regulations, Part 5.3 for use in the mine.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.
- (10) Subsection (9) does not prevent a person from performing one or more necessary adjustments, tests or inspections as part of the commissioning process before the plant is commissioned at a workplace.

188 Shotfiring apparatus to be overhauled or repaired by accredited person—the WHS Act, Sch 3, cl 2

The operator of an underground coal mine must ensure shotfiring apparatus, including exploders and circuit testers, used at the mine is not overhauled or repaired by a person unless the person is accredited by the National Association of Testing Authorities, Australia to carry out the overhauling or repair in accordance with the accreditation.

Maximum penalty—

(a) for an individual—60 penalty units, or

(b) for a body corporate—300 penalty units.

189 Serious injury or illness—the WHS (MPS) Act, s 14

For the WHS (MPS) Act, section 14(b), each of the following is prescribed as a serious injury or illness of a person—

- (a) an injury or illness requiring the person to have immediate treatment as an in-patient in a hospital,
- (b) an injury or illness requiring the person to have immediate treatment for one or more of the following—
 - (i) the amputation of a part of the person's body,
 - (ii) a serious head injury,
 - (iii) a serious eye injury,
 - (iv) a serious burn,
 - (v) the separation of the person's skin from an underlying tissue, such as degloving or scalping,
 - (vi) a spinal injury,
 - (vii) the loss of a bodily function,
 - (viii) serious lacerations,
- (c) an injury or illness requiring the person to have medical treatment within 48 hours of exposure to a substance.
- (d) a fracture to a person's bone other than a bone in the person's hand or foot, including a finger or toe,
- (e) a condition prescribed as a serious illness for the purposes of the WHS Act, section 36.

190 Dangerous incidents—the WHS (MPS) Act, s 14

- (1) For the WHS (MPS) Act, section 14(c), an incident in relation to a workplace that exposes a worker or other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to one or more of following is a dangerous incident—
 - (a) an uncontrolled escape, spillage or leakage of a substance,
 - (b) an uncontrolled implosion, explosion or fire,
 - (c) an uncontrolled escape of gas or steam,
 - (d) an uncontrolled escape of a pressurised substance,
 - (e) the fall or release from a height of plant, a substance or a thing,
 - (f) the collapse, overturning, failure or malfunction of, or damage to, plant that is required to be authorised within the meaning of the WHS Act, Part 4,

- (g) the collapse or partial collapse of a structure,
- (h) the collapse or failure of an excavation or of shoring supporting an excavation,
- (i) the inrush of water, mud or gas in workings at an underground excavation or tunnel,
- (j) the unintended interruption of the main system of ventilation at an underground excavation or tunnel,
- (k) the loss of control of heavy earthmoving machinery, including the failure of braking or steering,
- (l) the unintended activation, movement or failure to stop of vehicles or machinery,
- (m) a collision involving a vehicle or mobile plant,
- (n) damage to, or failure of, a part of a winding system or a shaft or shaft equipment,
- (o) damage to plant or structures,
- (p) a failure of ground, or of slope stability control measures,
- (q) rock falls, instability of cliffs, steep slopes or natural dams, occurrence of sinkholes, development of surface cracking or deformations or release of gas at the surface, due to subsidence,
- (r) a vehicle or plant making contact with an energised source having a voltage greater than 1,200V, other than testing equipment applied to energised equipment in accordance with the WHS Regulations,
- (s) spontaneous combustion at a coal mine.
- (2) The following are also dangerous incidents—
 - (a) a fire in the underground parts of a mine, including where the fire is in the form of an oxidation that releases heat and light,
 - (b) an electric shock to a person, other than a shock from an extra low voltage source,
 - (c) an initial indication that an underground part of a coal mine is subject to windblast, outbursts or spontaneous combustion,
 - (d) the unintended overturning of a vehicle or of plant weighing more than 1,000kg,
 - (e) ejection of rock from blasting that falls outside the blast exclusion zone, being the area from which persons are excluded during the blasting,
 - (f) an initial indication that there may be a fault in the cementing of a casing string forming part of the cement casing of a well,
 - (g) a gas outburst at an underground coal mine,
 - (h) a coal burst or rock burst at an underground mine.

191 Prohibition notices—the WHS (MPS) Act, s 50(2)

For the WHS (MPS) Act, section 50(2)(c), the following provisions of this Regulation are prescribed—

- (a) section 14,
- (b) section 18,
- (c) section 35 other than section 35(3).

192 Corresponding WHS laws—the WHS Act, s 4

For the WHS Act, section 4, definition of *corresponding WHS law*, the following are prescribed as corresponding WHS laws—

- (a) the *Coal Mining Safety and Health Act 1999* of Queensland and the *Mining and Quarrying Safety and Health Act 1999* of Queensland,
- (b) the Occupational Health and Safety Act 2004 of Victoria,
- (c) the *Mines Safety and Inspection Act 1994* of Western Australia and the *Work Health and Safety Act 2020* of Western Australia,
- (d) the Petroleum and Gas (Production and Safety) Act 2004 of Queensland,
- (e) the Petroleum and Geothermal Energy Resources Act 1967 of Western Australia.

193 Fees—the WHS Act, s 276(3)(g)

- (1) In addition to a fee payable to the regulator under this Regulation, the regulator may determine a fee for a service provided by the regulator.
- (2) The regulator may reduce, or waive payment of, a fee payable to the regulator under this Regulation.

194 Savings

An act, matter or thing that, immediately before the repeal of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*, had effect under that Regulation continues to have effect under this Regulation.

Schedule 1 Principal hazard management plans

section 28

Part 1 Mines

1 Ground or strata failure

- (1) The following matters must be considered in developing the control measures to manage the risks of ground or strata failure—
 - (a) the local geological structure,

- (b) the local hydrogeological environment, including surface and ground water,
- (c) the means by which water may enter the mine, the procedures for removing water from the mine and the effect the procedures have on rock stability over time,
- (d) the geotechnical characteristics of the rocks and soil, including the effects of time, oxidation and water on rock support and stability,
- (e) the timing of installation of ground and strata support for the mine, taking into account the geotechnical conditions and behaviour of the rocks and soil,
- (f) the collection, analysis and interpretation of relevant geotechnical data, including the monitoring of openings and excavations,
- (g) natural or induced seismic activity,
- (h) the equipment and procedures used to record, interpret and analyse data from the monitoring of seismic activity,
- (i) the location and loadings from existing or proposed mine infrastructure such as waste dumps, tailings storage, haul roads and mine facilities,
- (j) previously excavated or abandoned workings,
- (k) the proposed and existing mining operations, including the nature and number of excavations, the number and size of permanent or temporary voids or openings, backfilling of mined areas and stopes, abutments, periodic weighting and windblast or airblast,
- (l) the proposed blasting activities, including the design, control and monitoring of each blast,
- (m) the design, layout, operation, construction and maintenance of dump, stockpile or emplacement area at the mine, including open cut dumps or stockpiles,
- (n) the filling requirements for mined areas and the material to be used as fill,
- (o) the stability of slopes,
- (p) the size and geometry of the mine's openings,
- (q) the use of appropriate equipment and procedures for scaling,
- (r) the design, installation and quality of rock support and reinforcement,
- (s) the need to monitor areas at or around the mine where control measures are in place for the principal hazard of ground or strata failure,
- (t) for an underground mine—the stope and pillar dimensions,
- (u) for an underground coal mine—the strata support requirements for the mine and the pillar strength and stability required to provide that support and the probability of instability of a pillar taking into account the pillar's role,
- (v) for highwall mining, pillar and highwall support, the interaction of persons and plant,

- (w) for an underground coal mine—the proposed widening of an existing underground roadway to a width greater than 5.5m,
- (x) the risk of rock, coal or related pressure bursts.
- (2) In determining the strata support requirements under subsection (1)(u), the maximum width between pillars and the minimum possible dimension of a pillar for each part of the mine must be included in the principal hazard management plan along with the calculations used to determine the matters.
- (3) A principal hazard management plan for an underground coal mine that addresses the proposed widening of an existing underground roadway to a width greater than 5.5m must include the following—
 - (a) engineering drawings of the proposal endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine,
 - (b) a geotechnical report on the proposal,
 - (c) details of relevant strata control for the proposal.
- (4) A principal hazard management plan that addresses ground or strata failure must include a statement that makes it clear—
 - (a) requirements in the plan for ground and strata support are a minimum requirement only, and
 - (b) additional strata support, including more frequent rock bolt installations, is always permitted.

2 Inundation or inrush of substances

- (1) The following matters must be considered in developing the control measures to manage the risks of inundation or inrush of a substance—
 - (a) the potential sources of inundation, including extreme weather, overflow or failure of levees and dam structures, failure or blocking of flow channels, including regular, overflow or emergency flow channels,
 - (b) the location, design and construction of dams, lagoons, tailings dams, emplacement areas and other bodies of water or material that could enter the mine, including entry because of extreme weather conditions such as a cyclone,
 - (c) the potential sources of inrush including current, disused or abandoned mine workings, surface water bodies, backfill operations, highly permeable aquifers, bore-holes, faults or other geological weaknesses,
 - (d) the location of other workings and the strength of the ground, including the geotechnical characteristics of the rock, between the workings,
 - (e) the potential for the accumulation of water, gas or other substances or materials that could liquefy or flow into other workings or locations,
 - (f) the magnitude of all potential sources and maximum flow rates,

- (g) the worst possible health and safety consequences of each potential source, including the accuracy of plans of other workings, variation in rock properties and geological weaknesses.
- (h) survey plans of the mine including historical survey plans.
- (2) A principal hazard management plan that addresses inundation or inrush of a substance must include details of special systems of working developed for inrush control zones established under this Regulation, section 48 and the assumptions underpinning the development of the system.

3 Mine shafts and winding systems

The following matters must be considered in developing the control measures to manage the risks associated with mine shafts and winding systems—

- (a) the potential for instability and loss of integrity of the shaft,
- (b) the potential for fires in underground operations, the shaft or winder areas,
- (c) the potential for an unintended or uncontrolled movement of conveyances within the shaft,
- (d) the potential for a conveyance to fall down the shaft,
- (e) the potential for failure of, or damage to, equipment and control measures, including the following—
 - (i) control measures that are intended to prevent a shaft conveyance from overwind, excessive acceleration or deceleration, unsafe or excessive speeds or uncontrolled movement,
 - (ii) control measures that are intended to detect the presence of slack rope, drum slip conditions or unsafe tail rope conditions,
 - (iii) braking systems and systems performing an equivalent function that are intended to ensure the winder remains under control,
 - (iv) warning systems that are intended to alert persons at the mine to an emergency in a winding system,
 - (v) communication systems,
- (f) the potential for injury to a person from—
 - (i) material being carried in a conveyance with the person, or
 - (ii) material falling from a conveyance, or
 - (iii) the person falling from a conveyance, or
 - (iv) a part of the person extending out of the conveyance,
- (g) provision for the emergency exit of persons from a conveyance.

4 Gas outbursts

The following matters must be considered in developing the control measures to manage the risks of gas outbursts—

- (a) the potential for gas to be released into the working area of a mine from both natural and introduced sources in a concentration that could lead to fire, explosion or asphyxiation,
- (b) the potential for the accumulation of gas in working areas and abandoned areas of the mine,
- (c) the nature of the gas that could be released,
- (d) the gas levels in the material being mined,
- (e) gas seam pressures,
- (f) for a coal mine—Australian Standard AS 3980:2016, Determination of gas content of coal and carbonaceous material—Direct desorption method.

5 Spontaneous combustion

The following matters must be considered in developing the control measures to manage the risks of spontaneous combustion—

- (a) the potential for spontaneous combustion to occur in the material being mined, including by—
 - (i) evaluating the history of the mine in relation to spontaneous combustion, and
 - (ii) evaluating an adjacent or previous mining operations in the same seam, and
 - (iii) conducting scientific testing,
- (b) mine ventilation practices,
- (c) the design of the mine,
- (d) the impact of gas generated by spontaneous combustion on mine environmental conditions.

6 Subsidence

The following matters must be considered in developing the control measures to manage the risks of subsidence—

- (a) the characteristics of all relevant surface and subsurface features,
- (b) the characteristics of all relevant geological, hydrogeological, hydrological, geotechnical, topographic and climatic conditions, including conditions that may cause elevated or abnormal subsidence or the formation of sinkholes,
- (c) the characteristics of a previously excavated or abandoned workings that may interact with a proposed or existing mine workings,
- (d) the existence, distribution, geometry and stability of significant voids, standing pillars or remnants within an old pillar workings that may interact with a proposed or existing mine workings,

- (e) the predicted and actual nature, magnitude, distribution, timing and duration of subsidence,
- (f) the rate, method, layout, schedule and sequence of mining operations.

Part 2 Mines and petroleum sites

7 Roads or other vehicle operating areas

The following matters must be considered in developing the control measures to manage the risks of roads or other vehicle operating areas—

- (a) mobile plant characteristics, including stopping distances, manoeuvrability, operating speeds, driver position, driver line of sight and remote control mobile plant,
- (b) the effect on road conditions of expected environmental conditions during operating periods, including time of day, weather, temperature and visibility,
- (c) the impact of road design and characteristics, including grade, camber, surface, radius of curves and intersections,
- (d) the impact of mine design, including banks and steep drops adjacent to vehicle operating areas,
- (e) the volume and speed of traffic and the potential for interactions between mobile plant with different operating characteristics, including heavy and light vehicles,
- (f) the potential for interactions between mobile plant and pedestrians, including consideration of park up areas and driver access,
- (g) the potential for interaction between mobile plant and public traffic,
- (h) the potential for interaction between mobile plant and fixed structures, including overhead and underground power lines, tunnel walls and roofs.

8 Air quality or dust or other airborne contaminants

The following matters must be considered in developing the control measures to manage the risks of air quality or dust or other airborne contaminants—

- (a) the types of dust and other chemical and biological contaminants likely to be in the air from both natural sources, including naturally occurring asbestos, and introduced sources,
- (b) the levels of oxygen, dust and other contaminants in the natural or supplied air of a mine,
- (c) the temperature and humidity of the air,
- (d) the length of exposure, having regard to extended shifts and reduced recovery periods.

9 Fire or explosion

- (1) The following matters must be considered in developing the control measures to manage the risks of fire or explosion—
 - (a) the potential sources of flammable, combustible and explosive substances and materials, both natural and introduced, including gas, dust, ores, fuels, solvents and timber,

- (b) the potential sources of ignition, fire or explosion, including plant, electricity, static electricity, spontaneous combustion, lightning, light metal alloys, hot work and other work practices,
- (c) the potential for propagation of fire or explosion to other parts of the mine or petroleum site,
- (d) the potential sources of flammable material with a flash point of less than 61°C, including materials on the top of a shaft, outlet or well at the mine or petroleum site,
- (e) arrangements for the management and control of the transport and storage of combustible liquids,
- (f) arrangements for the prevention of fires, including the types and location of systems for the early detection and suppression of fires,
- (g) the equipment for fighting fire at the mine or petroleum site,
- (h) for an underground mine—the arrangements for the management and control of volatile or hazardous materials.
- (2) A principal hazard management plan that addresses fire or explosion must include details of procedures to be used for carrying out hot work at the mine or petroleum site.

Schedule 2 Principal control plans

section 30

1 Health control plan

A health control plan for a mine or petroleum site must address the following—

- (a) the control measures for eliminating or minimising the exposure of workers to health hazards associated with mining operations or petroleum operations at the mine or petroleum site, including the following hazards—
 - (i) dust,
 - (ii) noise,
 - (iii) hazardous substances,
 - (iv) contaminants, airborne or otherwise,
 - (v) ultraviolet and ionising radiation,
 - (vi) vibration,
- (b) the control measures to ensure persons working at the mine or petroleum site are fit to carry out the work without causing a risk to their own or others' safety, including control measures for minimising the risk that a worker will be impaired by—
 - (i) fatigue, or
 - (ii) extremes of temperature, or

- (iii) moisture content of air, or
- (iv) intoxication by alcohol or drugs,
- (c) the monitoring of the existence of the health hazards associated with mining operations or petroleum operations at the mine or petroleum site and the exposure of workers to the hazards,
- (d) the arrangements for monitoring the health of workers at the mine or petroleum site required under the WHS Regulations, Part 4,
- (e) the management of health records, including first aid records, of workers at the mine or petroleum site.

2 Mechanical engineering control plan

- (1) The operator of a mine or petroleum site must, in preparing a mechanical engineering control plan, take the following into account in determining the means by which the operator will manage the risks to health and safety from the mechanical aspects of plant and structures at the mine or petroleum site—
 - (a) the overall life cycle of plant and structures at the mine or petroleum site,
 - (b) the reliability of safeguards used at the mine or petroleum site to protect persons from the hazards posed by the plant or structure during each phase of its life cycle,
 - (c) the mechanical engineering practices to be employed at the mine or petroleum site,
 - (d) the competency required by workers to safely work on plant or structures at the mine or petroleum site.
- (2) A mechanical engineering control plan must set out the control measures for the following risks to health and safety associated with the mechanical aspects of plant and structures at the mine or petroleum site—
 - (a) injury to persons caused by the operation of plant or by working on plant or structures,
 - (b) the unintended initiation of explosions,
 - (c) the unintended operation of plant,
 - (d) the unintended release of mechanical energy,
 - (e) the catastrophic failure of plant or structures,
 - (f) uncontrolled fires being initiated or fuelled by plant,
 - (g) the exposure of persons to toxic or harmful substances.
- (3) The following matters must be taken into account when developing a control measure referred to in subsection (2)—
 - (a) the acquisition and operation of plant or a structure to ensure it is fit for purpose,
 - (b) the installation, commissioning, operation, maintenance, repair and alteration of plant or

structures,

- (c) the introduction of plant or structures into the mine or petroleum site,
- (d) safe work systems for persons dealing with plant or structures including the isolation, dissipation and control of all mechanical energy sources from plant or structures,
- (e) the inspection and testing of plant or structures including testing of braking systems, steering systems, warning systems and other safety critical functions or components,
- (f) the identification, assessment, management and rectification of defects that affect the safety of plant or structures,
- (g) the risks associated with diesel engines, including pollutants,
- (h) for underground coal mines—the arrangements for meeting and maintaining requirements for registration under this Regulation, section 187 and the WHS Regulations, Part 5.3 in relation to plant with a diesel engine,
- (i) the risks associated with plant, including face machines, winding systems, mobile plant, drilling plant and dredges,
- (j) the risks associated with pressurised fluids,
- (k) the risks associated with the transfer and storage of combustible liquids and other hazardous or volatile material associated with the use of plant or structures,
- (l) the prevention, detection and suppression of fires on mobile plant and conveyors,
- (m) the provision of operator protective devices on mobile plant including protective canopies on continuous miners when controlled by an on-board operator,
- (n) the maintenance of explosion-protected plant in an explosion-protected state,
- (o) undertaking hot work,
- (p) the use of fire-resistant hydraulic fluids and materials in high risk underground applications.
- (4) The following matters must be taken into account when developing a control measure referred to in subsection (2) for a belt conveyor—
 - (a) the risks associated with belt conveyors,
 - (b) the protection of persons near or travelling under a belt conveyor against the risk of being struck by falling objects,
 - (c) for a belt conveyor at an underground coal mine or in a reclaim tunnel—Australian Standard AS 4606-2012, *Grade S fire resistant and antistatic requirements for conveyor belting and conveyor accessories*,
 - (d) risks arising from the starting of belt conveyors,
 - (e) the interaction of persons and belt conveyors including provision for the safe crossing of belt conveyors by persons.

3 Electrical engineering control plan

- (1) The operator of a mine or petroleum site must, in preparing an electrical engineering control plan, take the following into account in determining the means by which the operator will manage the risks to health and safety from electricity at the mine or petroleum site—
 - (a) the overall life cycle of the electrical aspects of plant and electrical installations at the mine or petroleum site,
 - (b) the reliability of electrical safeguards used at the mine or petroleum site to protect persons from electrical or other hazards.
 - (c) the electrical engineering and electrical work practices to be employed at the mine or petroleum site,
 - (d) the competency required by workers to safely work on electrical plant or electrical installations at the mine or petroleum site.
- (2) An electrical engineering control plan must set out the control measures for the following risks to health and safety associated with electricity at the mine or petroleum site taking into account the matters set out in subsection (3)—
 - (a) injury to persons caused by direct or indirect contact with electricity,
 - (b) injury to persons caused by working on electrical plant or electrical installations,
 - (c) the unintended initiation of gas or dust explosions,
 - (d) the unintended operation of plant,
 - (e) the occurrence of uncontrolled fires.
- (3) The following matters must be taken into account when developing a control measure referred to in subsection (2)—
 - (a) the location of the electrical plant and electrical installations at the mine or petroleum site,
 - (b) the rating and design of plant for the prospective electrical fault level, electrical load, operating frequency, operating voltages and arc fault control,
 - (c) the design and operation of electrical plant that contains flammable liquid,
 - (d) the carrying out of the selection, installation and use of electrical cables and electrical cable accessories at the mine or petroleum site,
 - (e) the control of static electricity at the mine or petroleum site, including preventing the ignition of flammable gas,
 - (f) the impact of lightning on the mine or petroleum site, especially on an underground mine, including the effect on electrical systems,
 - (g) the need for reliable circuit interruption for all points in the electrical distribution system at the mine or petroleum site when faults occur, taking into account the operating time and tripping current of circuit protection devices,

- (h) the type of earthing system used, including levels of earth fault limitation,
- (i) the potential for persons to contact electricity indirectly,
- (j) the prospective touch, step and transfer voltage,
- (k) variations in operating conditions,
- (l) preventing persons inadvertently contacting energised parts of electrical plant and electrical installations.
- (m) the consultation, co-operation and co-ordination of activities between—
 - (i) persons, including the operator, conducting businesses or undertakings at the mine or petroleum site, and
 - (ii) persons conducting businesses or undertakings installing, maintaining or carrying out work on an electricity supply authority's infrastructure,
- (n) the procedures for the following—
 - (i) the use of electrical welding plant,
 - (ii) the use of electrical test instruments,
 - (iii) work near overhead power lines and cables,
 - (iv) the treatment of electric shocks and electric burns,
 - (v) accessing and working on high voltage electrical installations,
- (o) signage and notices in relation to the risks arising in relation to particular electrical plant and electrical installations such as electrical switchgear,
- (p) the security and maintenance of the electrical control system software and control circuits at the mine or petroleum site,
- (q) the use of lasers and fibre optic equipment at the mine or petroleum site,
- (r) the construction, installation and maintenance of battery powered vehicles and battery charging stations at the mine or petroleum site,
- (s) the supply of electricity in hazardous atmospheres and, for underground coal mines, in hazardous zones,
- (t) the use of electrical plant in hazardous atmospheres and, for underground coal mines, in hazardous zones,
- (u) safe work systems for persons dealing with electrical plant and electrical installations including the isolation, dissipation and control of all electrical energy sources from the electrical plant or electrical installation,
- (v) the use of switchgear and electrical protection devices that can automatically detect an electrical fault in a circuit and disconnect the supply of power to the circuit.

4 Explosives control plan

- (1) An explosives control plan must set out the control measures for risks to health and safety associated with explosives at the mine or petroleum site taking into account—
 - (a) the potential for unintended or uncontrolled detonation of explosives,
 - (b) the characteristics of relevant explosives and the purposes for which they may be used,
 - (c) the characteristics of the places in which the explosives may be used,
 - (d) the full set of phases for the use of relevant explosives such as the charging and firing phases,
 - (e) the potential for explosives to deteriorate,
 - (f) the potential for the theft or misuse of explosives,
 - (g) the potential for the ejection of fly rock or other material as a result of the detonation of an explosive.
- (2) An explosives control plan must also set out the following—
 - (a) the procedures for inspecting, reporting, isolating and disposing of deteriorated or damaged explosives,
 - (b) the procedures for finding, recovering and disposal of explosives that misfire,
 - (c) the inspection, testing, reporting and maintenance procedures in relation to the equipment used at the mine or petroleum site for manufacturing, storing, transporting and delivering explosives,
 - (d) the procedures and equipment used in storing and transporting explosives at the mine or petroleum site,
 - (e) the procedures used for the accounting of explosives at the mine or petroleum site,
 - (f) the arrangements for the keeping of a register identifying persons who are licensed under the *Explosives Act 2003* to transport, use, store or handle explosives at the mine or petroleum site,
 - (g) the procedures for ensuring a person transporting, using, storing or handling explosives at the mine or petroleum site has a licence necessary under the *Explosives Act 2003*,
 - (h) the procedures in relation to consultation and co-operation to ensure the transportation, use, storage or handling of explosives at the mine or petroleum site is conducted safely and in accordance with conditions attached to the licence under which the transportation, use, storage or handling takes place.
- (3) In this section—

explosives includes explosive precursors.

5 Well integrity control plan

- (1) A well integrity control plan must set out the control measures for risks to health and safety associated with a well at the petroleum site taking into account the following—
 - (a) the overall life cycle of a well, including—
 - (i) the design, construction, suspension and decommissioning of the well, and
 - (ii) how risks to the health and safety of persons from the well will be managed at all stages of the life cycle of the well,
 - (b) the maintenance of the casing and cementing in a well,
 - (c) the risks associated with pressure in a well, including the effect of pressure on casing, cementing, well heads, equipment and fracture stimulation,
 - (d) the need to install in a well subsurface safety devices, being devices designed to automatically cut off the flow of petroleum or water from a well, if damaged equipment would otherwise let the water or petroleum escape,
 - (e) the risks associated with the use of drilling fluid,
 - (f) the risks associated with fracture stimulation, including by the use of hazardous chemicals or explosives,
 - (g) the risks associated with a well that is suspended or decommissioned.
- (2) A well integrity control plan must also set out the following—
 - (a) the program for regularly inspecting and monitoring each well,
 - (b) the program of maintenance for each well,
 - (c) the arrangements for security at the site of each well,
 - (d) how the risks to the health and safety of persons at future coal mines from decommissioned wells will be managed.

Schedule 3 High risk activities

section 35

Part 1 All mines and petroleum sites

1 Application of Part

This Part applies to all mines and petroleum sites.

2 Electrical work on energised electrical equipment

- (1) Electrical work on energised electrical equipment is identified as a high risk activity, but not if the electrical work is testing whether or not the equipment is energised.
- (2) The waiting period for the activity is 7 days.

(3) No additional information or documents are required to be provided.

3 Winding systems

- (1) The following activities are identified as an high risk activity—
 - (a) the commissioning of a winding system in accordance with a design registered under this Regulation, section 187,
 - (b) the recommissioning of a winding system in accordance with an altered design registered under the WHS Regulations, clause 244.
- (2) The waiting period for the activity is 1 month.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) the name of the commissioning verifier for the commissioning of the winding system, and
 - (b) a written statement signed by a commissioning verifier that states the commissioning plan for the winding system is appropriate.
- (4) In this section—

commissioning plan means a plan—

- (a) prepared by the person responsible for the commissioning or recommissioning of the winding system, and
- (b) that describes the process for commissioning or decommissioning the winding system.

commissioning verifier means a person who—

- (a) is a competent person, and
- (b) is not involved in the commissioning or recommissioning of the winding system.

Part 2 Underground mines

4 Application of Part

This Part applies to underground mines only.

5 Development of new mine entry

- (1) Development of a new mine entry, including by sinking a shaft or drift or raise boring, is identified as a high risk activity.
- (2) The waiting period for the activity is 3 months.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of the method of working,
 - (b) details of the plant to be used.
- (4) This section does not apply to an opal mine.

(5) In this section—

mine entry does not include a borehole of 500mm or less in diameter drilled to support a mining activity, such as for removing water from a mine.

6 Connected voltage becoming greater than 12,000 volts

- (1) Connecting electricity to the mine so that the highest voltage underground is greater than 12,000 volts is identified as a high risk activity.
- (2) The waiting period for the activity is 12 months.
- (3) No additional information or documents are required to be provided.

7 Raise boring

- (1) Raise boring is identified as a high risk activity if the raise is greater than 3m in diameter and more than 100m long.
- (2) The waiting period for the activity is 3 months.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of the safety systems and method of working,
 - (b) details of the plant and equipment to be used.

Part 3 Underground coal mines

8 Application of Part

This Part applies to underground coal mines only.

9 Working in inrush control zone

- (1) Working in an inrush control zone is identified as a high risk activity.
- (2) The waiting period for the activity is—
 - (a) if the potential source of inrush can be inspected—7 days, or
 - (b) if the potential source of inrush cannot be inspected—3 months.
- (3) The information and document that must be provided in relation to each activity is an engineering drawing of the activity endorsed by the person nominated to exercise the statutory function of mining engineering manager at the mine.

10 Roadway or drift without intersection for 250m

- (1) Single entry development of a roadway or drift for more than 250m without an intersection is identified as a high risk activity.
- (2) The waiting period for the activity is 1 month.
- (3) The information and documents that must be provided in relation to the activity are as follows—

- (a) an engineering drawing of the development, endorsed by the person nominated to exercise the statutory function of mining engineering manager at the mine,
- (b) details of the explosion suppression measures to be taken,
- (c) details of the escape strategy to be implemented,
- (d) details of ventilation arrangements for the activity.

11 Shotfiring

- (1) Shotfiring, if shotfiring has not been undertaken within a year before the intended time of shotfiring, is identified as a high risk activity.
- (2) The waiting period for the activity is 7 days.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of the competency of each person carrying out the activity,
 - (b) if a person carrying out the activity has undertaken the activity at the mine before, details of training undertaken by the person since that time,
 - (c) details of ventilation arrangements for the activity.

12 Sealing

- (1) Sealing, other than emergency sealing, is identified as a high risk activity, but only if notice has not been given as part of a notice for secondary extraction.
- (2) The waiting period for the activity is 1 month.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of the proposed location of the seals and the areas of the mine to be sealed,
 - (b) details of the proposed sealing procedure and type of seals,
 - (c) if there is evidence of an ignition source at an area to be sealed, details of the evidence of the source,
 - (d) predictions of the rates at which methane and other gases will accumulate in the sealed areas.
 - (e) details of the gas monitoring procedures to be carried out during and after the sealing.

13 Conduct of hot work in a hazardous zone

- (1) The conduct of hot work in a hazardous zone is identified as a high risk activity.
- (2) The waiting period for the activity is 7 days.
- (3) No additional information or documents are required to be provided.

14 Driving underground roadway wider than 5.5m

- (1) Driving an underground roadway with a width greater than 5.5m is identified as a high risk activity.
- (2) The waiting period for the activity is 7 days.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) engineering drawings of the activity endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine,
 - (b) a geotechnical report on the activity,
 - (c) details of relevant strata control for the activity.

15 Use of high voltage plant and cables in a hazardous zone

- (1) Using electrical plant or cables in a hazardous zone is identified as a high risk activity if the plant or cable—
 - (a) is associated with longwall mining and has a voltage greater than 4,000 volts, or
 - (b) has a voltage greater than 1,200 volts.
- (2) The waiting period for the activity is 12 months.
- (3) No additional information or documents are required to be provided.

16 Formation of non-conforming pillars

- (1) The formation of a pillar other than a conforming pillar is identified as a high risk activity.
- (2) The waiting period for the activity is 7 days.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) engineering drawings of the activity endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine,
 - (b) a geotechnical report on the activity.
- (4) In this section—

conforming pillar means a pillar, the shortest horizontal dimension of which is no less than—

- (a) one tenth of the thickness of the cover to the surface, or
- (b) 10m, if the thickness of the cover is less than 100m.

17 Secondary extraction

- (1) Secondary extraction is identified as a high risk activity.
- (2) The waiting period for the activity is 3 months.

- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of the authoritative sources used in determining that the proposed method of work can be done safely,
 - (b) engineering plans showing the method and sequence of extraction, endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine.
 - (c) information about the land above or near the proposed activity including land use and details of who owns or occupies land that may be affected by subsidence,
 - (d) for a pillar extraction, details of the procedures for the recovery of buried and immobile mining plant in or around a goaf,
 - (e) details of how the risks to the health and safety of workers and other persons from subsidence caused by the activity will be managed.

18 Shallow depth of cover mining

- (1) Mining operations in locations where the depth of cover is less than 50m is identified as a high risk activity.
- (2) The waiting period for the activity is 3 months.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) an engineering drawing of the activity, endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine,
 - (b) survey plans certified by an individual nominated to exercise the statutory function of mining surveyor at the mine,
 - (c) a geotechnical report on the activity,
 - (d) information on how the risks to the health and safety of workers and other persons from the potential formation of sinkholes will be managed.

19 Mining in outburst control zones

- (1) Carrying out mining operations in an outburst control zone is identified as a high risk activity.
- (2) The waiting period for the activity is 3 months.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) an analysis of how the risk of gas outbursts will be managed in undertaking the activity,
 - (b) an engineering drawing of the activity, endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine,
 - (c) survey plans certified by an individual nominated to exercise the statutory function of mining surveyor at the mine,

- (d) the parts of the mine's emergency plan relevant to outbursts.
- (4) In this section—

gas means methane, carbon dioxide or a combination of methane and carbon dioxide.

outburst control zone means an area of a mine where—

- (a) if Australian Standard AS 3980:2016, Determination of gas content of coal and carbonaceous material—Direct desorption method is used—the amounts in subparagraphs (i) and (ii), when added together, is more than 9m³ per tonne of coal—
 - (i) the total amount of gas, measured in cubic metres per tonne of coal,
 - (ii) the percentage of the total amount of gas that is carbon dioxide, multiplied by 4m³ per tonne of coal, or
- (b) if the GeoGas Desorption Rate Index (DRI) method is used—the desorption rate index of gas is more than 900.

20 First applications of explosion inhibitors

- (1) The following are identified as high risk activities—
 - (a) the first application in a part of a mine of a coal dust explosion inhibitor used in combination with dry stone dust,
 - (b) the first application on a mine roadway of a coal dust explosion inhibitor other than dry stone dust.
- (2) The waiting period for the activity is 3 months.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) the results of a physical test showing the inhibitor's effectiveness at suppressing a coal dust explosion, where the physical test—
 - (i) is not a laboratory test, and
 - (ii) is carried out by a nationally accredited testing laboratory, being an individual or corporation that has accreditation by the National Association of Testing Authorities, Australia, or an equivalent body, to perform the test,
 - (b) the standards or test methods used,
 - (c) details of other control measures used to restrict propagation of a coal dust explosion,
 - (d) the method of sampling and testing of the treated dust to determine the effectiveness of the inhibitor and the need for further treatments.

21 Use of explosives designed for use in coal mines

- (1) The use of a coal mine explosive is identified as a high risk activity.
- (2) The waiting period for the activity is—

- (a) 7 days, or
- (b) if the regulator gives the mine operator written notice that the explosive has not been used before in the State—1 month.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of the type of explosive to be used,
 - (b) evidence that the explosive is suitable for use at an underground coal mine including the testing regimes used to determine that suitability and the results of the tests,
 - (c) details of the way in which the explosive is to be used,
 - (d) details of the coal dust explosion suppression methods to be used, including stone dust or other explosion inhibitors and explosion barriers,
 - (e) details of the gas regime at the mine,
 - (f) if the explosive is to be used in a way that is inconsistent with the conditions for which use of the explosive is suitable—analysis of an alternative method that could be used to achieve the task.
- (4) In this section—

coal mine explosive means an explosive or detonator manufactured and supplied for use at an underground coal mine.

22 Use of an explosive not designed for use in coal mines

- (1) The use of an explosive other than a coal mine explosive, within the meaning of this Schedule, section 21, is identified as a high risk activity.
- (2) The waiting period for the activity is 1 month.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of the type of explosive to be used,
 - (b) details of the way in which the explosive is to be used,
 - (c) details of the coal dust explosion suppression methods to be used, including stone dust or other explosion inhibitors and explosion barriers,
 - (d) details of the gas regime at the mine,
 - (e) analysis of an alternative method that could be used to achieve the task.

23 First use of a vehicle with a fire-protected diesel engine

- (1) Using a vehicle with a diesel internal combustion engine at a mine is identified as a high risk activity, but only if the engine is fire-protected and has not been used underground at the mine before.
- (2) Subsection (1) does not apply to a diesel internal combustion engine that is explosion-protected.

- (3) The waiting period for the activity is 3 months.
- (4) No additional information or documents are required to be provided.

24 First use of an explosion barrier other than a water barrier or bagged stone dust

- (1) Using an explosion barrier at a mine other than a water barrier or a explosion barrier made of bagged stone dust is identified as a high risk activity, but only if the type of explosion barrier has not been used at the mine before.
- (2) The waiting period for the activity is 3 months.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) the results of a physical test showing the explosion barrier's effectiveness at suppressing a coal dust explosion, where the physical test—
 - (i) is not a laboratory test, and
 - (ii) is carried out by a nationally accredited testing laboratory, being an individual or corporation that has accreditation by the National Association of Testing Authorities, Australia, or an equivalent body, to perform the test,
 - (b) the standards or test methods used for the test,
 - (c) details of how other explosion suppression methods interact with the explosion barrier,
 - (d) the installation and maintenance standards for the explosion barrier.

25 Booster fans

- (1) The following activities are identified as an high risk activity—
 - (a) the commissioning of a booster fan in accordance with a design registered under this Regulation, section 187,
 - (b) the recommissioning of a booster fan in accordance with an altered design registered under the WHS Regulations, clause 244.
- (2) The waiting period for the activity is 1 month.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) the name of the commissioning verifier for the commissioning of the booster fan, and
 - (b) a written statement signed by a commissioning verifier that states the commissioning plan for the booster fan is appropriate.
- (4) In this section—

commissioning plan means a plan—

(a) prepared by the person responsible for the commissioning or recommissioning of the booster fan, and

(b) that describes the process for commissioning or decommissioning the booster fan.

commissioning verifier means a person who-

- (a) is a competent person, and
- (b) is not involved in the commissioning or recommissioning of the booster fan.

Part 4 Coal mines other than underground coal mines

26 Application of Part

This Part applies to coal mines only, but not underground coal mines.

27 Highwall mining, entry of persons

- (1) The entry of a person into a mining excavation where mining operations, which would be classified as highwall mining if the person were not there, is taking place is identified as a high risk activity.
- (2) The waiting period for the activity is 7 days.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of the competency of the person appointed to control the mining operation while the person is inside the mining excavation,
 - (b) details of the competency of the person entering the mining excavation,
 - (c) details of self-rescue equipment to be carried by the person entering the mining excavation,
 - (d) details of the time period for which the person will be in the mining excavation including the time of first entry of persons in to the excavation to the time of final departure of persons from the excavation,
 - (e) confirmation that the direct supervision of a person within the mining excavation will be undertaken by an individual nominated to exercise the statutory function of deputy at the mine

Part 5 All coal mines

28 Application of Part

This Part applies to coal mines only.

29 Emplacement areas

- (1) The establishment, operation, alteration or decommissioning of an emplacement area is identified as a high risk activity.
- (2) The waiting period for the activity is 3 months.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) an overview of the life cycle of the emplacement area, including the following—

- (i) time frames for each stage of the life cycle,
- (ii) the design and construction of the emplacement area,
- (iii) reject at the emplacement area,
- (iv) the transport of reject to or from the emplacement area,
- (v) the treatment of reject at the emplacement area,
- (vi) inspections of the emplacement area,
- (vii) if relevant, details of the decommissioning of the emplacement area,
- (b) dam break studies,
- (c) details of the ongoing monitoring of the emplacement area,
- (d) engineering reports of the emplacement area showing all existing and proposed emplacement areas, endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine,
- (e) the geotechnical design of the existing and proposed emplacement areas, endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine,
- (f) survey plans of the emplacement area showing all existing and proposed emplacement areas at the mine, endorsed by an individual nominated to exercise the statutory function of mining surveyor at the mine.
- (4) In this section—

alteration means a variation to, or expansion of, an existing emplacement area, including new dam lifts, raises or buttressing or reject reprocessing.

operation includes the extraction or removal of reject from an emplacement area for disposal, co-disposal or further processing.

30 Highwall mining

- (1) Highwall mining is identified as a high risk activity.
- (2) The waiting period for the activity is 1 month.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) an engineering drawing detailing the activity, endorsed by the individual nominated to exercise the statutory function of mining engineering manager at the mine,
 - (b) a plan of the activity certified by an individual nominated to exercise the statutory function of mining surveyor at the mine,
 - (c) information on how the risks to the health and safety of workers and other persons from subsidence caused by the activity will be managed.

31 Barrier mining

- (1) Barrier mining is identified as a high risk activity.
- (2) The waiting period for the activity is 3 months.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) details of how risks from the activity will be managed,
 - (b) survey plans certified by an individual nominated to exercise the statutory function of mining surveyor at the mine.
- (4) In this section—

barrier mining means extraction or drilling activities taking place—

- (a) within 20m of an external boundary of the tenement, or
- (b) within 20m of an adjacent mine, or
- (c) for an underground mine, within 40m of an outcrop of the seam.

Part 6 Petroleum sites

32 Application of Part

This Part applies to petroleum sites only.

33 Construction of well

- (1) Constructing an exploration or production well is identified as a high risk activity.
- (2) The waiting period for the activity is 14 days.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) the type of well to be drilled,
 - (b) the proposed name of the well,
 - (c) the proposed survey of the well,
 - (d) the expected depth of the well,
 - (e) an assessment by the mine operator that indicates that the equipment is fit for purpose,
 - (f) the way in which the well control is to be managed during the activity.
- (4) In this section—

appraisal well means a well drilled after a discovery of petroleum to confirm the size of the hydrocarbon deposit.

construction of a well includes drilling the well, well testing activities and well stimulation activities.

exploration well means a well constructed to explore for petroleum and includes an appraisal well.

production well means a well that produces petroleum.

well control means the method used to maintain control, and minimise the risk, of an event that causes the well to flow or kick.

34 Well workover

- (1) Well workover is identified as a high risk activity.
- (2) The waiting period for the activity is 14 days.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) a description and a diagram of the well before the workover,
 - (b) a description and a diagram of the proposed well following the workover,
 - (c) a brief history of the well.

35 Decommissioning a well

- (1) Decommissioning a well is identified as a high risk activity.
- (2) The waiting period for the activity is 14 days.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) the name of the well,
 - (b) the reason for decommissioning the well,
 - (c) the proposed program for decommissioning the well, including details of how the risks to the health and safety of workers and other persons from the decommissioned well will be managed.

36 Suspending a well

- (1) Suspending a well is identified as a high risk activity.
- (2) The waiting period for the activity is 14 days.
- (3) The information and documents that must be provided in relation to the activity are as follows—
 - (a) the name of the well,
 - (b) the reason for suspending the well,
 - (c) the period of the proposed suspension,
 - (d) the way in which the well is to be suspended including a diagram of the well showing proposed barriers.

Part 7 Certain mines at which tailings storage facilities are located

37 Application of Part

This Part applies to a mine other than the following—

- (a) a coal mine,
- (b) an opal mine,
- (c) a small gemstone mine,
- (d) a mine at which the inundation or inrush of a substance would not reasonably be likely to result in an emergency situation or present a risk to the health and safety of workers and other persons.

38 Tailings storage facilities

- (1) The establishment, operation, alteration or decommissioning of a tailings storage facility is identified as a high risk activity.
- (2) The waiting period for the activity is 3 months.
- (3) The following information and documents must be provided in relation to the activity—
 - (a) an overview of the life cycle of the tailings storage facility, including the following—
 - (i) time frames for each stage of the life cycle,
 - (ii) the design and construction of the tailings storage facility,
 - (iii) tailings at the tailings storage facility,
 - (iv) the transport of tailings to or from the tailings storage facility,
 - (v) the treatment of tailings at the tailings storage facility,
 - (vi) inspections of the tailings storage facility,
 - (vii) details, if relevant, of the decommissioning of the tailings storage facility,
 - (b) dam break studies,
 - (c) details of the ongoing monitoring of the tailings storage facility,
 - (d) engineering reports of the tailings storage facility showing all existing and proposed tailings storage facility areas and the geotechnical design of the areas, endorsed by the individual nominated to exercise the statutory function of—
 - (i) for an underground mine—mining engineering manager at the mine, or
 - (ii) otherwise—quarry manager at the mine,
 - (e) either—
 - (i) survey plans of the tailings storage facility showing all existing and proposed tailings

storage facility areas at the mine, endorsed by an individual nominated to exercise the statutory function of mining surveyor at the mine, or

(ii) if a survey plan is not required for the mine under this Regulation, Part 6—a mine plan under section 122

(4) In this section—

alteration means a variation to, or expansion of, an existing tailings storage facility, including new dam lifts, raises or buttressing or tailings reprocessing.

operation includes the extraction or removal of tailings from a tailings storage facility for disposal, co-disposal or further processing.

tailings means the material left after the processing of extracted minerals.

tailings storage facility means a place at which there are tailings, including a wall or other structure that keeps the tailings, but does not include—

- (a) tailings situated underground, or
- (b) tailings that have been disposed of with overburden in a way that it does not alter the stability of an overburden dump.

Schedule 4 Prohibited items and substances

section 36

1 Internal combustion engines

Internal combustion engines, other than compression ignition engines, must not be used underground.

2 Fuels

- (1) Petrol and other fuels must not be used in a combustion engine at an underground mine unless the petrol or fuel is suitable for use underground.
- (2) Despite subsection (1), the following must not be used in a combustion engine at an underground mine—
 - (a) compressed natural gas,
 - (b) hydrogen,
 - (c) liquid petroleum gas.
- (3) In this section—

combustion engine includes an internal combustion engine and an external combustion engine.

3 Ignition sources

(1) Ignition sources, such as lighters, matches and naked flames, must not be used as follows—

- (a) at an underground coal mine, except when used to carry out—
 - (i) a high risk activity in accordance with this Regulation, or
 - (ii) hot work outside a hazardous zone in accordance with control measures developed under the mechanical engineering control plan,
- (b) by a person at a mine or petroleum site, while the person is—
 - (i) carrying, handling or using an explosive or initiating system, or
 - (ii) within 8m of an explosive or initiating system,
- (c) at a work area at a mine or petroleum site while solvents are being used, or flammable vapours are present, at the work area,
- (d) in a refuge chamber at an underground mine during an emergency, unless it is an oxygen candle.
- (2) This section does not apply to explosive power tools or to an explosive to which this Schedule, section 5 applies.

4 Uncoated or unprotected light metal alloys or aluminium

Uncoated or unprotected light metal alloys or aluminium must not be used in the following places at an underground coal mine—

- (a) in a hazardous zone,
- (b) on the inbye side of the first cut-through outbye from a longwall face,
- (c) in a rotating component or in a component subject to impacts.

5 Explosives

- (1) The following must not be used at a mine or petroleum site except for the purposes of shotfiring—
 - (a) explosives,
 - (b) detonators,
 - (c) explosives testing equipment,
 - (d) exploders.
- (2) Explosives testing equipment or exploders must not be stored at an underground coal mine.
- (3) The batteries of explosives testing equipment or exploders must not be changed while at or near an underground coal mine.
- (4) This section does not apply to explosive power tools.

Schedule 5 Water barriers in underground coal mines

section 68

1 Obligation on mine operator

The mine operator of an underground coal mine must ensure water barriers in use at the mine comply with the requirements of this Schedule.

Maximum penalty—

- (a) for an individual—60 penalty units, or
- (b) for a body corporate—300 penalty units.

2 Water barriers must be distributed or concentrated barriers

Water barriers must be distributed barriers or, if it is not reasonably practicable to use distributed barriers, concentrated barriers.

3 Trough design standards

- (1) The troughs used in water barriers must be manufactured and tested in accordance with European Standard EN 14591-2:2007, Explosion prevention and protection in underground mines—Protective systems—Part 2: Passive water trough barriers.
- (2) Troughs must be of a type designed to be used with rigid support.

4 Distributed barriers

- (1) A distributed barrier must, as far as reasonably practicable, be located so that the most inbye row of a distributed barrier used in relation to a face is placed as follows—
 - (a) within the face zone and as near as possible to the face,
 - (b) no more than 100m outbye from the face,
 - (c) if used in a roadway where a belt conveyor is installed—no more than 30m outbye from the belt conveyor feeder or boot-end,
 - (d) no more than 30m outbye from a trickle duster or auxiliary fan in use in the face zone,
 - (e) if no auxiliary fan is in use, no more than 30m outbye from the last line of cut-throughs.
- (2) The maximum distance in metres from one row of a distributed barrier to the next must be determined by dividing the number of litres of water in the row by the number of square metres of the cross sectional area of the roadway in which the barrier is located.

5 Concentrated barriers

- (1) A concentrated barrier must, as far as reasonably practicable, be located so that the most inbye row of a concentrated barrier used in relation to a face is placed no less than 60m outbye from the face and no more than 200m outbye from the face.
- (2) Each row of a concentrated barrier in a panel must be placed as soon as reasonably practicable as

the panel develops until the barrier is completed.

6 Loadings

A water barrier must be loaded, for each square metre of the cross sectional area of the roadway in which a water barrier is placed, with not less than—

- (a) if the barrier is located in accordance with this Schedule, section 4(1) or 5—200L, or
- (b) otherwise—400L.

7 Installation and other requirements

- (1) Water barriers must consist of troughs filled with water rigidly held in support frames or bearers, and the long side of troughs must form rows at right angles to the roadway direction.
- (2) A support frame or bearer—
 - (a) must provide a minimum of shielding to the face of the trough and to the space above the trough, and
 - (b) must be supported in the roadway in a way that means the support frame or bearer cannot move along the roadway.
- (3) The spacing between rows of troughs must be at least 1.5m between centres.
- (4) The maximum distance between the rims of troughs in a particular row and between the rim of the end trough in a row and the side of the road is 1.5m.
- (5) The minimum distance between the outside rims of the outside troughs in a particular row is 65% of the maximum roadway width.
- (6) Troughs must be placed as low as reasonably practicable in the upper third of the roadway.
- (7) A water barrier must not be installed in a cavity in a roof.
- (8) A water barrier in a roadway with a belt conveyor must be installed so that the majority of the barrier is not lower than the top of the conveyor belt.

Schedule 6 Sampling airborne dust at mines

section 89

1 Definitions

In this Schedule—

breathing zone, for a person, means an imaginary hemisphere that extends in front of the person's face having a radius of 300mm centred at the midpoint between the person's ears.

production shift, at a mine, means a shift at which extraction is carried out at the mine.

sample of inhalable dust means a sample of airborne dust taken to determine the inhalable dust component.

sample of respirable dust means a sample of airborne dust taken to determine the respirable dust component, including respirable quartz.

2 General requirements

- (1) Samples must be taken under, and in accordance with, a licence under this Regulation, Part 10.
- (2) Samples must, as far as reasonably practicable, be taken from the start of a shift to the end of the shift.
- (3) Samples must be taken over a period that is equivalent to 80% of the total period of the shift.
- (4) Samples must be taken from as close as reasonably practicable to places where persons work.
- (5) Samples taken for a person carrying out particular work must be taken, as far as reasonably practicable, from a person who carries out that same work for the whole shift or sampling period.
- (6) Samples must be analysed as soon as reasonably practicable after they are taken and if a sample was taken incorrectly it must be taken again.
- (7) Samples of respirable dust must be taken and analysed in accordance with Australian Standard AS 2985–2009, Workplace atmospheres—Method for sampling and gravimetric determination of respirable dust.
- (8) Samples of inhalable dust must be taken and analysed in accordance with Australian Standard AS 3640–2009, *Workplace atmospheres—Method for sampling and gravimetric determination of inhalable dust.*
- (9) Analysis of the level of respirable quartz in airborne dust is required for each sample taken.

3 Longwall mining area

- (1) Samples must be taken in each part of an underground coal mine where longwall mining is carried out, including from the breathing zone of at least 5 persons including, as far as reasonably practicable—
 - (a) a person operating a shearer, and
 - (b) 2 persons operating powered supports, and
 - (c) a person nominated to exercise the statutory function of deputy at the mine, and
 - (d) a person exposed to airborne dust.
- (2) Samples of respirable dust must be taken at least once every 6 months.
- (3) Samples of inhalable dust must be taken at least once every 12 months.
- (4) For a mine at which there is more than one production shift a day, samples must be taken at the frequency specified in subsections (2) and (3) for each shift.

4 Continuous miner operating area

- (1) Samples must be taken in each part of an underground coal mine where a continuous miner operates, including from the breathing zone of at least 5 persons including the following persons, as far as reasonably practicable—
 - (a) a person driving a continuous miner,
 - (b) a person who is working as a sideman or cable handler,
 - (c) a person who is working as a shuttle car driver,
 - (d) a person nominated to exercise the statutory function of deputy at the mine,
 - (e) a person who is working as a boot end attendant or a person exposed to airborne dust.
- (2) Samples of respirable dust must be taken at least once every 12 months.
- (3) For a mine at which there is more than one production shift a day, samples must be taken at the frequency specified in subsection (2) for each shift.
- (4) Samples of inhalable dust must be taken at least once every 12 months.

5 Area where cement products are applied

- (1) Samples must be taken in each part of an underground coal mine where cement products are being applied, including from the breathing zone of at least 2 persons including, as far as reasonably practicable—
 - (a) a person loading cement into a mixer, and
 - (b) a person spraying or applying cement products.
- (2) Samples of inhalable dust must be taken at least once every 12 months.
- (3) No samples of respirable dust are required to be taken.

6 Other areas of underground coal mines

- (1) Samples must be taken in each part of an underground coal mine, other than a part referred to elsewhere in this Schedule, including from the breathing zone of at least 1 person.
- (2) Samples of respirable dust and samples of inhalable dust must be taken at least once every 12 months.

7 Other coal mines

- (1) Samples must be taken in each part of a coal mine, other than an underground coal mine, where dust is, or may be, present, including from the breathing zone of at least 5 persons.
- (2) For samples taken where extraction is occurring, the persons referred to in subsection (1) must include, as far as reasonably practicable at least—
 - (a) a person who is working as a drill operator, shotfirer or stemmer, and

- (b) a person who is operating mobile plant.
- (3) Samples of respirable dust and samples of inhalable dust must be taken at least once every 12 months.

8 Mines other than coal mines

- (1) This section applies to a mine other than a coal mine where respirable crystalline silica has been identified as a hazard as a result of air monitoring being carried out under the WHS Regulations, clause 50(1).
- (2) Samples must be taken in each part of a mine where dust is, or may be, present, including from the breathing zone of at least 5 persons.
- (3) For samples taken where extraction is occurring, the persons referred to in subsection (2) must include, as far as reasonably practicable—
 - (a) a person who is working as a drill operator, shotfirer or stemmer, and
 - (b) a person who is operating mobile plant.
- (4) Samples of respirable dust must be taken at least once every 12 months.

Schedule 7 Emergency plans

section 91

1 Site and hazard details

- (1) The location of the mine or petroleum site, including its street address and the nearest intersection.
- (2) For a mine, the current survey plan or mine plan required under Part 6.
- (3) For a mine, a brief description of the nature of the mine and mining operations.
- (4) For a petroleum site, a brief description of the nature of the petroleum site and petroleum operations.
- (5) The maximum number of persons, including workers, likely to be present at the mine or petroleum site on a normal working day.
- (6) The emergency response control planning assumptions for different emergencies, and likely areas affected.
- (7) The protective resources available to control an incident that could result in an emergency.
- (8) The emergency response procedures, including procedures for isolating areas of the mine or petroleum site in an emergency.
- (9) The infrastructure likely to be affected by an emergency.

2 Command structure and site personnel

(1) The command philosophy and structure to be activated in an emergency, so that it is clear what

- actions will be taken, who will take these actions and how, when and where they will be taken.
- (2) Details of the person who can clarify the content of the emergency response control plan if necessary.
- (3) The contact details of, and the way to contact, the persons at the mine or petroleum site responsible for liaising with emergency services.
- (4) A list of 24 hour emergency contacts.
- (5) Arrangements for assisting emergency services.

3 Notifications

- (1) In the event of the occurrence of a notifiable incident, or an event that could reasonably be expected to lead to a notifiable incident, the procedures for notifying—
 - (a) a person whose health or safety may be affected, even if—
 - (i) the person is located underground, or
 - (ii) there is no electrical power that can be used for the notification, and
 - (b) the emergency services in circumstances where emergency services are required.
- (2) On-site and off-site warning systems.
- (3) Contact details for emergency services and other support services that can assist in providing resources and implementing evacuation plans in an emergency.
- (4) On-site communication systems.

4 Resources and equipment

- (1) On-site emergency resources, including the following—
 - (a) first aid equipment, facilities, services and personnel,
 - (b) emergency equipment and personnel, including—
 - (i) suitable personal protective equipment, and
 - (ii) adequate and compatible fire fighting equipment such as foam generators,
 - (c) gas detectors, wind velocity detectors, sand, lime, neutralising agents, absorbents, spill bins and decontamination equipment, where applicable.
- (2) Off-site emergency resources, including arrangements for obtaining additional external resources, specific to the likely incidents, including mines rescue services, as necessary.
- (3) For a mine, arrangements for mines rescue that state the following—
 - (a) the minimum mines rescue training to be provided,
 - (b) an arrangement for the mine operator and mine operator of a mine in the vicinity to assist

each other in an emergency,

- (c) how inertisation equipment must be used,
- (d) the procedures to be followed in carrying out mines rescue.
- (4) For an underground mine, a means of communication between the surface of the mine and an underground area of the mine where persons are located, that is effective, as far as reasonably practicable, even if there is no electrical connection between the surface and the relevant underground area.

5 Procedures

- (1) Procedures for the safe evacuation of, and accounting for, all persons at the mine or petroleum site
- (2) Procedures and control points for utilities, including gas, water and electricity.
- (3) For a mine, procedures if the ventilation system were to fail in all or part of the mine for more than 30 minutes.
- (4) Procedures for fighting fires at the mine or petroleum site and details of the persons having the competency to fight fires and to train others in fire fighting.
- (5) For an underground coal mine, procedures for emergency sealing of the mine from a safe place, including from a place out of the direct line of a potential blast.
- (6) For a mine, procedures for safely inserting inertisation equipment.

Schedule 8 Notification of incidents

section 124

1 Person injured

- (1) The name, date of birth and gender of a person who has suffered an illness or injury as a result of the incident
- (2) If a person who has suffered an illness or injury as a result of the incident is a worker, the following information—
 - (a) the worker's occupation,
 - (b) the worker's usual start and finish time, and start time on the day of the incident,
 - (c) the number of hours worked immediately before the incident,
 - (d) the name of the person conducting the business or undertaking in which the person works,
 - (e) the nature of the engagement of the worker.
- (3) If the worker is self-employed, the name of the business or undertaking.
- (4) The industry in which the business or undertaking is primarily conducted.

2 Description of incident

- (1) When the incident occurred, including the following—
 - (a) the date of the incident,
 - (b) the time of the incident,
 - (c) for an illness—the date on which the illness was first reported by or on behalf of the person suffering the illness.
- (2) A description of the incident, including the following—
 - (a) what each affected person was doing just before the incident,
 - (b) a description of all substances, including hazardous chemicals, and all plant and processes involved in the incident,
 - (c) the classification of—
 - (i) the mechanism of the incident, and
 - (ii) the agency of the illness or injury, that is, how the incident caused the illness or injury, and
 - (iii) the nature and bodily location of the illness or injury.
- (3) In this section—

classification means the code assigned by the *Type of Occurrence Classification System* originally published by the Australian Safety and Compensation Council, as in force from time to time.

3 Consequences of incident

- (1) Whether or not the incident has resulted in one or more of the following—
 - (a) a fatality,
 - (b) permanent incapacity,
 - (c) the inability of a worker to work for 1 day or more, not including the incident day, whether the worker is rostered on that day or not,
 - (d) the worker carrying out restricted work,
 - (e) medical treatment.
- (2) Whether the incident is likely to result in one or more of the circumstances referred to in subsection (1).
- (3) Whether the incident has the potential to result in one or more of the circumstances referred to in subsection (1).

Schedule 9 Work health and safety reports

section 126

1 Definition

In this Schedule—

incident means—

- (a) a notifiable incident, or
- (b) an incident referred to in this Regulation, section 124.

2 Mine operator

The name of the mine operator of the mine.

3 The mine

The location of the mine.

4 Commodity processed

A description of the primary commodity processed at the mine site during the reporting period.

5 Number of workers

The average number of workers who worked at the mine site during the reporting period.

6 Number of hours worked

The total number of hours, including additional shifts and overtime, worked at the mine during the reporting period.

7 Number of incidents

The total number of incidents that occurred during the reporting period.

8 Number of injuries and illnesses resulting in lost time

The total number of injuries and illnesses of workers during the reporting period that resulted in the inability of a worker to work for 1 day or more, not including the day on which the injury was sustained or the illness first became apparent.

9 Days lost from work

The total number of days, not including the day on which the injury was sustained or the illness first became apparent, lost from work by workers during the reporting period as a result of injuries or illnesses.

10 Number of restricted duty days

The total number of days on which workers carried out restricted duties during the reporting period as a result of injuries or illnesses, not including the day on which the injury was sustained or the illness first became apparent.

11 Number of injuries and illnesses resulting in restricted duties

The total number of injuries and illnesses of workers during the reporting period that resulted in a worker being placed on restricted duties for 1 day or more, not including the day on which the injury was sustained or the illness first became apparent, but not injuries or illnesses already included under this Schedule, section 8.

12 Number of medical treatment injuries

- (1) The total number of injuries and illnesses of workers during the reporting period that resulted in a worker requiring medical treatment, but not injuries or illnesses already included under this Schedule, section 8 or 11.
- (2) This section applies to medical treatment within the meaning of the WHS Act and includes the following—
 - (a) the suturing of a wound,
 - (b) the treatment of fractures,
 - (c) the treatment of bruises by drainage of blood,
 - (d) the treatment of second and third degree burns.
- (3) This section does not apply to medical treatment consisting of—
 - (a) diagnostic procedures, or
 - (b) observation, or
 - (c) counselling, or
 - (d) first aid, or
 - (e) therapeutic measures taken solely for preventative purposes.

13 Number of deaths

The total number of deaths that occurred during the reporting period as a result of incidents.

14 Other information

The information set out in Schedule 8 in relation to each incident, if the information has not already been provided to the regulator.

Schedule 10 Statutory functions at mines

section 132

Part 1 Application of Schedule

1 Mines to which Schedule does not apply

This Schedule does not apply to the following—

- (a) tourist mines,
- (b) mines at which no mining activity takes place other than exploring for minerals,
- (c) opal mines.

Part 2 Underground coal mines

2 Application of Part

This Part applies to underground coal mines only.

3 Mining engineering manager

- (1) The statutory function of mining engineering manager is to develop, supervise, monitor and review the mining engineering standards and procedures forming part of mining operations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

4 Electrical engineering manager

- (1) The statutory functions of electrical engineering manager are—
 - (a) to develop, supervise, monitor and review the electrical engineering standards and procedures forming part of mining operations at the mine, and
 - (b) to supervise the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.
- (2) The requirement for nomination to exercise the statutory functions is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory functions.

5 Mechanical engineering manager

- (1) The statutory functions of mechanical engineering manager are—
 - (a) to develop, supervise, monitor and review the mechanical engineering standards and procedures forming part of mining operations at the mine, and
 - (b) to supervise the installation, commissioning, maintenance and repair of mechanical plant at the mine.
- (2) The requirement for nomination to exercise the statutory functions is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory functions.

6 Undermanager

(1) The statutory function of undermanager is to supervise the mining operations at the mine for a shift during which—

- (a) there are more than 15 persons underground, or
- (b) secondary extraction is occurring at the mine, or
- (c) major changes are being made to the ventilation system for the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

7 Ventilation auditor

- (1) The statutory function of ventilation auditor is to audit the ventilation system and ventilation control plan for the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

8 Ventilation officer

- (1) The statutory function of ventilation officer is to control and manage the ventilation activities and standards forming part of mining operations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

9 Dust explosion control measures auditor

- (1) The statutory function of dust explosion control measures auditor is to audit the dust explosion control measures and standards used at the mine and report the results of the audits to the mine operator.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

10 Deputy

- (1) The statutory function of deputy is to supervise workers and inspect work areas in a part of the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

11 Mining surveyor

- (1) The statutory function of mining surveyor is to prepare and certify the survey plan of the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must be a registered mining surveyor within the meaning of the *Surveying and*

Spatial Information Act 2002.

12 Fire officer

- (1) The statutory function of fire officer is to inspect and maintain fire fighting equipment at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must have demonstrated competency in—
 - (a) the Nationally Recognised Training unit RIIERR201D Conduct fire team operations, or
 - (b) a Nationally Recognised Training unit that is equivalent to the unit identified in paragraph (a).

13 Roadway dust sampler

- (1) The statutory function of roadway dust sampler is to take roadway dust samples at the mine and ascertain the level of incombustible material in the samples.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must have completed a course, approved by the regulator for the purposes of this section, on the sampling and testing of roadway dust.

14 Qualified electrical tradesperson

- (1) The statutory function of qualified electrical tradesperson is to supervise the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) have a supervisor certificate that authorises the doing of electrical wiring work, or
 - (b) have a proficiency certificate, issued by Training Services NSW, in an electrical trade, or
 - (c) have been continuously employed as an electrical tradesperson at a coal mine since 21 December 2004.

15 Qualified mechanical tradesperson

- (1) The statutory function of qualified mechanical tradesperson is to supervise the installation, commissioning, maintenance and repair of mechanical plant at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) have been continuously employed as a mechanical tradesperson at a coal mine since 21 December 2004, or
 - (b) have the required skills and experience identified in the mechanical engineering control plan and a proficiency certificate, issued by Training Services NSW, as identified in the mechanical engineering control plan.

Part 3 Coal mines other than underground mines

16 Application of Part

This Part applies to coal mines only, but not underground coal mines.

17 Mining engineering manager—only required if extraction occurs at mine

- (1) The statutory function of mining engineering manager is to develop, supervise, monitor and review the mining engineering standards and procedures forming part of mining operations at the mine, but only as far as the standards and procedures relate to extraction.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.
- (3) This section does not apply to a coal mine at which no extraction occurs.

18 Open cut examiner—only required if extraction occurs at mine

- (1) The statutory function of open cut examiner is to supervise workers and inspect work areas in a part of the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.
- (3) This section does not apply to a coal mine at which no extraction occurs.

19 Mining surveyor

- (1) The statutory function of mining surveyor is to prepare and certify the survey plan of the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must be a registered mining surveyor within the meaning of the *Surveying and Spatial Information Act* 2002.

20 Electrical engineer

- (1) The statutory function of electrical engineer is to develop, supervise, monitor and review the standards and procedures for the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) hold an electrical engineer practising certificate (coal mines other than underground coal mines) or electrical engineering manager practising certificate (underground coal mines) that is in force, or
 - (b) have evidence of compliance with Australian Engineering Competency Standards Stage 2 for mining operations at a mine and be registered on the National Engineering Register as a professional electrical engineer, an electrical engineering technologist or an electrical

engineering associate.

21 Mechanical engineer

- (1) The statutory functions of mechanical engineer are—
 - (a) to develop and review the standards, mechanical engineering practice and procedures for the life cycle of mechanical plant and installations at the mine, and
 - (b) to supervise the installation, commissioning, maintenance and repair of mechanical plant at the mine
- (2) The requirement for nomination to exercise the statutory functions is that the individual nominated must—
 - (a) hold a mechanical engineer practising certificate (coal mines other than underground coal mines) or mechanical engineering manager practising certificate (underground coal mines) that is in force, or
 - (b) have evidence of compliance with Australian Engineering Competency Standards Stage 2 for mining operations at a mine and be registered on the National Engineering Register as a professional mechanical engineer, a mechanical engineering technologist or a mechanical engineering associate.

22 Qualified electrical tradesperson

- (1) The statutory function of qualified electrical tradesperson is to supervise the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) have a supervisor certificate that authorises the doing of electrical wiring work, or
 - (b) have a proficiency certificate, issued by Training Services NSW, in an electrical trade, or
 - (c) have been continuously employed as an electrical tradesperson at a coal mine since 21 December 2004.

23 Qualified mechanical tradesperson

- (1) The statutory function of qualified mechanical tradesperson is to supervise the installation, commissioning, maintenance and repair of mechanical plant at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) have been continuously employed as a mechanical tradesperson at a coal mine since 21 December 2004, or
 - (b) have the required skills and experience identified in the mechanical engineering control plan and a proficiency certificate, issued by Training Services NSW, as identified in the mechanical engineering control plan.

Part 4 Underground mines other than coal mines

24 Application of Part

This Part applies to underground mines only, but not underground coal mines.

25 Mining engineering manager

- (1) The statutory function of mining engineering manager is to develop, supervise, monitor and review the mining engineering standards and procedures forming part of mining operations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

26 Underground mine supervisor

- (1) The statutory function of underground mine supervisor is to supervise workers and inspect work areas in a part of the mine for a shift during which production is taking place.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

27 Mining surveyor—only required if survey plan required

- (1) The statutory function of mining surveyor is to prepare and certify the survey plan of the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must be a registered mining surveyor within the meaning of the *Surveying and Spatial Information Act* 2002.

28 Electrical engineer—only required if total connected power at mine is greater than 1,000kW or if high voltage is used

- (1) The statutory function of electrical engineer is to develop, supervise, monitor and review the standards and procedures for the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) hold an electrical engineering manager practising certificate (underground coal mines) or electrical engineer practising certificate (coal mines other than underground coal mines) that is in force, or
 - (b) have evidence of compliance with Australian Engineering Competency Standards Stage 2 for mining operations at a mine and be registered on the National Engineering Register as a professional electrical engineer, an electrical engineering technologist or an electrical engineering associate.
- (3) This section does not apply to a mine at which the total connected power to the mine is 1,000kW

or less unless voltages greater than 1,000V AC or 1,500V DC are used at the mine.

29 Qualified electrical tradesperson

- (1) The statutory function of qualified electrical tradesperson is to supervise the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) have a supervisor certificate that authorises the doing of electrical wiring work, or
 - (b) have a proficiency certificate, issued by Training Services NSW, in an electrical trade, or
 - (c) have been continuously employed as an electrical tradesperson at a mine since 20 December 2005.

Part 5 Mines other than underground mines or coal mines

30 Application of Part

This Part applies to all mines, but not underground mines or coal mines.

31 Quarry manager

- (1) The statutory function of quarry manager is to supervise mining operations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

32 Mining surveyor—only required if survey plan required

- (1) The statutory function of mining surveyor is to prepare and certify the survey plan of the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must be a registered mining surveyor within the meaning of the *Surveying and Spatial Information Act 2002*.
- (3) This section does not apply to a mine for which a survey plan is not required under this Regulation, Part 6.

33 Electrical engineer—only required if total connected power at mine is greater than 1,000kW or if high voltage is used

- (1) The statutory function of electrical engineer is to develop, supervise, monitor and review the standards and procedures for the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) hold an electrical engineering manager practising certificate (underground coal mines) or electrical engineer practising certificate (coal mines other than underground coal mines) that

is in force, or

- (b) have evidence of compliance with Australian Engineering Competency Standards Stage 2 for mining operations at a mine and be registered on the National Engineering Register as a professional electrical engineer, an electrical engineering technologist or an electrical engineering associate.
- (3) This section does not apply to a mine at which the total connected power to the mine is 1,000kW or less unless voltages greater than 1,000V AC or 1,500V DC are used at the mine.

34 Qualified electrical tradesperson

- (1) The statutory function of qualified electrical tradesperson is to supervise the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must—
 - (a) have a supervisor certificate that authorises the doing of electrical wiring work, or
 - (b) have a proficiency certificate, issued by Training Services NSW, in an electrical trade, or
 - (c) have been continuously employed as an electrical tradesperson at a mine since 20 December 2005.

Schedule 11 Statutory functions at petroleum sites

section 135

1 Rig manager (drilling operations)

- (1) The statutory function of rig manager (drilling operations) is to manage all drilling rig operations at the petroleum site.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold the Nationally Recognised Training qualification *RII50820 Diploma of Drilling Oil & Gas (Onshore)*, or a Nationally Recognised Training qualification that is equivalent to the qualification.

2 Rig manager (well workover and well servicing operations)

- (1) The statutory function of rig manager (well workover and well servicing operations) is to manage all drilling rig operations for well workovers and well servicing at the petroleum site.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold the Nationally Recognised Training qualification *RII51020 Diploma of Well Servicing Operations*, or a Nationally Recognised Training qualification that is equivalent to the qualification.

3 Driller (drilling operations)

(1) The statutory function of driller (drilling operations) is to supervise the conduct of drilling, well control and other work carried out in connection with drilling at the petroleum site.

(2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold the Nationally Recognised Training qualification *RII41120 Certificate IV in Drilling Oil & Gas (Onshore)*, or a Nationally Recognised Training qualification that is equivalent to the qualification.

4 Driller (well workover and well servicing operations)

- (1) The statutory function of driller (well workover and well servicing operations) is to supervise the conduct of drilling, well control and other work carried out in connection with well workovers and well servicing at the petroleum site.
- (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold the Nationally Recognised Training qualification *RII41220 Certificate IV in Well Servicing Operations*, or a Nationally Recognised Training qualification that is equivalent to the qualification.

Schedule 12 Membership of Mine Safety Advisory Council

Part 11

1 Term of office

Subject to this Regulation, a member holds office for a period no longer than 3 years, as specified in the member's instrument of appointment, but is eligible, if otherwise qualified, for reappointment.

2 Deputies of members

- (1) A member, other than the Chairperson or Deputy Chairperson, may, from time to time, appoint a person to be the deputy of the member.
- (2) The member or the Minister may revoke the appointment of a deputy.
- (3) In the absence of a member, the member's deputy may, if available, act in the place of the member.
- (4) When acting in the place of a member, a deputy has all the functions of the member and is taken to be a member.
- (5) A vacancy in the office of a member is taken to be an absence of the member.

3 Vacancy in office of member

- (1) The office of a member becomes vacant if the member—
 - (a) dies, or
 - (b) completes a term of office and is not re-appointed, or
 - (c) resigns the office by written notice to the Minister, or
 - (d) is removed from office by the Minister, or
 - (e) is absent from 4 consecutive meetings of the Council of which reasonable notice has been given to the member, unless the Minister approves the absences, or

- (f) becomes bankrupt, applies to take the benefit of a law for the relief of bankrupt or insolvent debtors, compounds with the member's creditors or makes an assignment of the member's remuneration for their benefit, or
- (g) becomes a mentally incapacitated person.
- (2) If a member is convicted in or outside New South Wales of an offence, the member must disclose the conviction to the Minister—
 - (a) if the conviction occurs before the member is appointed as a member—at the time the member is appointed, or
 - (b) if the conviction occurs after the member is appointed—as soon as reasonably practicable after the conviction.

4 Filling of vacancy in office of member

If the office of a member becomes vacant, a person must, subject to this Regulation, be appointed to fill the vacancy.

5 Deputy Chairperson

- (1) The Minister may, from time to time, appoint a member of the Council as Deputy Chairperson of the Council, and may revoke the appointment.
- (2) In the absence of the Chairperson, the Deputy Chairperson may, if available, act in the place of the Chairperson.
- (3) When acting in the place of the Chairperson, the Deputy Chairperson has all the functions of the Chairperson and is taken to be the Chairperson.
- (4) The Deputy Chairperson vacates office as Deputy Chairperson if—
 - (a) the Minister revokes the appointment, or
 - (b) the Deputy Chairperson ceases to be a member.

Schedule 13 Penalty notice offences

1 Application of Schedule

- (1) For the WHS Act, section 243—
 - (a) each offence created by a provision specified in this Schedule is an offence for which a penalty notice may be issued, and
 - (b) the amount payable for the penalty notice is the amount specified opposite the provision.
- (2) If the provision is qualified by words that restrict its operation to limited kinds of offences or to offences committed in limited circumstances, the penalty notice may be issued only for—
 - (a) that limited kind of offence, or
 - (b) an offence committed in the limited circumstances.

Offences under the WHS (MPS) Act

Column 1	Column 2	Column 3				
Provision	Penalty—individuals	Penalty—corporations				
Sections 15(1), (1A) and (2), 16(1), 17(1), 30(3)(b), 45(2) and (3), 46(2) and 47(2)	6 penalty units	30 penalty units				
Section 38(5)	3 penalty units	10 penalty units				
Offences under this Regulation						
Column 1	Column 2	Column 3				
Provision	Penalty—individuals	Penalty—corporations				
Sections 5(5) and (6), 9(2), 10(5) and (6), 13(2), 15(3), 16(2) and (3), 17(3) and (4), 18(1), (2) and (7), 22(1) and (2), 24, 25, 26(1), 27(1) and (2), 28(1) and (5), 29(1) and (2), 30(1), 31, 35(3), 36, 37(1), (2) and (4), 39(1), 41(1) and (2), 43, 48(1) and (6), 49(1) and (2), 50(1), (3) and (4), 51(1) and (2), 52(1)–(5), 54, 55, 56(1)–(3), 57(1), 58(1) and (2), 60(2)–(4), 62(1)–(3), 63(1) and (2), 64(1), 65(1), 66, 67(1) and (3), 68(5), 74(3), (4) and (6), 76(1)–(8), 77(1) and (2), 78(1), 80(1), 81(1), (4) and (6), 83(1), 84, 85(1), 86, 87, 88(1), (8), (9) and (11), 89(2), 90(3), 91(1), 93, 95, 96(1), 97(1) and (3), 98, 99(1) and (5), 100(1)–(4), and (6)–(8), 103(1)–(3), 104(2)–(4), 105, 106(1)–(4), 107(2) and (3), 108, 110, 112(6), 113(2), 114, 115, 116(4), 117(1), (2) and (7)–(9), 118(1) and (2), 119(2), 120, 122(2), 133(1)–(4), 136(1) and (2), 154(1) and (2), 155, 187(9) and 188 and Schedule 5, section 1	,	30 penalty units				
Sections 6(1), 8(6) and (7), 11(1), 14(2), 23, 38(1) and (2), 61(5), 94(1) and (2), 109, 119(1), 129(1) and 174(1) and (2)	4.32 penalty units	21.6 penalty units				
Sections 7, 12 and 63(5)	3 penalty units	10 penalty units				
Sections 44, 101 and 102	1.8 penalty units	9 penalty units				
Sections 61(1) and (4), 63(3), 83(7), 111, 130(1)–(3), 142(4), 145(8), 159(6) and 160(4)	1.25 penalty units	6 penalty units				
Section 63(4)	1.5 penalty units	6 penalty units				
Sections 121(1), 123, 124(1), 125(14), 126(1), 127(2) and 128	7.2 penalty units	36.6 penalty units				
Sections 134 and 137	6 penalty units	_				

Schedule 14 Amendment of this Regulation

[1] Section 81 Use of plant in hazardous zone—explosion-protection required

Omit "or is Departmental approved plant" from section 81(2)(a) and (3)(a).

[2] Section 81(6)(c)

Omit the paragraph.

[3] Section 81(8)

Omit the definition of *Departmental approved plant*.

Schedule 15 Dictionary

section 3

airblast means windblast.

approved way and form means the way and form approved by the regulator.

auxiliary fan means a fan, other than a cooling fan for equipment or a scrubber fan, used underground to direct ventilation in a part of an underground mine.

booster fan means a fan installed so the total ventilation flow in the place where the fan is installed passes through the fan.

breathing zone, for Schedule 6—see Schedule 6, section 1.

cache means a place at a mine at which self-contained self-rescuers are stored for use in an emergency.

change-over station means a place at a mine intended to be used for the change-over of self-contained self-rescuers in an emergency.

contractor means a contractor who conducts a business or undertaking at a mine or petroleum site other than the following—

- (a) a person who is the operator of the mine or petroleum site,
- (b) a person who conducts one or more of the following businesses or undertakings at the mine or petroleum site—
 - (i) a delivery business or undertaking,
 - (ii) an office equipment service business or undertaking,
 - (iii) an office cleaning business or undertaking,
 - (iv) a catering business or undertaking,
- (c) a person, or class of persons, specified in an order of the regulator published in the Gazette.

Council, for Part 11 and Schedule 12—see section 165.

cut-through means a tunnel driven to connect adjacent headings.

decommission a well means to permanently seal off the well so it cannot be entered.

direct supervision of a person means oversight by the supervisor of the person's work for the purposes of—

- (a) directing, demonstrating, monitoring and checking the person's work in a way that is appropriate to the person's level of competency, and
- (b) ensuring a capacity to respond in an emergency situation.

electrical installation has the same meaning as in the WHS Regulations, Part 4.7.

electrical plant means plant, all or part of which is powered by electricity.

emergency plan means the emergency plan prepared under section 91.

emplacement area means a place, including a tailings storage facility referred to in Schedule 3, Part 7, at which there is reject, including a wall or other structure that keeps the reject, but does not include—

- (a) reject situated underground, or
- (b) reject that has been disposed of with overburden in a way that does not alter the stability of an overburden dump.

explosion-protected, in relation to plant, means the plant is not capable of initiating an explosion of gas or dust.

explosive has the same meaning as in the Explosives Act 2003.

explosive precursor has the same meaning as in the Explosives Act 2003.

face machine includes a continuous miner, a mobile roof bolter, a road header and a tunnel boring machine.

face zone means an area within 200m outbye of—

- (a) a longwall face, or
- (b) for a panel where mining is being carried out by a continuous miner—the most inbye completed line of cutthroughs.

fire-protected, in relation to an engine, means the engine will not ignite flammable substances, other than gases.

ground includes the roof, floor and walls of excavations at a mine.

hazardous atmosphere has the same meaning as in the WHS Regulations, clause 51.

hazardous zone, at an underground coal mine, means each of the following—

- (a) any part at the mine in which the concentration of methane in the general body of the air is 1.25% by volume or greater,
- (b) a return airway,
- (c) any part of an intake airway that is on the return side of points that are within 100m outbye of—
 - (i) the most inbye completed line of cut-throughs, or
 - (ii) any longwall or shortwall face, but only to the extent the intake airway is on the intake side of that face, but not if the longwall face is an installation face at which the development of the face, and mining for development coal, have been completed and at which longwall mining has yet to commence.

heading means a tunnel driven in the main direction of the mining operation.

highwall mining means the underground extraction of coal carried out—

- (a) by remotely controlled plant that drives the extraction from an open pit or hole, and
- (b) without requiring a person to be present at a part of the extraction.

hot work means welding, soldering, heating, cutting, grinding or vulcanising where a surface temperature of more than 150°C is likely to be generated.

inbye, at a mine, means in a direction away from the closest entrance of the mine.

incident, for Schedule 9—see Schedule 9, section 1.

inhalable dust has the same meaning as in the *Guidance on the Interpretation of Workplace Exposure Standards for Airborne Contaminants* published by Safe Work Australia in April 2012, as in force or remade from time to time.

inrush hazard means a hazard involving the potential inrush of a substance.

interstate practising certificate, for Part 9—see section 131.

intrinsically safe circuit means a circuit that is intrinsically safe category 'i', as defined in Australian and New Zealand Standard AS/NZS 60079.11:2011 *Explosive atmospheres—Equipment protection by intrinsic safety 'i'*.

key statutory function means the following statutory functions—

- (a) mining engineering manager,
- (b) electrical engineering manager,
- (c) mechanical engineering manager,
- (d) electrical engineer,
- (e) mechanical engineer,
- (f) quarry manager,
- (g) ventilation officer.

light metal alloy means an alloy containing aluminium, magnesium or titanium, or a combination of the metals, but only if—

- (a) the metals make up more than 15% of the weight of the alloy, or
- (b) magnesium and titanium make up more than 6% of the weight of the alloy.

member—

- (a) for Part 11—see section 163, or
- (b) for Part 12—see section 167.

methane includes ethane, propane and similar hydrocarbon gases.

mine safety and health representative has the same meaning as in the WHS (MPS) Act, section 37.

mining supervisor, at a mine, means an individual nominated to exercise one or more of the following statutory functions at the mine—

- (a) mining engineering manager,
- (b) undermanager,
- (c) underground mine supervisor,
- (d) deputy,
- (e) quarry manager,
- (f) open cut examiner.

misfire means the complete or partial failure of an explosive to explode as planned.

operator means-

- (a) in relation to a mine—the mine operator of the mine, or
- (b) in relation to a petroleum site—the petroleum site operator of the petroleum site.

outbye, at a mine, means in a direction towards the closest entrance of the mine.

practising certificate means a practising certificate issued under Part 9, Division 4 that authorises an individual to exercise a statutory function.

principal control plan, for a mine, means—

- (a) each plan required to be prepared for the mine under section 30, and
- (b) if the mine is an underground mine—the ventilation control plan for the mine, and
- (c) the emergency plan for the mine.

principal control plan, for a petroleum site, means—

- (a) each plan required to be prepared for the petroleum site under section 30, and
- (b) the emergency plan for the petroleum site.

principal hazard—see section 4.

principal hazard management plan means a plan prepared under section 28.

production shift, for Schedule 6—see Schedule 6, section 1.

reclaim tunnel means a tunnel in or under a coal stockpile used for removing coal from the stockpile.

refill station means a place at a mine where compressed air breathing apparatus can be refilled in an emergency.

reject means material left after the processing of extracted minerals.

respirable dust has the same meaning as in the *Guidance on the Interpretation of Workplace Exposure Standards* for Airborne Contaminants published by Safe Work Australia in April 2012, as in force or remade from time to time.

roadway includes a heading, cut-through or crosscut or a part of a heading, cut-through or crosscut.

rope includes a cable but not an electrical cable.

sample of inhalable dust, for Schedule 6—see Schedule 6, section 1.

sample of respirable dust, for Schedule 6—see Schedule 6, section 1.

scrubber fan means a fan designed to extract dust from the air.

secondary extraction includes pillar extraction, pillar splitting and pillar reduction.

shaft includes a drift.

small gemstone mine means a gemstone mine, including an opal mine, that has fewer than 5 workers.

statutory function—see sections 132(1) and 135(1).

subsidence means the deformation or displacement of a part of the ground surface or subsurface strata caused by the extraction of minerals.

suspend a well means to temporarily seal off the well.

tier-3 quarry means a mine, other than an underground mine or a coal mine, where the mine—

- (a) has 5 or fewer full-time equivalent workers, including the quarry manager and contractors, and
- (b) does not carry out dredging or blasting activities, and
- (c) does not extract more than 30,000m³ of extractive material for sale or reuse in a year.

underground coal mine means an underground mine that is a coal mine.

underground mine means the part of a mine that is beneath the surface of the earth and includes plant and structures that extend continuously from the surface into the part of the mine, but does not include a part of a mine in which highwall mining is carried out.

ventilation control plan means the ventilation control plan prepared under section 65.

ventilation split means the parts of a mine ventilated by a particular branch of the ventilation system.

well means a hole made by drilling from the earth's surface for the purposes of exploring for, extracting or injecting petroleum, but does not include a hole made for a seismic shot or for stratigraphic assessment.

well servicing means routine maintenance or repairs on an operating well.

well workover means repairs or improvements to a well but does not include well servicing or routine maintenance or repairs on a well that is not operating.

WHS (MPS) Act means the Work Health and Safety (Mines and Petroleum Sites) Act 2013.

windblast means a significant overpressure of air forced out of a large void at high velocity as a result of the collapse of a mass of rock or material.

winding system means plant, other than a portable winch or plant that is manually operated, that is used in a shaft to lift a person to or from an underground mine or between levels at an underground mine, regardless of whether it is used exclusively for that purpose.

Historical notes

The following abbreviations are used in the Historical notes:

Am	amended	LW	legislation website	Sch	Schedule
Cl	clause	No	number	Schs	Schedules
Cll	clauses	p	page	Sec	section
Div	Division	pp	pages	Secs	sections
Divs	Divisions	Reg	Regulation	Subdiv	Subdivision
GG	Government Gazette	Regs	Regulations	Subdivs	Subdivisions
Ins	inserted	Rep	repealed	Subst	substituted

Table of amending instruments

Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 (509). LW 26.8.2022. Date of commencement, except sec 89(1)(b) and Sch 14, 1.9.2022, sec 2(c); date of commencement of sec 89(1)(b), 1.9.2023, sec 2(a); date of commencement of Sch 14, 1.9.2028, sec 2(b).