

South Australia

Explosives Variation Regulations 2013

under the *Explosives Act 1936*

Contents

Part 1—Preliminary

- 1 Short title
- 2 Commencement
- 3 Variation provisions

Part 2—Variation of *Explosives Regulations 2011*

- 4 Variation of regulation 14.01—Permit for sale and custody of explosives
- 5 Insertion of Part 14A

Part 14A—Mining—blasters' licences

Division 1—Preliminary

- 14A.01 Interpretation

Division 2—Blasters' licences

- 14A.02 Requirement to hold licence to conduct blasting operation
- 14A.03 Grant or renewal of licence
- 14A.04 Duration and conditions of blaster's licence
- 14A.05 Acquisition of explosives under licence
- 14A.06 Cancellation or suspension of licence
- 14A.07 Return of licence
- 14A.08 Retention of licence while explosives remain in possession
- 14A.09 Transitional provision

Division 3—Mining

- 14A.10 Application of Division
- 14A.11 Responsibilities of shotfirer and employer or contractor
- 14A.12 Attendance of shotfirer at blasting operation and supervision of others
- 14A.13 Hazard identification and risk control etc
- 14A.14 Storage of blasting explosives
- 14A.15 Action in event of thunderstorm or duststorm
- 14A.16 No other work in vicinity of blasting explosives
- 14A.17 Ensuring explosives are not damaged or defective
- 14A.18 Reduction of ground vibration and airblast
- 14A.19 Use of explosives in darkness
- 14A.20 Capping of fuses and preparation of primer cartridges
- 14A.21 Charging of shotholes
- 14A.22 Safety fuse firing
- 14A.23 Electrical firing
- 14A.24 Blasting in hot material
- 14A.25 Exclusion of people from area
- 14A.26 Butts and misfires
- 14A.27 Disposal of blasting explosives

Division 4—Opal mining

- 14A.28 Application of Division
- 14A.29 Responsibilities of holder of blaster's licence
- 14A.30 Responsibility of other persons involved in blasting operations

6	Variation of Schedule V—Fees
9	Blaster's licence

Part 1—Preliminary

1—Short title

These regulations may be cited as the *Explosives Variation Regulations 2013*.

2—Commencement

These regulations will come into operation on 1 January 2014.

3—Variation provisions

In these regulations, a provision under a heading referring to the variation of specified regulations varies the regulations so specified.

Part 2—Variation of *Explosives Regulations 2011*

4—Variation of regulation 14.01—Permit for sale and custody of explosives

Regulation 14.01—after "this Part" insert:

and Part 14A

5—Insertion of Part 14A

After Part 14 insert:

Part 14A—Mining—blasters' licences

Division 1—Preliminary

14A.01—Interpretation

(1) In this Part—

blaster's licence means a licence authorising the conduct of a blasting operation;

blasting explosive means an explosive that is used to provide the majority of the force when blasting rock or similar material, and includes the components for the initiation of the explosive such as a booster, detonator, fuse, shock tube or ignitor;

blasting operation means an operation or that part of an operation consisting of the use of blasting explosives conducted in the course of mining operations;

butt means any portion of a shothole that remains in the ground or other material being blasted after a charge has been fired;

charge means blasting explosives that are placed in a shothole or other place for firing;

detonator means a plain, electric, electronic or non-electric type detonator, detonating relay, connector or bunch block or other device with detonators;

high temperature blasting and **hot material** have the same meaning as in AS 2187.2 *Explosives - Storage and use - Part 2 - Use of explosives*;

licensee means the holder of a blaster's licence under this Part;

mine has the same meaning as in Chapter 10 of the *Work Health and Safety Regulations 2012*;

mining operations has the same meaning as in Chapter 10 of the *Work Health and Safety Regulations 2012*;

mine operator has the same meaning as in Chapter 10 of the *Work Health and Safety Regulations 2012*;

opal mining or **opal mining operations** means mining operations carried out in the course of prospecting or mining for precious stones;

precious stones means opal and other minerals declared to be precious stones under the *Opal Mining Act 1995*;

shotfirer means a natural person responsible for the conduct of a blasting operation;

shothole means a hole made for the purposes of placing in position explosives which are to be fired;

site means the site of a mine and includes the area in the vicinity of a mine;

use, in relation to explosives, means the preparation, assembling, charging or firing of explosives.

- (2) In this Part, a reference to a quantity of explosives is, in the case of an explosive article that contains explosive and non-explosive components, a reference to the mass (in kilograms) of the explosive components exclusive of any non-explosive components (ie the net explosive quantity).
- (3) However, if the net explosive quantity cannot be readily determined, the quantity of explosives in the article will be taken to be the mass of the article (in kilograms).

Division 2—Blasters' licences

14A.02—Requirement to hold licence to conduct blasting operation

- (1) Subject to subregulation (2), a person must not conduct a blasting operation unless the person holds a licence (a **blaster's licence**) authorising the conduct of the operation.

Maximum penalty: \$5 000.

- (2) A person must not conduct a blasting operation in the course of opal mining operations unless the person holds a blaster's licence specifically endorsed for opal mining and authorising the conduct of the operations.
Maximum penalty: \$5 000.
- (3) Despite subregulations (1) and (2), a person is not required to hold a licence authorising the conduct of the blasting operation if the person holds a current permit, licence or other authority granted under the law of another State or a Territory of the Commonwealth authorising the person to conduct a blasting operation of the same kind and the person complies with any conditions of that permit, licence or other authority.
- (4) Subregulation (3) does not apply to a person conducting a blasting operation in the course of opal mining operations if—
 - (a) the person has been residing in the State for at least 6 months; or
 - (b) the person has relied on the permit, licence or other authority to conduct a blasting operation in the State within the last 6 months; or
 - (c) the Chief Inspector determines, by notice in writing to the person, that it is inappropriate for the person to rely on the permit, licence or other authority for the purposes of this regulation.
- (5) A person who assists the holder of a blaster's licence to conduct a blasting operation in the course of opal mining operations need not hold a blaster's licence.

14A.03—Grant or renewal of licence

- (1) The Chief Inspector may, on application by a person, grant or renew, or refuse to grant or renew, a blaster's licence.
- (2) A body corporate is not entitled to apply for (or to be issued) a blaster's licence.
- (3) An application for the grant or renewal of a blaster's licence must—
 - (a) be made to the Chief Inspector in a manner and form approved by the Chief Inspector; and
 - (b) contain the information required by the Chief Inspector; and
 - (c) be accompanied by the relevant fee.
- (4) An applicant must provide further information, or cause assessments or investigations to be carried out (at his or her expense), reasonably required by the Chief Inspector for the purposes of determining the application.

- (5) A natural person is not entitled to be granted a blaster's licence unless the person—
 - (a) has attained the age of 18 years; and
 - (b) has qualifications and experience considered appropriate by the Chief Inspector.
- (6) The Chief Inspector may refuse to grant or renew a blaster's licence on 1 or more of the following grounds:
 - (a) the protection of the safety or health of persons or the safety of property;
 - (b) that the applicant is not a fit and proper person to hold the licence having regard, in particular, to—
 - (i) the applicant's record of non-compliance with these regulations, the Act or other relevant laws (including the *Work Health and Safety Act 2012*); and
 - (ii) any mental illness or incapacity suffered or previously suffered by the applicant;
 - (c) that there is no genuine reason for the applicant to be engaged in the activity authorised or proposed to be authorised by the licence or to acquire explosives authorised or proposed to be authorised by the licence;
 - (d) any other relevant ground.

14A.04—Duration and conditions of blaster's licence

- (1) Subject to this Division, a blaster's licence takes effect on the day it is granted and, unless cancelled earlier, expires 3 years after that day.
- (2) A blaster's licence is subject to the condition that the licensee—
 - (a) must only use or dispose of blasting explosives of a kind specified in the licence; and
 - (b) must only use an initiation method of a type specified in the licence; and
 - (c) must only conduct types of blasting operations specified in the licence.
- (3) The Chief Inspector may fix other conditions that will apply to a blaster's licence.
- (4) The Chief Inspector may, on application or at the Chief Inspector's own initiative, substitute, add, remove or vary a condition of a blaster's licence.
- (5) Without limiting subregulation (4), the Chief Inspector may vary a condition on the Chief Inspector's own initiative if satisfied that the licensee has contravened or failed to comply with the Act or these regulations or another relevant law or that other sufficient cause exists.

14A.05—Acquisition of explosives under licence

- (1) Subject to conditions of the licence to the contrary, a blaster's licence authorises the licensee, and any person over the age of 18 years authorised by the licensee to act on his or her behalf, to acquire explosives of a kind that may be used in blasting operations under the licence.
- (2) Despite regulation 14.01, a person may sell, give or supply explosives to a person who is not the holder of a current permit to purchase explosives if the person is a licensee authorised by his or her licence to acquire the explosives or a person acting on behalf of such a licensee in accordance with subregulation (1).

14A.06—Cancellation or suspension of licence

The Chief Inspector may suspend or cancel a blaster's licence if satisfied that—

- (a) the licensee has contravened or failed to comply with these regulations, the Act or another relevant law; or
- (b) the licensee has contravened or failed to comply with a condition of the licence; or
- (c) events have occurred such that the licensee would not now be granted the licence; or
- (d) other sufficient cause exists.

14A.07—Return of licence

If a blaster's licence granted to a person is suspended or cancelled, that person must, at the direction of the Chief Inspector, return the licence to the Chief Inspector.

Maximum penalty: \$5 000.

14A.08—Retention of licence while explosives remain in possession

- (1) A licensee or former licensee must retain his or her blaster's licence (even after it has expired) for so long as explosives acquired under the licence remain in the person's custody, possession or control.
Maximum penalty: \$5 000.
- (2) If an original or replacement licence is lost, stolen or destroyed, it is sufficient for the purposes of subregulation (1) if a replacement licence is retained.

14A.09—Transitional provision

- (1) A blaster's licence in force under Chapter 10 of the *Work Health and Safety Regulations 2012* immediately before 1 January 2014 will be taken to be a blaster's licence under this Division.

- (2) The licence under this Division—
 - (a) will expire 3 years after the day on which it was granted;
and
 - (b) is subject to the same conditions to which the licence was subject immediately before the commencement of this clause.
- (3) An application for the grant or renewal of a blaster's licence made under regulation 636 or 675G of the *Work Health and Safety Regulations 2012* but not finally determined before 1 January 2014 is to be taken to be an application to the Chief Inspector for the grant or renewal of the equivalent licence under regulation 14A.03 and is to be dealt with accordingly.

Division 3—Mining

14A.10—Application of Division

This Division does not apply in relation to opal mining operations.

14A.11—Responsibilities of shotfirer and employer or contractor

- (1) If a following requirement of this Division is not complied with in respect of a blasting operation, the following persons are each guilty of an offence:
 - (a) the shotfirer who conducted the operation;
 - (b) any person who employed the shotfirer to conduct the operation;
 - (c) if the blasting operation was conducted at a mine—the mine operator of the mine.

Maximum penalty: \$5 000.

- (2) A person who employs or engages a shotfirer in connection with blasting operations must comply with all reasonable requests of the shotfirer in regard to matters necessary to enable the shotfirer to comply with these regulations and to observe safe practices.

Maximum penalty: \$5 000.

14A.12—Attendance of shotfirer at blasting operation and supervision of others

The shotfirer must personally supervise the blasting operation and in particular—

- (a) the shotfirer must be present at the immediate site of the operation while—
 - (i) explosives are placed in a shothole; or
 - (ii) a charge is fired; or

- (iii) the area is inspected for misfires after a charge is fired; and
- (b) the shotfirer must, at all times while work is being undertaken in connection with the operation, be readily available to attend the immediate site of the operation to provide direction or deal with any accident or emergency.

14A.13—Hazard identification and risk control etc

- (1) The shotfirer who is supervising a blasting operation is responsible for the safety of all persons who could be endangered by the blasting operation and must ensure—
 - (a) that he or she has sufficient knowledge about the explosives and their safe handling for the proper performance of his or her responsibilities (including the responsibility of taking action in an emergency); and
 - (b) that appropriate steps are taken (before the blasting operation is commenced and as reasonably required during the blasting operation)—
 - (i) to identify all reasonably foreseeable hazards arising from the blasting operation; and
 - (ii) to assess the risks associated with each hazard identified; and
 - (iii) to eliminate, or where that is not reasonably practicable, minimise those risks; and
 - (iv) to ensure that each other person engaged in the blasting operation receives—
 - (A) sufficient information, instruction and training for the proper performance of his or her responsibilities in relation to the explosives; and
 - (B) where reasonably necessary—suitable and adequate assistance and supervision.
- (2) If a blasting operation involves use of explosives, risk assessment and control must take place under subregulation (1)(b)(ii) and (iii) immediately before each occasion on which the explosives are used.
- (3) For the purposes of eliminating or minimising risks associated with hazards involved in the blasting operation (identified in accordance with this regulation), consideration must be given to limiting the size or number of the explosive charges used and using blasting mats or other means to provide protection against debris resulting from the blast.

- (4) A shotfirer who is supervising a blasting operation must, immediately on becoming aware of a dangerous situation or potentially dangerous situation arising from the blasting operation, ensure that appropriate action is taken, so far as is reasonably practicable—
- (a) to protect the safety or health of any person or the safety of property immediately endangered; and
 - (b) to eliminate or minimise any risk associated with the situation.

14A.14—Storage of blasting explosives

Blasting explosives being used or awaiting use in a blasting operation must be stored in suitable, robust containers conspicuously marked to indicate their contents under the supervision of a competent person responsible for the explosives.

14A.15—Action in event of thunderstorm or duststorm

On the approach of a thunderstorm or duststorm to the site of a blasting operation—

- (a) all explosives not loaded into shotholes must be safely and securely stored; and
- (b) all persons must withdraw from the vicinity of the blasting operation until the storm has passed; and
- (c) if explosives have been loaded into shotholes, the area must be kept under observation by a person responsible for the explosives who has acquired through training, qualification or experience the knowledge and skills to carry out the task, or made reasonably secure against unauthorised access, until the operation is resumed.

14A.16—No other work in vicinity of blasting explosives

Work not connected with a blasting operation must not be carried out in the immediate vicinity of a place at which blasting explosives are awaiting use or being used in the blasting operation.

14A.17—Ensuring explosives are not damaged or defective

Explosives that are damaged or defective must not be used in a blasting operation.

14A.18—Reduction of ground vibration and airblast

Appropriate steps must be taken to reduce ground vibration and airblast from the blasting operation (see AS 2187.2 *Explosives - Storage and use - Part 2 - Use of explosives*).

14A.19—Use of explosives in darkness

If blasting explosives are used or disposed of in a blasting operation between sunset and sunrise, an adequate level of artificial light must be provided to ensure that the operations can be conducted safely and in accordance with these regulations.

14A.20—Capping of fuses and preparation of primer cartridges

- (1) Fuses must not be capped nor primer cartridges prepared within 10 metres of any explosives.
- (2) No person not directly engaged in the work of capping fuses or preparing primer cartridges may come within 7 metres of the place where the work is being carried out.

14A.21—Charging of shotholes

- (1) Metal tools, bars or rods or implements with exposed metal must not be used for the purpose of placing blasting explosives into shotholes.
- (2) Blasting explosives must not be rammed or forced into a shothole.
- (3) Each detonator used in connection with blasting explosives in a shothole must be protected from impact.

14A.22—Safety fuse firing

- (1) Before a roll or coil of safety fuse is first used, the burning rate of the fuse must be determined by burning a 1 metre sample of the fuse.
- (2) The fuse must not be used unless the burning rate of the sample is between 90 and 120 seconds per metre.
- (3) The length of safety fuse used to fire explosives must be sufficient to allow a person to unhurriedly withdraw to a safe place after igniting the fuse and, in any event, must not be less than 1 metre.
- (4) If more than 1 fuse but not more than 8 fuses are to be ignited at the 1 firing, 1 of the following means of ignition must be used:
 - (a) a 2-minute fuse igniter;
 - (b) a non-electric multiple fuse igniter;
 - (c) plastic igniter cord;
 - (d) electric igniters of a kind approved by the Chief Inspector.
- (5) If more than 8 fuses are to be ignited at the 1 firing, 1 of the following means of ignition must be used:
 - (a) if each fuse is at least 2 metres in length and not more than 15 fuses are to be ignited at the 1 firing—
 - (i) a 2-minute fuse igniter;
 - (ii) a non-electric multiple fuse igniter;
 - (b) in any case—
 - (i) plastic igniter cord;

- (ii) electric igniters of a kind approved by the Chief Inspector.
- (6) If more than 8 fuses are to be ignited at the 1 firing, a person (in addition to the shotfirer) must be present and readily available to provide assistance in case of accident or emergency.

14A.23—Electrical firing

- (1) Storage or dry cell batteries must not be used to fire explosives unless the batteries are part of an exploder.
- (2) Exploders, circuit testers and firing cables used in a blasting operation must be constructed, tested and maintained in accordance with Appendix B of AS 2187.2 *Explosives - Storage and use - Part 2 - Use of explosives* (although exploders and circuit testers do not require approval of the Chief Inspector).

14A.24—Blasting in hot material

Any blasting in hot material or high temperature blasting must be conducted in accordance with clauses 12.6 and 12.7 of AS 2187.2 *Explosives - Storage and use - Part 2 - Use of explosives*.

14A.25—Exclusion of people from area

- (1) Before a charge is fired, steps must be taken to ensure that no person is in a position where he or she could be injured or killed by the blast or affected by dust or gases generated by the blast.
- (2) After firing a charge, steps must be taken to ensure that—
 - (a) no person enters the area until fumes and toxic gases generated by the blast are no longer present; and
 - (b) no person (other than the shotfirer or a person authorised by the shotfirer) enters the area until the area has been thoroughly inspected for butts, unexploded charges or parts of charges and any butts and unexploded charges or parts of charges dealt with in accordance with this Division.

14A.26—Butts and misfires

- (1) If a butt is found after a charge has been fired, no work (except work necessary to make the butt and surrounding area safe) may be performed in the vicinity of the butt until the shotfirer is satisfied that it is safe to do so and, in particular, no holes may be drilled into, or within 150 millimetres of, the butt.
- (2) If an unexploded charge is found after firing or there is reason to suspect all or part of a charge failed to explode (ie a misfire occurred), the requirements of clause 10 of AS 2187.2 *Explosives - Storage and use - Part 2 - Use of explosives* must be complied with.

14A.27—Disposal of blasting explosives

Blasting explosives must not be disposed of except by a method allowed by clause 11 of AS 2187.2 *Explosives - Storage and use - Part 2 - Use of explosives*.

Division 4—Opal mining

14A.28—Application of Division

This Division applies in relation to opal mining operations.

14A.29—Responsibilities of holder of blaster's licence

- (1) A person who is responsible for the conduct of a blasting operation is responsible for the safety of all persons who could be endangered by the blasting operation.
- (2) A person who is responsible for the conduct of a blasting operation must, before the blasting operation is commenced, conduct a risk assessment of the blasting operation and ensure that appropriate steps are taken to eliminate, or where that is not reasonably practicable, to minimise any risk that is identified by that risk assessment.
- (3) A risk assessment under subregulation (2) must include consideration of the following matters:
 - (a) static electricity, lightning, electrical activity and dust storms;
 - (b) naked flames;
 - (c) fly rock;
 - (d) fumes;
 - (e) dust;
 - (f) the location of plant and equipment;
 - (g) possible effects on neighbouring mines;
 - (h) the possibility of a person entering the area;
 - (i) the means for leaving the blasting site;
 - (j) the need to check after the blast for—
 - (i) loose rocks in roofs and walls; and
 - (ii) misfires, or unexploded charges; and
 - (iii) blasting fumes.
- (4) Explosives must be disposed of in a safe manner in accordance with AS 2187.2 *Explosives - Storage and use - Part 2 - Use of explosives*.
- (5) If a requirement of this regulation is not complied with, the holder of the relevant blaster's licence is guilty of an offence.

Maximum penalty: \$5 000.

14A.30—Responsibility of other persons involved in blasting operations

A person who assists the holder of a blaster's licence in the conduct of a blasting operation must comply with all reasonable instructions or directions of the licence holder in regard to the matters necessary to enable compliance with these regulations and to observe safe practices.

Maximum penalty: \$5 000.

6—Variation of Schedule V—Fees

Schedule V—after item 8 insert:

9—Blaster's licence

Fee for application for blaster's licence	\$67.00
Fee for application for renewal of blaster's licence	\$67.00

Note—

As required by section 10AA(2) of the *Subordinate Legislation Act 1978*, the Minister has certified that, in the Minister's opinion, it is necessary or appropriate that these regulations come into operation as set out in these regulations.

Made by the Governor

with the advice and consent of the Executive Council
on 12 December 2013

No 280 of 2013

IR0073/13CS