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STATUTORY INSTRUMENTS

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**1999 No. 2024**

**The Quarries Regulations 1999**

**PART V**

**EXPLOSIVES**

**Application of this Part**

**24.** This Part shall apply to the storage, transport and use of explosives at a quarry.

**Operator's duties**

**25.—(1)** The operator shall—

- (a) ensure, so far as is reasonably practicable, that all explosives are stored, transported and used safely and securely;
- (b) appoint one or more competent individuals to organise and supervise all work at the quarry involving the use of explosives (“the Explosives Supervisor”); and
- (c) ensure that at no time is there more than one person acting as the Explosives Supervisor at the quarry.

**(2)** It shall be the duty of the operator to ensure that—

- (a) suitable and sufficient rules are made which lay down in writing procedures for—
  - (i) shotfiring operations at the quarry,
  - (ii) appointing shotfirers, trainee shotfirers and storekeepers,
  - (iii) authorising other persons who will be involved with the storage, transport or use of explosives,
  - (iv) dealing with misfires, and
  - (v) ensuring, so far as is reasonably practicable, that such rules are complied with;
- (b) an adequate written specification (whether produced by him or not) is prepared for each shotfiring operation at the quarry to ensure, so far as is reasonably practicable, that when such firing occurs it will not give rise to danger; and
- (c) a copy of the specification referred to in sub-paragraph (b) is given to any person upon whom it imposes duties.

**(3)** The operator shall ensure that operations involving the storage, transport or use of explosives are carried out by—

- (a) a duly authorised and competent person; or
- (b) a trainee under the close supervision of a duly authorised and competent person.

**(4)** The operator shall ensure that—

- (a) such facilities and equipment as are necessary to enable shotfiring operations to be carried out safely are provided;

- (b) any vehicle which is provided for use in relation to shotfiring operations is so marked as to be readily identifiable from a distance;
  - (c) detonators are stored in separate containers from other explosives; and
  - (d) explosives are kept at all times either in a locked explosives store or under the constant supervision of a suitable person.
- (5) The operator shall ensure, so far as is reasonably practicable, that each shotfiring operation is carried out safely and in accordance with the rules required to be made in pursuance of paragraph (2)(a) and any specification required to be prepared in pursuance of paragraph (2)(b).

### **Supervision of shotfiring operations and trainee shotfirers and records of appointment**

- 26.**—(1) The operator shall take all reasonable steps to ensure that—
- (a) a trainee shotfirer at the quarry does not fire shots and is not required to fire shots, except when he is under the close personal supervision of a shotfirer, until the operator is satisfied that he has completed a suitable period of training and has appropriate practical experience; and
  - (b) all shotfiring operations are carried out under the close personal supervision of the shotfirer.
- (2) The operator shall ensure that a record of the appointment at the quarry of any shotfirer or trainee shotfirer is kept at a suitable place until three years after that shotfirer's or, as the case may be, trainee shotfirer's employment at the quarry ends.

### **Shotfirer's duties**

- 27.** Before a shot is fired, a shotfirer shall—
- (a) check the shotfiring system or circuit to ensure that it has been connected correctly;
  - (b) where electrical detonators are used, ensure that they have been correctly connected to the shotfiring system or circuit and that the shotfiring system or circuit is tested with an instrument suitable for the purpose from a position of safety;
  - (c) where appropriate, ensure that the electrical integrity of the shotfiring system or circuit is such as to make a misfire unlikely; and
  - (d) ensure that the shot is fired from a safe place.

### **Misfires**

- 28.** In the event of a misfire the operator shall (if this is not the same person) consult the individual appointed under regulation 8(1)(c) and shall ensure, so far as is reasonably practicable, that—
- (a) apart from himself, no person other than the Explosives Supervisor, shotfirer, trainee shotfirer or any other person authorised by him enters the danger area—
    - (i) where the shot was fired by means of safety fuse, until a period of 30 minutes has elapsed since the misfire, or
    - (ii) where the shot was fired by other means, until a period of 5 minutes has elapsed since the misfire and any shotfiring apparatus has been disconnected from the shot;
  - (b) appropriate steps are taken to determine the cause of and to deal with the misfire; and
  - (c) a suitable record is kept of the misfire.

### **Prohibited activities**

**29.**—(1) No person (other than a person engaged in the transport of explosives to or from the quarry, a shotfirer, trainee shotfirer, a person authorised to handle explosives at a quarry, or a person appointed to be in charge of the explosives store) shall handle explosives at a quarry.

(2) No person shall bring any substance or article (other than explosives) likely to cause an unintended explosion or fire within 10 metres of any explosives or (except for the purpose of lighting igniter cord or safety fuse) take any naked flame within 10 metres of any explosives.

(3) No person shall forcibly remove any detonator lead, safety fuse or other system for initiating shots from a shothole after the shothole has been charged and primed.

(4) No person shall charge or fire a shot—

(a) unless there is sufficient visibility to ensure that work preparatory to shotfiring, the shotfiring operation and any site inspection after the shot is fired can be carried out safely;

(b) in a shothole which has previously been fired, unless he is dealing with a misfire in accordance with action taken in pursuance of regulation 28(b); or

(c) in any tunnel or other excavation (not being merely a shothole) in the face or side of the quarry for the purpose of extracting minerals or products of minerals.

(5) No person shall fire a shot—

(a) unless he is a shotfirer or trainee shotfirer; and

(b) other than by means of a suitable exploder or suitable safety fuse.

(6) No person shall cap a safety fuse with a detonator unless he is using equipment designed for the purpose and he is in a suitably sheltered place designated by the operator for the purpose.