#### SCHEDULE 1

Regulation 4

### ESSENTIAL SAFETY REQUIREMENTS

I.

# General requirements

- 1. Each explosive must be designed, manufactured and supplied in such a way as to present a minimal risk to the safety of human life and health, and to prevent damage to property and the environment under normal, foreseeable conditions, in particular as regards the safety rules and standard practices including until such time as it is used.
- **2.** Each explosive must attain the performance characteristics specified by the manufacturer in order to ensure maximum safety and reliability.
- **3.** Each explosive must be designed and manufactured in such a way that when appropriate techniques are employed it can be disposed of in a manner which minimises effects on the environment.

#### 11.

# Special requirements

- 1. As a minimum, the following information and properties—where appropriate—must be considered. Each explosive should be tested under realistic conditions. If this is not possible in a laboratory, the tests should be carried out in the conditions in which the explosive is to be used.
  - (a) Construction and characteristic properties, including chemical composition, degree of blending and, where appropriate, dimensions and grain size distribution.
  - (b) The physical and chemical stability of the explosive in all environmental conditions to which it may be exposed.
  - (c) Sensitiveness to impact and friction.
  - (d) Compatibility of all components as regards their physical and chemical stability.
  - (e) The chemical purity of the explosive.
  - (f) Resistance of the explosive against influence of water where it is intended to be used in humid or wet conditions and where its safety or reliability may be adversely affected by water
  - (g) Resistance to low and high temperatures, where the explosive is intended to be kept or used at such temperatures and its safety or reliability may be adversely affected by cooling or heating of a component or of the explosive as a whole.
  - (h) The suitability of the explosive for use in hazardous environments (eg environment endangered by firedamp, hot masses, etc.) if it is intended to be used under such conditions.
  - (i) Safety features intended to prevent untimely or inadvertent initiation or ignition.
  - (j) The correct loading and functioning of the explosive when used for its intended purpose.
  - (k) Suitable instructions and, where necessary, markings in respect of safe handling, storage, use and disposal in the official language or languages of the recipient member State.
  - (l) The ability of the explosive, its covering or other components to withstand deterioration during storage until the "use by" date specified by the manufacturer.

- (m) Specification of all devices and accessories needed for reliable and safe functioning of the explosive.
- 2. The various groups of explosives must at least also comply with the following requirements:

#### (A) Blasting explosives

- (a) The proposed method of initiation must ensure safe, reliable and complete detonation or deflagration as appropriate, of the blasting explosive. In the particular case of black powder, it is the capacity as regards deflagration which shall be checked.
- (b) Blasting explosives in cartridge form must transmit the detonation safely and reliably from one end of the train of cartridges to the other.
- (c) The gases produced by blasting explosives intended for underground use may contain carbon monoxide, nitrous gases, other gases, vapours or airborne solid residues only in quantities which do not impair health under normal operating conditions.
- (B) Detonating cords, safety fuses, igniter cords and shock tubes
  - (a) The covering of detonating cords, safety fuses and igniter cords must be of adequate mechanical strength and adequately protect the explosive filling when exposed to normal mechanical stress.
  - (b) The parameters for the burning times of safety fuses must be indicated and must be reliably set.
  - (c) Detonating cords must be capable of being reliably initiated, be of sufficient initiation capability and comply with requirements as regards storage even in particular climatic conditions.
- (C) Detonators (including delay detonators) and relays
  - (a) Detonators must reliably initiate the detonation of the blasting explosives which are intended to be used with them under all foreseeable conditions of use.
  - (b) Relays must be capable of being reliably initiated.
  - (c) The initiation capability must not be adversely affected by humidity.
  - (d) The delay times of delay detonators must be sufficiently uniform to ensure that the probability of overlapping of the delay times of adjacent time steps is insignificant.
  - (e) The electrical characteristics of electric detonators must be indicated on the packaging (eg no-fire current, resistance, etc.).
  - (f) The wires of electric detonators must be of sufficient insulation and mechanical strength including the solidity of the link to the detonator, taking account of their intended use.
- (D) Propellants and rocket propellants
  - (a) These materials must not detonate when used for their intended purpose.
  - (b) Propellants where necessary (eg those based on nitrocellulose) must be stabilised against decomposition.
  - (c) Solid rocket propellants, when in compressed or cast form, must not contain any unintentional fissures or gas bubbles which dangerously affect their functioning.

#### SCHEDULE 2

Regulations 7(3) and 9(3)

# PROVISIONS RELATING TO EXPLOSIVES TO WHICH THE CE MARKING HAS BEEN AFFIXED

# PART I

# EXPLOSIVES WHICH DO NOT SATISFY THE REQUIREMENTS OF REGULATION 4(1)(a) AND (b)

- 1. Where it is satisfied that the CE marking has been affixed to explosives but that the explosives do not satisfy the requirements of sub-paragraphs (a) and (b) of paragraph (1) of regulation 4, the Executive may serve notice in writing requiring the person on whom it is served to take such measures as are necessary to ensure that the explosives do satisfy the requirements of the said sub-paragraphs.
- 2. Where it is satisfied that explosives in respect of which a notice has been served in accordance with paragraph 1 of this Schedule continue not to satisfy the requirements of sub-paragraphs (a) and (b) of paragraph (1) of regulation 4, the Executive may serve notice in writing requiring the person on whom it is served to take such measures as are necessary to ensure the explosives are withdrawn from the market.

### **PART II**

# EXPLOSIVES WHICH MAY COMPROMISE SAFETY WHEN USED FOR THEIR INTENDED PURPOSE

**3.** Where it is satisfied that explosives to which the CE marking has been affixed may compromise safety when being used for their intended purpose, the Executive may serve notice in writing requiring the person on whom it is served to take such measures as are necessary to ensure the explosives are withdrawn from the market.

# **PART III**

# SUPPLEMENTARY PROVISIONS

- 4. A notice referred to in Part I of this Schedule may be served on—
  - (a) the manufacturer of the explosives or any person acting as agent for the manufacturer; or, failing them
  - (b) the person responsible for placing the explosives on the market.
- **5.** A notice referred to in Part II of this Schedule may be served on any person the Executive has reasonable grounds for believing is in a position to take the measures specified in the notice.
- **6.** A notice referred to in this Schedule may specify measures to be taken under the notice, may be subject to conditions and may have immediate effect or may allow such time for compliance as the Executive specifies in the notice.

#### **SCHEDULE 3**

Regulation 7(4)

#### **CONFORMITY MARKING**

The CE conformity marking shall consist of the initials "CE" taking the following form:



The marking may be reduced or enlarged but the proportions given in the above drawing must be respected.

#### **SCHEDULE 4**

Regulation 12

### **MODIFICATIONS**

## PART I

# THE EXPLOSIVES ACT 1875

- 1. Except in its application to Northern Ireland, and as it applies to acetylene by virtue of Order in Council (No. 30) dated 2nd February 1937(1), section 40 of the Explosives Act 1875(2) is modified by substituting the following sub-sections for sub-section (9)—
  - "(9) No person shall supply any explosive (other than gunpowder) unless the explosive—
    - (a) conforms in composition, character and quality to the description of the explosive in a list signed by an inspector appointed by the Health and Safety Executive and duly authorised for that purpose, corresponding to the name of that explosive as shown in such list and in "List of Authorised Explosives" issued by the Health and Safety Executive(3), such list and List as revised or re-issued from time to time; and
    - (b) has been classified in accordance with any Order in Council made under section 106 of this Act and for the time being in force which defines, for the purposes of this Act, the composition, quality and character of any explosive(4).
  - (10) The Health and Safety Executive shall ensure that any explosive which satisfies the requirements of sub-paragraphs (a) to (c) of regulation 4(1) of the Placing on the Market

<sup>(1)</sup> S.R. & O. 1937/54.

<sup>(2) 1875</sup> c. 17.

<sup>(3)</sup> The list current when these Regulations are made is "List of Authorised Explosives 1992", ISBN 0 11 886396 7, published by HMSO.

<sup>(4)</sup> The Orders in force at the date of making these Regulations are Order in Council (No. 1) dated 5th August 1875 (Rev. VII p. 1) and Order in Council (No. 1B) dated 11th April 1913 (S.R. & O. 1913/481).

and Supervision of Transfers of Explosives Regulations 1993 (S.I. 1993/2714) is classified in accordance with any Order in Council made under section 106 of this Act and is included in the list and in "List of Authorised Explosives" mentioned in sub-section (9)(a) of this section

(11) In sub-section (9) of this section, "supply" shall be construed in accordance with section 46 of the Consumer Protection Act 1987 (1987 c. 43).".

# PART II

#### THE CONTROL OF EXPLOSIVES REGULATIONS 1991

- 2. The Control of Explosives Regulations 1991(5) are modified as follows—
  - (a) in regulation 12, in paragraph (2), for "date of the latest entry", substitute "end of the year during which the latest entry was made"; and
  - (b) in regulation 12, after paragraph (2), insert the following paragraph—
    - "(2A) Where any employer or self-employed person is required to preserve records by virtue of paragraph (2) and ceases to trade, he shall forthwith notify the authority which is the enforcing authority in respect of this regulation and shall offer such records to that authority."

**<sup>(5)</sup>** S.I. 1991/1531.