

# **Explosives Regulations 2014**

# Security provisions

# Guidance on Regulations



L151 Published 2014 This publication is for anyone who has duties under the security provisions of the Explosives Regulations 2014 (ER2014). It is particularly relevant to dutyholders:

- acquiring, keeping and transferring relevant explosives;
- manufacturing, storing, transferring and placing on the market civil explosives;
- manufacturing, possessing or transferring plastic explosives.

Explosives Regulations 2014: Security provisions (L151) is the second of two overarching guidance documents. The first is Explosives Regulations 2014: Safety provisions (L150). Both are primarily aimed at more complex and larger operations.

It provides background information and detailed specialist and technical guidance that will help dutyholders to comply with the security provisions in the Regulations.

It also contains material relevant to enforcing authorities such as local authority trading standards officers, the police and fire and rescue services. This publication may also be of interest to other government or regulatory agencies.

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This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory, unless specifically stated, and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance.

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#### Introduction

#### Who is this publication for?

- 1 This publication is for anyone who has duties under the security provisions of the Explosives Regulations 2014 (ER2014). It is particularly relevant to dutyholders:
- acquiring, keeping and transferring relevant explosives;
- manufacturing, storing, transferring and placing on the market civil explosives;
- manufacturing, possessing or transferring plastic explosives.

Explosives Regulations 2014: Security provisions (L151) is the second of two overarching guidance documents. The first is Explosives Regulations 2014: Safety provisions (L150). Both are primarily aimed at more complex and larger operations.

- 2 It provides background information and detailed specialist and technical guidance that will help dutyholders to comply with the security provisions in the Regulations.
- 3 It also contains material relevant to enforcing authorities such as local authority trading standards officers, the police and fire and rescue services. This publication may also be of interest to other government or regulatory agencies.

#### What is this publication about?

- 4 This publication describes how the security provisions of the Regulations should be met.
- 5 Following the guidance will enable you to comply with the security provisions of ER2014.
- 6 Everyone manufacturing, storing or keeping explosives will need to comply with the provisions of regulation 30 in a way that is proportionate to their undertaking.
- 7 Those dealing with civil explosives should also follow the guidance for regulations 8, 33, 34, 36 and 39.
- 8 Those dealing with relevant explosives should also follow the guidance for regulations 31, 32, 35 and 37.
- 9 The security requirements for plastic explosives are dealt with under regulation 38.

Throughout this guidance you will see statements in boxes. The statements identify successful outcomes of the application of appropriate security measures to explosives operations. Dutyholders can use the statements to challenge themselves on the effectiveness of the security precautions that they have implemented.

#### Subsector guidance

- 10 There is subsector guidance that complements this document. Links to subsector guidance can be found at www.hse.gov.uk/explosives/new-regs-subsector.htm.
- 11 Dutyholders such as employers, private individuals and other people:
- acquiring, keeping and transferring relevant explosives;
- manufacturing, storing transferring and placing on the market civil explosives;
- manufacturing, possessing or transferring plastic explosives;

should use any relevant subsector guidance to supplement the guidance in this document.

12 Dutyholders working with other explosives should use this document to support or provide background to published subsector guidance.

#### Application and the scope of the Regulations

13 Regulations 2 and 3 of ER2014 describe how the Regulations apply to explosives operations. This section provides information and guidance on how the scope of the Regulations applies to the security provisions.

#### Explosives for work, personal and recreational use

14 ER2014 applies to explosives operations whether they are for work or non-work purposes. They therefore apply to anyone storing explosives for personal recreational use, or to voluntary clubs or societies storing explosives (examples include storage for firework displays, bonfire processions or re-enactment events).

#### **Transport**

- 15 ER2014 does apply to the transport of explosives on site. This includes movement on public roads between different buildings on the same site.
- 16 ER2014 does not apply to explosives that are being transported by road, rail, air or water provided that the explosives are not kept in one place for longer than 24 hours.
- 17 Explosives that are being transported will be treated as being in storage when they are, or are to be, kept at any place for more than 24 hours.
- 18 Dutyholders who keep explosives that are being transported as part of the supply chain should ensure that any explosives whose onward journey cannot take place are stored safely and lawfully.

#### Application offshore

19 ER2014 (other than regulations 4, 5, 31 and 32) applies to certain activities in the UK territorial sea adjacent to Great Britain (for example coastal construction activities which extend into the territorial sea and the construction, operation and demolition of wind farms).

- 20 Outside the territorial sea ER2014 will only apply within:
- areas on the UK Continental Shelf designated by order under section 1(7) of the Continental Shelf Act 1964 (c.20);
- a 'gas importation and storage zone' designated by section 1(5) of the Energy Act 2008 (c.32);
- a 'renewable energy zone' designated by section 84(4) of the Energy Act 2004 (c.20).
- 21 Regulations 6, 7, 9, 10, 12–18, 20, 23 and 26–30 do not apply to:
- activities within harbour areas to which Part IX of the Dangerous Substances in Harbour Areas Regulations 1987 (SI 1987/37) apply, such as the loading or unloading of certain vessels;
- the master or crew of a ship or to the employer of such people in respect of the normal shipboard activities of a ship's crew which are carried out solely by the crew under the direction of the master;
- offshore installations as defined by regulation 3 of the Offshore Installations and Pipeline Works (Management and Administration) Regulations 1995 (SI 1995/738).

#### Explosives in use

- 22 Explosives that are being prepared for use or which are in use should be kept secure and unauthorised people should be prevented from having access to those explosives.
- 23 All unused explosives should be returned to a suitably secure store at the end of each day. However, there may be circumstances, such as complex demolitions, blasting operations, or large fireworks displays, when explosives are left overnight in the shothole, or attached to the structure to be demolished or rigged as part of a display.
- 24 Similarly the investigation of a misfire may require explosives to be left in situ until they can be safely removed or disposed of.
- 25 The operator should make arrangements for the supervision of explosives in use or in situ, to ensure their security and safety.

#### Relevant explosive

- 26 ER2014 introduces the term 'relevant explosive'.
- 27 Relevant explosives are explosives for which an explosive certificate:
- is required under regulation 5 of ER2014 for acquiring or keeping that explosive; or
- which would be required if the explosives were not being acquired or kept on behalf of a person or organisation listed in regulation 3(7) of ER2014.
- 28 The people and organisations listed in regulation 3(7) of ER2014 are:
- any officer referred to in section 74 of the Explosives Act 1875 exercising the power of seizure under that section;
- constables acting in the execution of their duties;
- a person:
  - appointed to assist a police force as mentioned in paragraph 4(2) of Schedule 2 to the Police Reform and Social Responsibility Act 2011 (civilian staff); or

- appointed to assist a police force as mentioned in section 26 of the Police and Fire Reform (Scotland) Act 2012 (police staff);
- who, in either case, is duly authorised in writing by the chief officer of police for the relevant police area;
- customs officers acting in the performance of their functions;
- the Crown, in respect of any explosive which:
  - is in premises occupied on behalf of the Crown for; or
  - is intended for use for:
    - naval, military or air force purposes or the purposes of the department of the Secretary of State having responsibility for defence or that of the Secretary of State having responsibility for home affairs;
    - the service authorities of visiting forces or any headquarters or organisation designated for the purposes of the International Headquarters and Defence Organisations Act 1964;
    - a police force;
    - HSE; and
    - the Office for Nuclear Regulation (ONR).
- 29 For the purposes of regulations 35 (records) and 37 (reporting loss) relevant explosives also includes:
- ammunition, the acquisition of which is regulated or prohibited by virtue of the Firearms Act 1968 to 1997; and
- smokeless powder;

even though, and to the extent that (in the case of smokeless powder), an explosives certificate is not required for their acquisition or keeping.

- 30 Explosives listed in Schedule 2 (other than smokeless powder as noted above) and pyrotechnic articles (apart from those listed at Schedule 3) **are not** relevant explosives.
- 31 Schedule 2 to ER2014 is reproduced within this guidance.
- 32 Schedule 3 to ER2014 is reproduced within this guidance.
- 33 Many relevant explosives will also be civil explosives.

#### Civil explosive

- 34 ER2014 introduces the term 'civil explosive'. Civil explosives are explosives which have been or would be classified in accordance with the UN Recommendations<sup>2</sup> as falling within Class 1.
- 35 The following are not civil explosives:
- ammunition, the acquisition of which is regulated or prohibited by virtue of the Firearms Act 1968 to 1997;
- any explosive which it is shown is intended for the lawful use by the armed forces or the police of any country;
- a pyrotechnic article; and
- an explosive which is used immediately at the place of manufacture.
- 36 Explosives that are:
- an explosive which is transported and delivered without packaging or in a mobile explosives manufacturing unit for its direct unloading into the blast-

hole;

- fuses, which are cord-like, non-detonating igniting devices;
- safety fuses, which consist of a core of fine grained black powder surrounded by a flexible woven fabric with one or more protective outer coverings and which, when ignited, burn at a predetermined rate without any external explosive effect; or
- cap-type primers, which consist of a metal or plastic cap containing a small amount of primary explosive mixture that is readily ignited by impact and which serve as igniting elements in small arms cartridges or in percussion primers for propelling charges;

are not subject to the requirements of regulations 33 (unique identification), 34 (manufacturing site codes) and 36 (records in relation to civil explosives).

37 Many civil explosives will also be relevant explosives.

#### Plastic explosive

- 38 ER2014 introduces the term 'plastic explosive'.
- 39 Plastic explosives as defined are those explosive substances that have been traditionally known as such, and include such substances in flexible or elastic sheet form, whether or not the plastic explosive is contained in an explosive article.
- 40 For an explosive to be a plastic explosive it has to be:
- formulated with one or more high explosives which in their pure form have a very low vapour pressure at a temperature of 25 °C (less than 10<sup>-4</sup> Pa);
- formulated with a binder material; and
- malleable or flexible at normal room temperature.
- 41 Explosives that would otherwise meet the definition of plastic explosive are not treated as such under the Regulations when:
- they are manufactured or possessed in quantities no greater than is necessary for the purpose of, and solely for use in, lawful research, development or testing of new or modified explosives;
- they are manufactured or possessed in quantities no greater than is necessary for the purpose of, and is solely for use in, lawful training in explosives detection or development or testing of explosives detection equipment; or
- they are manufactured or possessed in quantities no greater than is necessary for, and is solely for, the purpose of lawful forensic science.
- 42 Plastic explosives may also be civil explosives and will be relevant explosives unless they are contained within an article that is listed in Schedule 2 to the Regulations.

#### **Terminology**

Further information on various terms used in the Regulations and in this document can be found in the Glossary.

## **Security requirements**

Explosive operations are subject to robust controls to maintain security standards.

#### Guidance

## **General principle of security in explosives operations**

- 44 Explosives have the potential to be misused and that misuse can cause both harm to people, the damage or destruction of property and infrastructure, and disruption to wider daily life.
- 45 In addition, inadequate controls can result in unauthorised people having access to places where explosives are manufactured, stored, kept or used which can increase the likelihood of a fire or explosion occurring through inappropriate actions or behaviours.
- 46 Robust security controls need to be in place before explosive operations start and they should remain in place and be effective for as long as the operations continue.
- 47 The security provisions of ER2014 provide the regulatory framework for identifying and implementing these security controls and are based on generally recognised principles of secure operation in the sector.

## **Regulatory framework**

- 48 The security provisions in ER2014 can be found in three parts of the Regulations.
- 49 **Part 10** comprises three regulations which relate to the prevention of the unauthorised access to, or acquisition of explosives. The three regulations are as follows:
- **Regulation 30** requires anyone who manufactures, stores or keeps explosives to take appropriate measures to prevent unauthorised people having access to either the places where the explosives are manufactured, stored or kept or to the explosives themselves. It also places a prohibition on people entering;
  - stores:
  - buildings used for manufacture; and
  - sites and places with marked boundaries;

without the permission of the licensee and provides a framework for the removal of unauthorised people from the site.

Regulation 31 provides a framework for the lawful transfer of relevant explosives.

- **Regulation 32** prohibits the employment of prohibited persons in positions where they handle or control relevant explosives. It also prohibits the prohibited person from acquiring, handling or controlling relevant explosives and restricted substances for their own purposes.
- 50 **Part 11** comprises five regulations which relate to the traceability of civil explosives, the records to be kept for both relevant and civil explosives, and the reporting of losses of relevant explosives. The five regulations are as follows:
- Regulation 33 provides a framework for the unique identification of civil explosives.
- Regulation 34 provides a framework for the attribution of manufacturing site codes for civil explosives.
- **Regulation 35** requires records to be kept for relevant explosives and identifies the information that those records should contain. It also identifies those people who are not required to keep records and states that when regulation 36 comes into force, explosives that are both relevant explosives and civil explosives will only need records to be kept under regulation 36.
- **Regulation 36** comes into force on 5 April 2015 and requires records to be kept for civil explosives. The regulation also identifies what those records should contain and those people who are not required to keep records of civil explosives.
- Regulation 37 requires dutyholders to report losses of relevant explosives. It provides a framework for the information on the loss that should be reported and requires dutyholders to have proportionate systems in place to identify that a loss of a relevant explosive has occurred.
- 51 There are also links between **Part 11** and the requirements of regulation 8 which relates to authorisations to transfer civil explosives.
- 52 **Part 12** comprises one regulation relating to plastic explosives:
- **Regulation 38** prohibits the manufacture, transfer and import of plastic explosives unless they are marked with a detection agent.

# **Management arrangements**

- 53 Appropriate security controls require active management if they are to remain effective.
- Arrangements should be in place to manage the security of explosives. These arrangements should address the responsibilities for:
- identifying;
- implementing; and
- maintaining;

the security controls.

- Dutyholders will generally deliver the arrangements for managing the security of explosives by appointing a person whose role and responsibilities include ensuring that the security measures are implemented, effective and maintained.
- 56 Employers and the self-employed who comply with any duties they may have under the Quarries Regulations 1999 (SI 1999/2024) will have taken the steps necessary to manage the security of explosives.

57 List X contractors who comply with the requirements of the Cabinet Office publications Security Requirements for List X Contractors $^3$  and HMG Security Policy Framework $^4$  will have taken the steps necessary to manage the security of explosives.

# **Preventing unauthorised access or acquisition**

# **Regulation 30 Unauthorised access**

#### Regulation

- 30
- (1) Any person who manufactures, stores or keeps explosives must take all appropriate precautions for preventing unauthorised persons having access to—
  - (a) the places where those explosives are manufactured, stored or kept; or
  - (b) the explosives.
  - (2) No person may—
  - (a) without the permission of the licensee, enter-
    - (i) any store in or at a site;
    - (ii) any building used for the manufacture of explosives in or at a site,
    - (iii) any site, or any place within it, with clearly marked boundaries at which explosives are stored or manufactured,

operating under a licence; or

- (b) having so entered, refuse to leave that site when requested to do so by a constable or the licensee.
- (3) Where following a request referred to in paragraph (2)(b) the person who has entered that place without permission refuses to leave that site, a constable or the licensee may remove that person from the site using reasonable force, if necessary.
  - (4) For the purposes of paragraphs (2) and (3)—
  - (a) "enter" includes entering onto a roof of a store or a building in which explosives are manufactured; and
  - (b) "licensee" includes an employee or agent of a licensee.

People who manufacture, keep or store explosives ensure that those explosives are secure. Unauthorised access is prevented.

#### Guidance

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### **Security management standards**

- 58 To maintain a secure operation, dutyholders should have suitable arrangements in place which:
- restrict who has access to the explosives, the explosive stores or place of manufacture;
- raise the alarm should an unauthorised person gain, or in certain circumstances, attempt to gain access to these places; and

- will enable the removal of any unauthorised person from that area if they refuse to leave when requested to do so by the licensee.
- 59 The nature of these arrangements will generally depend on:
- the hazard the explosives present and their potential for misuse;
- the potential for the explosives to be left unattended;
- any local factors that suggest the explosives are at a higher risk of theft or that unauthorised people routinely access the site; and
- whether the explosives are relevant explosives.

#### Standards of physical security

- 60 The physical security measures required for the explosives site or where the explosives are stored should be assessed by the dutyholder to ensure appropriate controls are applied to prevent unauthorised access. The dutyholder should consider:
- having appropriate alarm systems which may be a manual operation, electronic system or a combination of these;
- using the appropriate type of store for the explosives whether it be steel, brick or concrete, taking into consideration the thickness of the walls and roof;
- securing the store to prevent its unlawful removal;
- whether the doors on those stores are of the appropriate strength, size and fitting and that features such as bolts are not exposed and aid an attack;
- ensuring that door locks are secure and protected from attack; and
- that where a store is ventilated for safety reasons, security is not compromised.
- 61 Appendix 1 gives more detail on the standards dutyholders should follow for each of the above points if they are storing relevant explosives.
- 62 Where explosives are not relevant explosives, dutyholders should apply the security standards normally expected of domestic or commercial premises as appropriate, unless the site has been targeted by intruders or repeatedly subject to theft. In those instances, the physical security standards applicable to relevant explosives should be considered and applied appropriately.
- Further information on the security standards expected for explosives that are not relevant explosives can be found in relevant subsector guidance.

#### **Maintaining physical standards**

- The security of all stores regardless of construction should be maintained. This is particularly important where relevant explosives are to be kept.
- Where a store no longer provides appropriate standards of physical security, it should either be taken out of use, or alternative arrangements such as ongoing surveillance or the permanent presence of an attendant or guard should be implemented to assure an appropriate standard of security.

#### Maintaining brick, stone and concrete stores

66 Brick, stone and concrete walls should not be allowed to deteriorate to any significant extent. Some types of building brick and stone are susceptible to deterioration by weather. Mortar and sand/cement mixtures are also subject to decay. Concrete can age and loose its strength or be subject to deterioration by spalling.

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67 Deteriorated bricks and stones should be removed and replaced by sound ones. Joints should be inspected regularly and deteriorated mortar or sand/cement mix should be thoroughly raked out and replaced. Repointing alone is not an adequate measure. The structural integrity of roofs made of reinforced concrete should not be neglected.

#### Maintaining steel stores

- 68 The metal fabrication of steel stores requires periodic inspection to check for any degradation (eg by rusting) and any necessary remedial work should be undertaken. Any welding that might be required must be to the highest standard and carried out by a competent person, so that weld integrity is assured and no distortion of metal occurs.
- 69 Inspectors will generally require the removal of lining materials (fitted to ensure the continuing safety of the store) to enable the interior faces of the stores' structure to be examined.

#### Physical standards of older stores

- 70 As part of their security management system, dutyholders should consider whether older stores meet current recommendations and provide the appropriate level of security. Where appropriate levels of security are not provided by the store, improvements should be made to the store or additional measures to ensure that the explosives are secure should be taken.
- 71 The standards of physical security will be considered during licensing and on inspection visits. This may entail the partial removal of fixtures such as:
- any internal wooden lining necessary for ongoing explosives safety;
- ventilation covers:

to facilitate examination of the state of voids.

#### Security and repairs or modifications to stores

- 72 Before any repairs or modifications are undertaken on a store, an assessment should take place to determine whether the store should be emptied of all explosives and either swept out or thoroughly washed down. Further guidance on explosives safety during maintenance operations can be found in *Explosives Regulations 2014: Safety provisions* (L150).
- 73 The explosives removed from the store should be placed in a licensed store or other lawful place of keeping appropriate to the quantity and type of explosives.
- 74 In an emergency and when it is not possible to store the explosives in a licensed store or other lawful place of keeping, the explosives should be either:
- kept in a safe and secure building; or
- at an appropriate open place.
- 75 The temporary place of storage or keeping should be a safe distance, not only from the store being modified or repaired, but from other protected places. The separation distance tables in the ER2014 should be used to determine what separation distance should be applied.

30

- 76 For continued security the work should be carried out promptly once the store is emptied.
- 77 Upon completion of any repairs or modifications and reinstatement of any lining removed to permit the repairs or alterations:
- steel surfaces which still remain exposed should be given sufficient layers of paint to disguise where repairs or modifications have been made; and
- other materials should be examined to determine whether the repairs or modifications could be regarded as a potential weakness and encourage an attempt to gain unlawful access to the store.
- 78 Treating exposed surfaces following repair, maintenance and modification can also control sources of initiation and prevent contamination of any explosives by grit or rust that might become detached from the steel or other surfaces.

# Secure storage of explosives in buildings also used for other purposes

79 Explosives kept in buildings that are not solely used for explosives operations should be kept as securely against unauthorised access as those explosives kept in separate stores.

#### Relevant explosives

- 80 Where relevant explosives are kept in houses, offices, factories etc, any store should be physically secure and the curtilage of the building, or the room containing explosives, should either be:
- provided with a monitored alarm system;
- constantly attended; or
- have frequent visits by security patrols at intervals that will identify any attempts to gain access to the explosives before that access is actually achieved.

#### Shooters' powder

- 81 When shooters' powder are kept or stored in domestic premises, a constantly monitored system may not be required.
- 82 Where the shooters' powder is:
- blackpowder and the enforcing authority is satisfied that the storage place itself has adequate physical resistance to attack, an acceptable standard of alarming would be a system installed to a relevant standard with an external audible sounder;
- smokeless powder and the enforcing authority is satisfied that the storage place itself has adequate physical resistance to attack, no alarm would be required.

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#### **Key security**

- 83 Adequate key security arrangements should be in operation at all places where explosives are being kept. Where premises are to be left unattended, the key should either be kept:
- by a responsible person; or
- in a locked container secured by a combination lock or robust keycard system, or similar.

#### Relevant explosives

- 84 Containers used for holding keys should be bolted to the fabric of the building and either:
- kept under direct observation;
- kept in an alarmed area; or
- individually alarmed.

so that any unauthorised attempt to remove the keys can be prevented and/or identified.

# Controlling access to explosives buildings and other explosives areas on licensed sites

- 85 Anyone entering a licensed explosives building or a licensed explosives area with clearly marked boundaries must have permission from the licensee or their agent.
- 86 The police should be called if an unauthorised person refuses to leave. Normally, the licensee or agent (such as their employees) should only remove unauthorised people themselves, using reasonable means, in situations where they consider that there is an imminent threat to the security and safety of the explosives.
- 87 If a licensee intends to rely on the provisions of regulation 30(2)(iii), they will need to mark the boundaries of the site or the licensed places to which they would want to restrict access.
- 88 Larger sites are likely to have perimeter fencing which can be marked with signs and notices and be subject to patrols or monitoring that can identify the presence of an unauthorised person. At smaller sites, there may not be a secure perimeter fence and the security arrangements will primarily consist of a secure store with (where relevant explosives are being kept) a monitored alarm.
- 89 The decision on whether to erect boundary markers and warning signs will depend on the circumstances of the site, especially its location, the type of explosives being stored, and whether it may be preferable not to draw attention to the existence of an explosives site. Police explosives liaison officers and counterterrorism security advisers can advise sites on the appropriateness of erecting boundary markers and warning signs.

# **Prohibitions concerning the transfer of relevant explosives**

# **Regulation 31 Prohibitions concerning the transfer of relevant explosives**

#### Regulation

- 31 (1) No person may transfer any relevant explosive to another person ("the transferee") unless—
  - (a) the transferee has an explosives certificate certifying that the transferee is a fit person to acquire that relevant explosive;
  - (b) the relevant explosive is for immediate export to a transferee resident outside the United Kingdom;
  - (c) the explosive is for immediate transport to Northern Ireland and the transferee has police consent under regulation 11(1) of the Explosives Regulations (Northern Ireland) 1970;
  - (d) the relevant explosive is for transport to an offshore installation in controlled waters as both those terms are defined in section 12 of the Mineral Workings (Offshore Installations) Act 1971; or
  - (e) the transferee is a person specified in regulation 3(7) and, where those provisions apply to a specified person only in particular circumstances or for particular purposes, those circumstances or purposes are satisfied in the case of the person concerned.
  - (2) For the purposes of this regulation, a person who acts as agent to transfer any relevant explosive for another person is to be treated as if the person acting as agent as well as that other person had transferred that relevant explosive as principal.
  - (3) For the purposes of this regulation, where any relevant explosive is transported (including being loaded or unloaded and during breaks which are reasonably incidental to completing the journey within a reasonable length of time) the relevant explosive is not to be treated as being transferred to or from a person who has possession of it only by reason of being—
    - (a) a carrier;
    - (b) a person engaged in the work of loading or unloading; or
    - (c) the occupier of a place it passes through while on the journey.
  - (4) Nothing in paragraph (1)(b), in relation to the transfer to which it refers, is to be taken as meaning that any requirement under other legislation applying in relation to that transfer does not apply.

Relevant explosives are only transferred to authorised persons.

Guidance

31

90 The Regulations place duties on people who transfer relevant explosives to others.

31

#### What is a transfer?

- 91 Transfer of relevant explosives may be by way of sale, gift, loan or any other method.
- 92 It does not include a transfer of relevant explosives from one employee to another in the same company for the purposes of that employment. If the explosive is also a civil explosive, any physical movement apart from movement within the site will be a transfer subject to the provisions of regulation 8.

#### Confirming the identity of the transferee

- 93 No person should transfer relevant explosives unless they are satisfied about the identity of the prospective recipient.
- 94 The person transferring the relevant explosives should ensure that any individual acquiring those relevant explosives on behalf of their employer is duly authorised. The practical implications of this will depend on the circumstances. In some cases, for example where no previous transfer has taken place between the people involved, written authorisation may be required. In other situations, however, the conditions of transfer may make this unnecessary, for example where:
- there are repeated deliveries under a fixed contract;
- the recipient is able to show valid identification; and
- periodic checks of the recipient's employment status are made.

#### The requirement for an explosives certificate

- 95 The person transferring the relevant explosives must be satisfied that the transferee holds a valid explosives certificate or that one of the exemptions to the requirement for a transferee to hold a valid explosives certificate applies. When relevant explosives are being transferred to employees acting in the course of their employment, it is the employer who must hold the explosives certificate.
- 96 The person transferring the explosives should check that the certificate is still in force and that any terms, eg limits on type and quantity of relevant explosives to be acquired, adequately cover the proposed transfer. A photocopy of an explosives certificate would be acceptable for validation of a transfer provided this is accompanied by a statement from the certificate holder that the certificate is still in force. If necessary, validity of explosives certificates may be verified with the police.

#### Transfer of explosives to Northern Ireland

97 The Explosives Act (Northern Ireland) 1970 prohibits transport, without written consent of the Police, of any explosive in or through Northern Ireland or any part thereof. Anyone transferring explosives to Northern Ireland is required to ensure beforehand that such consent has been obtained.

#### Agents and the transfer of relevant explosives

98 The duties in regulation 31 are extended to agents acting on behalf of another person or buying or arranging the transfer as an intermediary of any relevant explosive. For example, an agent buying relevant explosives for a third person would need to possess an explosives certificate. Even though the relevant explosive may never be in the agent's ownership or possession, it would be under the agent's control.

31

#### **Transporting relevant explosives**

99 Any relevant explosive being transported (which includes loading and unloading, actual movement and during breaks in the journey which are reasonably incidental to completing the journey within a reasonable length of time) is not treated as being transferred. Such breaks would normally be hours rather than days. This should enable most, if not all, transport to take place without the need for the carrier, or the occupier of places in which the vehicle may temporarily stop to keep records or possess an explosives certificate.

100 For instance, in the case of the transfer of relevant explosives at harbours, provided there is a minimum practical waiting time between arrival by road or rail and acceptance by ship or vice versa, this activity would not be considered as keeping and neither the carrier nor the harbour authority would need to hold an explosives certificate for such relevant explosives. Similarly, records would not be required to be kept in such circumstances, but simpler records would need to be made by the harbour authority under the Dangerous Substances in Harbour Areas Regulations 1987 (SI 1987/37).

101 Where there is a significant break or delay in a journey, for example where an explosives consignment is held in transit, the distinction does not apply. The relevant explosives are regarded as having been transferred to and kept by, for example, the carrier. The person keeping the relevant explosives must hold an explosives certificate.

## **Restrictions on prohibited persons**

## **Regulation 32 Restrictions on prohibited persons**

#### Regulation

32

- (1) Subject to paragraph (3), no employer may knowingly employ a prohibited person in a position where the employee handles or has control of any relevant explosive or any restricted substance.
- (2) Subject to paragraph (3), no prohibited person, regardless of whether the person satisfies regulation 5, may acquire, handle or have control of any relevant explosive or any restricted substance.
- (3) This regulation does not apply to the employment of, or the acquisition, keeping, handling or control of any relevant explosive or any restricted substance in the course of their duties by, members of Her Majesty's Forces.

Prohibited persons are not allowed access to relevant explosives.

#### Guidance

32

#### **Employing prohibited persons**

102 An employer who is aware that a person is a prohibited person must not engage (or continue to employ) that person in a position involving work with relevant explosives or restricted substances. The activities and positions concerned need to be carefully identified and include both direct handling (eg manufacturing, transporting, storing or using explosives), and indirect control (eg supervising or organising movements of relevant explosives).

#### Pre-employment checks

103 In general an employer will not have to make any additional checks above preemployment checks that would normally be expected, ie:

- verifying the applicant's identity;
- ensuring that the applicant is eligible to work in the United Kingdom;
- taking up references and speaking to previous employers;
- asking an applicant to disclose unspent convictions;
- asking the applicant to provide a Basic Disclosure from either the Disclosure and Barring Service www.gov.uk/government/organisations/disclosure-and-barring-service, Disclosure Scotland www.disclosurescotland.co.uk or Access Northern Ireland www.nidirect.co.uk/accessni-criminal-record-checks as appropriate;

in order to determine whether or not an applicant is a prohibited person.

104 However, the disclosure of unspent convictions may not reveal some convictions relating to offences under the Explosives Substances Act 1883. Employers should therefore ask applicants for a post to make a statement that they are not a prohibited person because they have not been convicted of an offence under the Explosives Substances Act 1883.

32

#### **Application to prohibited persons**

105 Regulation 32(2) places an absolute prohibition on certain people carrying on activities by which they may influence the security of relevant explosives and restricted substances. It does not just apply to people acquiring, using or keeping relevant explosives or restricted substances but also to those who may be engaged in any transport or handling operation. All people involved in direct handling of relevant explosives (eg manufacture, transport, storage and use), are covered; also covered are those people involved in indirect control (eg in supervising or organising movements of relevant explosives).

# Application to people and organisations that do not need an explosives certificate

106 Employers, other than Her Majesty's Forces, who are exempted from the requirement for an explosives certificate, remain subject to the restrictions on the employment of prohibited persons.

107 Employees of these organisations, other than members of Her Majesty's Forces, are still subject to the prohibitions in regulation 32(2).

#### Application to Her Majesty's Forces

108 The restrictions on the employment of prohibited persons do not apply to Her Majesty's Forces.

109 The restrictions on the acquisition, keeping, handling or control of explosives do not apply to prohibited persons who are members of Her Majesty's Forces and who are acting in the course of their duties.

## **Traceability, records and reporting loss**

## **Regulation 33 Unique identification of civil explosives**

#### Regulation

33

- (1) Subject to paragraphs (3) and (4), any person who manufactures a civil explosive must, as soon as is practicable after that manufacture and before the civil explosive may be moved away from the site where it is manufactured—
  - (a) mark each civil explosive item referred to in Schedule 7 relating to the civil explosive with a unique identification in accordance with that Schedule:
  - (b) where an associated label in respect of that marking is required by that Schedule, attach the label in accordance with those requirements; and
  - (c) where a passive inert electronic tag or associated tag is applied in respect of that marking, place that tag in accordance with the applicable provisions of that Schedule.
  - (2) The unique identification must—
  - (a) comprise the components described in Schedule 6; and
  - (b) be marked on or firmly affixed to the civil explosive item concerned in a way which ensures that it is durable and clearly legible.
- (3) Paragraph (1) does not apply where the civil explosive is manufactured for export and is marked with an identification in accordance with the requirements of the importing country for allowing traceability of the civil explosive.
- (4) Where a civil explosive is subject to a further manufacturing process after its original manufacture, the manufacturer must mark each civil explosive item relating to the civil explosive subjected to that further process, with a new unique identification only if the original unique identification is no longer marked in the way that paragraph (2)(b) requires and any new marking so required must be done as soon as is practicable after that further process and before the civil explosive may be moved away from the site where it is manufactured.
- (5) Subject to paragraph (6), a person who imports a civil explosive into Great Britain must, as soon as is practicable after import and before acquisition of the civil explosive by another person—
  - (a) mark each civil explosive item referred to in Schedule 7 relating to the civil explosive with a unique identification in accordance with that Schedule:
  - (b) where an associated label in respect of that marking is required by that Schedule, attach the label in accordance with those requirements; and
  - (c) where a passive inert electronic tag or associated tag is applied in respect of that marking, place that tag in accordance with the applicable provisions of that Schedule.

#### Regulation 33

- (6) Paragraph (5) does not apply where the civil explosive items are marked with a unique identification before importation.
- (7) Where a distributor repackages a civil explosive, the distributor must ensure that—
  - (a) the civil explosive items relating to the civil explosive have the unique identification marked on or affixed to them in accordance with Schedule 7.
  - (b) where an associated label in respect of that marking is required by that Schedule, the label is attached in accordance with those requirements; and
  - (c) where a passive inert electronic tag or associated tag is applied in respect of that marking, that tag is placed in accordance with the applicable provisions of that Schedule.
  - (8) For the purposes of this regulation and Schedule 7—
  - (a) "civil explosive item" means a civil explosive article, a container containing a civil explosive substance or each smallest packaging unit containing civil explosive;
  - (b) "civil explosive article" means an article containing one or more civil explosive substances; and
  - (c) "civil explosive substance" means an explosive substance in a civil explosive.

Civil explosives are identifiable and traceable.

#### Guidance

33

### Unique identification code

110 Subject to certain exceptions mentioned below, manufacturers or importers of civil explosives are required to mark civil explosives with a unique identification code. Where it is required, the unique identification code must be marked on (or in certain cases attached to) each individual item. Different marking requirements apply depending on the size of the explosive.

111 The marking must be firmly affixed to the article in a durable and legible way.

112 The unique identification is described in Schedule 6 of ER2014 and is made up of:

- a part which can be read by a human being containing:
  - the name of the manufacturer;
  - an alphanumeric code detailing:
    - the state of manufacture or importation onto the market of the European Economic Area;
    - the manufacturing site code;
    - the unique product code and the logistical information designed by the manufacturer;
- a part which can be read electronically in barcode or matrix code format, or both, which relates directly to that alphanumeric code.

113 Schedule 7 of ER2014 describes how the unique identification should be affixed to different types of civil explosives.

33

#### Items too small to mark individually

114 If the explosive is too small to be marked with all of this information, only some of the information will be required. Schedule 7 of the Regulations details this information.

115 Further guidance on the marking of civil explosives including suggestions on how small items should be marked can be found at www.hse.gov.uk/explosives/traceability-itoer.htm.

#### **Exceptions to marking requirements**

116 Manufacturers are not required to mark civil explosives that are manufactured for export, providing that they are marked in accordance with the traceability requirements of the importing country.

117 Importers are not required to mark civil explosives if they are already marked with a unique identification compliant with Schedule 6 of ER2014.

118 The requirement to mark civil explosives does not apply to:

- an explosive which is transported and delivered without packaging or in a mobile explosives manufacturing unit for its direct unloading into the blasthole:
- fuses, which are cord-like non-detonating igniting devices;
- safety fuses, which consist of a core of fine grained black powder surrounded by a flexible woven fabric with one or more protective outer coverings and which, when ignited, burn at a predetermined rate without any external explosive effect; or
- cap-type primers, which consist of a metal or plastic cap containing a small amount of primary explosive mixture that is readily ignited by impact and which serve as igniting elements in small arms cartridges or in percussion primers for propelling charges.

# Regulation 34 Attribution of manufacturing site codes for civil explosives

#### Regulation

34

- (1) This regulation applies for the purposes of the attribution of a three digit code (referred to in this regulation as the "code") to a site where civil explosives are manufactured, which is unique to that site and is a component of the unique identification described in Schedule 6.
- (2) For each site within Great Britain at which civil explosives are manufactured—
  - (a) the manufacturer must apply to the Executive for it to attribute a code for the site; and
  - (b) the Executive must attribute the code and inform the manufacturer accordingly.
- (3) For the purposes of the attribution of a code to a site where civil explosives are manufactured in a country that is not an EEA State—
  - (a) paragraph (4) applies where the manufacturer is established in an EEA State and the place of import of the civil explosives is Great Britain;

#### Regulation 34

- (b) paragraph (5) applies where the manufacturer is not established in an EEA State and the place of import of the civil explosives is Great Britain; and
- (c) paragraph (6) applies where the manufacturer is established in Great Britain and the place of import of the civil explosives is either Northern Ireland or an EEA State other than the United Kingdom.
- (4) Where this paragraph applies -
- (a) in the case where the manufacturer is established in Great Britain—
  - the manufacturer must apply to the Executive for it to attribute a code for the site where the civil explosives are manufactured; and
  - (ii) the Executive must attribute the code and inform the manufacturer accordingly; and
- (b) in the case where the manufacturer is established in Northern Ireland or an EEA State other than the United Kingdom—
  - the Executive must attribute a code for the site where the civil explosives are manufactured when it receives a request from the manufacturer to do so; and
  - (ii) the Executive must inform the manufacturer accordingly.
- (5) Where this paragraph applies—
- (a) the importer must apply to the Executive for it to attribute a code for the site where the civil explosives are manufactured; and
- (b) the Executive must attribute the code and inform the importer accordingly.
- (6) Where this paragraph applies, the manufacturer must apply to—
- (a) the Secretary of State for Northern Ireland, where the place of import of the civil explosive is Northern Ireland; or
- (b) the national authority of the EEA State of import of the civil explosive,

for that Secretary of State or that national authority, as the case may be, to attribute a code for the site where the civil explosives are manufactured.

Sites manufacturing civil explosives have a site code.

#### Guidance

34

What is a site code?

119 A site code is a three digit code which forms part of the unique identification of the civil explosive.

#### Who to apply to for a site code

120 Who to apply to for a site code will depend on:

- where the explosives are manufactured;
- where the dutyholder is established; and
- when the civil explosives are being imported into the EEA where the place of import is.

121 Where civil explosives are manufactured in Great Britain the manufacturer should apply to HSE for a site code.

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- 122 Where civil explosives are manufactured in an EEA State other than the United Kingdom, the manufacturer should apply to the national authority of that state for a site code.
- 123 Where civil explosives are manufactured outside the EEA by a manufacturer established in Great Britain and the place of import of the civil explosives into the EEA is Great Britain, the manufacturer must apply to HSE for a site code.
- 124 Where civil explosives are manufactured outside the EEA by a manufacturer established in Northern Ireland or an EEA State other than the United Kingdom and the place of import of the civil explosives into the EEA is Great Britain, the manufacturer can apply to HSE for a site code who will attribute a code on request.
- 125 Where civil explosives are manufactured outside the EEA by a manufacturer who is not established in Great Britain and the place of import of the civil explosives into the EEA is Great Britain, the importer must apply to HSE for a site code.
- 126 Where civil explosives are manufactured outside the EEA by a manufacturer who is established in Great Britain and the place of import of the civil explosives into the EEA is Northern Ireland, the manufacturer should apply to the Secretary of State for Northern Ireland for a site code. HSE will attribute a code on their behalf.
- 127 Where civil explosives are manufactured outside the EEA by a manufacturer who is established in Great Britain and the place of import of the civil explosives into the EEA is not the United Kingdom, the manufacturer should apply to the national authority of the EEA state of import for a site code.

#### How to obtain a site code from HSE

128 Applications for a site code should be made to HSE by email to explosives.licensing@hse.gsi.gov.uk.

129 The HSE website gives details of what information will be required.

#### **Exceptions to the requirement for a site code**

130 A site code is not required for explosives that are:

- transported and delivered without packaging or in a mobile explosives manufacturing unit for its direct unloading into the blast-hole;
- fuses, which are cord-like, non-detonating igniting devices;
- safety fuses, which consist of a core of fine grained black powder surrounded by a flexible woven fabric with one or more protective outer coverings and which, when ignited, burn at a predetermined rate without any external explosive effect; or
- cap-type primers, which consist of a metal or plastic cap containing a small amount of primary explosive mixture that is readily ignited by impact and which serve as igniting elements in small arms cartridges or in percussion primers for propelling charges.

# **Regulation 35 Records in relation to relevant explosives**

#### Regulation

35

- (1) Subject to paragraph (2), a person ("person A") who acquires or keeps a relevant explosive must keep a record containing the information referred to in paragraph (3).
  - (2) The duty imposed by paragraph (1) does not apply to—
  - (a) individuals who acquire any relevant explosive, otherwise than in connection with their work, solely for their own personal use; or
  - (b) a relevant explosive which is produced by mixing at any place nonexplosive substances or preparations to form a relevant explosive for immediate use at that place.
  - (3) The information referred to in paragraph (1) is—
  - (a) the means of identifying the relevant explosive, including—
    - (i) its type;
    - (ii) its manufacturer;
    - (iii) a description of the relevant explosive and its name, product code or other information which enables the relevant explosive to be distinguished from every other explosive to which it is not identical;
  - (b) the total number of any explosive articles, the total nominal mass of explosive substance not contained in explosive articles or, in the case of such substances in cartridge form, the total number of cartridges;
  - (c) the location of the relevant explosive while it is in the possession of person A;
  - (d) the name and address of any person to whom the relevant explosive is transferred; and
  - (e) whether, while in the possession of person A, the relevant explosive has been—
    - (i) subjected to a further manufacturing process after its acquisition;
    - (ii) used;
    - (iii) transferred to another person; or
    - (iv) destroyed,
    - and the date of any such further manufacturing process, use, transfer or destruction.
  - (4) The record of that information must be kept up to date by person A.
- (5) The system applied by person A for collecting the information must be tested by person A at regular intervals to ensure its effectiveness and the quality of the information recorded.
- (6) Person A must keep the record for a period of three years from the date when the relevant explosive concerned was used, transferred to another person or destroyed.
- (7) Person A must protect the record against accidental or malicious damage or destruction.
  - (8) Person A must provide the enforcing authority with—
  - (a) information as to the origin and location of each relevant explosive to which the record relates, where the enforcing authority requests it; and

#### Regulation

35

- (b) the name of an employee or other person who would be able to provide the enforcing authority with that information at any time and the details necessary for that authority to be able to contact that individual.
- (9) Where a business of person A which acquires or keeps any relevant explosive is to cease to trade, person A must notify the enforcing authority of that fact and offer any record still required to be kept pursuant to paragraph (6) to that authority.
- (10) In paragraph (3)(a)(iii), "name" means, in relation to an explosive article or explosive substance—
  - (a) the name under which it is or is to be marketed; or
  - (b) in the case of a military explosive (within the meaning of regulation 25(11) (a) of the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009), the name designated in writing for that explosive article or substance by the Secretary of State having responsibility for defence.
- (11) When regulation 36 is in force, this regulation, to the extent that it concerns civil explosives to which the duty in regulation 36(1) will then apply, ceases to have effect in relation to those civil explosives.

People keep records of the relevant explosives they acquire or keep.

#### Guidance

35

# Who has to keep a record of the relevant explosives they acquire or acquire and keep?

- 131 Most people who acquire possession of or keep relevant explosives are subject to the record-keeping requirements of the Regulations.
- 132 Records are not required to be kept for relevant explosives that are:
- acquired or kept by private individuals other than in connection with their work and that are solely for their own personal use;
- manufactured in situ and used immediately, ie not kept. Examples of such relevant explosives could include:
  - ammonium nitrate fuel oil (ANFO);
  - relevant explosives produced during shot firing operations from ammonium nitrate blasting intermediate (ANBI);
  - relevant explosives manufactured from restricted substances.

#### Agents and records

133 An agent who acts to acquire relevant explosives for another person but who never has physical possession of the relevant explosives is not required to keep a record of those relevant explosives. This is because records will be kept by the person in physical possession of the relevant explosives.

#### Private individuals acquiring relevant explosives for their own use

134 As noted above, private individuals who acquire and keep explosives other than in connection with their work and solely for their own personal use are not required to keep a record of the relevant explosives. They should however have systems in place to retain sufficient information to be able to report losses under regulation 37.

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#### Record keeping and explosives that are not relevant explosives

135 A person acquiring or keeping:

- small arms ammunition;
- fireworks and most other pyrotechnic articles; or
- explosives listed in Schedule 2 to the Regulations;

will not have to keep records meeting the requirement of regulation 35 because those explosives are not relevant explosives. Records should however be kept to ensure compliance with any licence or permission or in order to provide information to the emergency services.

#### What should the records cover?

136 Relevant explosives should be accurately accounted for from manufacture or receipt to their final use, disposal or destruction.

137 The detailed arrangements to achieve these objectives will depend on specific circumstances. In some cases, (eg acquisition of relevant explosives for immediate use, with no keeping involved) a simple record of receipt and use may suffice. In more complex situations, however, (eg where explosives may be kept or used in several locations, and where multiple movements and transfers are required) subordinate records at key stages should be kept to support the main record. Record systems must be carefully designed to match specific operational arrangements. Simplicity and ease of understanding by people who have to operate any system are key factors. The existence of 'unofficial' records made by individuals is often symptomatic of the failure of a security management system.

#### Information to be recorded

138 A record should provide an accurate indication of the relevant explosives acquired or kept at any time and enable rapid detection and identification of any loss.

139 The record must to be kept up to date and should identify:

- the type of relevant explosive;
- its manufacturer;
- the date of acquisition;
- a description of the relevant explosive and its name, product code or other information which enables the relevant explosive to be distinguished from every other explosive which is not identical;
- the total number of any explosive articles, the total nominal mass of explosive substance not contained in explosive articles or, in the case of such substances in cartridge form, the total number of cartridges;
- the location of the relevant explosive while it is in the possession of the dutyholder. Where a site has more than one storage location or place of keeping, records should either identify the place where a relevant explosive is being kept or a separate record should be maintained for each keeping place;
- the name and address of any person to whom the relevant explosive is transferred; and
- whether, while in the possession of the dutyholder, the relevant explosive has been:
  - subjected to a further manufacturing process after its acquisition;
  - used;

35

- transferred to another person;
- destroyed; or
- lost:

and the date of any such further manufacturing process, use, transfer or destruction.

#### **Retention of records**

140 The records must be kept for three years from when the relevant explosive was used, transferred to another person or destroyed.

# Interaction with record-keeping requirements for civil explosives

141 After 5 April 2015, regulation 35 will cease to apply to those relevant explosives that are also civil explosives subject to regulation 36.

# Additional record-keeping guidance for certain relevant explosives

142 The record has to include a description which provides accurate and specific identification. Guidance on the approaches to be taken to the description of certain types of relevant explosives is given below.

#### Substances packaged in bulk

143 Where relevant explosives comprise substances packaged in bulk without being divided into units:

- the name;
- the number of outer cases; and
- the total nominal mass;

should be recorded for the purposes of regulations 35(3)(a)(iii) and (b). Alternatively, the unique identification information required by regulation 36 can be recorded.

#### Linear fuses: Detonating or otherwise

144 Where relevant explosives comprise linear fuses, whether detonating or otherwise:

- the name;
- the number of spools of linear fuse or cord of that type;
- the length of fuse or cord, or in the case of partially used spools, a reasonably accurate estimate of the length of fuse or cord;

should be recorded for the purposes of regulation 35(3)(a)(iii) and (b). Alternatively, the unique identification information required by regulation 36 can be recorded.

#### Plain detonators

145 Where the relevant explosives comprise plain detonators:

- the name;
- charge strength;
- type of delay series and delay number if any (where it is not part of the name);

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- tube material; and
- length of shock tube (if any);

should be recorded for the purposes of regulation 35(3)(a)(iii) and (b). Alternatively, the unique identification information required by regulation 36 can be recorded.

#### Electric detonators

146 Where the relevant explosives comprise electric detonators:

- the name:
- charge strength;
- type of delay series and delay number if any (where it is not part of the name);
- tube material:
- lead wire metal;
- colour of lead wire insulation; and
- length of leg wires;

should be recorded for the purposes of regulation 35(3)(a)(iii) and (b). Alternatively, the unique identification information required by regulation 36 can be recorded.

#### Sources of descriptions

147 The information detailed above should be readily available as it is generally included on packaging or on manufacturers' product data sheets, however manufacturers or suppliers should be able to assist in providing data in cases of difficulty.

#### Alternative approaches where the net mass is not available

148 If the net mass of explosive cannot be ascertained, the gross mass should be recorded instead. In certain cases, eg for the partially used spools of linear fuse, it may not be practicable to measure the precise quantity of explosive and a reasonably accurate estimate of mass should be recorded based on the length of fuse remaining.

#### Form of record

149 The form in which the record is to be kept is not specified and, in principle, any recording method, eg record book, stock card, docket, electronic record or combination of these, may be used as long as the necessary information is readily available and current stocks or losses can be assessed. For convenience, stock records may identify relevant explosives by means of codes (such as the unique identification information required by regulation 36), provided that quick and easy cross-reference, eg to manufacturers' literature, is available to give the full description of the explosive as required. Suitable arrangements should be made to secure any information stored on computer, eg against corruption or loss and facilitate auditing to discover any alteration.

#### **Stocktaking**

150 Records should be subject to regular monitoring and regular stock checks should be undertaken to check the accuracy of the records. The frequency and extent of stocktaking should take into account circumstances, eg regularity, scale and complexity of movements of relevant explosives.

35

151 In some cases, such as large scale-storage including many types of relevant explosives, it may be appropriate to check stock in rotation, limiting checks on each occasion to a particular range of relevant explosives. More frequent checks may be justified in relation to those relevant explosives most frequently used. Where sampling checks are used, ensure that the whole stock of relevant explosives is accounted for on a periodic basis. Appropriate checks should also be made on the consistency of records kept throughout any chain of distribution and use of relevant explosives. For instance, a storekeeper's record of issued and returned relevant explosives should be compared to records of downstream transfer and use to ensure relevant explosives are being properly accounted for.

#### Records for relevant explosives that are being manufactured

#### Substances

152 A record is not generally required of a relevant explosive substance in the course of manufacture. A record is, however, required once a relevant explosive substance of the intended composition has been produced, irrespective of whether the relevant explosive is to be, for example:

- stored in a desensitised form;
- further processed (eg into cartridges); or
- labelled, wrapped or packaged.

#### **Articles**

153 A relevant explosive article should be subject to a record either when it is capable of performing the function for which it is intended or when a part finished article is put into storage. For example:

- a record is not required for electric detonator tubes containing explosive, prior to attachment of the fuse head, plug and leading wires unless the tubes are placed into a store awaiting further processing;
- a record is required for completed detonators irrespective of whether further operations (eg incorporation into another article, attachment of identification labels or packaging) have to be carried out.

# **Regulation 36 Records in relation to civil explosives**

#### Regulation

36

- (1) Subject to paragraph (2), a person ("person B") who manufactures, imports, distributes, acquires or keeps any civil explosive must, in respect of any civil explosive manufactured in, or imported into, Great Britain on or after 5th April 2015, keep a record containing the information referred to in paragraph (3).
- (2) The duty imposed by paragraph (1) does not apply to individuals who acquire any civil explosive, otherwise than in connection with their work, solely for their own personal use.
  - (3) The information referred to in paragraph (1) is—
  - (a) the means of identifying and describing the civil explosive, including—
    - (i) its type; and
    - (ii) the unique identification in relation to the civil explosive;
  - (b) the location of the civil explosive while it is in the possession of person B;
  - (c) the name and address of any person to whom the civil explosive is transferred; and

#### Regulation 36

- (d) whether, while in the possession of person B, the civil explosive has been—
  - (i) subjected to a further manufacturing process after its original manufacture;
  - (ii) used;
  - (iii) transferred to another person;
  - (iv) or destroyed,

and the date of any such further manufacturing process, use, transfer or destruction.

- (4) The record of that information must be kept up to date by person B.
- (5) The system applied by person B for collecting the information must be tested by person B at regular intervals to ensure its effectiveness and the quality of the information recorded.
- (6) Person B must keep the record for a period of ten years from the date when the civil explosive concerned was used, transferred to another person or destroyed.
- (7) Person B must protect the record against accidental or malicious damage or destruction.
  - (8) Person B must provide the enforcing authority with—
  - (a) information as to the origin and location of each civil explosive to which the record relates, where the enforcing authority requests it; and
  - (b) the name of an employee or other person who would be able to provide the enforcing authority with that information at any time and the details necessary for that authority to be able to contact that individual.
- (9) Where a business of person B which manufactures, imports, distributes, acquires or keeps civil explosives is to cease to trade, person B must notify the enforcing authority of that fact and provide any record still required to be kept pursuant to paragraph (6) to that authority, who must keep that record for the remainder of the period referred to in that paragraph.

Records of civil explosives are kept throughout their supply chain and life cycle.

#### Guidance

36

#### Who has to keep a record of civil explosives?

154 Manufacturers, importers, distributors, and anyone who acquires or keeps civil explosives will have to keep a record of civil explosives from 5 April 2015.

155 Records are not required to be kept for explosives that are:

- acquired or kept by private individuals other than in connection with their work and that are solely for their own personal use;
- explosives transported and delivered without packaging or in a mobile explosives manufacturing unit for its direct unloading into the blast-hole;
- fuses, which are cord-like non-detonating igniting devices;
- safety fuses, which consist of a core of fine grained black powder surrounded by a flexible woven fabric with one or more protective outer coverings and which, when ignited, burn at a predetermined rate without any external explosive effect; and

#### Guidance

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cap-type primers, which consist of a metal or plastic cap containing a small amount of primary explosive mixture that is readily ignited by impact and which serve as igniting elements in small arms cartridges or in percussion primers for propelling charges.

#### **Retention of records**

156 The records should allow tracking and identification of an explosive at any time, and should be kept for ten years after the date when the explosive was used, transferred to another person or destroyed, even if the manufacturers, importers, distributors, and anyone who acquires or keeps the explosives, have ceased trading.

157 If they do cease trading, dutyholders must notify the enforcing authority and provide any records to them to keep for the remainder of the ten years.

#### Records and transfers of civil explosives

158 A record must be kept when a civil explosive is transferred to another person.

#### Interaction with regulation 8

159 Regulation 8 of ER2014 requires that before explosives are transferred to another person or physically moved (apart from within one site) the consignee must obtain a recipient competent authority document granting approval for the transfer from the competent authority for the place where the transfer will terminate.

160 Detailed guidance on transfers of civil explosives and recipient competent authority documents can be found at www.hse.gov.uk/explosives/transfer-of-explosives.htm.

#### **Additional guidance**

161 Additional guidance on what the record-keeping requirements should be applied to different civil explosives can be found on the HSE website – see www.hse.gov.uk/explosives/news/record-keeping.htm.

# **Regulation 37 Reporting loss**

#### Regulation

37

- (1) Any person who acquires possession of, keeps, loads, unloads or transports any relevant explosive or is the occupier of a place where it is loaded or unloaded while on a journey must ensure that the loss of any relevant explosive is reported forthwith—
  - (a) to the chief officer of police for the police area in which the loss occurs; or
  - (b) if it is not known where the loss occurred, to the chief officer of police for the police area in which the loss is discovered, or
  - (c) if the loss occurs or is discovered outside Great Britain, to any chief officer of police.
- (2) Where the person required by paragraph (1) to ensure the reporting of a loss is a person who had acquired possession of the relevant explosive or was keeping it, that person must also confirm the report in writing without delay

#### Regulation

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including the following information (whether or not previously supplied orally)—

- (a) the date and time that the loss was first discovered;
- (b) the place at which that discovery was made;
- a description of each type of relevant explosive that has been lost sufficient to distinguish that type from other explosives which are similar but not identical;
- (d) for each type lost-
  - (i) the number of articles lost, or
  - (ii) the total nominal mass of each type of explosive substance lost, except that in the case of a substance in cartridge form, the number of cartridges lost may be given.
- (3) Any person who transports, loads or unloads relevant explosive or is the occupier of a place where it is loaded or unloaded must also report the loss of any relevant explosive without delay to the consignor or, if the consignor is outside the United Kingdom, to the consignee.
- (4) Any person making a report under paragraph (3) must provide the consignor or consignee with any information in the possession of the person making the report which the consignor or consignee needs to comply with paragraph (5).
- (5) Any consignor or consignee to whom a loss is reported under paragraph (3) must without delay notify the loss in writing to the chief officer of police for the police area in which the loss was discovered, and also (if different) the chief officer of police who issued any explosives certificate held by the consignor or consignee which relates to the relevant explosive the loss of which has been so reported, giving the information listed in paragraph (2).
- (6) Employees must inform their employer without delay if they become aware of any loss of any relevant explosive which their employer must report.
- (7) Where any loss of a relevant explosive occurs at a site in relation to which the Executive is the licensing authority by virtue of Schedule 1, then any requirement in this regulation to report or supply information to a chief officer of police also includes a like requirement to report or supply the same information to the Executive.
- (8) Where any loss of a relevant explosive occurs at a site in relation to which the ONR is the licensing authority by virtue of paragraph 4 of Schedule 1, then any requirement in this regulation to report or supply information to a chief officer of police also includes a like requirement to report or supply the same information to the ONR.
- (9) The person required by paragraph (1) to ensure that a loss is reported must maintain adequate systems for ensuring that any loss of a relevant explosive is detected.
- (10) That system must be tested by that person at regular intervals to ensure its effectiveness.
- (11) In determining whether any relevant explosive is lost for the purposes of this regulation, no account is to be taken of any relevant explosive in respect of which it can be shown that the cause was not theft and that the relevant explosive no longer exists.

Losses of relevant explosives are reported immediately.

#### Guidance

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#### What does loss mean?

162 Loss of relevant explosives includes theft and accidental losses of relevant explosives during transport.

163 Loss does not include relevant explosives which have not been stolen and which can be shown to have been destroyed, or rendered non-explosive.

#### Does any loss of a relevant explosive have to be reported?

164 The loss of even a small amount of any relevant explosive must be reported immediately. This is important, given the significant potential for misuse presented by, for example, a single detonator or cartridge of blasting explosives in the possession of an unauthorised person.

#### Accountable losses, evaporation and accounting errors

165 A small accountable loss in weight of explosive substances (in handling during manufacture or laboratory analysis) does not have to be reported. A change in the previously measured weight is not regarded as a loss, if the change can be justifiably attributed for example to evaporation. Where a discrepancy in a record suggests a loss has taken place, but this can be shown to be an accounting error rather than a genuine loss, no report is required. In any case of doubt the police should be informed.

#### Losses of other explosives

166 Losses of small arms ammunition, fireworks and explosives listed in Schedule 2, other than:

- ammunition the acquisition of which is regulated or prohibited by virtue of the Firearms Acts 1968 to 1997; and
- smokeless powder;

do not have to be reported to the police because they are not relevant explosives. It is, however, recommended that such losses are reported to the police and to any licensing authority due to the potential that all explosives have for misuse.

#### Systems to identify losses

167 Everyone with a duty to report losses of relevant explosives is required to:

- maintain adequate systems for ensuring that any loss of a relevant explosive is detected; and
- test that system at regular intervals to ensure its effectiveness.

#### Guidance

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168 The nature of that system will depend on the circumstances but should include:

- regular stock checks against the records required to be maintained by regulation 35;
- comparing deliveries against transport documentation, delivery notes and invoices; and
- investigating potential breaches of physical security to indentify whether or not any relevant explosives have been stolen.

#### Individuals acquiring or acquiring and keeping relevant explosives

169 Individuals acquiring and keeping relevant explosives for their own personal use other than in connection with their work are not required to keep records but should keep sufficient information to enable them to identify and report losses of relevant explosives.

170 This information should be sufficient to allow the nominal types and quantities of explosives lost to be reported and should include:

- invoices and receipts;
- delivery notes;
- notes of activities where explosives have been used;
- lists or notes of relevant explosives manufactured; and
- lists or notes of relevant explosives used to manufacture other explosive articles.

#### **Reporting losses**

171 An initial report must be sent by the fastest practicable means, eg telephone or email, immediately following the discovery of any loss and this report should contain as much information as is initially available. A written report confirming the required details of the loss should be forwarded as soon as reasonably practicable after the initial report.

172 In order to report a loss, a number of people may be involved in providing information. For instance, where a loss occurs during transport of explosives, the person making the report has to give relevant information in their possession to the consignor or consignee, (regulation 37(4)) and the consignor and consignee will also have to make a report or reports to the police (regulation 37(5)).

# Related requirements to report losses of explosives in other legislation

173 Where explosives are lost at harbours, there is a related requirement under the Dangerous Substances in Harbour Areas Regulations 1987 (regulation 37(4)) to report a loss of those explosives to the Harbour Master and the Harbour or Berth Explosives Security Officer. This requirement applies whether the explosives are relevant explosives or not.

# **Plastic explosives**

# Regulation 38 Prohibitions in relation to unmarked plastic explosives

#### Regulation 38

- (1) No person may manufacture any plastic explosive, the finished product of which is unmarked.
- (2) No person may be in possession, nor transfer possession, of any unmarked plastic explosive.
- (3) Paragraph (2) does not apply to a plastic explosive that is in the process of being manufactured.
- (4) No person may import any unmarked plastic explosive into the United Kingdom.
- (5) For the purposes of this regulation, a plastic explosive is marked if, at the time of its manufacture, it, or a sample of the plastic explosive, contains a detection agent of at least the concentration specified in the corresponding entry for that detection agent in column 2 of the Table in Part 2 of Schedule 8, whether that detection agent is introduced during the process of manufacture of the plastic explosive for the purpose of making the plastic explosive detectable or as a result of the normal formulation of that plastic explosive.
  - (6) In this regulation—
  - (a) ("detection agent" means a substance named in column 1 of the Table in Part 2 of Schedule 8;
  - (b) "plastic explosive" has the meaning given by Part 1 of Schedule 8; and
  - (c) "unmarked" is to be construed in accordance with paragraph (5).

Plastic explosives are marked with a detection agent.

#### Guidance

38

#### **Definition of plastic explosives**

174 Plastic explosives are defined in Schedule 8 of ER2014 and a description of what substances are (or are not) plastic explosives for the purposes of regulation 38, can be found at paragraphs 39–43.

#### Marking of plastic explosives

175 Plastic explosives that are finished products must be marked with a detection agent ('taggant'). A detection agent is a chemical that has been added to the plastic explosive to aid detectability.

#### Guidance

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#### **Detection agents**

176 The detection agents that can be used to mark plastic explosives can be found in Part 2 of Schedule 8 (reproduced below).

#### Table 1

(1)	(2)
Name of detection agent	Minimum concentration
Ethylene glycol dinitrate (EGDN)	0.2% by mass
2,3-Dimethyl-2,3-dinitrobutane (DMNB)	1.0% by mass
para-Mononitrotoluene (p-MNT)	0.5% by mass

177 The minimum concentration of detection agent must be present in the plastic explosive at the time of its manufacture.

#### **Prohibitions**

178 No person can possess or transfer unmarked plastic explosives or import them into the United Kingdom.

# **Schedule 2 Explosives not requiring an explosives certificate**

## Schedule

## Part 1 List of explosives

Explosives	UN no
2-AMINO-4, 6-DINITROPHENOL, WETTED with not less than 20% water by mass	3317
CARTRIDGES, OIL WELL	0277
CARTRIDGES, OIL WELL	0278
CARTRIDGES FOR TOOLS, BLANK	0014
CASES, COMBUSTIBLE, EMPTY, WITHOUT PRIMER	0446
CASES, COMBUSTIBLE, EMPTY, WITHOUT PRIMER	0447
CORD, IGNITER	0066
CUTTERS, CABLE, EXPLOSIVE	0070
FUSE, NON-DETONATING	0101
FUSE, SAFETY	0105
1-HYDROXYBENZOTRIAZOLE, ANHYDROUS	0508
1-HYDROXYBENZOTRIAZOLE, MONOHYDRATE	3474
LIGHTERS, FUSE	0131
5-MERCAPTOTETRAZOL-1-ACETIC ACID	0448
NITROCELLULOSE SOLUTION, FLAMMABLE with not more than 12.6% nitrogen, by dry mass, and not more than 55% nitrocellulose	2059
NITROCELLULOSE WITH WATER (not less than 25% water, by mass)	2555
NITROCELLULOSE WITH ALCOHOL (not less than 25% alcohol, by mass, and not more than 12.6% nitrogen, by dry mass)	2556
NITROCELLULOSE with not more than 12.6% nitrogen, by dry mass, MIXTURE WITH or WITHOUT PLASTICIZER, WITH OR WITHOUT PIGMENT	2557

#### Schedule

2

Explosives	UN no
4-NITROPHENYLHYDRAZINE, with not less than 30% water, by mass	3376
PRIMERS, CAP TYPE	0044
PRIMERS, CAP TYPE	0378
SODIUM PICRAMATE, dry or wetted with less than 20% water by mass	0235
SODIUM PICRAMATE, WETTED with not less than 20% water, by mass	1349
TETRAZOL-1-ACETIC ACID	0407

#### Part 2 Further list of explosives

- 1 Ammunition intended for use in small arms.
- 2 Ammunition consisting of a propelling charge and an inert projectile intended for use in the industrial tools commonly known as kiln-guns.
- 3 Blank ammunition intended for use in small arms.
- 4 Cartridges, which are empty but with a primer which—
- (a) are assigned in accordance with the United Nations Recommendations the UN no 0055 or 0378;
- (b) are intended for use in small arms; and
- (c) would, if packaged for transport, be assigned in accordance with the United Nations Recommendations the UN no 0055 or 0378.
- 5 Cartridges power device which—
- (a) is assigned in accordance with the United Nations Recommendations the UN no 0275, 0276, 0323 or 0381;
- (b) is designed to produce mechanical actions such as inflation, linear or rotary motion, projection of fastening devices or extinguishing agents; and
- (c) consists of a casing with a charge of deflagrating explosive and a means of ignition.
- 6 A desensitised explosive which is—
- (a) a medicinal product as defined in regulation 2 of the Human Medicines Regulations 2012; or
- (b) a veterinary medicinal product as defined in regulation 2 of the Veterinary Medicines Regulations 2013.
- 7 A desensitised explosive which is a substance specified in an order made under section 104 or 105 of the Medicines Act 1968 which is for the time being in force and which directs that specified provisions of the Human Medicines

#### **Schedule**

2

Regulations 2012 or the Medicines for Human Use (Clinical Trials) Regulations 2004 are to have effect in relation to that substance as such provisions have effect in relation to medicinal products as defined in regulation 2 of the Human Medicines Regulations 2012.

- 8 Any desensitised explosive acquired, in a quantity not exceeding 5 grams, for the purposes of—
- (a) research, analysis or testing at a University;
- (b) research, analysis or testing by or on behalf of the Crown; or
- (c) the application of forensic science by or on behalf of a police force or the Crown.
- 9 Any desensitised explosive acquired, in a quantity not exceeding 1 gram, for the purposes of calibration or testing of explosives detection equipment at a port, airport or any other publicly accessible place.
- 10 Explosive articles which-
- (a) are assigned in accordance with the United Nations Recommendations the UN no 0186, 0272, 0349, 0351 or 0471;
- (b) are intended to be used for the propulsion of model rockets or similar articles; and
- (c) in respect of each individual explosive article, contain no more than 1 kilogram of explosive.
- 11 The explosive substance Isosorbide Dinitrate which has been desensitised by mixture with not less than 60% lactose, mannose starch or calcium hydrogen phosphate and which is—
- (a) assigned in accordance with the United Nations Recommendations the UN no 2907; and
- (b) intended for use as an active pharmaceutical ingredient.
- The explosive substance Nitrogen Triiodide with the chemical formulation  $\mathrm{NI}_3$ , in a quantity not exceeding 0.5 grams which has been manufactured for, and is used for, demonstration purposes as part of an educational activity within the meaning of section 1(3) of the Further Education Act 1985 and either it is wholly used up in the demonstration or any amount remaining is destroyed immediately after it.
- 13 A solution of the explosive substance Nitroglycerine in alcohol which is—
- (a) assigned in accordance with the United Nations Recommendations the UN no 1204 or 3064; and
- (b) intended for use as an active pharmaceutical ingredient.
- Any pyrotechnic substance, in a quantity not exceeding 0.5 grams, which has been manufactured for, and is used for, demonstration purposes as part of an educational activity within the meaning of section 1(3) of the Further Education Act 1985 and either it is wholly used up in the demonstration or any amount remaining is destroyed immediately after it.
- 15 The explosive substance smokeless powder which is—
- (a) assigned in accordance with the United Nations Recommendations the UN no 0161 or 0509 or which has been recovered from ammunition or blank ammunition intended for use in firearms; and

#### **Schedule**

2

- (b) acquired by a person who either is registered as a firearms dealer under section 33 of the Firearms Act 1968 or holds—
  - (i) a permit granted under section 7 of that Act;
  - (ii) a firearms certificate granted under section 27 of that Act;
  - (iii) a shotgun certificate granted under section 28 of that Act; or
  - (iv) a permit granted under section 17 of the Firearms (Amendment) Act 1988.
- 16 A solution of the explosive substance 2,4, 6-Trinitrophenol in a concentration no greater than 2% weight per volume intended for use as an analytical reagent, stain, dye or fixative.

# Schedule 3 Pyrotechnic articles requiring an explosives certificate

#### **Schedule**

- 3
- 1 Pyrotechnic articles which are or would, if packaged for transport, be assigned in accordance with the United Nations Recommendations the UN no. 0350, 0352, 0353, 0354, 0355, 0356, 0462, 0463, 0464, 0465, 0466, 0467, 0468, 0469, 0470 or 0472.
- 2 Pyrotechnic articles which-
- (a) are or would, if packaged for transport, be assigned in accordance with the United Nations Recommendations the UN no. 0349, 0351 or 0471; and
- (b) are not intended to be used for the propulsion of model rockets or similar articles.
- 3 Pyrotechnic articles which-
- (a) are or would, if packaged for transport, be assigned in accordance with the United Nations Recommendations the UN no. 0033, 0034, 0035, 0037, 0038, 0039, 0171, 0254, 0291, 0297, 0299, 0399 or 0400; and
- (b) are intended to be dropped as bombs from an aircraft.
- 4 Pyrotechnic articles which—
- (a) are or would, if packaged for transport, be assigned in accordance with the United Nations Recommendations the UN no. 0451, 0329, 0330, 0450 or 0449; and
- (b) are intended to be dropped as torpedoes from an aircraft or dispatched from an installation on land or a vessel.
- Tracers for ammunition which are or would, if packaged for transport, be assigned in accordance with the United Nations Recommendations the UN no. 0212 or 0306.

# Appendix 1 Further information on standards of physical security for stores holding relevant explosives

#### Objectives of the security arrangements

- 1 In addition to providing an appropriate level of physical security, the objectives of the security arrangement for relevant explosives should include alerting the police or other defensive force promptly if an attempt is made to gain access to the relevant explosives or to the places they are manufactured, stored or kept.
- 2 Once an alert has been raised, a plan agreed between the occupier of the site and the police or other defensive force should be implemented.

#### Use of patrols and alarms

- 3 Storage places for relevant explosives on sites that are not constantly manned should be:
- equipped with a suitably monitored alarm system;
- subject to an effective system of patrols that takes account of staff absences;
- kept secure by a combination of suitable alarms, supplementary patrols and/or surveillance systems.
- 4 A 'constantly manned' site is one where any attempt to break into a storage place would be immediately detected by the workforce and appropriate action taken.

#### Standards for alarms

- 5 The alarm system should conform to a relevant standard.
- Alarms should react to the first onslaught and not wait until the intruder is actually inside the storage place, because there is then much less time for the defensive force to react. Doppler microwave and passive infrared systems in general only detect an intruder after they have entered a storage place.
- 7 The alarm system itself should be fail-safe and signal any attack that may be made on it, or its connecting equipment and wiring. It should safeguard the walls, doors and roof of a building or the perimeter of any open storage areas.
- 8 The electrical alarm system should comply with a relevant standard for electrical apparatus in explosives buildings. The alarm's signalling systems should comply with the Association of Chief Police Officers (ACPO) alarms policy unless the delay between a system responding to two distinct and different alarm triggers would not allow the first onslaught to be detected. Where this is the case, systems that work by detecting a series of distortions to that one system should be used.

#### Standards for patrols and other surveillance systems

- 9 If patrols are used for surveillance, the time for which the building can resist the expected level of attack should be at least equal to the sum of the longest interval between inspection by the patrol or the patrol's response to an alarm and the time expected for the police, or other defensive force, to make an effective response.
- 10 Stores are unlikely to withstand an attack with power tools for a prolonged period and this should be considered when planning patrols.
- 11 A 'fail-safe' system of reporting should be employed, ie the patrol should report by telephone or radio at prearranged intervals and the defensive force should react if a report is not received.
- 12 While systems based on closed-circuit television are a valuable means of assessing alarms, they should not be used as a primary means of detection and it is recommended that the police Explosives Liaison Officer or Counterterrorism Security Adviser for the area where the store is located is consulted before any surveillance system is installed.

#### Construction of steel stores

#### Material and method of construction

- 13 Steel stores should be of all-welded construction, using minimum 6 mm thick steel plate.
- 14 Where container type stores are constructed from materials other than steel or when steel stores:
- do not meet this 6 mm minimum thickness (eg ISO containers); or
- are not of welded construction;

the dutyholder should be able to demonstrate that they have alternative security controls in place that will deliver an equivalent level of security.

#### Preventing unlawful removal of the store

- 15 Steel explosives stores are generally designed to be transportable. When they are being used for the storage of relevant explosives, they should be firmly fixed to an adequate base to prevent their unlawful removal. Each store should be fitted with strong, steel channels securely welded to the base.
- 16 At four points, suitably-spaced holes should be drilled through the channel and the adjacent parts of the steel base of the store. The diameter of these holes should be just sufficient to accept a 20 mm diameter bolt.
- 17 The store should stand on a base of good quality concrete at least 200 mm thick. The base should extend under the whole area of the store, including the area occupied by any attached detonator annex. Four 20 mm rag bolts should be fixed firmly into the concrete to a depth of at least 150 mm.
- 18 The threaded upper ends of the bolts should pass through the holes in the steel channel and terminate just below the wooden floor of the store. The store should be firmly fixed to the four bolts. The concrete base should be thoroughly cured before fixing the store in position, otherwise distortion of the store may occur and doors may not fit properly. Figure 1 illustrates two acceptable arrangements.

Arrangement 1 Arrangement 2 Front view Front view Plan view Plan view Bolt fixing Bolt fixing Wooden floo Vooden floo 20 mm diameter 20 mm diameter steel bolt steel bolt Steel bottom of store Steel bottom of store

Figure 1 Arrangements for store fixing

#### **Doors**

19 The door should fit flush with the walls and any gaps around the door must be the minimum necessary to allow the door to open and close freely. Door handles should be of weak construction to prevent them being used to assist in an attack on the door.

Concrete base containing rag bolts

#### Single leaf doors

Concrete base containing rag bolts

20 Single leaf doors should be a minimum of 6 mm thick steel plate and secured by at least two locks. Doors taller than 1.5 m should be secured by three or more locks.

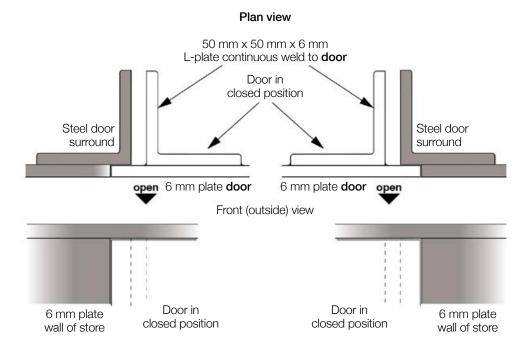
#### Double leaf doors

- 21 Double leaf doors should be a minimum of 10 mm thick steel plate and secured by at least three locks. The first closing leaf should also be secured by an upward operating bolt and a downward operating bolt that are:
- of either square or circular cross-section, having respectively sides or diameters of 20 mm;
- enclosed within robust cages which should themselves be continuously welded to the door;
- located behind the top vertical position of the steel framework and at the bottom of the door within or behind strong steel housing sunk in the floor; and
- not visible from the outside when the door is closed.
- When the double leaf door is locked, no part of the lock bolts should be visible from the outside and a steel plate at least 6 mm thick should be welded to the whole length of the edge of the inner surface of the first closing leaf. It should extend beyond the edge of the inner surface for a distance of at least 15 mm.

#### Stiffening doors and openings

23 Doors that are manufactured from 6 mm plate should be stiffened. Thicker steel doors may need to be stiffened depending on the size of the leaf. Stiffening should be by steel angles or channel (50 mm x 50 mm x 6 mm) welded to the inner surface of the door as close to the four edges as possible. This angle should be continuous and unbroken. Figure 2 shows a suitable arrangement for door stiffening.

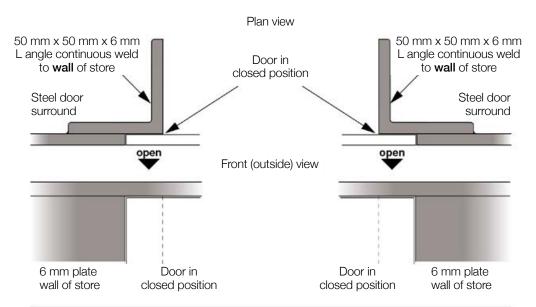
Figure 2 Suitable arrangements for door stiffening

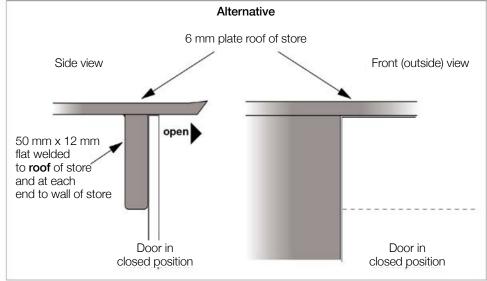


24 The top of the door should either not sit immediately under the roof plate or, where it does, the door opening should be stiffened.

- 25 Door openings should be stiffened by either:
- 50 mm x 50 mm x 6 mm steel angles welded to the walls in such positions that, when the door is closed, its inner surfaces meet at the top and at the two vertical sides for a distance of 20 mm inwards from the edge; or
- horizontal parts of the framework being stiffened by a 10–15 mm thick steel bar welded to the inner surface of the roof and, at each end, to the walls on either side of the door.

Figure 3 Suitable arrangements for door opening



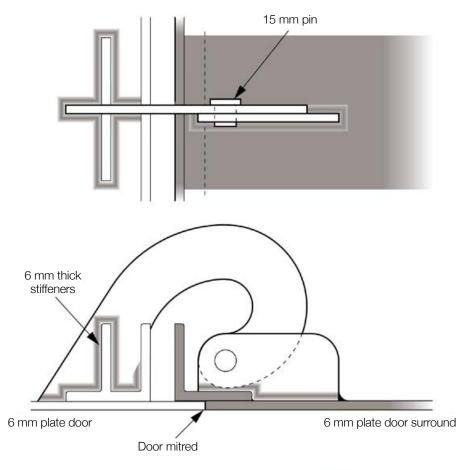


#### Hinges

26 The door should hang by means of robust steel hinges continuously welded both to the door and to the door surround. At least two hinges should be fitted to each door and additional hinges should be fitted where necessary to ensure safe and efficient operation of the door.

- 27 The hinges may be fitted internally or externally. For doors with external hinges, a number of hinge bolts (alternatively known as 'dogbolts' or 'snugs') should be provided. They prevent the door being opened from the hinge side, should the external hinges have been previously destroyed or partly removed.
- 28 Hinge bolts should be continuously welded to the inner surface at the hinge side of the door and extended at least 20 mm behind the door surround. When the door is closed, the hinge bolts should fit snugly against the door surround. The cross-sectional areas of the hinge bolts should be no less than 40 mm x 20 mm.
- 29 The upper hinge bolts should be positioned at or above the level of the hinge, with lower hinge bolts at or below the level of the lower hinge. The number of hinge bolts fitted will be dependent on the height of the door, but in no case should there be fewer than two. Where there are more than two, they should be equally spaced.
- 30 Where internal hinges are fitted, the design of the hinges should be such that they will not straighten if the hinge side of the door is subjected to lever attack. Figure 4 gives an indication of a suitable hinge and the means by which it may be fixed to the door surround. It should be noted that, to provide additional strength, the hinge is also welded to the adjacent parts of the steel angle stiffening pieces.

Figure 4 Internal hinge (showing strengthening arrangements)



Note extent of the welding: 6 mm solid fillet indicated by

#### Secure ventilation

- 31 Steel stores should be ventilated to prevent the:
- accumulation of vapours that are hazardous to either human health or which are flammable when mixed with air;
- deterioration of packaging or the explosives that they contain.
- 32 The simplest form of secure ventilation for steel stores is a number of 5 mm diameter holes drilled through the walls of the store. The location of ventilation holes should be considered as part of the design process for the store and as part of determining its location on site. The potential for any vent to act as a point of leverage should be assessed and additional precautions implemented where appropriate.
- 33 Whatever form of ventilation is used, it should be protected by a 6 mm thick steel cover-plate welded to the outside of the walls, covering all ventilation spaces and open at the bottom. The corresponding ventilation holes drilled through any inner wooden lining should be located so that the group is offset from the location of those in the steel wall.

#### Construction of concrete, stone or brick stores

#### Stores built of reinforced concrete

Walls of buildings of reinforced concrete should be at least 250 mm thick and tied into the roof by means of reinforcing rods.

#### Stores built of brick, stone or concrete block

#### New buildings

New buildings should be built with a cavity wall with external leaf at least 100 mm thick brick and internal leaf either 215 mm thick brick or 200 mm dense concrete block.

#### Existing buildings

- 36 Existing buildings used as stores should either:
- meet the requirements for new buildings; or
- have walls at least 230 mm thick, excluding the width of any cavity.

#### Buildings with walls a single brick thick

- 37 Buildings with walls a single brick thick should not be used for the storage of relevant explosives unless additional physical measures are in place that will deliver an appropriate standard of security. Examples of additional security measures include the relevant explosives being kept within:
- a secure steel store; or
- secure brick or concrete block compartment

constructed within the building.

#### Roofs and frangible panels

- 38 Concrete roofs should be solid, reinforced, and not less than 150 mm thick. They may be sloped to 125 mm at the edge to drain off water.
- 39 Buildings used as stores should not have a roof constructed of tiles, slates hanging on beams or other similarly insecure roof unless additional physical security measures are in place that will deliver an appropriate standard of security.

Examples of additional physical security measures include the relevant explosives being kept within:

- a secure steel store; or
- secure brick or concrete block compartment

constructed within the building.

40 Additional physical security measures should also be implemented where buildings used as stores are fitted with frangible panels or a frangible roof for reasons of safety. A separate security barset or roof which does not compromise venting should be fitted inside the frangible panel or roof.

#### **Doors**

#### Single and double leaf doors

Doors should be designed and constructed in accordance with paragraphs 19–23, unless they are intended to close larger openings.

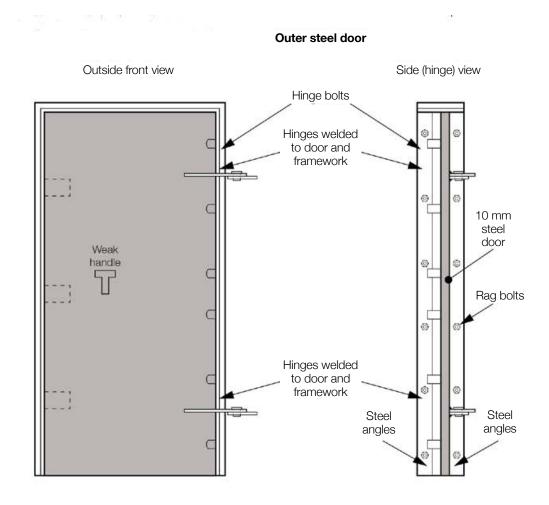
#### Doors for larger openings

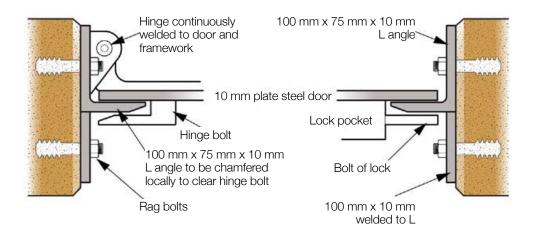
42 Doors for larger openings should be designed and manufactured to a provide a level of security equivalent to that provided by doors designed and constructed in accordance with paragraphs 19–30.

#### Door frames

- 43 Door frames should be made of steel angles having a minimum thickness of 10 mm. The angle should be constructed to form a 'T-section' frame with a minimum of 200 mm width of the frame against the wall and 75 mm to form the door rest.
- 44 This can be provided by either:
- 100 mm x 75 mm angle and a 100 mm flat bar welded to form the T; or
- the use of T-section steel.
- The angles should be securely bedded and rag bolted to the surrounding walls. Where possible, the door should not protrude beyond the line of the wall and in no case should it protrude beyond that of the door frame. See Figure 5.

Figure 5 Suitable arrangements for a door

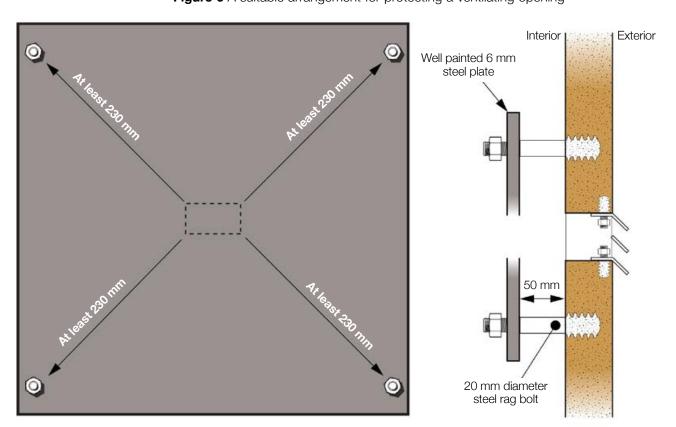




#### Secure ventilation

- 46 Concrete, stone and brick stores should be securely ventilated to prevent the:
- accumulation of vapours that are hazardous to either human health or which are flammable when mixed with air;
- deterioration of packaging or the explosives that they contain.
- 47 Particular attention should be paid to the design of ventilators for concrete stone and brick stores because of their vulnerability to attack. The inner and outer ventilating openings in brick, stone or concrete block built cavity walls should be staggered vertically so as to prevent direct access to the inside of the store. For each set of ventilators there should be built into the brickwork, at a stage midway between the two openings, a strong, perforated steel plate, in a horizontal position, spanning the cavity between the two lines of brickwork.
- Ventilating louvres on the outside should be of steel and not of other materials such as cement, or earthenware. They should be firmly fixed to the surrounding walls and these fixings should be entirely concealed from the outside.
- 49 Additional security controls will need to be implemented where it is not possible to arrange a staggered form of ventilation in a solid walled store. Where 'straight through' ventilation is required, the outer ventilating opening should be fitted with a louvre of the type referred to in paragraph 33. In addition, the opening on the inner surface of the wall should be faced with a robust, well-painted, steel plate fixed by means of four rag bolts to the wall. The bolts should be of 12 mm diameter and located at least 225 mm from the opening. The plate should be so fixed as to stand away from the wall at a distance of about 50 mm, to permit an adequate airflow. Figure 6 shows a suitable arrangement.

Figure 6 A suitable arrangement for protecting a ventilating opening



Note: The 12 mm diameter rag bolts should be at a distance of at least 230 mm from the ventilation opening

#### Locks

50 Doors should be secured by at least two multilever mortice deadlocks, each having a bolt of hardened steel or which contains hardened steel cylinders. New or replacement locks should have at least seven levers. The bolt should extend a distance of at least 20 mm beyond the fore-end of the lock when it is in the thrown position.

#### Lock pockets

- 51 Each lock should be enclosed within a steel lock pocket which should be continuously welded to the inner surface of the door and to the steel angle stiffener, which will of necessity have been partially cut away at that point to permit the lock pocket to be fitted. In fitting the pocket, the edge of the angle through which the lock is passed to fit into the pocket should be slotted and not cut through.
- 52 Where, on existing stores, the 50 mm wide angle has been cut out and then re-welded into place, it will be necessary to periodically examine these welds to ensure no deterioration has reduced the effective strength of the angle.
- 53 The two side plates of the pocket should have a thickness of 6 mm. They should be separated from each other by steel blocks at the top and bottom, the whole being welded together. The internal dimensions of the pocket should be such that the lock fits snugly into it with only the absolute minimum amount of lateral movement. A suitable arrangement is illustrated in Figure 7.

Steel door tapped to accomodate thread stud for fixing fore-end lock to door pocket

Edge of 6 mm or 10 mm plate door

6 mm mild steel plate

Fedge of 6 mm or 10 mm plate door

Edge of 6 mm or 10 mm plate door

Figure 7 Steel pocket lock

The pocket should be of all-welded construction and should be continually welded to the inner surface of the door, and in the case of 6 mm plate door, to the adjacent portions of the locally cutaway steel angle door stiffener.

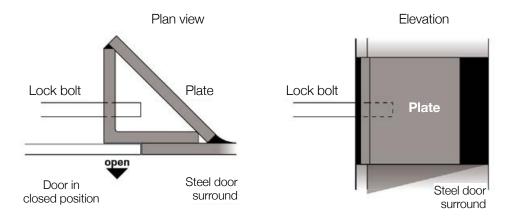
The pocket should be positioned as close as possible to the vertical edge of the door, while permitting the door to be opened without obstruction.

#### Securing the thrown bolt

#### Steel stores

When a lock is fitted to a single leaf door to a steel store, the lock bolt should, when in the thrown position, pass into a hole cut for this purpose in the steel angle stiffener fitted to the adjacent part of the surround of the door. The size of the hole should be such that it forms a snug fitting for the lock bolt and does not permit any movement of the door when locked. In addition, the end of the lock bolt should be protected from end-on attack by means of a piece of steel angle or plate welded across the door surround stiffening angle in such a position to prevent end-on attack on the bolt. Figure 8 shows a suitable arrangement.

Figure 8 Additional protection for lock bolt



#### Concrete, stone or brick stores

56 When a lock is fitted to a single leaf door to a concrete, stone or brick store, the lock bolt should, when in the thrown position, sit behind the 'upright' of the T-section frame that is referred to in paragraph 43 of this appendix. See illustration at the bottom right-hand corner of Figure 5.

#### **Anti-drilling plates**

57 The vulnerability of any lock to drilling should be assessed by a competent person and anti-drilling plates fitted as necessary. This plate can be built into the lock pocket or may be welded onto the outside of the door in the position shown in Figure 9.

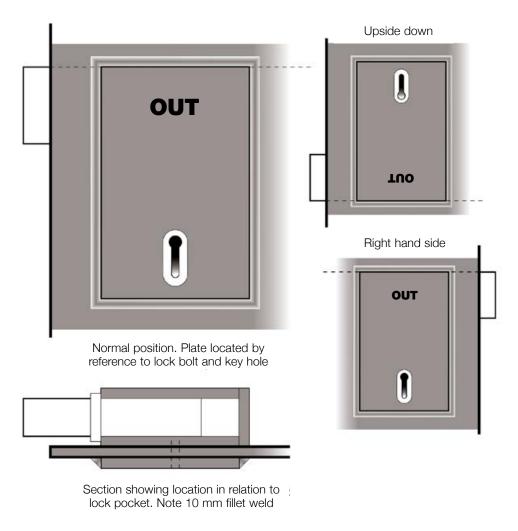


Figure 9 Location of lock protection plates

58 If an Erebus E2553, Banham M101, Chubb 3G317 or Chubb 3G227 lock is fitted, it should be protected by an anti-drilling plate.

#### Fitting anti-drilling plates

- 59 All locks on a door that have been identified as requiring an anti-drilling plate should be protected. It is not sufficient to protect just one lock on each door.
- 60 The plate must be precisely aligned with the lock to ensure that the hard facing material is located over the vulnerable area of the lock.
- 61 All fittings, eg escutcheon plates, should be removed from the outside face of the door over the areas required for the protection plates. Ensure that the area is flat and that the plates lie closely against the surface of the door.
- 62 Operate the lock to leave the bolt in the extended position. The bolt should protrude beyond the edge of the door and act as a reference point for alignment of the plate. The edge of the bolt furthest from the keyhole, normally the top edge, is used for this alignment.
- 63 Clamp the protection plate to the door such that the plate top edge is precisely in line with the lock bolt and the keyway is placed centrally over the lock

keyhole. The side of the plate marked 'OUT' or 'O' must be outermost. Check that the key can be operated; it should not be necessary to enlarge the keyway in the protection plate.

- 64 Locks are normally fitted to the left-hand side of the door. However, a small proportion may be in other positions, eg on the right-hand side, on the top edge, on the left-hand side but upside down. The main alternatives are shown in Figure 9. The correct alignment of the plate for any lock position can be deducted from this figure.
- The plate should be fixed to the door by a continuous 10 mm fillet weld using a normal electric arc welding technique for mild steel. Gas welding would not be expected to give appropriate penetration and should not be attempted. The minimum heat necessary to deliver an effective weld should be used to avoid distorting the door. The plate should be first attached with a narrow chain weld, the gaps filled and the weld finally built up to 10 mm.
- The plate and the surrounding area should finally be cleaned off, primed and painted and escutcheon plates replaced as appropriate.

#### Continuing effectiveness of locks

- 67 All types of lock should be serviced regularly and checked to ensure that they work correctly.
- 68 Simple escutcheon plates should be fitted over the key openings on the doors to prevent intrusion of grit and dust, which could damage the locks.

#### Testing locks for wear

- 69 Locks can suffer wear over time, for example some older Erebus and Banham locks have become relatively insecure, due to excessive wear on an internal brass link. As a result, the key may fail to throw the bolt to its fullest extent and it may, therefore, not function as a deadlock. Locks can be tested for this condition by:
- holding the door open and placing the bolt in the retracted position, place the thumb against the end of the bolt and turn the key as if to lock the door. If the lock is defective, it is possible that the bolt will not be thrown fully, notwithstanding that the key may be turned to the locked position and be capable of being removed from the lock;
- with the door open and the bolt fully thrown, press the thumb against the end of the bolt. If the lock is defective, the bolt can be pushed back to the retracted position.

### **Glossary**

The following terms are used in this publication:

**black powder** is the explosive substance assigned in accordance with the United Nations Recommendations the UN no 0027 or 0028.

**civil explosive** an explosive which has been or would be classified in accordance with the UN Recommendations as falling within Class 1 but it does not include:

- ammunition the acquisition of which is regulated or prohibited by virtue of the Firearms Act 1968 to 1997;
- any explosive which it is shown is intended for the lawful use by the armed forces or the police of any country;
- a pyrotechnic article; and
- an explosive which is used immediately at the place of manufacture.

A full explanation can be found at paragraphs 35–38.

**Class 1** means Class 1 in respect of explosives or the classification of dangerous goods as set out in the United Nations Recommendations.

**detection agent** a substance used to chemically mark plastic explosives to aid their detection.

**EEA** the European Economic Area.

**explosives area** any area, which may be outdoors or within a building, where explosives are stored, manufactured, disposed of or otherwise processed.

**explosives building** any building in which explosives are stored, manufactured, or otherwise processed.

**explosive certificate** a certificate certifying that the person to whom it is issued is a fit person to:

- acquire relevant explosives; or
- acquire and keep relevant explosives;

in accordance with the terms of the explosives certificate.

Explosives certificates are granted by the police and it is an offence for a person to acquire and/or keep relevant explosives unless the person has a valid explosives certificate.

An explosives certificate is not required for the acquisition or keeping of:

- ammunition regulated or prohibited by the Firearms Act 1968 to 1997;
- most pyrotechnic articles; or

other explosives listed in Schedule 2.

Nor is a certificate required by those officials and official bodies listed in regulation 3(7) of ER2014.

The requirement for an explosives certificate is extended beyond just those people having actual physical possession or ownership of explosives to 'agents' or to others who do not own the explosives but may have possession or a degree of control of them which amounts in law to possession. For instance, contractors who use explosives owned and kept by clients, eg shot-firing companies, dealers who buy and sell but do not keep explosives, and agents who directly or indirectly control movements of explosives owned by other companies, are all required to hold an explosives certificate. Owners, as well as those people having physical possession of explosives, are required to have a certificate and, in some cases, this means that more than one person will need to hold a certificate for the same explosive.

**explosives operations** any activities involving explosives that are subject to the requirements of the Regulations. They will include manufacture, storage, disposal, discard, and decontamination and may include explosives processing that does not constitute manufacture and on certain sites, use. In relation to the security provisions of ER2014 they will also include transfer, importation and marking of explosives.

**explosive substance** an explosive substance can be a single substance or a mixture of substances. The definition contains two important qualifications:

- the definition of explosive substance excludes gases and mixtures of gases;
   and
- the explosion effect must be created by a reaction in the substance or preparation in itself (or in the case of a pyrotechnic effect, by a self-sustaining reaction).

This does not therefore include a secondary reaction which involves substances or preparations which were not part of the original explosive substance.

**frangible panel** a panel, (including a complete roof or wall) generally of lightweight construction, which is designed to break-up when subjected to an overpressure and which can be used to either:

- direct blast effects in a particular direction; or
- reduce the potential for buildings to fragment and generate harmful fragments in an explosion.

**List X** a list of contractors undertaking work for Her Majesty's Government and who have been security cleared.

**manufacture** the interpretation in the Regulations specifies certain activities that are regarded as manufacture. However, manufacture is not limited to these activities but would include any activity where the process undertaken changes the nature of the substance or article. This includes processes where explosive substances or explosives are made or assembled, or unmade or disassembled (for example, manufacture of gunpowder, filling or fusing of fireworks, assembling fireworks displays from components, breaking down jet perforating guns, removing fuses from artillery shells and filling shotgun cartridges and other cartridges for small arms).

The activities covered by ER2014 include the manufacture of explosives and intermediate products for on-site mixing and storage.

There are a number of processes that are not considered to be 'manufacture' for the purposes of the Regulations. These can include:

- packing or repacking explosives or explosive articles;
- breaking down explosives stored in bulk into smaller storage containers;
- labelling explosives or explosive articles;
- testing and proofing explosives or explosives articles; and
- using explosives articles as components to make a product which is not classified as an explosive (for example, the preparation of an explosive actuator into a fire drencher system, fitting air bags to vehicles, fitting ejector seats and other pyrotechnic articles to aircraft).

Where these activities alone are undertaken then there is no requirement to hold a licence under regulation 6. However, such activities fall within the scope of ER2014 as a whole and of the safety and security requirements of the Regulations.

**mobile explosives manufacturing unit (MEMU)** a moveable unit, whether mounted on a vehicle or not, for manufacturing and charging explosives from dangerous goods that are not explosives, with the unit consisting of various tanks, bulk containers and related equipment.

**net mass** the terms 'net explosive content' and 'net explosive quantity' are commonly used in the industry to refer to the weight of the explosive contained within an article (ie less packaging, casings etc but including explosives in fuses and propelling charges etc). Although these terms are commonly understood to refer to mass there is scope for differing interpretations of 'content' and 'quantity' in that these could be taken to refer to volume. The term 'net mass' is used for the sole reason of avoiding any scope for confusion or misinterpretation.

#### normal shipboard activities includes:

- the construction, reconstruction or conversion of a ship outside, but not inside, Great Britain; and
- the repair of a ship except repairs carried out in dry dock.

**offshore** the belt of sea over which the UK exercises sovereign jurisdiction and any area designated under:

- section 1(7) of the Continental Shelf Act 1964;
- section 1(5) of the Energy Act 2008;
- a 'renewable energy zone' designated by section 84(4) of the Energy Act 2004.

**person** the term 'person' is used in a number of the Regulations. 'Person' can be an individual and it includes a body of people, corporate or unincorporate.

#### **prohibited person** a person who is forbidden from:

- acquiring, keeping, handling or controlling relevant explosives or any restricted substance;
- being knowingly employed in a position where they handle or had control of relevant explosives or any restricted substance;

because they have been:

- convicted of any offence under the Explosives Substances Act 1883;
- sentenced to a sentence which is excluded from rehabilitation under the Rehabilitation of Offenders Act 1974 by virtue of section 5(1) and (1A) of that Act; or

- sentenced to a custodial sentence within the meaning of section 5(7) and (8) of the Rehabilitation of Offenders Act 1974 and their conviction is not spent for the purposes of that Act;
- sentenced to a sentence of service detention, within the meaning of section 5(8) of the Rehabilitation of Offenders Act 1974, for a recordable service offence and their conviction is not spent for the purposes of that Act.

See www.gov.uk/government/publications/new-guidance-on-the-rehabilitation-of-offenders-act-1974 for more guidance on the Rehabilitation of Offenders Act 1974 and what comprises a custodial sentence.

pyrotechnic articles articles that contain explosives substances or an explosive mixture of substances designed to produce heat, light, sound, gas or smoke or a combination of such effects through self-sustained exothermic chemical reactions. They include fireworks plus other items such as flares, smoke signals and flash cartridges. Pyrotechnic articles will also include all such articles that have been characterised as such by a notified body under the provisions of Directive 2007/23/EC, pyrotechnic articles that are equipment falling within the scope of Directive 96/98/EC and percussion caps intended specifically for toys falling within the scope of Council Directive 2009/48/EC. Pyrotechnic articles will also include those articles that have been identified as such by Directive 2004/57/EC.

**reasonably practicable** balancing the level of risk against the measures needed to control the real risk in terms of money, time or trouble. However, you do not need to take action if it would be grossly disproportionate to the level of risk. See www.hse.gov.uk/risk/expert.htm.

**relevant explosive** an explosive for which an 'explosives certificate' is required under regulation 5 of ER2014 for acquiring or keeping that explosive, or would be required if it were not being acquired or kept by a person or organisation exempted by regulation 3(7). In relation to regulations 35 (records) and 37 (reporting loss) of ER2014 it also includes:

- ammunition, the acquisition of which is regulated or prohibited by virtue of the Firearms Act 1968 to 1997; and
- smokeless powder;

even though, in the case of smokeless powder, an explosives certificate is not always required for their acquisition or keeping.

Explosives listed in Schedule 2 (other than smokeless powder as noted above) and pyrotechnic articles (apart from those listed Schedule 3) are **not** relevant explosives.

A full explanation can be found in paragraphs 27–34.

**relevant standard** a code of practice or other standard linked to legislation (CEN, BS EN, ANSI, BS, IEC, ISO) or a published and commonly known industry-produced standard of performance, providing specific standards relevant to an explosives operation, activity or facility.

A relevant standard will be a document established by consensus and approved by a recognised body that provides for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.

A relevant standard will be based on consolidated results of science, technology and experience.

**restricted substance** these are collections of substances that require control under the Regulations but are not included in UN Class 1. They are collections of substances that may not be explosive in themselves but form explosives when mixed and which have been collected together for that purpose. They are normally known as two-part or multi-part explosives.

#### shooters' powder comprises:

- black powder;
- smokeless powder which is manufactured for the use in small arms; or
- any other substance or preparation based on potassium nitrate or nitrocellulose, whether in powder, pelletised or granular form, used or to be used, as a propellant.

**site** 'site' is defined as 'the whole area under the control of the same person'. In most instances it will be the same as the area of the establishment at which the explosives operations take place, although in some cases the extent of the area under control of that person will be much greater than the area within which the explosives operations take place. For the purposes of the ER2014 the whole area includes:

- all places adjoining each other; and
- two or more areas separated only by a:
  - road;
  - railway;
  - inland waterway.

See www.hse.gov.uk/explosives/licensing/storage for more detailed guidance on the application of the Regulations to sites that are shared by different people and between a parent company and its subsidiaries (or between subsidiaries).

**storage** includes all possession, keeping or holding other than when the explosives are actually undergoing manufacture, are in use or are being transported (see paragraph 18 for further information on storage and transport).

**storage area** any area where explosives are stored either on a short- or long-term hasis

**store** a building, enclosed area or metal structure in which explosives are, or are to be, stored.

## **References and further reading**

#### References

- 1 Guidance on safety in explosives operations can be found in *Explosives Regulations 2014*. *Safety provisions*. *Guidance on Regulations* L150 HSE Books 2014 ISBN 978 07176 6551 8 www.hse.gov.uk/pubns/books/l150.htm
- 2 United Nations Recommendations on the Transport of Dangerous Goods www.unece.org/trans/danger/publi/dg\_publications.html
- 3 Security Requirements for List X Contractors Cabinet Office 2014 www.gov.uk/government/uploads/system/uploads/attachment\_data/file/299559/ Security\_Requirements\_for\_List\_X\_Contractors.pdf
- 4 HMG Security Policy Framework Cabinet Office 2014 www.gov.uk/ government/uploads/system/uploads/attachment\_data/file/316182/Security\_Policy\_ Framework\_-\_web\_-\_April\_2014.pdf

#### **Further reading**

#### Electrical safety in explosives operations

Guidance on electrical standards in explosives buildings can be found in *Guidance* for electrical installation and equipment within explosive manufacturing facilities including fireworks Confederation of British Industry 2009 www.eig.org.uk

#### Alarm Standards and sources of advice from the police

Further information on the Association of Chief Police Officers policies on standards for alarms for premises can be found at www.nsi.org.uk/information-centre/information-for-businesses/police-policy/

A list of police explosives liaison officers can be found at www.hse.gov.uk/explosives/elo.htm

Counterterrorism security advisors can be contacted via your local police force.

#### Application of health and safety legislation offshore

Guidance on the application of health and safety legislation offshore can be found in Application of health and safety law offshore: Guidance on the legislative changes introduced by the Health and Safety at Work etc Act 1974 (Application outside Great Britain) Order 2013 Offshore Information Sheet No 1/2013 www.hse.gov.uk/offshore/legislative-changes.pdf

#### **Further information**

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

This guidance can be found online at: www.hse.gov.uk/pubns/books/l151.htm.

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