

## CHAPTER 18

### WORKS SERVICES, THE CONTROL AND THE PROTECTION OF CONTRACTORS IN EXPLOSIVES FACILITIES

#### CONTENTS

##### Para

- 1 INTRODUCTION
  - 1.1 Background
  - 1.2 Scope
- 2 DEFINITIONS OF WORK, WORKERS AND CONTRACTORS
  - 2.1 Routine Operations and Maintenance
  - 2.2 New Projects and Major Repairs or Modifications
  - 2.3 Contractor
- 3 RESPONSIBILITIES
  - 3.1 General
  - 3.2 Responsibilities of the Duty Holder or their appointed Explosives Safety Representative
- 4 REGULATIONS FOR THE CONTROL OF CONTRACTORS AND VISITING WORKERS
  - 4.1 General Principles
  - 4.2 Disclosure of Risk From Explosives Statement
  - 4.3 Permit-to-Work (Explosives)
  - 4.4 Explosives Safety Brief
  - 4.5 Withdrawal of Permit-to-Work (Explosives)
- 5 REGULATIONS FOR THE PROTECTION OF CONTRACTORS AND VISITING WORKERS
  - 5.1 General Principles
  - 5.2 Minor Works
  - 5.3 Major Works - Assessing the Risk
  - 5.4 Contractors Working Outside Inhabited Building Distance
  - 5.5 Major Works Contractors Located Between Inhabited Building Distance (22.2Q1/3) and Public Traffic Route Distance (14.8Q1/3)
  - 5.6 Major Works Contractors Located Within Public Traffic Route Distance
  - 5.7 QRA in Support of Major Works
- Annex
  - A Advice and Guidance for the Duty Holder or their appointed Explosives Safety Representative
  - B Reserved
  - C Numbers of Contractor's Staff Within Inhabited Building Distance of a PES

- D Multiple Groups of Contractors at Different Ship Distances Hazardized by a PES or Multiple PES
- E Example of Disclosure of Risk from Explosives Statement
- F Essential Features of Permit-To-Work (Explosives)
- G Example Permit-To-Work (Explosives)
- H Example of Explosives Safety Brief for Contractors Staff Working Within The Inhabited Building Distance of Explosives Facilities

## 1 INTRODUCTION

### 1.1 Background

1.1.1 The Health and Safety at Work etc Act 1974 (HSWA) places a duty on employers to conduct their undertakings in such a way that their employees, and other persons who might be affected by their activities, are not unnecessarily exposed to risk. JSP 375 and Chapter 3 of this publication state the policy of the Secretary of State for Defence regarding the application of the HSWA. This requires the application of adequate risk control measures, such as a 'Permit to Work' (PTW) system, to all contractors' personnel who are affected by risk within the MOD. The presence of explosives in or near an area or building where contractors are required to work is a hazard to be risk managed in a similar manner to any other hazard.

### 1.2 Scope

1.2.1 This chapter amplifies the JSP 375 requirements in respect of explosives, and also provides advice and guidance to Unit explosives staff on implementation. The following circumstances are excluded:

- (1) Contractors or other workers (e.g. farm employees) who are outside the MOD boundary.
- (2) Transient personnel (e.g. NAAFI vans, BT vehicles, etc).
- (3) Contractors required to undertake any form of work in the storage, processing or transportation of military explosives.

## 2 DEFINITIONS OF WORK, WORKERS AND CONTRACTORS

### 2.1 Routine Operations and Maintenance

2.1.1 This encompasses the routine work necessary on a regular basis. In all cases, the numbers of both MOD and contractors' staff exposed to explosives risk must be kept to the reasonably practicable minimum and closely controlled by safe systems of work and procedures laid down by the HoE. Contractors employed in lieu of MOD personnel may sometimes be Explosives Workers but more typically be Explosives Areas Support Workers (defined in Chapter 9). Examples of the latter include those engaged in regular maintenance activities such as minor repairs, testing of electrical equipment or other fittings such as cranes, and grass cutting. As far as is reasonably practicable, such work should be de-conflicted in areas where explosives activities such as movements or processing are being undertaken. Routine maintenance work should be temporarily suspended at times whenever explosives activities are briefly raised to a significantly higher tempo.

### 2.2 New Projects and Major Repairs or Modifications

2.2.1 This work will inevitably be contracted and must be carried out in accordance with the regulations in this chapter under the authority of the appropriate IE. New projects or major modifications in, on, or in the vicinity of, explosives

facilities may seriously prejudice storage and processing capabilities by compromising their Explosives Licences. The procedure for planning and siting of new explosives facilities, or major alterations to existing facilities, is given in Chapter 5.

### 2.3 Contractor

2.3.1 A contractor is a person/company/organisation who enters into a business agreement for the performance of work or the supply of goods, such agreement being enforceable by law. Any Service or associated civilian personnel carrying out "contractor like" activities are to be classed as contractors for the purposes of control and protection in accordance with this Chapter.

## 3 RESPONSIBILITIES

### 3.1 General

3.1.1 Under the terms of JSP 375, HoEs have overall responsibility for safety in their establishment, including assessing risks, composing safety cases, and control and protection of contractors' staff. Though the HoE is responsible for health and safety on his site, the Contractor is responsible for the safe practices of his workers that relate to the nature of their work. However, where there is a special hazard on the site that may affect the Contractors' staff, the HoE must discuss it with the Contractor as the HoE owns that hazard.

### 3.2 Responsibilities of the HoE or their appointed Explosive Safety Representative

3.2.1 The HoE or their appointed Explosives Safety Representative (see Chapter 3) is responsible for:

- (1) Production and subsequent maintenance of two copies of an appropriate site plan indicating:
  - (a) All licensed PES on the Unit,
  - and
  - (b) The Inhabited Building Distance (IBD) for each.

One copy is retained and the other is to be passed to DIO Facilities Managers and Prime Contractors to make it available to the appropriate Contractors. This is to allow that the possible requirement to protect and control contractors inside the IBD to minimise hazard to the contractors or the possibility of their activities hazarding the explosives in a PES is recognised early in the contract tendering process.

- (2) Where relevant, raising/staffing of, as appropriate, applications for Non-Standard Explosives Licences/Letters of Authority (see Chapter 9 para 10.6).
- (3) Providing DIO Facilities Managers and Prime Contractors, prior to a contractor commencing work, with:
  - (a) Disclosure of Risk from Explosives Statements (DRES)
  - (b) Authorisation of Permits To Work (Explosives) (PTW(E)).
  - (c) Explosives Safety Briefs pertinent to the PES/areas concerned.
- (4) Liaison with DIO Facilities Managers is required, especially to ensure that contracts are raised which, where necessary, reflect the requirements of JSP 375 and the regulations in this chapter.

- (5) Providing the contractor and his staff with any information or advice that he deems necessary to ensure that the safety of the explosives is not compromised.
- (6) Assessment of the degree of monitoring required and, when appropriate, the appointment of, provision of case specific written Terms of Reference for, and briefing of, a Monitor (in conjunction with the building custodian if required).
- (7) Control of Contractors' staff, whilst engaged in their activities, through the use of the Monitor.
- (8) The withdrawal, through DIO staff, of the PTW (E) when its conditions are not being complied with, or when explosives safety has been compromised.

3.2.2 Further guidance on these duties is at Annex A.

## **4 REGULATIONS FOR THE CONTROL OF CONTRACTORS AND VISITING WORKERS**

### **4.1 General Principles**

4.1.1 Contractors and visiting workers whose normal, permanent place of employment is not within an establishment explosives area or within IBD must be controlled at all times when they are required to be exposed to the explosives hazards<sup>1</sup>.

4.1.2 When civilian contractors require access inside explosives storage/process buildings or an ESA with open explosives storage, with explosives present, they must be escorted unless they are in possession of an appropriate COER Certificate, Firearms certificate or Firearms Section 5 Authority, as appropriate.

### **4.2 Disclosure of Risk from Explosives Statement**

4.2.1 In demonstrating control the HoE has a duty to disclose the hazards associated with his explosives facilities/areas to others that may be exposed to them. This is through the Disclosure of Risk from Explosives Statement (DRES). The DRES must provide sufficient information on the hazards and control measures associated with the explosives facilities/areas to allow contractors and visiting workers to produce a Method Statement. The Method Statement must detail how the work will comply with any controls imposed. The DRES must also have enough information to allow suitable and sufficient Risk Assessments to be made by the contractors and visiting workers.

4.2.2 It is the responsibility of the HoE to ensure a DRES is issued. The DRES may be issued to a Prime Contractor who will then be required to ensure it is further issued to any 3<sup>rd</sup> party contractors employed, as the Prime Contractor is then the host.

4.2.3 The DRES should address specific hazards and controls associated with a particular task. An example DRES is given at Annex E.

### **4.3 Permit to Work (Explosives)**

4.3.1 A Permit to Work (PTW) is a formal written procedure used to authorise and control certain types of work which are potentially hazardous, either intrinsically or because of the place where the work is being carried out. The general principles of a PTW are contained in JSP 375.

---

<sup>1</sup> For ongoing activities a standing PTW(E) is acceptable providing suitable daily access controls can be demonstrated for work within IBD.

4.3.2 Within establishments storing, handling or process explosives there exists a clear potential for an accident involving the explosives. HoE's are therefore required to ensure an auditable PTW system is used. The PTW to be used is a Permit to Work (Explosives) (PTW (E)) and is specific to work being authorised within IBD, in or on a PES. PTW (E) and associated documentation is to be retained for a minimum of 24 months following the date of cancellation.

4.3.3 The PTW (E) is the HoE's documented system for authorising activities within IBD and in or on a PES. It will require input from the contractors or visiting workers but is to be retained by unit staff.

4.3.4 The essential features of a PTW (E) are listed at Annex F. An example is given at Annex G.

#### **4.4 Explosives Safety Brief**

4.4.1 Contractors and visiting workers are to be provided with a safety brief prior to entering explosives facilities/areas. This is to ensure their activities do not significantly increase the hazard to the explosives, place them at risk from the explosives and to explain the emergency arrangements of the establishment. The Explosives Safety Brief may be given as part of the general safety brief provided by area custodian to contractors and visiting workers. Where contractors and visiting workers are individuals who regularly access the explosives areas a system of issuing and recording periodic safety briefs may be incorporated. Such personnel are to be subject to safety briefs at intervals of no longer than six months.

4.4.2 An example Explosives Safety Brief is given at Annex H. However, it is stressed that this example is for guidance only and other pertinent information may need to be included.

#### **4.5 Withdrawal of Permit To Work (Explosives)**

4.5.1 See Annex A.

### **5 REGULATIONS FOR THE PROTECTION OF CONTRACTORS AND VISITING WORKERS**

#### **5.1 General Principals**

5.1.1 Contractors' staff must be afforded at least the same level of protection from explosives as MOD staff. For contractors, other than those defined as Explosives Workers or Explosives Area Support Workers, ancillary facilities, such as offices, workshops and canteens, are ideally always to be located outside the full IBD (or minimum distance from any PES). Similarly, contractors' staff are not permitted to use any existing miscellaneous facilities (Chapter 10, Section 7) located inside the IBD from a PES nor any facilities deemed to be in Direct or Indirect Support (Chapter 10, Section 5). Applications to waive these requirements will only be considered exceptionally, and are to be submitted through the appropriate IE for consideration and consultation with CIE (MOD) where appropriate.

#### **5.2 Minor Works**

5.2.1 Where works services are of a routine and repetitive nature (E.g. electrical testing, estate maintenance, etc) the contractors regularly engaged in these activities within an Explosives Area will be classed as Explosives Area Support Workers.

5.2.2 Where the work is of a minor one-off nature, involving contractors other than those regularly on site, the HoE or their appointed Explosives Safety Representative may, under the terms of the existing Explosives Licence(s) authorise their presence providing:

- (1) The number of contractors' staff exposed to explosives is kept to the absolute minimum and is not more than 10 at any one time.
- (2) Work is not reasonably expected to exceed 400 man hours.
- (3) Risk assessment is produced and the work is judged by the HoE or their appointed Explosives Safety Representative as presenting an insignificant risk to PES contents.
- (4) It is not reasonably practicable to conduct the work while the PES is empty.
- (5) Risks to contractors' staff are ALARP.
- (6) A DRES, PTW(E) and an Explosives Safety Brief are to be produced.
- (7) No explosives from Compatibility Groups (CG) A, H, J, K or L, detonators in CG B, bulk propellant in CG C, or bulk explosives substances in CG D are to be present in a PES to be worked on or in.
- (8) The areas within the PES in which the contractors' staff may work are to be defined by a barrier or similar means.
- (9) Before work commences in a PES, walls, fixtures and fittings, etc, requiring repair are to first be inspected, and cleaned if necessary, to ensure that no explosives contamination is present.
- (10) Handling, movement or processing of explosives within the PES is to be prohibited and that at adjacent PES reduced to the reasonably practicable minimum.
- (11) All activity in the PES which could generate flammable or explosive vapours or dust is to be prohibited.
- (12) Prior to any work on any PES electrical system, including replacement of light bulbs, the main electrical supply to the building is to be isolated.

5.2.3 The overall number of Explosives Area Support Workers and other contractors' staff employed on minor works must be carefully monitored and controlled to minimise numbers simultaneously exposed to any single potential explosives event. This is particularly the case at large sites where several small parties may be present simultaneously but doing different tasks.

5.2.4 Where the one-off task is of a minor repair or refurbishment nature but will take longer than 400 man hours, then the appropriate IE should be consulted whether the work can be covered within the spirit of the above approval arrangements or whether the activity must be classed as Major Work (see below). For example the IE may judge that it is reasonable to place a small number of contractors' staff at risk for several weeks, in excess of the 400 man hours rule, if there can be a compensating reduced exposure of Explosives Area Support Workers for the duration of the contract.

### 5.3 Major Works - Assessing the Risk

5.3.1 Major Works includes all repair, refurbishment, modification or new construction activities that cannot be classed as Minor Work in accordance with paras 5.2 above. For Major Works, three categories are considered. These are where Contractors' staff will be situated:

- (1) Outside the IBD (for HD 1.1,  $22.2 Q^{1/3}$ ) of any PES.
- (2) At a distance between IBD and PTRD (for HD 1.1,  $14.8Q^{1/3}$ ) from any PES.
- (3) Within the PTRD (for HD 1.1,  $14.8Q^{1/3}$ ) from any PES.

5.3.2 In all cases, the IBD or PTRD are to be calculated based on the actual NEQ expected to be present in the PES during the contract. Minimum distances will not be applied.

#### 5.4 Contractors Working Outside Inhabited Building Distance

5.4.1 Contractors' staff may be present outside the IBD of a any PES with no restrictions. The NEQ of any PES should be reduced to achieve IBD whenever reasonably practicable.

#### 5.5 Major Works Contractors Located Between Inhabited Building Distance (22.2 Q1/3) and Public Traffic Route Distance (14.8 Q1/3)

5.5.1 If Contractors' staff are required to work in the area between IBD and PTRD, then their numbers and the task duration must be kept to a minimum.

5.5.2 Providing that the number of Contractors' staff multiplied by the task duration does not exceed 900 man months (e.g. 75 staff for 12 months or 300 staff for 3 months) the risk may be accepted at the discretion of the HoE, subject to the following:

- (1) The appropriate IE must be formally notified.
- (2) Each relevant PES and its contents must be inspected for general explosives safety by a competent person before Contractors' staff are allowed within the IBD of the PES. A record of these inspections is to be maintained.
- (3) Handling and processing of explosives at the PES must be kept to a minimum as is reasonably practicable during the time that Contractors' staff are on site.
- (4) A DRES, PTW(E) and an Explosives Safety Brief are to be initiated (see paras 4.2, 4.3 and 4.4) and consideration given to provision of a Monitor (see sub-para 3.2.1(6)) prior to the commencement of work.

#### 5.6 Major Works Contractors Located Within Public Traffic Route Distance (14.8 Q1/3)

5.6.1 A Major Works site located within the PTRD (for HD 1.1,  $14.8Q^{1/3}$ ) of any PES presents a higher level of individual and societal risk and the numbers of Contractors' staff, distance from PES and task duration are important factors in determining whether the risk of fatalities should be accepted. Where reasonably practicable, the PES should be emptied, or the NEQ reduced, or the stocks re-brigaded to put less hazardous explosives natures in the PES. Additionally, handling and processing will normally cease. There may be circumstances where the HoE deems it not to be reasonably practicable to implement these measures. This may be because of severe operational/ business penalties or because stock relocation would create risks to explosives workers disproportionate to those explosives risks to contractors thereby avoided. The HoE must produce a Safety Case to justify the operational/ business imperatives and to fully demonstrate that all risks are ALARP.

5.6.2 In considering ALARP measures, explosives processing and handling at a PES where the contractors' site falls within its PTRD, should not be permitted unless it is demonstrated to be not reasonably practicable to de-conflict essential explosives and contractor activities. In such cases, as a minimum ALARP measure, all PES not achieving PTRD to an active contractor area should be dormant and explosives movements re-routed as far away from it as is reasonably practicable. Where dormant PES within PTRD cannot reasonably practicably be achieved, then the IE must be consulted as to whether a lesser distance than the calculated PTRD may be applied.

5.6.3 Where the number of contractors will not exceed 10 simultaneously on site and the anticipated task duration will not exceed 12 weeks, then the risk of their death or injury should a catastrophic event occur may be accepted at the discretion of the HoE subject to:

- (1) ALARP being fully demonstrated and documented, together with the PTRD calculations, in a Safety Case.
- (2) The appropriate IE being notified and provided with an ALARP statement and a copy of the supporting Safety Case.
- (3) The conditions listed in the bullet points at para 5.5.2 being met.

5.6.4 Where the predicted number of contractors and/or the task duration fall outside the scope of para 5.6.3, then the appropriate IE must be consulted. Initially the IE will consult the table at Annex C to determine whether scaled distances achieved would permit greater contractor numbers and/or task duration. If Annex C can be applied, then the Societal Risk will be deemed tolerable and the IE will authorise the HoE to proceed with the review of ALARP measures and preparation of a Safety Case. Subject to a rigorous review of ALARP measures and formal IE endorsement of the Safety Case, HoE may be granted the discretion to accept the risk of fatalities should a catastrophic event occur as for para 5.6.3 above.

5.6.5 If the major works proposals fall outside the scope of Annex C, the IE will, where practicable, commission a QRA (see Chapter 9 and para 5.7 below) and assess the results. The HoE will previously have produced a Safety Case outlining the imperatives for this work, proposed methods of work and ALARP measures to be imposed. If the IE judges that the risk generated in a particular case is tolerable and ALARP, he is either to provide temporary Non-Standard Explosives Licence(s) for each PES, together with written justification or (especially for multiple PES situations) a comprehensive and conditional Letter of Authority detailing the basis for its approval. The maximum number of Contractors' staff permitted at the work site at any one time is to be specified and must be strictly adhered to.

5.6.6 The IE is to notify CIE (MOD) when Non-Standard Licence(s) or a Letter of Authority is issued for Major Works purposes so that the acceptance of these higher risks may be monitored across the MOD estate.

5.6.7 If the IE judges that a QRA is not practicable or the QRA conducted identifies that risk generated in a particular case cannot be defended as tolerable or ALARP, CIE (MOD) must be consulted. Only CIE (MOD) can give the necessary authorisation, balancing the tolerability of risk against the necessity for the work and imposing constraints as deemed appropriate. Ultimately, CIE (MOD) may have to apply to higher authority for approval. The circumstances and the basis for the approval must be fully documented. The written acceptance of increased risk by the HoE or their superiors in the Chain of Command must be included in this supporting documentation.

## 5.7 QRA in Support of Major Works

5.7.1 QRA is an essential tool where significant numbers of Contractors' staff are to be employed within PTRD of a PES. The crucial element is likely to be Societal Risk. Where a baseline QRA study already exists, it will often be possible to extrapolate Societal Risk calculations from the baseline figures and thus a new QRA should not be necessary. The QRA must take account of all workers in the area (including those engaged in routine operations and maintenance) and all PES that contribute to the risk. The QRA should be based on the maximum NEQs that will be present during the duration of the contract since using the Authorised Limits may significantly overstate the risk.



## CHAPTER 18

### ANNEX A

#### ADVICE AND GUIDANCE FOR THE HOE OR THEIR APPOINTED EXPLOSIVES SAFETY REPRESENTATIVE

#### CONTENTS

Para

- 1 ADVICE AND GUIDANCE FOR THE HOE OR THEIR APPOINTED ESR
  - 1.1 Introduction
  - 1.2 Responsibilities
  - 1.3 Control of Contractors
  - 1.4 Disclosure of Risk from Explosives Statement
  - 1.5 Permit to Work (Explosives)
  - 1.6 Withdrawal of Permit-To-Work (Explosives)
  - 1.7 Explosives Safety Brief
  - 1.8 Duties of a Monitor
  - 1.9 Further Advice

#### 1 ADVICE AND GUIDANCE FOR THE HOE OR THEIR APPOINTED ESR

##### 1.1 Introduction

1.1.1 The presence of contractors in, or within the IBD of, a PES where explosives are present is not solely an explosives matter, but requires addressing by DIO Facilities Managers, Prime Contractors and other MOD Contracts Officers during the tendering stages of the contract in the same manner as any other hazard. This requirement is stipulated by ESTC, and the advice and guidance to the HoE or their appointed Explosives Safety Representatives in this annex amplifies the content of JSP 375. It is not exhaustive and will not meet all given situations.

##### 1.2 Responsibilities

1.2.1 The responsibilities of the HoE or their appointed Explosives Safety Representative with regard to contractors staff are detailed in Chapter 18 paras 3.2.

##### 1.3 Control of Contractors

1.3.1 Wherever possible, re-brigading or removal of stocks should be considered. Whether this is possible or not, during the whole period of work, a competent person is normally required to monitor a Contractors or visiting workers work. The responsibilities of such a Monitor are at Paras 1.8. However, for aircraft HAS sites and other forward areas, the occupying formation should be tasked to provide a Monitor, as they are more likely to be aware of the other, considerable, hazards present in such a location. Similarly, work in a Safety Equipment section or other location where the explosives are a minor risk in comparison to the other hazards found in that location should be monitored by a competent person from that section. Liaison with the Building Custodian concerned is essential in these cases, as the HoE or their appointed Explosives Safety Representative is still responsible for authorising the PTW (E).

1.3.2 When assessing the competence of a person to be a Monitor, the HoE or their appointed Explosives Safety Representatives are to take into account the risks associated with the work activity. The greater the risk, the greater the required competence of the Monitor. Equally, the HoE or their appointed Explosives Safety Representatives are to assess the degree of monitoring required.

Where the risks are assessed as minor there may not be a need for continuous monitoring, occasional visits may be all that is required.

1.3.3 The HoE or their appointed Explosives Safety Representatives are to produce task specific TORs for the Monitor. These should stipulate the type and degree of monitoring required. For example:

- (1) A contractor operating a tar-burning machine giving an increased fire risk close to a PES would normally justify continuous monitoring.
- (2) A contractor changing light bulbs or similar minor maintenance in a PES containing explosives would probably require continuous monitoring.
- (3) Grass cutters operating without direct access to explosives would only require monitoring at periodic intervals to ensure compliance with regulations for refuelling and maintenance of machinery, and the provision of fire extinguishers.
- (4) Painters working on a non-explosives building but within the IBD of a PES present little increased risk to the explosives, and may only require one initial visit at the start of the work to ensure the workers had been given the Disclosure of Risk from Explosives Statement and the Explosives Safety Brief.

#### 1.4 Disclosure of Risk from Explosives Statement (DRES)

1.4.1 Where contractors' staff are on, in or within the IBD from a PES, the Contractor is to be advised, in writing, of the risks involved from the explosives at the work site. This advice is in the form of a DRES. The advice of the Unit Health and Safety Officer and, if required, the appropriate IE, should be sought before providing such information on a DRES. Typically, the written statement should include:

- (1) Details of the IBD applied for the PES.
- (2) The separation distance available between the work site and the PES.
- (3) A statement that details the likely consequences at the work site of an event at the explosives facility. This statement should cover the hazards from blast and fire and, if within the IBD of a PES containing HD 1.1, or within the PTRD of any other PES, the hazard from fragments.
- (4) The very low probability of an event as a consequence of any limitations imposed on activity at the explosive facility during the period of the contract.
- (5) The requirements and procedures for PTW (E).
- (6) The control measures to be applied in order to mitigate the risks to and from the explosives.
- (7) The facilities available to cope with any event, including fire-fighting, rescue and medical capability.
- (8) The evacuation procedures to be adopted in the unlikely event of any hazardous incident at the explosive facility including:
  - (a) Reporting point for evacuated staff (outside IBD, and wherever practicable 2 x IBD, from any PES).
  - (b) Roll call and reporting procedures.
- (9) Where applicable, the role of the Explosives Safety Representative and Monitor.

1.4.2 It is permissible for a DRES to be produced for every PES and retained by the Site Estate Representative, DIO Facilities Manager or Prime Contractor provided it is regularly reviewed by the HoE or their appointed Explosives Safety Representative.

1.4.3 A copy of the DRES is to be sent to the contractor at the Tender Stage of any works being planned in order that they have enough information to produce a Risk Assessment and Method Statement.

## 1.5 Permit to Work (Explosives)

1.5.1 There is a clear risk of serious accidents at units storing, handling or maintaining quantities of explosives. HoEs are therefore required to ensure that an auditable PTW system is used to reduce the probability of such an accident occurring as a result of activity by Contractors' staff.

1.5.2 The general requirement relevant to PTW systems, set out in the Health and Safety at Work etc Act 1974, are as follows:

- (1) Section 2. General duties of employers to their employees.
- (2) Section 3. General duties of employers and self-employed to persons other than other employees.
- (3) Section 7. General duties of employees at work.

NOTE: Additionally, an exchange of safety information between MOD, their Contractors, DIO Contractors and agents is also required.

1.5.3 A PTW system is a formal written procedure used to control certain types of work which are potentially hazardous, either intrinsically or because of the place where the work is being carried out.

1.5.4 The aim of a PTW system is to ensure that the hazards arising from the contractors and visiting workers work and the adjacent explosives are dealt with before work starts. The PTW for contractors' staff working on, in or within the IBD of a PES is type specific: the PTW (E). An example format for this document is at Annex G.

1.5.5 HoEs are to ensure that a system exists to issue PTW (E)s for all work by contractors' staff and visiting workers within the IBD of any PES, including maintenance, repair, inspection, testing, alteration, excavations, construction refurbishment, reconstruction, dismantling, adaption, modification, decommissioning, cleaning and demolition. The PTW (E) is a written document which records authority for a specified number of defined people to carry out specified work in a stated period at a particular location, and which sets out the main safety precautions needed to complete the job safely.

1.5.6 If a Non-Standard Licence is required, the number of contractors' staff and the duration of their stay must be calculated from Annex C for inclusion in the PTW (E).

## 1.6 Withdrawal of Permit-To-Work (Explosives)

1.6.1 If the safety of explosives is compromised, or workers fail to comply with their Method Statement, work is to be suspended immediately and the PTW (E) withdrawn in order to remove any risk to explosives or contractors. Wherever possible, suspension of the task should be accomplished through the DIO Facilities Manger. Negotiations are to be started with the contractor to redefine safety requirements before the PTW (E) can be re-issued and work can restart.

## 1.7 Explosives Safety Brief

1.7.1 The Contractor, his staff and visiting Workers are to be provided with information and advice as necessary, in the form of a safety brief, so that their activities do not significantly increase the risk to any explosives, or place them at risk from the explosives. A Contractor may still, dependent on the situation, require a suitable safety brief even though the work site is outside the IBD.

This would be particularly relevant in the case of major works where traffic flow was heavy and continuous. Safety Briefs for explosives may form part of the overall safety brief for a particular building/section.

### 1.8 Duties of a Monitor

1.8.1 The duty of Monitor may only be undertaken by a competent person, detailed by the HoE or their appointed Explosives Safety Representative. Additionally, due to the additional hazards to Contractors' staff working in or near a HAS or other forward area licensed in accordance with Chapter 10, Section 5, the Monitor is to be from the formation concerned.

1.8.2 Subject to security requirements, the Monitor is to provide the contractor and their staff with any information or advice that they deem necessary to ensure that the safety of the explosives is not compromised. The Monitor is not to enter into any dispute with the contractor or their staff but is to refer them to the HoE's appointed Explosives Safety Representative. If at any time the monitor is unsure of their duties, or requires advice, they are to seek guidance from the HoE's appointed Explosives Safety Representative.

1.8.3 The Monitor is responsible for:

- (1) Ensuring they are recognised by all the contractor's staff.
- (2) Ensuring that the contractor's staff comply with all safety precautions detailed in the Permit to Work.
- (3) Reporting immediately, to the HoE or their appointed Explosives Safety Representative, any activity by contractor's staff that may compromise explosives safety.
- (4) Initiating evacuation procedures for contractor's staff in the event of a hazardous incident.
- (5) Mustering contractor's staff at the designated muster point and reporting missing persons to the emergency services and the HoE or their appointed Explosives Safety Representative.

### 1.9 Further Advice

1.9.1 If further advice is required, then it should be sought in the first instance from the relevant IE, and, ultimately from CIE (MOD) staff.

**CHAPTER 18**

**ANNEX B**

**RESERVED**

**Intentional Blank Page**

**CHAPTER 18**

**ANNEX C**

**NUMBERS OF CONTRACTOR'S STAFF WITHIN INHABITED BUILDING  
DISTANCE OF A PES**

**CONTENTS**

Para

1 INTRODUCTION

Table

Page

1 Hazard Division 1.1

2

2 Hazard Division 1.2

3

3 Hazard Division 1.3

3

**1 INTRODUCTION**

1.1 To use the information in Table 1 to Table 3, below, it is first necessary to calculate the Scaled Distance. Tables 1, 2 and 3 relate to HDs 1.1, 1.2 and 1.3 respectively. For the use of the tables, 'Scaled Distance from the PES' for HD 1.1 is to be calculated as follows:

$$\frac{\text{Actual Distance}}{\text{Scaled Distance}} = \frac{\text{Actual Distance}}{\text{NEQ}^{1/3}}$$

1.2 For the formulae for HD 1.2 and HD 1.3, see Table 2 and Table 3 respectively.

1.3 In all cases:

- (a) For contract periods, round up to nearest value in tables.
- (b) For scaled distances, round down to nearest value in tables.

**Example 1** The work site is 100 m from a PES which contains an NEQ of 10 000 kg HD 1.1.

$$\text{Scaled Distance} = \frac{100}{(10000)^{1/3}} = \frac{100}{21.54} = 4.64 = 4.5 \text{ (round down iaw para 3(b))}$$

$$\text{Scaled Distance} = 4.5$$

Table 1 shows, for example, that 10 people may be employed at the site for 4 months.

**Example 2** A contractor wants to employ 8 people for 18 weeks on a site 100 m from a PES containing HD 1.1.

Table 1 shows that 8 people employed for 18 weeks (5 months rounded up iaw para 1.3(a)) and gives a scaled distance of 4.5.

$$\text{NEQ}^{1/3} = \frac{\text{Actual Distance}}{\text{Scaled Distance}} = \frac{100}{4.5} = 22.2^3 = 10,950 \text{ kg}$$

Providing the NEQ of the PES does not exceed 10 950kg, the site work may be authorized.

1.4 Where work will take place in an area affected by more than one PES, or more than one group of contractors' staff is hazarded, see Annex D. In more complex situations, further direction should be requested from the appropriate IE.

Scaled Distance from PES $\text{mkg}^{-1/3}$	Period of Contract (Months)									
	12+	11	10	9	8	7	6	5	4	3 or less
14.5	75	90	105	120	130	140	150	200	250	300
14	65	79	92	105	114	123	132	175	217	260
13.5	55	68	79	90	98	106	114	50	184	220
13	45	57	66	75	82	89	96	125	151	180
12.5	35	46	53	60	66	72	88	100	118	140
12	30	35	40	45	50	55	60	74	87	100
11.5	26	30	35	39	43	48	53	66	78	90
11	22	26	30	33	36	41	45	58	69	80
10.5	18	22	25	27	29	34	37	49	60	70
10	15	17	19	21	24	27	30	40	50	60
9.5	14	15	17	19	22	25	28	37	46	56
9	13	14	15	17	20	23	26	35	42	52
8.5	12	13	14	16	18	21	24	32	39	48
8	11	12	13	15	17	19	22	29	36	44
7.5	10	11	12	14	16	18	20	26	33	40
7	8	9	10	12	14	15	16	21	27	36
6.5	6	8	8	10	11	12	13	17	21	32
6	5	6	7	8	9	9	10	13	16	20
5.5	5	6	6	7	8	8	9	11	14	16
5	4	5	5	6	6	7	8	10	12	13
4.5	4	4	4	5	5	6	7	8	10	10
4 or less	3	3	3	4	4	5	5	6	8	10

Table 1 Hazard Division 1.1

**WARNING** - Achievement of Scaled Distances do not provide adequate levels of protection to **individuals** should a catastrophic event occur but are the means of determining whether the **Societal Risk** is tolerable without re-course to a Quantitative Risk Assessment. Contractors located in the open at the "4 or less" Scaled Distance are unlikely to survive a catastrophic event but the percentage of survivors improves as the Scaled Distances progress upwards.



Scaled Distance from PES mkg <sup>-0.18</sup>	Period of Contract (Months)									
	12+	11	10	9	8	7	6	5	4	3 or less
53	75	90	105	120	130	140	150	200	250	300
50	55	68	79	90	98	106	114	150	184	220
45	35	46	53	60	66	72	88	100	118	140
40	22	26	30	33	36	41	45	58	69	80
35	14	15	17	19	22	25	28	37	46	56
30	11	12	13	15	17	19	22	29	36	44
25	8	9	10	12	14	15	16	21	27	36
20	5	6	6	7	8	8	9	11	14	16
15	4	4	4	5	5	6	7	8	10	10
10 and below	3	3	3	4	4	5	5	6	8	10

Table 2 Hazard Division 1.2<sup>2</sup>

**For Scaled Distance HD 1.2:**

$$NEQ^{0.18} = \frac{\text{Actual Distance}}{\text{Scaled Distance}}$$

$$\text{Scaled Distance} = \frac{\text{Actual Distance}}{NEQ^{0.18}}$$

Scaled Distance from PES mkg <sup>-1/3</sup>	Period of Contract (Months)									
	12 +	11	10	9	8	7	6	5	4	3 or less
4.3	75	90	105	120	130	140	150	200	250	300
4	55	68	79	90	98	106	114	150	184	220
3.5	26	30	35	39	43	48	53	66	78	90
3	15	17	19	21	24	27	30	40	50	60
2.5	12	13	14	16	18	21	24	32	39	48
2	6	8	8	10	11	12	13	17	21	32
1 or less	3	3	3	4	4	5	5	6	8	10

Table 3 Hazard Division 1.3

**For Scaled Distance HD 1.3:**

As for HD 1.1 (Table 1).

<sup>2</sup> If arrangements can be made to evacuate effectively and quickly all personnel at risk inside SD 53 within a period not exceeding 15 minutes then the above guidelines may be waived.

**Intentional Blank Page**

## CHAPTER 18

### ANNEX D

#### MULTIPLE GROUPS OF CONTRACTORS AT DIFFERENT SCALED DISTANCES HAZARDED BY A PES OR MULTIPLE PES

#### CONTENTS

Para

1 MULTIPLE GROUPS OF CONTRACTORS

#### 1 MULTIPLE GROUPS OF CONTRACTORS

1.1 The following method may be used where two different groups of contractors are hazarded by the same PES at the same time but at different Scaled Distances (SDs). The total exposure to the PES must be a sum of the two sites personnel's exposure.

##### Example for use with HD 1.1

Work out SDs:

$$SD_1 = \frac{\text{Range 1}}{Q_1^{1/3}} \qquad SD_2 = \frac{\text{Range 2}}{Q_2^{1/3}}$$

1.2 These will probably be different because of the two groups of contractors and therefore a conversion factor (CF) to allow the two to be compared is necessary. In this example, let  $SD_1 = 10$  and  $SD_2 = 7$ .

1.3 To help derive CF, work out two average constants which are the products ( $C_1$  and  $C_2$  respectively) of the duration of contract and maximum number of persons permitted to be exposed (see Annex C, Table 1). This is effectively the maximum permissible (or actual if referring to a known situation) 'contractor exposed months' (CEM). Below, this is done in months (a factor of 4.3 can be applied to convert this into 'contractor exposed weeks' if felt necessary).

So, for  $SD_1$ :

No of Months	12+	11	10	9	8	7	6	5	4	3
CEM	180	187	190	189	192	189	180	200	200	180
$C_1 = 189$										

Performing same operation for  $SD_2$ , gives  $C_2 = 104$ . So, to compare or add CEMs at the different SDs, use the form:

$$\text{Total CEMs} = \text{CEMs at } SD_1 + (\text{CEMs at } SD_2 \times \frac{189}{104})$$

i.e. the CF to compare CEMs at  $SD_2$  with those already known at  $SD_1$  is 1.82.

1.4 This is a rather simplistic approach but does allow for comparison of exposure at different SDs. The total CEM should not exceed that allowed by the respective tables at Annex C.

**Intentional Blank Page**

## CHAPTER 18

### ANNEX E

#### EXAMPLE OF DISCLOSURE OF RISK FROM EXPLOSIVES STATEMENT

#### CONTENTS

Para

- 1 INTRODUCTION
- 2 SITUATION
- 3 PERSONNEL LIMITS
- 4 HOE'S APPOINTED EXPLOSIVES SAFETY REPRESENTATIVE
- 5 MONITOR
- 6 PERMITS TO WORK
- 7 CONTRABAND LIST AND TOOLS
- 8 WORK SITE ACCESS
- 9 CONTRACTORS/VISITING WORKERS RESPONSIBILITIES

NOTE: It is stressed that the DRES below is an example for guidance only and other pertinent information may need to be included. A DRES may be raised for each PES and held centrally by the DIO Facilities Manager, Site Estate Representative or Explosives Safety Representative for issue with each tender or be held by duty staff for issue to contractors for out-of-hours emergencies.

#### 1 INTRODUCTION

1.1 The purpose of this statement is to provide information to a Contractor on the risks from explosives, which are stored near the work site and the controls required to mitigate the risks. Additional risk statements will be provided where appropriate for other hazards.

#### 2 SITUATION

2.1 The work site is located in the vicinity of MOD explosives facilities. In the unlikely event of a hazardous incident occurring at such a facility, there may be a risk from:

- (1) Blast,  
and/or
- (2) Fragments,  
or
- (3) Radiant heat.

2.2 An explosion may cause severe structural damage, the severity and range being proportionate to the amount of explosives involved in the incident. The effects will be limited by the licensing constraints on the explosives facilities, but injury and death are possible consequences. Heavy debris may be projected from the building in which the explosion occurs and the propagation of fire is highly likely. Persons other than those directly working with explosives may be involved. However, it must be emphasised that as a consequence of our work practices and the limitations placed upon your activities there is a very low probability of any hazardous incident occurring involving explosives. Equally, working methods adopted by a Contractor may increase the risk of an explosion and as such, restrictions will be applied to ensure these risks are tolerable.

- (1) The nearest Potential Explosion Site to the work area is\_\_\_\_\_.
- (2) The separation distance between the work site and \_\_\_\_\_  
is \_\_\_\_\_ metres.
- (3) In the event of an incident, \_\_\_\_\_ (Unit) \_\_\_\_\_ has a  
disaster plan which will be implemented. Personnel trained in fire fighting,  
rescue and medical facilities are available on the site/unit.

### 3 PERSONNEL LIMITS

3.1 For major works within certain distance of explosives facilities it may be necessary to place a limit upon the numbers of personnel allowed on the work site at any one time. This will be discussed with you during the planning of the task and will be detailed on the Permit to Work.

### 4 HOE'S APPOINTED EXPLOSIVES SAFETY REPRESENTATIVE

4.1 The HoE has appointed an Explosives Safety Representative, who will brief your staff on the location of the explosives facilities and the safety procedures to be adopted should there be an incident. In addition, the HoE's Explosives Safety Representative will be responsible for liaising on safety matters between the work site manager or foreman and the unit Contracts Officer. The HoE's Explosives Safety Representative is to be allowed access to the work site as and when he requires, and will have the power to immediately suspend all work if he considers that the safety of the work site or the explosives is being jeopardised. Details of the HoE's Explosives Safety Representative will be notified on the Permit to Work.

### 5 MONITOR

5.1 In addition to the HoE's Explosives Safety Representative, a Monitor may be appointed to escort you and maintain observation of the work site to ensure any working practices you may wish to use do not increase the risk to, or from, any explosives. The Monitor will report any situations or activity that they consider to compromise explosives safety to the HoE's Explosives Safety Representative. In the unlikely event of a hazardous incident occurring, the Monitor will take responsibility for initiating evacuation procedures. However, it is emphasised that as long as all stipulated precautions are adhered to, there is a very low probability of any hazardous incident occurring involving explosives. Details of the Monitor appointed, and the method of contacting them, will be notified on the Permit to Work.

### 6 PERMITS TO WORK

6.1 Prior to work commencing on the site, a Permit to Work (Explosives) (PTW (E)) is to be obtained by the Work Site Manager or Foreman.

- (1) A PTW (E) is to be obtained from \_\_\_\_\_.
- (2) In addition, the Work Site Manager or Foreman is to ensure that they and/or their staff have received an Explosives Safety Brief before work at the site commences. You will be required to provide the names of all staff who will require access to the work area and details of their competency for the work they are undertaking.

## 7 CONTRABAND LIST AND TOOLS

7.1 The following are contraband and must not be taken into the explosives area without being authorised. (Display contraband list). Unless formally authorized in advance, the following items must not be taken into an explosives area. It will be necessary to declare any tools/equipment that would be classed as contraband items \_\_\_\_\_days in advance to allow for them to be cleared for entry. All such tools/equipment must be identified by Make, Model and Serial Number:

- (1) Matches or any other means of producing flame or high temperatures.
- (2) Tobacco in any form, including snuff.
- (3) Any articles used in connection with smoking.
- (4) Radio transmitters or receivers, including mobile phones.
- (5) Any battery or mains operated item.
- (6) Unauthorized explosives.
- (7) Dangerous or flammable substances.
- (8) Cameras.
- (9) Firearms.
- (10) Drugs and Medicines.
- (11) Metal shod footwear.
- (12) Magnetic Therapy Products.
- (13) Food and Drink

## 8 WORK SITE ACCESS

8.1 The following additional safety restrictions will apply:

- (1) Pass. All persons entering an explosives facility are to be in possession of a current pass issued by \_\_\_\_\_.
- (2) Area Access Discs/Tags. Each person entering an explosives area will be issued with a disc or tag. These are used as a control measure so that, in the event of an incident, the number of personnel in the area is known. They are to be retained on the person to whom they are issued, and returned to the issuing point when leaving.
- (3) Search. All persons and vehicles are liable to be searched on entering or leaving the area.
- (4) Refuelling. Refuelling of vehicles and other appliances is not permitted within the area unless specific authorization has been given by the HoE's Explosives Safety Representative on the PTW (E).
- (5) Repairs to Vehicles or Appliances. Only the minimum repairs, authorised by the HoE's Explosives Safety Representative, to a defective vehicle or appliance to enable that vehicle or appliance to be moved outside the area are permitted.
- (6) Fire Precautions. All personnel are to be briefed on the fire regulations and precautions that are to be observed.

## 9 CONTRACTORS/VISITING WORKERS RESPONSIBILITIES

9.1 You, the Contractor/Visiting Worker, will be responsible for the following:

- (1) Ensuring that the work is completed and the work site vacated in the minimum reasonable practical time, and in any case before the date stipulated on the PTW (E). Only the personnel named on the PTW (E) are permitted to be at the work site at any one instance.
- (2) Ensuring that all waste and flammable products are promptly removed to an area which is outside the explosives area or/and at least 25 metres from any explosives facility, or other distance stipulated by the HoE's Explosives Safety Representative.
- (3) Providing the DIO Facilities Manager, Site Estate Representative and HoE's Explosives Safety Representative with all appropriate health and safety information relevant to the contract work.
- (4) Detailing, to the DIO Facilities Manager, Site Estate Representative and HoE's Explosives Safety Representative, the procedures that will be adopted and the tools and equipment that will be used.
- (5) Informing your employees of any conditions of work, including the Disclosure of Risk Statement and safety procedures, imposed by the contract and the PTW (E).
- (6) Where required by the PTW (E) you will be responsible for providing suitable dry powder fire extinguishers for any petrol or diesel operated equipment you require to use within the explosives area.



## CHAPTER 18

### ANNEX F

#### ESSENTIAL FEATURES OF A PTW (E)

#### CONTENTS

Para

- 1 GENERAL MATTERS
- 2 MATTERS RELATING TO EXPLOSIVE HAZARDS

NOTE: The purpose of this annex is to assist establishments and units to draw up appropriate Permits to Work (Explosives).

#### 1 GENERAL MATTERS

- (1) Personnel who raise PTW (E) are to be competent and properly authorised to do so.
- (2) PTW (E) must be raised for all work by contractors or visiting workers on or in a PES or within IBD of a PES.
- (3) PTW (E) must be uniquely identified and auditable.
- (4) PTW (E) must be dated and time limited.
- (5) PTW (E) Registers must be reviewed periodically to ensure all PTW (E) issued are still extant or have been cancelled.
- (6) The areas in which the Contractors' staff may work are to be clearly defined and detailed within the PTW (E). This may be on a suitable site map which is to be attached to the PTW (E).
- (7) Full details of any systems or equipment to be worked on are to be detailed.
- (8) A full description of the task or activity being authorised is to be detailed. This may be cross referred to the Method Statement where the task is complicated.
- (9) All tools and equipment that are classed as contraband are to be declared. This must define by Type, model and serial number where such information can be identified.
- (10) All personnel required to access the site must be named in person. Their competency levels are to be detailed and where specific safety personnel are required for hazardous tasks they are to be detailed.
- (11) Where a monitor is required, he/she must be identified on the PTW (E).
- (12) There must be an acknowledgement by all concerned that where the work authorised cannot be completed within the time period allocated, no further work can take place until a new PTW (E) has been issued.
- (13) There must be a formal acceptance of the PTW (E) and acknowledgement that the PTW (E) controls and Safety Brief are understood by the Works Site Manager/Foreman.
- (14) There must be a positive hand back procedure endorsed by the Work Site Manager/Foreman and the Area/Building custodian.
- (15) The hand back procedure must identify whether the site is safe to take back into normal use or if not identify the hazards still present.

- (16) There must be a formal certification by the Work Site Manager/Foreman and Area/Building Custodian that all tools and personnel have been removed from the site at the completion of the task.
- (17) All PTW (E) must be returned to the issuing authority upon suspension or closure.

## 2 **MATTERS RELATING TO EXPLOSIVE HAZARDS**

- (1) An assessment of the numbers of contractors and time they will be on site and exposed to the explosives hazard must be made. Where it is appropriate there will be a need for a Non-Standard Explosives Limit Licence. This must be referred to the relevant functional IE.
- (2) The total number of contract staff or visiting workers permitted to be on site at any given time must be detailed.
- (3) The hazards to and from the explosives must be detailed and the control measures required to mitigate the risks specific to the task being permitted. When determining the hazards to and from the explosives account must be taken of how the task is to be completed and what tools and equipment are required. This will normally involve an examination of the Method Statement.
- (4) The PTW (E) must be authorised by the HoE or his appointed Explosives Safety Representative.
- (5) The Area/Building Custodian must certify that the area is safe to work in and where they are detailed any controls he is required to implement have been completed.
- (6) The Area/Building Custodian must give authority to proceed with the task. Where other specialist PTW are required but not present no authority to proceed may be given.
- (7) Where there is a requirement to use either electrical equipment which does not comply with Chapter 8, or vehicles/MHE not complying with Chapter 16, additional fire fighting precautions advised by the Unit Fire Officer are to be taken, and advice sought from IE staff.

**ANNEX G EXAMPLE PERMIT-TO-WORK (EXPLOSIVES)**

Serial No \_\_\_\_\_ / \_\_\_\_\_ Date of Origination \_\_\_\_\_

This Permit to Work (Explosives) (PTW(E)) is only to be issued by persons nominated and promulgated as competent to carry out that function and when the job detailed in Parts 1 and 2 is to be carried out on or in a Potential Explosion Site (PES) or within the Inhabited Building Distance (IBD) of buildings/areas containing explosives. All personnel operating under a PTW (E) are to satisfy themselves that it has been properly issued by a nominated competent person before commencing the task to which it refers.

This PTW (E) relates only to work in the following area and within the time period stated. Work is not to commence until sections 1 – 7 of this PTW (E) are completed and agreed.

---

---

**PART 1 - SITE DETAILS**

Unit/Establishment \_\_\_\_\_

Site/Section: \_\_\_\_\_

Location: \_\_\_\_\_

System/Equipment (if any): \_\_\_\_\_

---

---

**PART 2 - TASK TO BE CARRIED OUT**

Describe the task or activity:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Time period to complete the task: From: \_\_\_\_\_ To: \_\_\_\_\_

---

---

**PART 3 - TOOLS AND EQUIPMENT**

List all tools and equipment required for use during the task:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

---

---

**PART 4 - PERSONNEL AND COMPETENCY**

Details of personnel nominated to carry out the job:

Name: \_\_\_\_\_ Competency: \_\_\_\_\_

Safety Personnel (if applicable): \_\_\_\_\_

Safety Competency Required (if applicable): \_\_\_\_\_

Person in Charge: \_\_\_\_\_

**PART 5 - STATEMENT BY HEAD OF ESTABLISHMENT (HOE) OR EXPLOSIVES SAFETY REPRESENTATIVE (ESR)**

I have received the contractors risk assessment and method statement and have carried out a full risk assessment of the explosives hazards relating to the task identified in Part 2 of this PTW (E) Ser No \_\_\_\_/\_\_\_\_. Control measures have been specified which are designed to ensure that the hazards to and from the explosives have been removed or reduced to a practicable minimum, and which must be observed throughout the full period of the task. Tools identified at Part 3 are authorized for entry into the Explosives Area. In addition, a Safety Brief has been prepared for issue to the person in charge.

The maximum number of contractors' staff permitted at any one time is: \_\_\_\_\_

The Task is to be completed by (Insert date): \_\_\_\_\_

A Non-Standard Licence is/is not\* required.

Hazards to and from the explosives involved with this task. (Use continuation sheet if necessary).

HAZARD	CONTROL MEASURE
a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____

Date of Authorization \_\_\_\_\_

Rank/Status \_\_\_\_\_ Name \_\_\_\_\_ Signature \_\_\_\_\_

Date \_\_\_\_\_ Tel \_\_\_\_\_

**PART 6 - STATEMENT BY THE PERSON IN CHARGE**

I certify that the persons nominated at Part 4 of this PTW (E) Ser No \_\_\_\_/\_\_\_\_ will comply with the requirements in the method statement attached to this PTW (E). I understand that it is my responsibility to supervise the work through to its completion and remain on site while work is in progress.

I have received the Safety Brief relating to the task and undertake to instruct each and every person identified at Part 4 of this PTW (E) of the contents.

I understand the permitted staffing levels and completion date placed upon me at Part 5.

No additional work may be carried out, beyond that necessary to contain an emergency, until a new PTW (E) has been authorised and issued.

Signed \_\_\_\_\_ Name \_\_\_\_\_

Rank/Status \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

**PART 7 - AUTHORITY TO PROCEED BY EXPLOSIVES SAFETY REP / BUILDING OR AREA CUSTODIAN**

I declare that the workplace identified at Part 1 of this PTW (E) Ser No \_\_\_\_/\_\_\_\_ has been rendered as safe as reasonably practicable by measures identified at Part 5 with reference to the listed hazards and their control measures, together with any additional limitations imposed by a Non-Standard Licence and/or the method statement. I further declare that the Person in Charge is in possession of all other PTWs which relate to or interact with the work identified in this permit.

I understand that if the task has not been completed within the time period defined in Part 2, no further activity can take place until a new PTW (E) has been issued and authorised.

The Monitor allocated to this task (if required) is:

Name \_\_\_\_\_ Tel \_\_\_\_\_

Signed \_\_\_\_\_ Name \_\_\_\_\_

Rank/Status \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

---

---

**PART 8 - CONFIRMATION OF WORK COMPLETION OR SUSPENSION BY PERSON IN CHARGE**

\* I confirm that the work indicated at Part 2 of this PTW (E) Ser No \_\_\_\_/\_\_\_\_ has been completed, all tools and contract personnel have left the site, and the site is safe and ready for normal activities to resume.

\* The task identified at Part 2 of this PTW (E) Ser No \_\_\_\_/\_\_\_\_ has been suspended. I understand that before any further work can continue, a new PTW (E) will be issued. The site has been left in a safe/unsafe\* condition. Warning signs/notices have been put in place and equipment/systems have/have not\* been locked off.

**\* Delete as Applicable**

Signed \_\_\_\_\_ Name \_\_\_\_\_

Rank/Status \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

---

---

**PART 9 - CONFIRMATION OF WORK COMPLETION OR SUSPENSION BY EXPLOSIVES SAFETY REP / BUILDING OR AREA CUSTODIAN**

\* I confirm that the work indicated at Part 2 of this PTW (E) Ser No \_\_\_\_/\_\_\_\_ has been completed, all tool and contract personnel have left the site, and the site is safe and ready for normal activities to resume. This PTW (E) is now cancelled.

\* The task identified at Part 2 of this PTW (E) Ser No \_\_\_\_/\_\_\_\_ has been suspended. Before any further work can continue, a new PTW (E) must be issued. I am aware of any restrictions on the safety of the site.

**\* Delete as Applicable**

Signed \_\_\_\_\_ Name \_\_\_\_\_

Rank/Status \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

---

---

**At the suspension or completion of the work once all relevant sections of this Permit are completed it is to be returned to the SER/Propman/Issuing authority.**

## COMPLETION INSTRUCTIONS

**Serial number and date:** To be completed by the Propman/SER/Issuing authority. Serial number to include establishment identifier and unique serial number.

**Part 1** - To be completed by authority or contractor initiating the work. System/Equipment is applicable to installed equipments. (Example; DCSA working on communication systems).

**Part 2** - To be completed by authority or contractor initiating the task. Description of task or activity to be detailed.

**Part 3** - To be completed by contractor undertaking task. A complete list of tools and equipment required for the task, that are declared as Contraband items within the DRES, type and serial number (where available) are to be included.

**Part 4** - To be completed by the contractor. All personnel nominated to carry out the work are to be detailed by name. Competency or qualifications are to be detailed. Safety Personnel are only required if the Safe System of Work requires them. Example Confined Spaces.

**Part 5** - To be completed by the HOE or their nominated Explosives Safety Representative. The assessment of contractors Risk Assessment and Method Statement is to be carried out with regard to Explosive Safety issues. A copy of the Method Statement is to be attached to the PTW (E). Where necessary the maximum number of staff permitted must take into account any other contractors working in, or within IBD of, the PES. The hazards and control measures identified are to be limited to those affecting explosives safety. (Examples include the need to remove explosives and clean processing facilities if exposed explosives have been present. Control measures required for the introduction of Battery Operated equipment or Petrol driven grounds maintenance equipment).

**Part 6** - To be completed by the Person in Charge of the work on site.

**Part 7** - To be completed by the Building or Area Custodian, or ESR if he is the custodian, as applicable. Where the work to be undertaken requires specialist PTW that cannot be issued until the PTW (E) is issued, the signing of both PTW (E) and specialist PTW is to happen concurrently at the work site. Where specialist PTW are identified in the contractors Risk Assessment and Method Statement but are not available then authority to proceed is **not** to be granted.

**PART 8** - To be completed by the Person in Charge. A physical check of the work area is required to ensure that all contract personnel, tools and equipment have been removed and the work site is safe. If work is suspended and the site is unsafe appropriate warning signs and controls must be put in place and declared to the ESR, Building or Area Custodian as applicable.

**Part 9** - To be completed by ESR or Building /Area Custodian.

## CHAPTER 18

### ANNEX H

#### EXAMPLE OF EXPLOSIVES SAFETY BRIEF FOR CONTRACTORS STAFF WORKING WITHIN THE INHABITED BUILDING DISTANCE OF EXPLOSIVES FACILITIES

#### CONTENTS

Para

- 1 INTRODUCTION
- 2 HEALTH AND SAFETY
- 3 WORKING SITUATION
- 4 ACCIDENT PROCEDURES
- 5 EVACUATION PROCEDURE
- 6 REST BREAKS
- 7 PETROL/DIESEL OPERATED EQUIPMENT
- 8 CONCLUSION

NOTE: It is stressed that the Explosives Safety Brief below is an example for guidance only and other pertinent information may need to be included. An Explosives Safety Brief may be raised for each PES and held centrally by the Contracts Manager for issue with each tender or be held by duty staff for issue to contractors for out-of-hours emergencies.

#### 1 INTRODUCTION

1.1 The work that you have been authorised to undertake is within, or in the vicinity of, a building containing explosives. Consequently, you and your employees are advised to take note of the following information and instructions.

#### 2 HEALTH AND SAFETY

2.1 General Health and Safety is covered under a separate brief. This brief only provides information on the risks associated with explosives.

#### 3 WORKING SITUATION

3.1 You and your employees will be working in the vicinity of explosives facilities. Further details are given in the Disclosure of Risk from Explosives Statement (DRES) for this work site.

3.2 The hazards associated with this building are (Detail the specific hazards associated with the explosives stored within)

#### 4 ACCIDENT PROCEDURES

- (1) In the event that you discover a fire raise the fire alarm. If you have a monitor with you he/she will raise the alarm.
- (2) In the event that you have an accident you must report it to your monitor or \_\_\_\_\_.
- (3) First Aid facilities are available at \_\_\_\_\_.

**DIAL \_\_\_\_\_ FOR POLICE, FIRE AND MEDICAL EMERGENCY ASSISTANCE****5 EVACUATION PROCEDURE**

- (1) In the unlikely event of a hazardous incident occurring involving explosives, you and your employees are to evacuate the site to the designated assembly area, which is \_\_\_\_\_.
- (2) Where a Monitor has been allocated, he/she will co-ordinate the evacuation and take a roll call to establish if any personnel are missing; details of any missing personnel are to be reported to the emergency services. Under these circumstances, you and your employees are to comply with any instructions given by the Monitor, HoE's Explosives Safety Representative, or the Emergency Services.

**6 REST BREAKS**

- (1) Your rest facilities are located at \_\_\_\_\_.
- (2) Toilets are located at \_\_\_\_\_.
- (3) The following are contraband and must not be taken into the explosives area without being authorised. (Display contraband list).

**7 PETROL/DIESEL OPERATED EQUIPMENT**

- (1) Refuelling of petrol or diesel operated equipment is prohibited within the explosives area.
- (2) It is to take place at \_\_\_\_\_.
- (3) You must have a dry powder fire extinguisher appropriate to the equipment and fuel at all times when it is inside the explosives area and when being refuelled.

**8 BATTERY OPERATED PORTABLE ELECTRICAL APPLIANCES**

8.1 Where you have been authorised to take battery operated portable electrical appliances into the explosives area/facilities there must be no removal of the battery. The battery must be positively fixed to the tool/appliance to prevent accidental exposure. If you need to change the batteries you must leave the explosives area.

**9 CONCLUSION**

9.1 The above requirements are laid down for the safety of personnel and property and it is essential that they are understood and complied with. Furthermore, it is pointed out that it is a condition of your contract that unit regulations are to be fully complied with.

- (1) If you have any queries regarding the content of this statement you are to address them to \_\_\_\_\_.
- or
- (2) The HoE's Explosives Safety Representative who may be contacted at Building No \_\_\_\_\_ or Telephone No \_\_\_\_\_.