# POLICY INSTRUCTION

**Subject:** ESTC Standard 6, Part 2 (B&CE), March 2011

Professional Appraisal (PA) and Technical Inspection (TI) of Explosives Storage & Processing Facilities

Revision and Compulsory Adoption of Standard

**Number:** PI 11/11

<table>
<thead>
<tr>
<th>Strategy &amp; Policy Directorate Sponsor:</th>
<th>Date of issue:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robin Cawthorne</td>
<td>01 September 2011</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact if different from above Sponsor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Friend</td>
</tr>
<tr>
<td>ESTC Technical Advisor (Structures), Weapons Effects on Structures</td>
</tr>
<tr>
<td>Professional &amp; Technical Services</td>
</tr>
<tr>
<td>Defence Infrastructure Organisation</td>
</tr>
</tbody>
</table>

**Who Should Read this:**

Top Level Budget Holders, Customer Estate Organisations, Commanding Officers, Heads of Establishment, Project Sponsors, Project Managers, DIO Advisors, Property Managers, Estate Managers, Site Estate Team Leaders, Site Estate Authority Teams, Maintenance Management Organisations, DIO Health and Safety teams, Consultants & Contractors involved in any works (including new build, modification or refurbishment, and maintenance) on explosives storage and processing buildings/facilities and ammunition stores, and any other person who has responsibility for the inspection & maintenance of Explosives Storage & Processing Facilities.

<table>
<thead>
<tr>
<th>When it takes effect:</th>
<th>When it is due to expire:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately</td>
<td>When superseded</td>
</tr>
</tbody>
</table>
Equality And Diversity Impact Assessment

This policy has been Equality and Diversity Impact Assessed in accordance with the Department’s Equality and Diversity Impact Assessment Tool against:

Part 1 Assessment Only (no diversity impact found)

The aim of this Policy Instruction (PI) is to ensure that the Building & Civil Engineering aspects of all Explosives Storage & Processing facilities are Inspected & Appraised in accordance with existing published policy.

Background

1. This PI supersedes PI 61/2004 and is to be read by all persons involved with any works and/or maintenance associated with the sites or facilities that are the subject of this Policy Instruction (PI).

2. The Defence Infrastructure Organisation Senior Estates Team Leader (DIO / SETL) or appropriate MOD Officer is to arrange for the Maintenance Management Organisation (MMO) to carry out all actions required by this PI.

3. No work involving expenditure on a MOD account is to be carried out without the prior authority of the PM, DIO Senior Estates Team Leader or the appropriate MOD Officer for the location or facility in question.

4. For MOD Establishments occupied by the United States Visiting Forces (USVF), the responsibilities of the Project Manager, SETL and MMO are mutually held by the USVF and DIO(USF). At an operational level, the jointly managed organisation is to ensure that the appropriate action is taken to implement the requirements of this Instruction. Where this PI requires procedures which differ significantly from normal USVF/DIO(USF) practice a relevant DIO(USF) Code of Practice is to be issued by DIO(USF).

Requirement

5. The purpose of this PI is to announce the Publication of ESTC Standard 6, Part 2 (B&CE), March 2011 which is the mandatory lead document for the inspection, testing and maintenance of B&CE aspects of explosives facilities licensed, owned or operated by the MOD.

6. The March 2011 edition of this standard is now available and is to be adopted with immediate effect.

7. It is not intended that the March 2011 edition will be used for ESTC Standard 6, Part 2 (B&CE) surveys which have already been ordered against the July 2008 edition or work that is currently in progress (e.g. RPC Scotland’s Project Creek)

8. ACTION ADDRESSEES ARE TO ENSURE THAT THE REQUIREMENTS OF THIS PI ARE PASSED TO THEIR PROPERTY MANAGERS OR OTHER RESPONSIBLE PERSONS WITHOUT DELAY.
Purpose

9. In the event of an explosion on a site, explosives storage & processing facilities are subjected to much higher loads than normal structures. Additionally, because a blast load is ‘accidental’, these types of buildings do not generally have the same margins of safety available that are inherent in normal building structures.

10. Whether they are purpose-designed protected buildings or are conventional buildings placed at appropriate quantity-distances (Q-D’s), the suitability & ‘fitness for purpose’ of explosives storage or processing buildings is predicated on them being in good condition. In view of this, any structural degradation must be viewed with concern & caution as any deterioration or significant loss of strength in the building may lead to the unacceptable consequences of premature collapse, unnecessary loss-of-life and/or propagation of the explosive event. Any deterioration of a building is also likely to affect the condition of the stored explosives etc. which, if significant, will reduce their life and result in unnecessary cost to MOD.

11. Technical Inspections (TI) & Professional Appraisals (PA) of explosives storage & processing facilities are required to provide evidence to MOD ‘Duty Holders’ (Heads of Establishment and Explosives Licensing Authorities) that they will continue to meet the assumptions of the explosives license and will perform as intended in the event of an incident. It is also essential that TI’s and PA’s identify further investigative or remedial works where the observed deterioration has the potential to affect these assumptions.

12. In the Ministry of Defence (MOD), the Explosives Storage & Transport Committee (ESTC), which sits under the Defence Ordnance and Environment Safety Board (DOESB), is responsible for setting the appropriate standards and monitoring compliance in this area. It does this under the auspices of the Joint Services Publication 482 ‘The MOD Explosives Regulations’ (JSP482) which is effectively the MOD’s safe system of work for complying with the ‘Manufacture and Storage of Explosives Regulations’ (MSER) which is the legislative framework covering this type of operation in the UK.

13. As a direct consequence of their definition as ‘Specialised Defence Facilities’, the potential hazards involved and the unfamiliarity of general industry with military explosives & their effects, explosives facilities are required to have a prescriptive inspection regime to justify to the Chief Inspector of Explosives of the MOD (CIE(MOD)), his Inspectors of Explosives (IE’s) and the License Holder that they are in a fit state to licence and use.

14. The purpose of ESTC Standard 6 Part 2 (Building & Civil Engineering), therefore, is to provide a uniform and formalised approach for justifying to the MOD Chief Inspector of Explosives via his Inspectors of Explosives that the buildings used (or are to be used) to store and/or process explosives are in a fit state for an explosives license to be granted, and that they will continue to be so for the duration that the explosives license is valid.

15. For the larger sites with multiple explosives storage & processing buildings, the B&CCE elements of the site-wide infrastructure & utilities must also be inspected / appraised to ensure that explosives can be safely stored and moved around the site.
16. The carrying out of inspections & appraisals are not an end in themselves. Rather, it is the output & use of this work that is of prime importance in determining and prioritising the requirement & scope of any preventative maintenance and / or repairs that are necessary to ensure the longevity and fitness for purpose of the facility.

17. The carrying out of any DIO/RPC Asset Physical Condition Grading Survey does not replace the requirements of the ESTC Standard 6, Part 2 (B&CE) Technical Inspections and Professional Appraisals as these inspections are integral to the MOD explosives licensing process.

18. Where constructions are discounted from the ESTC Standard 6 Part 2 inspection requirements, they should have their own locally arranged Routine Inspections (RI) put in place to ensure they are in a serviceable state and can continue to function properly. The Potential Explosion Site (PES) checks carried out by the user of these facilities is deemed acceptable to satisfy this requirement provided and defects observed are reported to the MMO via the appropriate channels. Whilst these local arrangements fall outside the scope of ESTC Standard 6, Part 2 (B&CE), they will still be subject to DCIE and IE Audits.

19. Where there is any doubt as to whether Technical Inspections (TI) and/or Professional Appraisals (PA) are required, the relevant Inspector of Explosives (IE) or, in extremis the CIE (MOD) Buildings Compliance office or ESTC TA(Structures) shall be consulted for a determination.

Distribution

20. Copies of ESTC Standard 6, Part 2 (B&CE), March 2011 and it’s associated documents can be found at the following link:

http://defenceintranet.diweb.r.mil.uk/DefenceIntranet/Library/CivilianAndJointService/BrowseDocumentCategories/SafEnvFire/Safety/OrdnanceAndExplosivesSafety/Jsp482AssociatedDocuments.htm

21. Copies of JSP482 ‘The MOD Explosives Regulations’ and other relevant ESTC Standards can be found at the following link:

http://defenceintranet.diweb.r.mil.uk/DefenceIntranet/Library/CivilianAndJointService/BrowseDocumentCategories/SafEnvFire/Safety/OrdnanceAndExplosivesSafety/Jsp482ModExplosivesRegulations.htm

22. Copies obtained from the MOD Intranet should not be considered as Controlled Documents under Quality Assurance schemes and, when required, formal issue should be obtained using MOD Form 999.

Contacts

23 CIE(MOD) Staff may be contacted at:
DES WpnsDOSG-ESTC
Defence Equipment & Support
Fir 3B, #4304
MOD Abbey Wood
Bristol
BS34 8JH Tel: ABW Mil: 9 3523 5592 Civil: 0316 793 5592