



Defence  
Infrastructure  
Organisation

## SAFETY ALERT

Subject: INCORRECTLY SEALED/SECURED GAS BOILER FLUE  
TERMINALS FOUND ON THE MOD ESTATE

Number: 04/13

DIO Secretariat Sponsor: Robin Cawthorne

Date of issue:  
25 March 2013

Contact if different from above Sponsor:

David Stainsby

Deputy Senior Authorising Authority (Mechanical)  
Professional & Technical Services  
Defence Infrastructure Organisation  
Kingston Road, Sutton Coldfield, West Midlands B75 7RL

Tel: 94421 3204/0121 311 3204 Email: [DIOOpsNorth-PTS9a@mod.uk](mailto:DIOOpsNorth-PTS9a@mod.uk)

Who should read this:

Top Level Budget Holders, Prime Contractors, Private Finance Initiatives, Public, Private Partnership and other traditionally procured contracts, Project Managers, Site Estate Authority Teams and Property Managers with responsibility for MOD projects and Property Management Works Services (including the legacy work of EWCs/WSMs), Reserve Forces Cadet Associations, Coordinating Authorising Engineers, Authorising Engineers, Authorised Persons, installers and maintainers of boiler flues, and the Responsible Person Gas/SETL.

When it takes effect: Immediately

Review date: 31 March 2015

Health and Safety

### Document Aim:

To raise awareness of reported incidences of statutory non-compliance in the sealing or fitment of boiler flues and terminations and the actions to be taken on the MOD Estate.

## 1. Introduction

There have been three reported incidents on MOD installations in Northern Ireland where the outer trim of the boiler flue has been used to hide the fact that the flue has not been correctly sealed. Correct sealing is vital to prevent the flow of harmful flue gasses back into the building and is a statutory requirement under the Gas Safety (Installation and Use) Regulations.

## 2. Background

The recent discoveries on the MOD Estate in Northern Ireland, coupled with the HSE NI Safety Alert 'Correct Sealing of Horizontal Flue Terminals' indicates that the problem may be more widespread.

Extract: During the past 18 months numerous RIDDOR reports have been submitted to the HSE NI Gas Safety Team which, when investigated, have shown that horizontal flue terminations on both concentric and twin pipe systems are not being correctly sealed and secured to the building fabric on completion of installation. The result of this has been two fold;

- Installations have experienced re-entry of products of combustion into the premises in some cases resulting in the activation of Carbon Monoxide Alarms.
- Flues have become internally disconnected from the boiler allowing high levels of products of combustion to be discharged into the premises with potentially fatal consequences.

The full text of the HSE NI Safety Alert is available on the following link:

<http://www.hseni.gov.uk/gsis-010-flue-terminals-safety-alert.pdf>

## 3. Requirement

- a) Existing practices already dictate that the flue be inspected as part of a gas (or any) boiler routine service and that:
  - the inspection includes the integrity of all the flue joints and the quality and security of the seal between the flue and the building structure;
  - particular attention is paid to installations where a flue trim ring is fitted. These rings are intended for aesthetic purposes only and do not provide an adequate seal of sufficient security. Where a trim ring is fitted and additional inspection must be carried out behind the ring.
  - all adverse findings are brought to the attention of the Estate Management site team immediately and a programme of remedial works is completed as soon as possible.
- b) Additional actions required in response to this Safety Alert:
  - Action addressees are to take positive action to record the findings on the integrity of the flue and its fitment during the next inspection, highlighting any failings or that it is compliant. All such records are to be brought to the attention of the Estate Management site team to confirm all appliances have been inspected and to initiate remedial action where necessary.
  - Estate Management teams are to copy any adverse findings/non-conformance reports to the Chief Environmental and Safety Officer at DIO ([DIO-CESO@mod.uk](mailto:DIO-CESO@mod.uk))

who will prompt normal accident/incident follow up procedures and confirm that RIDDOR requirements have been met.

- Advice on the continued use of any installation with a defective flue should be sought from a Gas Safe registered technician and followed in every case.
- Timing of inspections:

Northern Ireland – **On a risk assessed, priority basis.**

Elsewhere – **As part of the next programmed inspection / service.**