



Defence
Infrastructure
Organisation

SAFETY ALERT

PART A

Subject: Electric Shock Hazard: 250W SON Low Bay Lighting Fitting

Number: SA 04/15

DIO Sponsor: Bryan Dunn

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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), Coordinating Authorising Engineers, Authorising Engineers (WaH), Authorised Persons (WaH).

This Safety Alert does not necessarily cover all aspects of the subject matter and readers should make themselves aware of other potential issues. Readers should also not rely on DIO Safety Alerts as their only means of becoming aware of safety issues, but they should consult widely across other media to maintain awareness.

When it takes effect: Immediately

When it is due to expire: When updated or rescinded.

Health and Safety

Aim

1. To bring to the attention of appropriate persons an electrical shock hazard found on a number of Urbis Lighting (formally Urban Enviroscene) 250 W SON low bay lighting fittings type 7RT3NB/250/83D+53/TC63.

2. To Note: This hazard has been identified by Carillion Amey who have issued a Technical Bulletin Reference 015-009 independently of this Safety Alert.

Introduction

3. Compliance with the contents of this Alert will enable compliance with the Health & Safety at Work etc Act 1974 and its subordinate Regulations.
4. The appropriate MOD officer shall arrange for the Maintenance Management Organisation (MMO) contractor to carry out all actions in accordance with this Alert.
5. Any work required as a result of this Safety Alert must be carried out in accordance with JSP 375 Part 2 Volume 3 – High Risk Activities on the Defence Estate.
6. On MOD Establishments occupied by United States Visiting Forces (USVF) responsibility is jointly held by USVF and DIO(USF). At base level this jointly managed organisation is to take appropriate action to implement the contents of this Alert. Where this Alert contains procedures which differ significantly from USVF practice, DIO (USF) code of practice will be issued.

Requirement

7. These light fittings are known to have been installed in NATO Hardened Aircraft Shelters (HAS) and similar structures circa 1980s, however, their installation in other areas cannot be precluded.
8. Responsible persons are to establish if these light fittings are present on their sites. If found, their location, number, approximate age and condition should be recorded. Additionally, relevant persons at establishment and contract level informed and following suitable and sufficient risk assessment, appropriate notices posted to alert people to the hazard and 4Cs Register suitably annotated to identify the additional hazard.
9. A safe system of work is to be established the vicinity of these light fittings. No work should be undertaken on or near these light fittings unless appropriately isolated.
10. The MMO is to notify the DIO Service Delivery Performance Management Team, using the DIO SD-Perf Mgt Team (MULTIUSER) account, through their respective DIO Service Manager of the location, number, condition and approximate age for each affected asset and are invited to outline a best value solution for each of the affected assets which will be considered prior to the issue of a **Part B** to this safety alert.
11. The available data will be reviewed on 10th July 2015.
12. Further instructions will follow, if required, with the issue of **Part B** to this Safety Alert once the extent and scope of the affected estate has been established.

Background

13. When carrying out a non-intrusive inspection, an operative touched the outer casing of the light fitting and received a shock. Initial Investigation revealed that the end cover was live at 230v to earth.
14. Further investigation revealed that 18 of the 24 fittings fitted in the building had a similar fault.

15. Following isolation of the circuit, a detailed examination was made of a fitting which revealed that the fault is likely to be the caused by the breakdown of insulation of the thermal cut-out fixed to the end cover.
16. It appears that the end cover is electrically isolated from the rest of the fitting by a gasket and non metallic mounting screws. Therefore this fault may not be detected by insulation resistance testing of the fitting and may only become apparent when the end cover is touched.

Note:

End view of fitting



Internal detail of fitting



External View of Installed Fitting

