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| ONR Site Report  Urenco UK Ltd. (UUK) – Capenhurst Site |



ONR Site Report

Urenco UK Ltd. (UUK) - Capenhurst Site

**Report for period**: 1 July – 30 September 2024

**Authored by**: Nominated Site Inspector

**Approved by**: DFW Head of Safety Regulation

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Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed to members for the Capenhurst Site Stakeholder Group and are also available on the ONR website (<http://www.onr.org.uk/llc/>).

Site inspectors from ONR usually attend Capenhurst Site Stakeholder Group meetings where these reports are presented and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

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# Inspections

## Date(s) of inspection

ONR inspectors made inspections on the following dates during the report period 1 July – 30 September 2024:

* 23 and 24 July; and
* 12 August.

# Routine matters

## Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

* the conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
* the Energy Act 2013;
* the Health and Safety at Work etc Act 1974 (HSWA74);
* regulations made under HSWA74, for example the Ionising Radiations Regulations 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99); and
* regulations made under the Energy Act 2013, for example the Nuclear Industries Security Regulations 2003 and the Nuclear Safeguards (EU Exit) Regulations 2019.

The inspections entail monitoring the licensee’s actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of the Capenhurst site covered the following:

* safeguards;
* organisational capability and the management of change; and
* cyber security leadership and risk management.

Members of the public, who would like further information on ONR’s inspection activities during the reporting period, can view site Intervention Reports at [www.onr.org.uk/intervention-records](http://www.onr.org.uk./intervention-records) on our website [www.onr.org.uk](http://www.onr.org.uk).

Should you have any queries regarding our inspection activities, please email [contact@onr.gov.uk](mailto:contact@onr.gov.uk).

## Other work

UUK is implementing a site-wide transformation programme known as ‘One Capenhurst.’ ONR is regulating this change under Licence Condition 36: Organisational Capability; and throughout this quarter has continued to engage with UUK to discuss their progress with the change and ONR’s regulatory expectations. This included conducting a readiness inspection on 12 August 2024. ONR has received final versions of documents comprising UUK’s suite of management of change proposals underpinning ‘One Capenhurst,’ and has undertaken assessment work, on a sampling basis. Overall, at this stage, ONR is satisfied with the licensee’s approach to managing this change. UUK are proceeding with the change following their licence condition compliance arrangements and ONR continues to monitor progress.

ONR has also continued to engage with UUK on their strategy and plans for the development of a new facility to produce high assay low enriched uranium (HALEU) and their approach to managing an inventory of legacy material comprising one of the byproducts of uranium enrichment, called uranium hexafluoride tails (or HEX tails for short); a project known as the legacy tails separation facility (LTSF).

Site inspectors hold periodic meetings with safety representatives to support their function of representing employees and receiving information on matters affecting their health, safety, and welfare at work. ONR’s nominated site inspector for the Capenhurst site conducted such a meeting on 24 September 2024.

ONR’s nominated inspector for the Capenhurst site continues to conduct formal quarterly reviews of the site’s progress in delivering a number of agreed improvement activities, including:

* Refurbishment works for the site-wide fire fighting main.
* Fire safety shortfalls at one of the site’s uranium enrichment facilities.
* Following up on shortfalls with procedural adhereance.

ONR inspectors continue to engage with the Capenhurst site on several other, more routine matters, including:

* Progress with the outage at the Tails Management Facility (TMF), including several significant plant modifications.
* Implementing safety improvements at one of the site’s uranium enrichment facilities, prior to its return to service.
* The site’s Chemistry Services Department, including progress with adopting and implementing a revised safety case for the facility and UUK’s plans to construct new laboratory facilities on the site.
* Progress with planned expansion / modernisation projects across the site.
* Radiological protection and compliance with the Ionising Radiations Regulations 2017.
* Several requests for ONR’s approval(s) related to the off-site transport of radioactive material.

# Non-routine matters

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee’s response, including actions taken to implement any necessary improvements.

There was one event of particular note at the Capenhurst site during this period:

* On 27 July 2024 at one of the uranium enrichment plants on the site, operators at the plant discovered that a safety system designed to protect against over-heating faults was not functioning correctly. Operators on the shift were alerted to the failure by a low temperature alarm given by the plant’s control system. When they responded to the alarm, they found pipework had become blocked with approximately 3kg of solid uranium hexafluoride (HEX). They followed the plant’s operating instructions and cleared the blockage. Nobody was injured as a result of the incident and there was no release of HEX. The licensee followed its operational decision-making process and, as an immediate short-term measure, took several additional steps to strengthen their operational safety controls. The licensee is now undertaking an investigation into the incident. ONR’s Nominated Site Inspector for Capenhurst has continued to have frequent engagements with the licensee about the event. At this stage, we are satisfied with their response. We closely monitoring their progress with implementing a longer-term engineered solution, and have raised a Level 3 Regulatory Issue.

Throughout this period ONR has continued to investigate the incident that occurred at the TMF on 5February 2024, involving a container of uranium powder. ONR considers there was no signifcant risk to members of the public as a result of the event and will report on the outcome of the investigation at the appropriate time.

# Regulatory activity

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed ‘Licence Instruments’ (LIs) but can take other forms. In addition, inspectors may take a range of enforcement actions, to include issuing an Enforcement Notice.

No LIs were issued this period. However, the following Enforcement Notices were issued:

* Improvement Notice ONR-IN-24-006 was issued to Urenco ChemPlants Ltd. (UCP), a tenant organisation on the Capenhurst Nuclear Licensed Site. The notice followed ONR’s investigation into an event that occurred at the TMF in May 2024, when hydrofluoric acid was discharged from a pipework leak. Although no workers were harmed, the incident had the potential to have more serious consequences if they had been directly exposed to the acid. The notice was served due to breaches of Sections 2(1) and 3(1) of the Health & Safety at Work etc. Act 1974 and Regulation 5 of the Management of Health and Safety at Work Regulations 1999. UCP has until 2 December 2024 to comply with the notice.
* Separately, ONR served Improvement Notice ONR-IN-24-007 on Babcock Critical Services Ltd., a contractor on the site, for not having a suitable and sufficient risk assessment for carrying out work with ionising radiation at the Urenco UK Ltd. site. No workers were harmed as a result of this shortfall, and there was no impact on the public or the environment. The notice was issued due to breaches of Section 2(1) of the Health and Safety At Work etc. Act 1974 and Regulation 8(1) of the Ionising Radiations Regulations 2017.The dutyholder has until the start of October 2024 to comply with the notice.

**Table 1: Enforcement notices issued by ONR during this period**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Type | Ref. No. | Description |
| 02/08/24 | Improvement Notice | ONR-IN-24-006 | Issued to UCP for contravening Sections 2(1) and 3(1) of the Health & Safety at Work etc. Act 1974 and Regulation 5 of the Management of Health and Safety at Work Regulations 1999. |
| 02/08/24 | Improvement Notice | ONR-IN-24-007 | Issued to Babcock Critical Services Ltd. for contravening Section 2(1) of the Health and Safety At Work etc. Act 1974 and Regulation 8(1) of the Ionising Radiations Regulations 2017. |

A press release detailing the above Enforcement Notices can be found on the ONR website: [Improvement notices served to contractor and tenant at Capenhurst site | Office for Nuclear Regulation (onr.org.uk)](https://www.onr.org.uk/news/all-news/2024/08/improvement-notices-served-to-contractor-and-tenant-at-capenhurst-site/)

# News from ONR

For the latest news and information from ONR, please read and subscribe to our regular email newsletter ‘ONR News’ at [www.onr.org.uk/onrnews](http://www.onr.org.uk/onrnews).

# Contacts

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