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| ONR Site Report  Sellafield Ltd – Sellafield |



ONR Site Report

Sellafield Ltd - Sellafield

Report for period: 01 April 2024 – 30 September 2024

Authored by: Nominated Site Inspector

Approved by: Superintending Inspector

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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 West Cumbria Sites Stakeholder Group (WCSSG) and are also available on the ONR website (<http://www.onr.org.uk/llc/>).

Site inspectors from ONR usually attend West Cumbria Sites 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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List of abbrevations:

|  |  |
| --- | --- |
| AHF | Active Handling Facility |
| ALARP | As Low As Reasonably Practicable |
| BEP | Box Encapsulation Plant |
| BEPPS/DIF | Box Encapsulation Plant Product Store/Direct Import Facility |
| CA | Competent Authority |
| CDM | Construction (Design and Management) Regulations 2015 |
| CFSI | Counterfeit, Fraudulent and Suspect Items |
| COMAH | Control Of Major Accident Hazard (Regulations 2015) |
| COSHH | Control Of Substances Hazardous to Health Regulations |
| DSEAR | Dangerous Substances and Explosive Atmospheres Regulations |
| EA | Environment Agency |
| EDNUP | Electrical Distribution Network Upgrade Project |
| EPS | Encapsulation Product Store |
| ERA | Enhanced Regulatory Attention |
| FGFL | First Generation Finishing Line |
| FGMSP | First Generation Magnox Storage Pond |
| HALES | Highly Active Liquor Evaporation and Storage |
| HAST | Highly Active Storage Tank |
| HLWP | High Level Waste Plants |
| HPCP | Hold Point Control Plan |
| HSWA74 | Health and Safety at Work Act 1974 |
| ILW | Intermediate Level Waste |
| INES | International Nuclear Event Scale |
| IRR17 | Ionising Radiations Regulations 2017 |
| ISF | Interim Storage Facility |
| KDM | Key Decommissioning Milestone |
| LAEMG | Low Active Effluent Management Group |
| LC | Licence Conditions |
| LOLER | Lifting Operations and Lifting Equipment Regulations 1998 |
| MEP | Magnox Encapsulation Plant |
| MER | Magnox East River |
| MHSWR99 | Management of Health and Safety at Work Regulations 1999 |
| MRF | Magnox Reprocessing Facility |
| MSSS | Magnox Swarf Storage Silo |
| NDA | Nuclear Decommissioning Authority |
| NIA65 | Nuclear Installation Act 1965 |
| NSHS | Nuclear Site Health and Safety |
| OFSG | Oxide Fuel Storage Group |
| ONR | Office for Nuclear Regulation |
| OR | Operating Rule |
| PFCS | Pile Fuel Cladding Silo |
| PFSP | Pile Fuel Storage Pond |
| PPP | Programme and Project Partner |
| PSR | Periodic Safety Review |
| REPPIR | Radiation Emergency Preparedness and Public Information Regulations |
| RCW | Recirculating Cooling Water |
| RI | Regulatory Issue |
| SCIE | Sellafield Compliance, Inspection and Enforcement |
| SEMS | Sellafield Enterprise Management System |
| SEP2 | Silo Emptying Plant No2 |
| SFAIRP | So Far As Is Reasonably Practicable |
| SFM | Spent Fuel Management |
| SMF | Silo Maintenance Facility |
| SNM | Special Nuclear Materials |
| SQEP | Suitably Qualified and Experienced Person |
| SSB | Self Shielded Boxes |
| SRP | Sellafield Product and Residue Store Retreatment Plant |
| THORP | Thermal Oxide Reprocessing Plant |
| WTR | Waste Transfer Route |
| WVP | Waste Vitrification Plant |

**Licence conditions**

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3 Control of property transactions

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5 Consignment of nuclear matter

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35 Decommissioning

36 Organisational capability

# Inspections

## Date(s) of Inspection

The ONR site inspectors made inspections on the following dates during the report period 01 April 2024 – 30 September 2024:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **April 2024** | **May 2024** | **June 2024** | **July 2024** | **August 2024** | **September 2024** |
| **Special Nuclear Materials (SNM)** |  | 8, 9 | 12 |  | 6-8 | 4,5 |
| **Retrievals** | 9-11 | 8,9 |  | 10, 15 |  |  |
| **Remediation** |  | 2,15 |  | 9-10 |  |  |
| **Spent Fuel Management (SFM)** | 3, 10 | 7, 14, 15 | 12 |  |  | 12, 18, 24,25 |
| **Site Management** |  |  | 4,12 |  |  | 3,4 |
| **Corporate** |  | 14, 15, 22, 23 | 25,26 | 31 | 1 | 11,12 |

# 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); and
* regulations made under HSWA74, for example the Ionising Radiations Regulations 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).

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 Sellafield covered the following:

**Special Nuclear Materials Value Stream (SNM)**

Sellafield Product and Residue Store Retreatment Plant (SRP)

To derive confidence in the construction conformance of the anchorages to the SRP roof trusses, which are important to the structural integrity of the roof, we undertook an inspection prior to casting the anchorages into the reinforced concrete superstructure. This focussed on construction planning and supervision pursuant to its obligations under LC19 and sampled LC17 arrangements to manage conformance risks associated with the procurement and installation of the anchorage assemblies. We judged that compliance met the legal standard and awarded a green (no formal action)

SNM North

Two planned compliance inspections were conducted to confirm Sellafield Ltd.’s compliance with its arrangements for Licence Conditions (LCs) 7 and 11. We judged that compliance with the LCs was adequate and awarded green (no formal action) inspection ratings.

SNM South

Three planned compliance inspections were conducted to confirm Sellafield Ltd.’s compliance to its arrangements for LC7, 10, 12, 23, 24, 26, 27, 28 and 34. We judged that compliance was adequate and awarded a green (no formal action) inspection rating.

**Retrievals Value Stream**

During the reporting period within the retrievals value stream, our safety inspectors carried out three planned Licence Condition (LC) compliance inspections:

• LC 28 – Pile Fuel Cladding Silo (PFCS)

• Lifting operations – Magnox Swarf Storage Silo (MSSS)

• Lifting operations– Legacy Ponds

The lifting inspections were carried out against LC 28 - examination, inspection, maintenance and testing (EIM&T), Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 and Provision of Use and Work Equipment Regulations (PUWER) 1998.

Pile Fuel Cladding Silo (PFCS)

The purpose of the inspection was to judge the PFCS facility’s compliance with Sellafield Ltd.’s LC28 arrangements. The inspection focused on systems, structures and components (SSC) important to safety used for radioactive waste retrieval operations.

The inspectors’ judged that, from the evidence sampled, Sellafield Ltd. was complying with the requirements of LC 28 and assigned a green (no formal action) inspection rating.

Magnox Swarf Storage Silo (MSSS)

The purpose of this inspection was to judge the MSSS facility’s compliance with Sellafield Ltd.’s arrangements for LC 28, LOLER and PUWER. The inspection focused on lifting operations associated with radioactive waste retrieval.

The inspectors’ judged that, from the evidence sampled, Sellafield Ltd. was complying with the relevant legal standard and assigned green (no formal action) inspection ratings.

Legacy Ponds

The purpose of this inspection was to judge the legacy ponds facilities’ compliance with Sellafield Ltd.’s arrangements for LC 28, LOLER and PUWER. The inspection focused on lifting operations associated with radioactive waste retrieval.

The inspectors’ judged that, from the evidence sampled, Sellafield Ltd. was complying with the relevant legal standard and assigned green (no formal action) inspection ratings.

**Remediation Value Stream**

Magnox Remediation (MR)

One planned themed compliance inspection was conducted at the MR facility to confirm Sellafield Ltd.’s compliance with its arrangements for LC 23, 24, 35 and 36 following the facility transition into post operational clean out. We judged that compliance with these LCs was met and assigned a green (no formal action) inspection rating.

Our inspectors also conducted a Construction, Design and Management (CDM) 2015 compliance inspection on the Calder site on 2 May 2024. The reason for the inspection stemmed from the accelerated demolition at the Calder site and intelligence from other demolition projects on the Sellafield site. This inspection set out to gain confidence that Sellafield Ltd had learned from experience in managing contractors and effectively controlling the risks throughout the decommissioning lifecycle, in compliance with the CDM 2015 Regulations. The inspection concluded that Sellafield Ltd had complied with CDM 15 and a green rating was provided with no further regulatory action required and no regulatory issues raised.

**Spent Fuel Management Value Stream**

Eight inspections were undertaken at the Spent Fuel Services operating unit during the period; one readiness inspection covering LCs 10, 23, 24, 27 and 28, five LC compliance inspections covering LCs 10, 11, 26, 28, 32 and 36, a nuclear fire safety themed inspection covering LCs 10, 23, 24, 27, 28 and 34, and an emergent inspection covering flask lifting operations at the Fuel Handling Plant, with the related LCs and legislation being 10, 24, 26, 27, 28 and Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) Regulations 9 and 10.

The readiness inspection undertaken to assess the readiness to implement the safety case for a planned permissioning activity and the three compliance inspections were rated green. The nuclear fire safety inspection was awarded a green rating for four LCs, but amber for compliance with the expectations of LC23, where there was no evidence of compliance for several lower-level conditions and limits of safe operations. A regulatory issue has been raised to ensure these shortfalls are addressed. A further LC (27) was unrated as it was determined during the inspection that there were no safety mechanisms, devices and circuits required to support relevant (nuclear fire safety) operations.

An emergent inspection was undertaken on flask lifting operations at the Fuel Handling Plant, following the identification of a safety case related shortfall (the shortfall presented a risk to the worker as opposed to the public). The inspection identified a significant shortfall with the use of operating instructions and knowledge of the required emergency response instruction and the inspector subsequently rated LC24 as red. Sellafield Ltd voluntarily suspended flask lifting operations while the shortfalls were satisfactorily addressed and is now back in compliance. Given this inspection was only recently undertaken, we are considering if further regulatory action is appropriate. The remainder of the LCs and regulations were rated either green or were unrated due to insufficient evidence; despite the insufficient evidence there were no concerns beyond that already captured with the LC24 shortfall.

Highly Active Liquor Evaporation and Storage (HALES) and High Level Waste Plants (HLWP)

For the HLWP, one planned compliance inspection was conducted to confirm Sellafield Ltd.’s compliance with its corporate arrangements for LC 22. We judged that compliance with LC 22 as met and assigned a green (no formal action) inspection rating.

For HALES, one planned compliance inspection was conducted which was a Systems-Based Inspection to confirm the adequate implementation of the safety case for the HALES Evaporator D ventilation systems and to confirm compliance with LCs 10, 23, 24, 27, 28 and 34. For all the planned LC compliance inspections we judged that Sellafield Ltd had met the required standard and assigned green (no formal action) inspection ratings. We also judged that the HALES safety case for its ventilation systems had been adequately implemented.

**Site Management**

Annual Level 1 LC11 Exercise Demonstration

A planned compliance inspection was undertaken of the Sellafield Ltd Level 1 safety demonstration exercise (Exercise Enigma). The purpose of the intervention was to evaluate the adequacy of existing arrangements to ensure compliance with Licence Condition 11.

Sellafield Ltd demonstrated its emergency arrangements with an exercise involving a fire at the Pile Fuel Cladding Silo. The scenario provided a challenge to the responders with an emergency intervention, casualty and radiological release. ONR welcomes demanding exercises as they generally provide greater learning opportunities.

There were a number of areas of good practice with effective command and control at the incident plant and the implementation of timely and considered actions to protect the workers and public. The exercise objectives were achieved, there were also associated learning opportunities with Sellafield Ltd making some observations regarding emergency communications. We have an existing regulatory issue open on emergency communications and are continuing to engage regularly with Sellafield Ltd on their associated improvement programme.

The demonstration was considered challenging and Sellafield Ltd adequately demonstrated the application of their emergency arrangements warranting an intervention rating of green (no formal action) for LC11.

LC15 and LC28 at B39

B39 is a key facility supporting the Advanced Gas Reactor Operating Plan (AGROP) and therefore is strategically significant to the UK. The facility is at the end of its envisaged design life and in need of significant material improvement.

The purpose of the inspection was to seek assurance that the periodic review and examination, inspection, maintenance and testing (EIMT) arrangements for B39 are suitable and sufficient to ensure that the facility will be able to support flask operations (including AGROP) for the next decade.

The B39 safety case management process, arrangements for EIMT and asset management strategy including delivery was sampled, along with an inspection of the B39 facility including the flask reception bay, decontamination bays, grit and painting booths and work control office. The facility was in good condition with clear evidence of routine maintenance. Discussions with the Duly Authorised Person also gave confidence in the embedding of safety case knowledge at an implementation level.

The facility also demonstrated an enterprise leading approach to asset management with demonstrable resource, finance and effort directed into the programme. The sampling undertook gave confidence in the physical delivery of the improvements such as the T-Door and ergonomic/safety handrails in the decontamination bays.

The B39 facility demonstrated adequate implementation of their arrangements for LC15, LC28 and asset management warranting an intervention rating of green (no formal action).

**Corporate**

Undertaking risk, hazard and regulatory intelligence informed compliance inspections and overseeing strategic enterprise change at Sellafield, including leadership and culture, are ONR’s corporate inspection areas of focus. From 01 October 2024, the scope of our corporate inspection function for the Sellafield site will change. Its focus will be upon leadership and culture, organisational capability, and learning and decision-making. As such, the information reported in this section of future reports will change to reflect this new focus.

This financial year (FY), most planned corporate inspections are themed compliance inspections rather than LC compliance inspections. This enables these inspections to cover several of our purposes, rather than just our nuclear safety purposes. Based on regulatory intelligence, the corporate inspection programme for this FY focusses on our nuclear safety purposes and our Nuclear Site Health & Safety (NSHS) purposes.

Inspectors conducted a “Sellafield Enterprise Management System (SEMS) Compliance Management and Implementation Progress” themed inspection in September 2024. SEMS replaced the Sellafield Ltd. Management System (SLMS) in March 2024 and this inspection examined the implementation of SEMS, its forward plan, and compliance management arrangements. Inspectors judged Sellafield Ltd.’s compliance with LC 12 and LC 17 to require no formal action and consequently assigned green ratings to these. Inspectors judged Sellafield Ltd.’s compliance with the Lifting Operations and Lifting equipment Regulations 1998, the Management of Health and Safety at Work Regulations 1999, and the Provision and Use of Work Equipment Regulations 1998, require improvement and consequently assigned amber ratings to these. We are currently considering what further regulatory action may be appropriate in response to these three amber ratings.

A corporate LC compliance inspection of LC 24 (Operating instructions) was undertaken in May 2024. LC 24 was selected for inspection since Sellafield Ltd. had self-rated this LC as amber for a number of years. A specific aim of this inspection was to sample completed and planned Sellafield Ltd. LC 24 improvement activities. We determined that the improvements identified by Sellafield Ltd. last FY had been delivered and have led to significant improvements, and the improvements identified for this FY were risk informed and supported by evidence. LC 24 was rated green (no formal action).

During the reporting period, we also continued to monitor improvement actions being taken by Sellafield Ltd. in response to previous corporate inspections.

During the previous period it was reported that an enforcement letter was due to be issued based on the outcome of a corporate LC 25 (Operational records) inspection which had been rated amber (seek improvement). This enforcement letter was issued on 21 May 2024 and it is referenced in Section 4.

Supply Chain and Quality

One Counterfeit, Fraudulent and Suspect Items (CFSI) themed intervention commenced during the reporting period. The aim of the inspection is to sample the CFSI risk mitigation arrangements of Sellafield Ltd. including its supply chain, focussing on LC6 and LC17. The inspection has included sampling the CFSI risk mitigation arrangements at four Sellafield Ltd. safety significant suppliers' facilities. No significant matters were identified which required immediate regulatory attention. A further inspection is planned in October 2024 of the Sellafield Ltd. Operational Technology Group CFSI risk mitigation arrangements, which will complete this intervention. An overall regulatory rating will be assigned based on the totality of the inspection sampling.

During the reporting period, continued monitoring took place of Sellafield Ltd’s progress with regulatory issue actions. This covered required improvements relating to the intelligent customer oversight arrangements for the manufacture and supply of self-shielded boxes, procurement of grey market products, records management, and CFSI risk mitigation and quality management arrangements on the electrical distribution network upgrade project.

Nuclear Site Health and Safety (NSHS)

Sellafield Ltd continue to be in Enhanced Regulatory Attention for NSHS across three areas: (1) leadership and culture; (2) maturity of NSHS risk profiling; and (3) safety leadership and culture. Focus continues to be around two key areas: improvements to NSHS risk profiling and task risk assessments; with a level 3 regulatory issue raised for risk profiling and level 4 regulatory issue raised for task risk assessments. Sellafield Ltd has committed to making continuous long-term improvements across NSHS management.

Our NSHS team has been involved in enforcement action and has served two improvement notices on Sellafield Ltd. due to breaches of The Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended). Further detail is given in Section 3 of this report.

NSHS team was presented with Sellafield Ltd.’s internal Board of Inquiry Report covering Convention Health and Safety. We will maintain a focus to review progress to address the actions described within the report.

Members of the public, who would like further information on our 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

Spent Fuel Management - Highly Active Liquor Evaporation and Storage (HALES) - HALES butex transfers - HPCP 603

On 17 May 2024 we permissioned the facility to commence butex liquor transfer operations. This permission enabled the transfer of the butex highly active liquor (HAL) located in the old side HAL storage tanks to the new side HAL storage tanks. This will enable the facility to feed the butex HAL to the Waste Vitrification Plant (WVP) where this material will be incorporated into vitrified glass for long term safe storage.

Special Nuclear Materials (SNM)

Following the issuing of a Licence Instrument in September 2023, Sellafield Ltd. successfully implemented its capabilities to commence overpacking and retrieval of SNM packages from a legacy store to more modern storage, which allowed the associated level 1 regulatory issue (RI-4995) to be closed (covered in the previous WCSSG report). Subsequent to this, a level 3 regulatory issue was raised (RI-11899) as a means to ensure timely retrieval of the remaining inventory in the legacy store. Sellafield Ltd. retrieved the final SNM package from the store in July 2024 enabling the level 3 regulatory issue to the closed.

A level 1 regulatory issue remains extant for SNM which relates to safe and secure storage of the material transported to Sellafield under the Dounreay Exotics Consolidation Programme which we are continuing to engage on. Sellafield Ltd. has submitted a request for us to permission an activity to allow transfer of a significant proportion of this former Dounreay SNM into medium-term storage which would address some of the inventory that is subject to the regulatory issue. We are currently assessing this submission.

Remediation Value Stream - Decommissioning Projects

In this period, we have been engaging with Sellafield Ltd on the floc removal from legacy tanks. Sellafield Ltd. recently submitted to us a consolidated programme for floc retrieval and a revised set of key performance indicators for this milestone which will help monitoring the progress.

Regulatory engagements continue with other projects in remediation, including on active demonstrators (the alpha glovebox demonstrator, the sort and segregate demonstrator and risk reduction of glovebox operations demonstrator / RrOBO). The glovebox demonstrator (developing an efficient and effective capability to semi-remotely decommission alpha-active gloveboxes using laser cutting technology) is scheduled for permissioning this FY. Sellafield Ltd. has informed us of their intention to pause the sort and segregate demonstrator (trialling an approach to separate the intermediate active wastes from plutonium contaminated material, for a more efficient management of legacy crates), due to challenges with resources and prioritisation of other projects. Sellafield Ltd. has also briefed us regarding a new demonstrator involving robotic arm in a glovebox (RrOBO), with plans to trial this solution later this financial year.

Early engagement is now underway regarding the removal of the barrel section of the pile 1 chimney. Engagement has also resumed on a new major construction project, i.e. lightly shielded stores, for permissioning in the medium term. Finally, in cooperation with the ONR innovation team, we are also engaging on other concept designs (demonstrators and other pilots).

Projects and permissioning including Long Term Periodic Review

Sellafield Ltd. submitted HP406 Licence instrument submission in July 2024 requesting agreement to receive and store First Generation Magnox Storage Pond (FMGSP) fuel and fuel bearing material (FBM), within self-shielded boxes (SSBs) in the Interim Storage Facility (ISF). This is currently being considered by our inspectors.

Our inspectors undertook an inspection of the MSSS nitrogen generation and storage plant (NG&SP) to inform the release of a regulatory hold point on original building (OB) and first extension (FE) waste retrieval and FE pressurised inerting (PI) from NG&SP, known as hold point (HP)2j. The inspection was undertaken against Licence Condition (LC) 22, modification or experiment on existing plant. Our inspectors judged, based on the samples taken, Sellafield Ltd. had provided evidence that LC 22 arrangements had been adequately implemented. The inspection rating of green (no formal action) was assigned. We subsequently released HP2j via Enhanced Implementation, Monitoring and Control (EIM&C) arrangements (see section 4).

We judged that two further regulatory hold points on MSSS submitted by Sellafield Ltd. in this review period could be received for information only.

Facilities to support waste retrievals from legacy silos

To support waste retrievals from the legacy silos, MSSS and PFCS, Sellafield Ltd. needs to progress the construction of several new build facilities and implement modifications to existing facilities. We are continuing to maintain regulatory focus in these areas to ensure we have the necessary regulatory confidence that Sellafield Ltd. has the key enablers in place to safely store the waste retrieved from the legacy silos and that the overall risks to people on and off site remain reduced so far as is reasonably practicable.

Box Encapsulation Plant Product Store/Direct Import Facility (BEPPS-DIF)

BEPPS-DIF is a critical enabler for hazard and risk reduction, storing the filled waste packages retrieved from the silos and other legacy facilities. Active commissioning of the facility is continuing, further PFCS packages are expected to enter the facility in quarter four of 2024. Once active commissioning has been concluded, the facility will move directly into active operations in early 2025

Box Encapsulation Plant (BEP)

BEP is another critical enabler for hazard risk reduction in receiving waste packages, processing, followed by onward passage and storage in BEPPS-DIF. The facility is in the later stages of construction and inactive commissioning is anticipated to start in the summer of 2025.

SIXEP Continuity Plant (SCP)

The Site Ion Exchange Effluent Treatment Plant (SIXEP) treats effluent discharges from the Sellafield Site. This facility was brought into service in 1985 with a design service life of 25 years. The SCP project provides a replacement for SIXEP using similar technologies. The new facility is currently being constructed adjacent to SIXEP. We are continuing to engage with the SCP project team during its construction phase.

Corporate

ONR considers it necessary that Sellafield Ltd. remains subject to enhanced regulatory attention for both organisational learning and organisational capability. Consequently, we continue to closely monitor Sellafield Ltd.’s progress in implementing improvements to its arrangements for learning from incidents, and its actions to address enterprise-wide shortfalls in organisational capability.

During this reporting period, we have continued to monitor Sellafield Ltd.’s progress in implementing improvements to its performance management arrangements to ensure that managers adequately consider the behaviours of their direct reports, alongside outcomes.

National Nuclear Laboratory (NNL) Annual review of Safety, Security, Safeguards and Environment (ARoSSSE) for Central Laboratory and Windscale Laboratory

NNL presented their Annual Review of Safety, Security, Safeguards & Environment (ARoSSSE). The following topics were discussed: achieving and maintaining nuclear and radiological safety; timely hazard and risk reduction; emergency planning and resilience; nuclear security; cyber & information security; environmental protection; conventional health & safety; radioactive transport safety and safeguards. We were supportive of the review and considered that it represented good practice.

# Non-Routine Matters

Low Active Effluent Management Group (LAEMG)

On 27 August 2024 we served two improvement notices to Sellafield Ltd. due to breaches of The Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended) within LAEMG.

The enforcement action was taken after Sellafield Ltd. failed to manage the risks of working with nickel nitrate and to prevent or adequately control exposure of workers to this hazardous substance in one of its effluent facilities. These shortfalls did not compromise either nuclear or radiological safety.

Used in the treatment of effluent, nickel nitrate is not radioactive, but is a hazardous substance and could cause harm to the health of a worker exposed to it. To mitigate these risks, operations involving the chemical should be conducted in a glovebox to protect workers from any harmful health effects. In the B800 facility, contamination was found outside the glovebox area, which resulted in workers potentially being exposed to the chemical. A poorly designed and maintained glovebox appeared to have contributed to the contamination.

The first notice, served under Regulation 6 of COSHH, requires Sellafield Ltd. to complete a suitable and sufficient assessment of the risks associated with the use of nickel nitrate by the end of October 2024. The second notice, served under Regulation 7 of COSHH, requires Sellafield Ltd. to either prevent or, where this is not reasonably practicable, adequately control exposure of workers to nickel nitrate. Sellafield Ltd. is required to do this by the end of March 2025.

Box Encapsulation Plant (BEP)

The ONR project inspector for the BEP undertook preliminary enquiries into a fall from height incident that occurred in early March 2024. An individual had fallen backwards from a ladder approximately 1 metre onto a lower mezzanine floor. The individual sustained multiple broken ribs and rib fractures as a result of the fall. The RIDDOR associated with this incident was submitted on the 12 March 2024.

The inspector visited the scene of the incident and was supported by one of our NSH&S specialist inspector’s. The inspector noted that the appropriate working arrangements and preparations had taken place, the scaffold construction and ladders were compliant and in good condition and the appropriate PPE was provided. In light of this the inspector concluded that there was no breach of the law and recommended that a formal investigation into the incident was not warranted.

# 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.

**Table 1: Licence Instruments Enforcement Notices and Letters Issued by ONR during this period**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Type | Ref. No. | Description |
| 17 May 2024 | EIM&C | HPCP line 603 | HALES BUTEX Transfers |
| 3 September 2024 | EIM&C | HPCP line 635 -HP2j | MSSS original building (OB) and first extension (FE) waste retrieval and FE pressurised inerting (PI) from NG&SP. |
| 21 May 2024 | Enforcement Letter | ONR-EL-23-049 | Planned corporate inspection of LC 25. LC 6 (Documents, records, authorities and certificates), LC 25 (Operational records) and LC 36 (Organisational capability). |
| 25 July 2024 | Improvement Notice | ONR-IN-24-3 | The Control of Substances Hazardous to Health Regulations 2002 (as amended) Regulation 6(1)  The Control of Substances Hazardous to Health Regulations 2002 (as amended) Regulation 6(2 |
| 25 July 2024 | Improvement Notice | ONR-IN-24-4 | The Control of Substances Hazardous to Health Regulations 2002 (as amended) Regulation 7(1)  The Control of Substances Hazardous to Health Regulations 2002 (as amended) Regulation 7(5) |

Reports detailing the above regulatory decisions can be found on the ONR website at <http://www.onr.org.uk/pars/>.

# 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).

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