

Report to the Springfields Fuels Limited (SFL) Site Stakeholder Group

Report for the period: November 2021 to October 2022

Introduction

The Environment Agency's Nuclear Regulation Group (NRG) is based at Penrith and Wallingford. The role of the NRG is to ensure the protection of the public and the wider environment from radiation, to prevent pollution and to protect and enhance the environment. Further details of our activities at Nuclear Sites can be found at:

<https://www.gov.uk/government/collections/radioactive-substances-regulation-for-nuclear-sites>

<https://www.gov.uk/government/organisations/environment-agency>

Radioactive Substances Regulation

Radioactive Substances Activity (RSA) Environmental Permit

We regulate radioactive waste disposals and discharges on the nuclear licensed under a radioactive substances activity environmental permit issued in accordance with the Environmental Permitting Regulations (EPR) 2016 as amended.

The permit contains limits and conditions aimed at minimising wastes and protecting people and the environment. We check compliance with the permit by making inspections and reviewing data and information. Our findings and any non-compliances will be recorded on Radioactive Substances Compliance Assessment Reports (RASCAR). These will be placed on the Public Register, available to view at our offices in Penrith. We maintain regular contact with the site by telephone and email, in addition to formal correspondence.

Environmental Monitoring

Under the Radioactive Substances Activity permit, SFL are required to carry out routine environmental monitoring. This involves taking and analysing a wide range of environmental samples from locations in the vicinity of the site.

The Environment Agency also undertakes an independent programme of environmental monitoring. The results are reported in the Radioactivity in Food and the Environment (RIFE) report, along with results from monitoring programmes around other UK nuclear sites. The RIFE report for 2021 will be published during autumn 2022, and along with previous RIFE reports can be found at:

<https://www.gov.uk/government/publications/radioactivity-in-food-and-the-environment-rife-reports>

Recent results from both programmes are in line with previous periods and show no cause for concern.

During the summer of 2022, a Habits Survey was carried out near to the Springfields site. The survey is designed to collect information on consumption and occupancy habits of people near the Springfields Fuels Limited nuclear licensed site. The information gathered

customer service line **03706 506 506**

floodline **03459 88 11 88**

incident hotline **0800 80 70 60**

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by the survey is used along with data obtained from monitoring of radioactivity in food and the environment to assess the radiation exposure (doses) to people living near UK nuclear licensed sites. The full report on the findings of the survey will be published during 2023. The survey was last carried out at Springfields in 2012.

Chemical Installation Regulation

Installations Environmental Permit

The operation of the chemical and combined heat and power plants on SFL are covered by a different section within the Environmental Permitting Regulations (EPR) 2016 as amended. SFL have a separate environmental permit for the operation of an Installation.

The permit contains limits and conditions aimed at ensuring that the best available techniques to prevent or minimise the environmental impact from the operation of the installation. The environmental impact considers emissions to air and water, wastes being generated, noise and odour as well as the efficient use of energy and raw materials.

We check compliance with the permit by making inspections and reviewing data and information. Our findings and any non-compliances will be recorded on Compliance Assessment Reports (CAR). These will be placed on the Public Register, available to view at our offices in Penrith. We maintain regular contact with the site by telephone and email, in addition to formal correspondence.

Control of Major Accident Hazards Regulations (COMAH)

The generation, use and storage of certain categories of dangerous substances (primarily hydrofluoric acid) above specified threshold levels on site means that SFL is subject to the Control of Major Accident Hazard Regulations (COMAH) 2015. The site is classed as an Upper Tier Establishment under these regulations. As a result SFL have to prepare a COMAH Safety Report which sets out the major accident hazards associated with site and how SFL will manage and control the operations to prevent and minimise the consequences from them.

We act as the part of the joint COMAH Competent Authority along with the Office for Nuclear Regulation (ONR). We carry out interventions and assessments to ensure that SFL are applying all measures necessary to prevent and/or minimise the consequences of major accidents to people and the environment.

Summary of Regulatory Activity

A summary of the regulatory activity carried out during the period is provided below:

- We have continued to carry out our regulatory activities in the period to October 2022 through a mix of in-person site visits, remote meetings, and regular update calls.
- All radioactive and non-radioactive discharges remained within the limits set in the EPR-RSA and EPR-Installation permits during the report period. SFL are required to submit various monitoring returns on a routine basis (monthly, quarterly and annually) for both environmental permits. These monitoring returns are available to access on the public register held at the Environment Agency, Lutra House, Dodd Way, Off Seedlee Road, Walton Summit, Bamber Bridge, Preston, PR5 8BX or by emailing inforequests.cmbInc@environment-agency.gov.uk.

- In November 2021 we undertook a COMAH inspection on Mechanical Integrity jointly with the ONR as part of the COMAH Competent Authority. No formal actions were raised at the inspection. We have also attended meetings during 2022 to discuss the process for the 2023 COMAH Safety Report submission.
- In January 2022, the Clifton Marsh low level waste landfill site, operated by Suez, stopped accepting consignments of radioactive waste for disposal. As most of the solid radioactive waste from Springfields is disposed at Clifton Marsh, this has significantly affected routine waste management operations on site. Together with ONR we have discussed and reviewed SFL's contingency plans to manage waste in the short term, which includes temporary accumulation of radioactive waste on site, improvements to waste characterisation and alternative disposal options. It was anticipated that Clifton Marsh would become available for disposals during the second half of 2022, although this has not yet occurred, and we will therefore maintain regulatory contact in this area to ensure waste is appropriately managed and SFL consider alternative disposal route in line with Best Available Techniques (BAT).
- Jointly with ONR, we carried out an inspection on solid waste management at Springfields in March 2022, focusing on arrangements related to the decommissioning of the Magnox Island. No non-compliances were found during the inspection, but we raised three recommendations and one observation. These related to some minor improvements to written operating instructions; improvements to characterisation of metal wastes; and review of Best Available Techniques for solid waste disposal due to the unavailability of Clifton Marsh.
- In June 2022 we attended the Annual Review of Safety, Security and the Environment (ARoSSE) along with colleagues from the Office for Nuclear Regulation. The review covered the period from April 2021 to March 2022. The ARoSSE was also the first opportunity for senior regulatory staff to meet with the new Springfields Managing Director and discuss the future direction of the SFL business and site. A tour of the OFC facility was included as part of the ARoSSE agenda.
- In July 2022 we undertook an inspection at the National Nuclear Laboratory (NNL) facility. This followed a meeting in March 2022 with the NNL Compliance Manager, where we expressed our intention to review the operational arrangements between SFL and NNL. The inspection therefore focussed on the management arrangements at NNL and sought to ensure that SFL (as the permit holder) had adequate oversight of the facility and its operations. We requested a number of documents following the inspection to review and are currently in the process of summarising our findings in a RaSCAR, which will be provided to SFL once complete.
- We have continued to focus on SFL's resourcing over the last 12 months. During the first quarter of 2022 SFL lost a number of staff from the business who had significant experience in roles which relate directly to environmental compliance. These included the Environment Manager and Deputy Environment Manager, Head of Radiation Protection and Waste Manager. Although some of these roles have been recruited into, SFL have stated that recruitment has been challenging, especially for people with nuclear industry experience. We have previously expressed concerns around environmental capability and resource available to support the Environment Manager, and SFL had an improvement programme in place to address these concerns. We will continue to review SFL's progress in delivering the improvements committed to by this plan and ensure that SFL have a suitably skilled and resourced Environment team in

order to maintain compliance with their environmental permits and other legal obligations relating to the environment (e.g. COMAH).

- Two amendments to the SFL Compilation of Environment Agency Requirements (CEAR) document have been issued during the period. The first amendment was to agree to a new date for SFL to complete the first iteration of a Waste Management Plan and Site Wide Environmental Safety Case. These are documents required by a new permit condition which was added to SFL's permit in 2019, following publication of the Environment Agency's Guidance on Requirements for Release from RSR. SFL had initially intended to complete the documents during 2022, however due to the loss of key staff involved in producing the documents SFL requested further time to complete these. A new date of 30 June 2023 has been agreed by the Environment Agency. The second amendment to the CEAR added a new discharge outlet to air from the new Effluent Precipitation and Separation Plant (EPSP), following review of a BAT assessment related to potential gaseous releases from the plant.
- We have continued to discuss with SFL their proposals for the site transformation programme, including providing high level advice and guidance around likely permitting requirements for a number of new business opportunities and potential growth projects that SFL are looking into. These include reprocessed uranium fuels, advanced nuclear technologies, medical isotopes and waste treatment facilities. The opportunities discussed are all at an early stage and we have not yet entered into any detailed discussions or formal regulatory engagement (such as pre-application permitting advice) with SFL over the plans.
- We continue to attend the Lancashire Emergency Planning Consultative Committee meeting and also took part in debrief meetings for the 2021 Heron 8 off-site emergency exercise as required by The Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR) and COMAH 2015.

Environmental Events

A number of events have been reported to the Environment Agency by SFL during the period:

- In November 2021 the Shift Plant Manager (SPM) noted that the pH probe measuring stormwater leaving the site was recording an elevated pH. Investigations were initiated to trace the elevated pH through the stormwater drains, which found the source of the to be adjacent to the EURRP facility. Further investigation found a trade effluent drain had become blocked which had resulted in trade effluent backing up into a manhole access chamber. This had then overflowed into an adjacent stormwater drain. SFL undertook an investigation into this event to understand how the trade drain came to be blocked. The Environment Agency is reviewing this investigation in order to assess potential non-compliances with SFL's environmental permits.
- In March 2022 SFL reported that required monitoring of the Auxiliary boilers had not taken place while they were running intermittently during periods in February and March. It was apparent there was some confusion amongst operators about whether measurements needed to be taken if the boilers were only running for short periods of time. SFL have taken steps to brief operators on the monitoring requirements and have improved written instructions to remove any opportunity for confusion. This event will be scored as a non-compliance against the EPR-Installations permit when the monitoring return relating to this period is formally assessed.

- In July 2022 a small amount (less than 50 litres) of caustic leaked through a faulty valve at the CHP plant. We conducted a visit to the facility in order to look at the arrangements relating to storage and transfer of chemicals used in the CHP effluent treatment process and have asked for some follow up information from SFL in order to assess whether this event was non-compliant with the EPR-Installations permit.
- In September 2022 a high volumetric air sampler (HiVol) located on the site boundary was taken offline due to the need to replace an electrical cable. The HiVol was not operational for a period of 7 days. As other HiVol's around the site remained operational, there was no impact on permit compliance and therefore no non-compliances were issued.
- In September 2022 SFL reported a leak of caustic from a tank, which was being filled, into a bund at OFC. All of the caustic was contained within the bund and was disposed of by SFL in accordance with their EPR-Installations permit and therefore there was no environmental impact. The event was reported to the Environment Agency as SFL intend to investigate further to understand the circumstances which led to the tank being overfilled, and ensure corrective action is taken to prevent reoccurrence.

Contact Details

Site regulator

Sarah Wallace - sarah.wallace@environment-agency.gov.uk

Telephone: 020 3025 5844

Site regulator (COMAH)

Mike Baggs - mike.baggs@environment-agency.gov.uk

Telephone: 020 3025 5806

Address

Nuclear Regulation Group (North), Environment Agency, Ghyll Mount, Gillan Way, Penrith, CA11 9BP