



Dounreay Stakeholder Group
Site Restoration Sub Group Update Report
July 2022

Cyber Attack

On Christmas Eve, SEPA was subject to a serious and complex cyber-attack which has significantly impacted our contact centre, internal systems, processes and communications.

While some systems and services may be badly affected for some time, step-by-step we're working to assess and consider how we recover.

We've published:

- Our [Cyber attack | Scottish Environment Protection Agency \(SEPA\)](#)
- Our [Cyber-Attack: Service Status | Scottish Environment Protection Agency \(SEPA\)](#) information

SEPA are updating its service status on a weekly basis.

Chief Executive

SEPA has announced the appointment of a new Chief Executive. Nicole Paterson takes over the role in October of this year.

- [Scottish Environment Protection Agency announces Nicole Paterson as next Chief Executive | Media | Scottish Environment Protection Agency \(SEPA\)](#)

Site Inspection Work & EASR Compliance

In February SEPA issued DSRL with an Information Notice requiring a report detailing options assessment work undertaken for the non-active drainage system by end of May 2022. DSRL provided the required information to SEPA within the timeframe specified in the notice,. SEPA has reviewed DSRL's response to the Information Notice and concluded DSRL's submission adequately meets the requirements of the Notice.

In June SEPA undertook a site visit as part of its investigation of the circumstances surrounding the failure to install appropriate filtration within the site laundry facility's air supply system, and to restart operations following the discovery the filter had not been installed. Some follow up work remains prior to SEPA reaching a conclusion to this investigation.

Also in June SEPA undertook a site visit as part of its investigation into the circumstances around the pressure excursion at the PFR Sodium Tank Farm. This investigation remains ongoing while SEPA consider its findings and DSRL undertake the works necessary to safely access the tank to take samples in order to underpin its assessment of the resulting discharge of Tritium via an unauthorised and unmonitored route.

The Dounreay site was visited by Corynne McGuire and David Stone as part of their familiarisation with the site, its processes and visited facilities which they will be regulating in future. DSRL also provided a tour of the site which both found useful.

A number of project update meetings took place during this period covering the Shaft and Silo waste retrieval project, DMTR decommissioning, FCA decommissioning plans, Fuels projects, Environmental Monitoring reporting arrangements and Reactors decommissioning.

Transition to Magnox

SEPA continue to be updated on progress toward transition to Magnox. SEPA expect to receive application to transfer the permit to Magnox in the coming weeks. It should be noted that if SEPA determine to grant the transfer of the EASR permits it would be a 'like for like' transfer, so would mirror limits and conditions of the permits currently held by DSRL and would not take effect until such time as the wider transfer from DSRL to Magnox occurs.

Discussions are also taking place on the process for transfer of the non-radiological permits (PPC, CAR, WML) currently held by DSRL to Magnox.

Low Level Radioactive Waste Facility

SEPA continue to engage with the LLWF team on a regular basis and are content that the facility continues to operate in a compliant manner.

The first inspection for calendar year 2022 took place in February and the LLWF was found to be in compliance with the conditions inspected against. The second inspection is a desk-based inspection that is currently underway and the plans for the third inspection which will include a visit to the site are just starting.

Non-Nuclear Site Regulation

DSRL reported to SEPA a hydraulic fuel oil leak from a stone delivery wagon at the LLWF which occurred on 7th July. DSRL Decontamination Unit attended and SEPA were content with the actions taken to mitigate the leak.

Planning

Nothing to report.

Vulcan

Nothing to report

Response to Action DSG(2022)M02/A16:

DSG(2022)M02/A16: Stewart Ballantine to provide an update on PRAG(D) findings on comparison of systems for detecting particles.

PRAGD have been considering the Am-241 fragment of irradiated nuclear fuel detected on Dounreay foreshore during December 2016 in terms of the potential hazard that the item poses to an individual; and in terms of the likelihood of a large population of sources being present on the beach.

Unlike fragments normally detected and removed, the presence of caesium-137 contamination was not detected in this fragment.

Simulated digestion analysis was undertaken on the fragment in order to assess the potential hazard via ingestion. The results of the digestion analysis indicated that only

extremely low quantities of americium-241 were released and as a result the fragment would not represent a realistic risk to public health from ingestion. Due to alpha emissions, ingestion of the Am-241 particle would be considered the more limiting pathway for radiation exposure.

The Particles Retrieval Advisory Group (Dounreay) (PRAG (D)) and SEPA requested that the site operator determine the possibility of a large population of high Am-241/low Cs-137 bearing fragments being present on either Sandside beach or the Dounreay foreshore.

During July and August 2021, DSRL performed a beach monitoring trial at the west foreshore and Sandside Beach using the monitoring system which is in operation at Sellafield. The monitoring system is known as the FIDLER (Field Instrument for the Detection of Low Energy Radiation) system and includes additional detectors to assist with the detection of 'alpha rich' fragments. No particles were found during the beach monitoring trial. PRAG (D) concluded that the monitoring with the FIDLER detectors indicated that there could not be a large population of alpha rich fragments present on the upper sediment on the beach which could pose a realistic risk to health. Considering the results of the digestion analysis (low hazard) and large area monitoring (low population), PRAG(D) recommended that there is no need for changes to be made to DSRL's beach monitoring arrangements.

Currently, PRAGD are not considering any further actions in relation to this fragment and the matter is considered closed.

Stewart Ballantine

Radioactive Substances Unit