





Site Inspection Work & RSA Compliance

Following the notification from Dounreay Site Restoration Limited (DSRL) on 7 October 2014 regarding a fire that occurred in the Sodium Tank Farm building at the Prototype Fast Reactor (PFR) facility at Dounreay, SEPA has investigated the circumstances surrounding the decommissioning work that was being undertaken at the time in the tank farm and having looked at the highest estimate of the amount of tritium released, and the environmental monitoring results, the environmental impact is considered to be very low. However, SEPA's investigation identified failings in the arrangements in place for ensuring radioactive gaseous waste was disposed of in accordance with DSRL's Authorisation and identified a number of non-compliances with the conditions contained in DSRL's Authorisation. As some of the identified noncompliances relate to failures in DSRL's management system, SEPA is of the view that these failures could occur during other decommissioning work on the Dounreay site. As a result on 10 December SEPA issued a Notice of Variation to the Authorisation to include the requirement for DSRL to undertake a range of improvements within the Authorisation. These improvements relate to the design and testing of temporary containment and ventilation systems and to the management and supervision of decommissioning activities. DSRL are required to complete the various improvements between 1 March 2015 and 1 June 2015.

Other Site Work

A Level 2 meeting, involving SEPA, Office for Nuclear Regulation (ONR) & DSRL was held on 5 November. The Dounreay annual environmental review meeting, involving SEPA and DSRL was held on 12 November.

SEPA attended NDA's Spent Fuels and Nuclear Materials strategic Theme Oversight Group and discussed a number of issues arising with DSRL during a site visit on the 9th of December. DSRL gave a briefing on DFR Breeder, Exotics and progress with the UFCF BPM Case and Safety Case.

Low Level Radioactive Waste Facility

SEPA received and reviewed the submissions relating to the operational management plans and supporting documentation from DSRL. Following SEPA's review of DSRL's readiness to begin operations against RSA93 requirements, which was undertaken in October, SEPA undertook a further inspection of DSRL's readiness in November which saw much improvement.

SEPA has now been provided with updated documentation which reflects the October and November findings and discussions and will now follow its own due process for considering DSRL readiness to begin facilities operations.

Site End State

SEPA wrote to DSRL giving formal review comments on DSRL's proposed Limits of Detection (LoD) for radionuclides and non-radioactive substances in groundwater at the Dounreay site. Finalised review comments on DSRL's characterisation of contamination in Zone 1B and their interpretive report have also been supplied to DSRL. In addition SEPA has written to DSRL to clarify its position regarding the regulation of buried infrastructure and what would be considered a disposal of radioactive waste.

A technical workshop was held between SEPA and DSRL on November 26th to discuss the ongoing remediation at the Dounreay site. Key areas of discussion were SEPA's regulation of priority hazardous substances and the decision making process leading to DSRL achieving their Interim End State. It was agreed that SEPA's detailed review comments on the proposed LoD and zonal characterisation work would be discussed at a workshop to be held in February 2015 when DSRL would have had time to consider the details of the SEPA reviews. The workshop also agreed a number of subsequent meetings and the technical issues to be discussed at them.

SEPA also wrote to DSRL in November regarding SEPA's view on the adequacy of DSRL's proposed monitoring plans which are intended to provide an understanding of background levels of non-radiological contaminants in surface waters at the site. This is a key issue in their ongoing site remediation work and DSRL intend to present their proposed borehole monitoring plans to SEPA at a workshop in January 2015.

Non-Nuclear Site Regulation

During November SEPA undertook a site visit to discuss with DSRL compliance issues in respect of the Non-nuclear permits, in particular focused around issues with site drainage. DSRL have since shared with SEPA details of the technical review of site non-active drainage system completed in December. Further discussion on this are expected with DSRL through 2015.

The following non-compliances were reported to SEPA during November;

- Suspended solids levels were breached in a groundwater sample at D6500 waste storage facility.
- Suspended solids levels were exceed at in 2 groundwater samples at the Low Level Waste Facilities inert landfill site. DSRL failed to resample within 7 days of the breach in either case, as required by the facility PPC permit.
- During commissioning DSRL failed to undertake the required weekly tests of the high level alarm on cement storage silo and the monthly tests on the filter cartridges forming part of the arrestment plant on the bulk cement silos. DSRL suspended operation at the plant until they satisfied themselves that they were now meeting all permit conditions.

SEPA has recorded all of the above incidents as non-compliances within it Compliance Assessment Scheme.

Application for surrender of the Landfill 42 Waste Management Licence has been received from DSRL and is under consideration by SEPA.

Planning

SEPA has been consulted by the Highland Council on the Main Issues Report of the emerging Caithness and Sutherland Local Development Plan. With regards to Dounreay, the Report suggests that the Plan should use the Dounreay Planning Framework 2 (DPF2) to guide decommissioning of the site, and it sets out the main principles of DPF2. It further states "DPF2 suggests some potential future issues. We have not identified specific future issues in this Main Issues Report but we remain open minded to considering suggestions of uses particularly ones that would support the economic regeneration of the area." SEPA will be responding to the Main Issues Report on issues within its remit by the end of the stated consultation period, 12 noon on Thursday 29 January 2015.

<u>Vulcan</u>

On the issue of under-reporting of discharges that had been promptly reported to SEPA, who in turn had reported to Scottish Government. The environmental impact of this was minimal and discussion of associated Best Practicable Means (BPM) issues had been satisfactory.

Vulcan has subsequently closed out several actions from a previous inspection with the submission of a number of documents requested by SEPA.

Stewart Ballantine

Radioactive Substances Policy and Nuclear Regulation Unit