



DSG(2018)P003



Dounreay Stakeholder Group  
Site Restoration Sub Group Update Report  
January 2018



## **Site Inspection Work & RSA Compliance**

During November SEPA undertook a site visit looking at DSRL arrangements covering site engineering processes, sampling at DFR and to undertake further investigations in relation to the PFR Fan 6 duct failure incident. During that week SEPA was also updated on progress with actions identified by DSRL in relation to previous duct failures and DSRL's implementation of specified improvements in relation to evaluation and reporting of authorised discharges. A further site visit was undertaken in December in relation to the PFR Fan 6 incident as part of SEPA's investigations.

SEPA are visiting the site during January to undertake its 2017 year end Compliance Assessment Scheme final inspection. This inspection gives DSRL the opportunity to demonstrate that they have addressed non-compliances identified during 2017 and have that recognised in its year end classification. SEPA will also be inspecting DSRL's implementation of Standardised Reporting of its authorised discharges.

A number of discussions have been held with the DSRL Chief Nuclear Officer to update SEPA on progress with The Dounreay Plan. In addition during January SEPA met with a member of the DSRL Board to discuss the Dounreay Plan.

In January SEPA met with DSRL to discuss proposals for the introduction of Standard Conditions as part of the implementation the Environmental Authorisation (Scotland) Regulations 2018.

## **Radioactivity in Food and the Environment Report**

The latest Radioactivity in Food and the Environment Report (RIFE 22) was published on 19<sup>th</sup> October 2017.

In 2016, the *total dose* from all pathways and sources of radiation was 0.058 mSv, less than 6 per cent of the dose limit, and up from 0.010 mSv in 2015.

The highest calculated dose was to an adult consuming game meat (venison) at high-rates of consumption, and was a change from that in 2015 where the highest calculated dose was an adult spending time over sediments. Samples of venison were not collected in 2015 as they were not always available from areas close to the Dounreay site to ensure provenance of sample locations. SEPA's monitoring contractors have multiple contacts across Caithness and strive to access appropriate samples each year.

The increase in total dose in 2016 was mostly due to the inclusion of the caesium-137 concentration in game (venison) in 2016. It is no longer possible to determine if the source of the Cs-137 is from Dounreay or from Chernobyl due to the decay of Cs-134, however historic surveys have suggested that parts of Caithness were affected by Chernobyl fallout.

Doses to the different reference groups are generally low and are more susceptible to change in sampling (sample availability or sample volume).

Table 1 summarises the total doses in millisievert (mSv) to the most exposed members of the public in the vicinity of Dounreay for the past 5 years.

**Table 1.** Summary of Dounreay total dose over the last five years (mSv)

Year	Total Dose (mSv)
2012	0.017
2013	0.012
2014	0.012
2015	0.010
2016	0.058

### **Low Level Radioactive Waste Facility**

Investigations are ongoing into the issue of incorrectly grouted containers being accepted into the vaults. The issue relates to the presence of steel boxes containing waste within HHISO's which had the grout ports closed at the time the HHISO was grouted. This creates a void within the final waste package (HHISO), the implications of which for the long term stability of the vault and compliance with the RSA authorisation are currently being looked at.

### **Site End State**

Nothing to report.

### **Non-Nuclear Site Regulation**

SEPA held meetings with DSRL to discuss the provision of technically competent management to supervise waste management operations following staffing changes at DSRL. In addition SEPA has asked DSRL to update its package of evidence to demonstrate the 'certainty of use' for inert waste currently in storage of site, and for expected future arisings planned to be stored on site prior to re-use.

### **Planning**

SEPA has provided a response to The Highland Council on DSRL Phase 3 planning application which has been shared with DSRL. Future meetings are planned with the Local Authority and DSRL to discuss these related matters. SEPA has not objected to DSRL's application, or requested The Highland Council add any planning conditions following its review of the Environmental Statement. SEPA has however highlighted a number of areas which are lacking in information to allow SEPA to make any considered comment on at this stage, i.e. future site projects. SEPA has also requested a correction in relation to approach identified in the Environmental Statement for characterisation and remediation of the water environment.

### **Vulcan**

Nothing to report

Stewart Ballantine

Radioactive Substances Policy and Nuclear Regulation Unit