

DOUNREAY SITE RESTORATION LTD

DOUNREAY STAKEHOLDER SITE RESTORATION SUB GROUP REPORT, OCTOBER 2021

Current as of 10 October 2021

Introduction

Dounreay Site Restoration Limited (DSRL) formally became a subsidiary of the Nuclear Decommissioning Authority on 1 April 2021. As part of the new structure, two new appointments have been made to the DSRL Board with effect from 1 July 2021.

On 23rd September, the NDA has announced its intention to join Dounreay with Magnox in a move to simplify and strengthen the NDA group's operating model. The work to join our organisations builds on the close working that already exists, made possible by becoming part of the NDA group in April.

At the point of joining, which is expected to take around 18 months and is subject to regulatory approvals, the Dounreay business and its staff will transition into Magnox and DSRL will no longer exist as a legal entity. The Magnox Board will then oversee the Magnox and Dounreay entity, meaning the Dounreay Board is not separately required. Outside this change in governance arrangements, Mark Rouse will continue to lead the site with his executive team. As part of the new arrangements, Mark Rouse will report into Magnox CEO Gwen Parry-Jones and into the Magnox Board. Magnox will hold the nuclear site licences, environmental permits and other licences for the Magnox and Dounreay sites.

Assurances have been given that Dounreay's annual funding will be ring-fenced for Dounreay decommissioning and will also look to hold on to its unique identity.

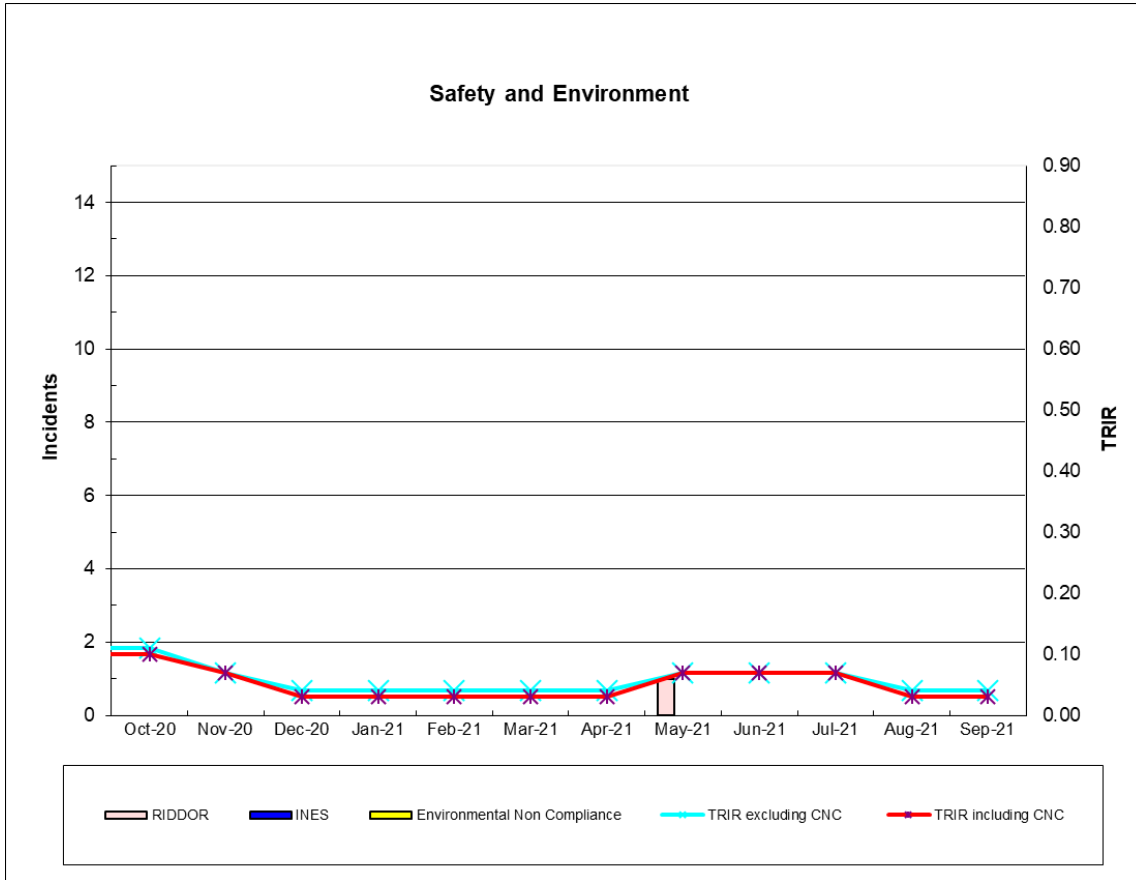
At the point of coming together all DSRL employees will transition to become Magnox employees with terms and conditions unchanged. There will be an ongoing full and meaningful consultation with the trade unions on the transition, and any future changes would be subject to a subsequent consultation.

This move will further enhance our ability to work collaboratively, sharing knowledge and understanding to deliver decommissioning missions that have far more in common than they do differences.

Operations during COVID-19

- DSRL continues to operate under Covid-19 restrictions. Around 800-850 people are back working on site full time and enhancements continue to be made to ensure adherence to Covid guidance. Those who can work remotely are being encouraged to continue to do so for now.
- The temporary office facility at Ormlie has been operational for over 4 months and those who require occasional access can now book 4 hours slots and can cater for around 30 staff. Dounreay.com is also opened on Tuesday to Thursday to allow DSRL staff to print large documents if required. It is not envisioned that Dounreay.com will re-open to the public until next year.

Health, Safety, Environment, Security



- The TRIR at the end of September was 0.03 and no non compliances have been recorded by SEPA in the last twelve months.
- In spite of this excellent performance, there have been a number of high-potential near misses with a couple of investigations still ongoing. Concerns have also been raised by the TU Safety Representatives. We are very mindful of the risks of complacency and conscious that the workforce are having to deal with a substantial amount of change (COVID, change in leadership team, changes in working arrangements and the future move to Magnox). We have launched an Improvement Plan under the 'Zero Harm' value that will look at a number of factors including mental health, learning, engagement and error traps. Progress will be closely monitored by ExCo.
- We are also conscious of a number of areas where progress has not been as we would like and are aware of increasing concern from ONR in a number of areas. We are developing action plans for these issues and will progress them through the Zero Harm Improvement plan to ensure consistency and coherence while avoiding overload.
- There has, however, been some significant and complex activities carried out in a very safe and controlled way. The DCP Store Extension has lifted into place prefabricated concrete roof beams and a steel shield door. These were extremely complex lifting tasks

that were carried out safely and ‘right first’ time with strong support from the Caithness supply chain.

Dounreay decommissioning update

Key project milestones for 2021/22 are provided below:

Target	Planned	Comment
DCP Store Extension – overall completion of main civil engineering construction of the drum store (without overall cladding)	31-Dec-21	<p>Running Late</p> <ul style="list-style-type: none"> • Security clearances, COVID restrictions and resource availability have caused delays • Major shield door (24m wide x 3m high) installed in August 2021 • 76 pre-cast concrete roof beams delivered - to be installed in 3 phases. Phase 1 roof beams lifted into place – video link: https://youtu.be/wvyxan55vFA • Construction materials ordered early and stored (to mitigate potential shortage due to Covid/Brexit) • Civil works has been re-sequenced to allow acceleration of electrical and mechanical works during the winter period, this permits the whole building to be finished earlier but delays the completion of civils works. New target date under review
Fuel remnants – completion of the disposition of Remnants Exotics fuel	31-Dec-21	<p>On target</p> <ul style="list-style-type: none"> • No updates provided
Breeder fuel removal – continuation of breeder fuel removal transport		<p>On target</p> <ul style="list-style-type: none"> • 20+ elements out of reactor
Irradiated Fuels –complete of D2001 irradiated scheme design	01-Mar-22	<p>On target</p>
RHILW Gate 1 concept review	28-Feb-22	<p>On target</p> <ul style="list-style-type: none"> • Optioneering prior to concept design • Review will include high level concept info • Contract placed • Awaiting programme from contractors following contract award.
FCA North Design Review D1208 – completion of D1208 Design review	31-Jul-21	<p>Complete</p>
Shaft & Silo business case approved by DSRL Board ready for submission to NDA	31-Aug-21	<p>Missed target</p> <ul style="list-style-type: none"> • Inactive trials completed • Samples undergoing analysis • NDA assurance reviews now sequenced before DSRL Board. • Draft business case developed in September. Board advised to focus on a quality business case rather than chase a date

Target	Planned	Comment
		<ul style="list-style-type: none"> Expected to go to DSRL Board not before March 2022 New target date under review
PFR Alkali Metal target – removal of the remaining bulk sodium from the bottom of the PFR reactor vessel	30-Sep-21	Complete
Project FORSSE II (Integrated security solution) interim capability	30-Apr-21	Complete <ul style="list-style-type: none"> Further training will continue
Business Improvement – Delivery Centre Model	On target	On target <ul style="list-style-type: none"> Trialling alternatives to coordinating and delivering site activities Initially Fuel Cycle Area Pulls together all those who have a decision or role to play to deliver DCM Trial now extended to cover all of FCA and to continue to end Jan 21
Delivery of Business case to implement updated Life Time Plan	30-Mar-22	On target <ul style="list-style-type: none"> Weekly management workshops to continue to develop life time plan and business case strategies. Discussions on going with DSRL Board and Executive Team on strategic requirements and quality assurance aspects of LTP. Review of current timeline with transition of DSRL into Magnox.

The Interim End State Delivery Team

- Site End State Review - as noted in the July update to DSG, the approach has been to split the site in to fifteen 'Components' (areas of the site) whose individual end states are expected to have an influence on the overall site end state. For each of the Components, possible end states have developed based on the suite of options presented in the GRR (Regulatory Guidance on the Requirements for Release from Radioactive Substances Regulation) and assessed against criteria from the NDA Value Framework. The possible end states for each Component have gone through an integration process, to develop a shortlist of end state options for the whole site. A stakeholder workshop was held in early October with representatives of DSG present. Views and opinions on the site end state options were sought, with the aim of determining a preferred option. The feedback from the workshop will be combined with the rest of the work done to date to write a Gate B Paper which will describe the preferred site end state option. The Gate B Paper will be submitted to the NDA SSC for consideration – target date for submission is March 2022.

Particles update

- Information on recovered particles is kept up to date online at [Radioactive particles in the environment around Dounreay - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

- Since the last report 1 (minor) particle was detected and removed from Sandside beach.
- The next surveys of Strathy and Murkle beaches are planned as normal in November 2021.
- A trial of the FIDLER (enhanced low gamma-ray energy detectors for increased sensitivity to americium-241 gamma-ray signature) equipped Groundhog beach monitoring system (SYNERGY + FIDLER, in operation by Nuvia Ltd at Sellafield) was performed during the period 19 Jul 2021 – 6 Aug 2021 on the Sandside and West Foreshore beaches. The trial involved a side by side comparison during routine beach monitoring surveying of both the Sellafield (SL, SYNERGY + FIDLER) and Dounreay (DSRL, SYNERGY) systems to evaluate the possibilities of there being more americium rich particles, similar to DF/16/007, present on the beaches. No particles were found during surveys at the West Foreshore or Sandside Beach either by the DSRL or SL operated systems. This provides reassurance that there was no resident cache of particles similar to DF/16/007 (americium rich, caesium poor) present and undetected on the beaches. Comparative analysis of the two systems to reassure ourselves that the existing Dounreay system is BPM for our particles issue is underway and will be presented and discussed with SEPA's ERMTT/PRAG(D).
- SEPA undertook an on-site compliance inspection on 8 September and recorded that DSRL was compliant with the permit conditions (relating to monitoring of beaches). SEPA indicated that "The personnel undertaking the beach monitoring activities were familiar with and understood the requirements of the relevant operating instructions. The beach monitoring activities which were observed were undertaken in accordance with the relevant operating instructions and no issues were identified".

Dounreay Heritage

- **Advisory Panel:** The 10th meeting of the heritage Advisory Panel was held in June 2021 using Microsoft Teams. There were representatives from the National Museum of Scotland, Historic Environment Scotland, Nucleus and a former UHI PhD student. Of note:
 - The DFR control room is due to be transferred from the British Science Museum to the National Museum of Scotland (NMS) in Edinburgh. It will become under the sole ownership of NMS.
 - The subject of nuclear heritage is now attracting an international audience and there are conferences dedicated to it. This was not the case back in 2010 when the Dounreay heritage work started.
 - Nucleus is undertaking a project to digitise all of its nuclear records.
- **Collection of objects:** Two objects were collected:
 - wooden clock (engraved) presented to a Dounreay Police Constable on his retirement in 2004.
 - Sky blue work shirt with UKAEA coat of arms and wording "UKAEA restoring our environment."
- **Recording history:** **A process to capture the memories of those leaving the site** is in place and 6 forms were completed and returned.
- **Knowledge sharing:** Talks about the early history of Dounreay were given to:
 - Summer students
 - New graduates

- New craft apprentices
- Members of UK Alpha Resilience and Capability programme

Advice given to Communications Manager at Hunterston B nuclear power station about possible heritage activities. The station is due to shut down in 2022.

- **Academic Studies:** Discussion held with a nuclear historian who is studying for a masters degree with the University of South Wales (Pontypridd). The research is entitled “The Philosopher’s Plutonium Stone: The Dounreay Fast Reactor.” It is basically about the rise and fall of the UK fast reactor programme.
- **Community Project:** James Gunn and June Love had recently suggested a community project involving ex-employees. This entails gathering a group of former Dounreay staff to review old photographs with the intention of enhancing the metadata and creating a social network that helps general wellbeing. There could also be an opportunity to record oral history. J Gunn has approached 6 ex-employees and all are very willing to participate.

This project is a joint venture between Dounreay, the NDA, Highlife Highland and Restore Digital (Nucleus operations) and the intention is to launch it at the North Coast Visitor Centre over the Winter. If the trial is successful, it may be expanded and opened up to other nuclear sites.

- **Exhibition:** Staff of Highlife Highland based at Nucleus organised a virtual exhibition entitled “Atomic Recreation”. It covered the history of the Dounreay workers early recreational activities, particularly at Viewfirth and Ormlie Lodge. It had text and photographs and links to small clips of oral history recordings undertaken by James Gunn.
- **Media Interest:** The BBC programme “Scotland from the sky” interviewed James Gunn about the history of Dounreay and the effect on the community. The production team also interviewed numerous people living in Caithness, including Alastair MacDonald, former DSG Chairman. Unfortunately it has been confirmed that the Dounreay element of the programme will not be included as they had so much footage of the area they couldn’t fit it in.
- **NDA Heritage Initiative:** James Gunn continued in the role as the NDA Heritage Officer and manages the NDA’s heritage initiative alongside his Dounreay duties as Information and Knowledge Manager. One of the NDA heritage themes is artworks and a list of the Dounreay artworks was drawn up including the stone structure (see pic), the model of DFR, glassware sculptures and other a number of other artefacts.

PFR stone sculpture –re-installed at Nucleus



Staffing

- Steven Butler has been appointed as Dounreay's Commercial Director and will be starting in this role shortly. Steven is a chartered quantity surveyor and is joining Dounreay after a successful career in facilities management, construction, multi-utility and industrial services sectors within the UK and overseas. Steven will take over from Dominic O'Brien.
- In collaboration with Nuvia, Morson and GDES six new decommissioning operative trainees have started work at Dounreay as part of a structured programme to develop skills required to safely decommission the site. Over a 4 year period, the trainees will attend North Highland College part-time, where they will complete a selection of training modules covering the wide range of practical skills associated with nuclear decommissioning. For the remaining time they will gain hands on experience by assisting with a wide range of decommissioning tasks completed at Dounreay. Four of the trainees are pictured at the site.
- Twelve graduates started their 2-year development programme on 13 September. As part of their induction the graduates were involved in a series of lectures and facility tours before joining their allocated teams.
- This year marks 66 years since the first apprentice was employed at Dounreay. A new intake of 8 apprentices began their careers with Dounreay in September and visited site before starting a year of blended learning at college.
- Recruitment of 2 Quantity Surveyor apprentices and three business apprentices have also started on site. Eighteen university students were also provided 3 month summer placements.



Procurement

- At the end of September, LINC (Liaise, Innovate, Network and Collaborate) was relaunched to reinvigorate the engagement with small and medium size enterprises (SMEs) to help deliver innovative solutions to support the decommissioning programme. The platform is available for packages of work up to £150,000 and provides a more convenient route to market by omitting the need for full commercial processes. There are currently over 400 suppliers registered with LINC and any further SME's wishing to benefit from the platform are encouraged to email LINC@dounreay.com for an application form to register.

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