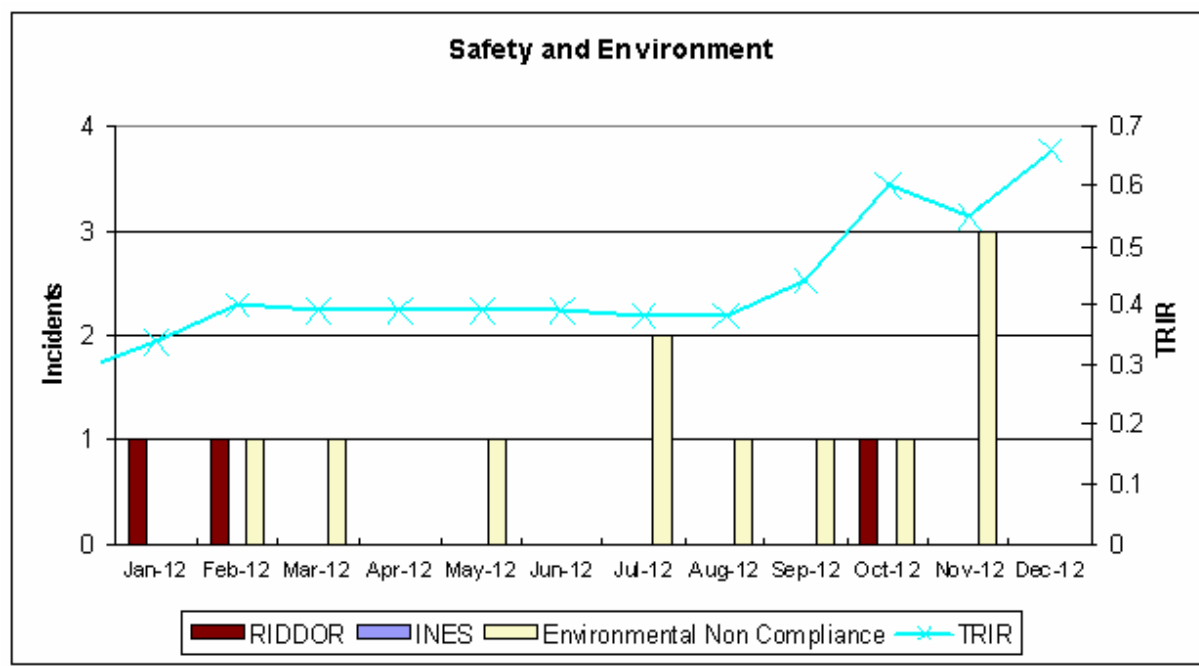


Dounreay Report

Period 09 (December) 2012/13

Health, Safety, Security and Environmental Performance



- There were no RIDDOR reportable incidents in Period 9 up to 31 December 2012. There were two TRIR recordable injuries
 - On 5 December 2012, a contractor was alighting from a vehicle when his foot slipped on ice resulting in a sprained ankle. This resulted in five days of lost time.
 - On 9 December 2012, a contractor was sweeping with a hand brush underneath a fire exit staircase and hit his elbow on the steel framework. The elbow was x-rayed at A&E and found to be badly swollen. This resulted in seven days of lost time.

As a result, the DACR and TRIR for the rolling year have deteriorated to 0.61 and 0.66 respectively. The TRIR remains in the NDA Amber Zone.

- The Traffic Safety Challenge continues. On 7 January 2013, 9 days remained to achieve the challenge.
- The highest radiation doses for DSRL and Contractor personnel up to the end of November 2012 (latest available reported figures) were 1.53 mSv and 1.92 mSv respectively, which are in line with the expectation.
- The Dounreay Counter Terrorist Exercise was held on 21 November 2012 with attendance from ONR(CNS), DECC and the NDA. The exercise was considered a successful demonstration of the Counter Terrorist arrangements by the Regulator.

Consolidation Status and Update

Consolidation was the period defined in the NDA competition which was to be used to refine the plan submitted with the proposal in light of any changes and different information that needed to be taken into account since the information gathering phase of the competition. The consolidation phase was completed at the end of December and has resulted in some changes to the Life Time Plan. There have been some organisational changes which have also been completed during the consolidation phase to ensure that there is an organisation in place which can deliver the plan. The most significant change which has affected the LTP has been the impact of delays associated with DFR fuel removal which placed DFR onto the critical path for site closure. In January we will produce a project profile which provides a summary of the key points of the Life Time Plan and the staffing profile as well as providing the revised staffing data.

Reactors

Dounreay Fast Reactor (DFR)

- The 9" reactor plug was removed from the DFR reactor at the end of November 2012. This was completed in preparation for installation of the reactor inspection equipment by the Breeder Fuel team.
- All 3 DFR lead baths have been grouted in preparation for removal and consignment as bulk waste packages in March 2013.
- Physical installation of the NaK Optimisation equipment continues with 42m of process pipework, as well as other services, being installed during December 2012.

Prototype Fast Reactor (PFR)

- The Flask Arrestor Gear (FAG) crane tripped during routine flasking operations at the start of November 2012. DSRL have taken the decision to implement additional maintenance activities on the crane.
- 500m³ of asbestos enclosures were constructed in November 2012 in support of the next phase of the asbestos pipework stripout. To date, 80m of pipework has been removed, which accounts for 14% of the asbestos lagged pipework in the ventilation annexe.
- 60m of sodium-contaminated 14" diameter pipework was cleaned during November 2012. A total of 270m of legacy secondary sodium-contaminated pipework has now been cleaned.

Fuel Cycle Area Decommissioning

- D1251: Sentencing tank liquor removal completed.
- D2001: 70% of DFR Out of Reactor Breeder Fuel has been recanned.
- D1204: Decommissioning of the active filter cells is now complete. Man entry to medium active cell has now recommenced.

- D1211: North, West and 50% of the South perimeter wall demolition has been completed.
- D2900: Implementation work to place the facility into minimal care and maintenance has commenced.
- Radiological Characterisation activities have commenced in a number of Fuel Cycle Area (FCA) shielded cells. Results are currently being assessed.

Shaft/Silo Decommissioning

- The concept design for the Shaft/Silo is now complete.
- Tenders have been received for the Retrieval & Process Crane Package and are currently being assessed.
- Contractors continue to prepare their responses for the Tenders for Assay Systems. These are expected on 05 December 2012, and for Remote Operated Vehicles (ROV) and the Shaft Intervention Platform in January 2013.

Waste and Fuels

- The first of approximately 90 packages of fast reactor breeder material was delivered safely to Sellafield in December 2012.
- In the PFR Irradiated Fuel Cave (IFC) preparations for cleaning the IFC in cell glass surfaces has commenced to aid visibility during Primary Storage Tank (PST) preparatory and subsequent work.
- A total of 8207 cubic metres of concrete has been poured in the Demolition Low Level Waste (LLW) and LLW Vaults. In the demolition vaults:
 - 100% of the blinding concrete has been poured
 - 100% of the structural concrete for the bases
 - 82% of the structural concrete for the walls.

Concrete pours in the LLW Vault are scheduled to be complete by mid February 2013. Delivery of the structural steel commenced in December 2012.

The planning application for the New Low Level Waste Facilities included up to six vaults planned to be built in three phases. The first two vaults (phase 1), one LLW and one demolition LLW vault are currently under construction (and progress reported above).

The next two vaults (phase 2) were planned should the volumes of waste dictate a need with the final two vaults (phase 3) being planned to take the waste from the existing LLW pits on site should it be impracticable to make a safety/environmental case to leave that waste in-situ.

Following a review of the inventory information to better understand the uncertainties on the likely volumes of waste that will be generated the site has concluded that, as a minimum, a further vault for LLW (phase 2) will be required.

- The second shipment of waste was returned to Belgium in November 2012.
- Installation of the ductwork continues for the new active analysis laboratory. Installation is now complete for the main ducting sections and external civils work continues.
- In the Dounreay Cementation Plan a scheduled maintenance shutdown was completed successfully and mixing operations resumed.
- The concept design options for the Low Level Waste (LLW) store conversion to an Intermediate Level Waste (ILW) store were produced and are currently under review.
- The failed supercompactor has been removed and placed into interim storage. The supporting BPM has been reviewed with SEPA.

Environmental Restoration

- The drilling of 19 additional groundwater monitoring wells is complete
- Particles update

Beach Monitoring

Sandside: DSRL have continued to monitor Sandside beach on a monthly basis. Since the last update a further three particles have been removed, all were in the minor category.

The analysis of the particle found on the 14th February 2012, which had a much higher level of Beta radiation than was normal, is now complete and the results communicated to SEPA. The results from the laboratory analysis have confirmed the original estimate of the gross Beta content, giving a final result of 1.4MBq. This particle will be considered by PRAG(D) in their report for 2012 which is now due for publication in March 2013. Meanwhile, SEPA has asked DSRL to undertake trials in order to identify any potential improvements in the detection of such beta particles.

Foreshore: Since the last update a further two particles have been recovered from the foreshore, a relevant particle on 20th Nov 2012 and a significant one on 9th January /2013.

Other beaches: No particles have been found on any of the other beaches surveyed

Offshore Work

PRAG(D) have received all of the data associated with the work. DSRL continue to assist PRAG(D) by providing any additional data or analysis that they require. They are considering the information in detail and are expected to confirm their recommendations in their 2012 report, which is expected to be published in March 2013.

Staffing

| | FTE Target | FTE Actual /Forecast |
|----------------|-------------------|-----------------------------|
| Current | 933* | 919** |

| | | |
|-------------------|-----|--|
| YE Outturn | 933 | <i>At this point in the consolidation phase it is not possible to predict a forecast for the year end out-turn. Therefore the YE Out-turn has been left blank.</i> |
|-------------------|-----|--|

* target includes 848 employees and 85 agency staff

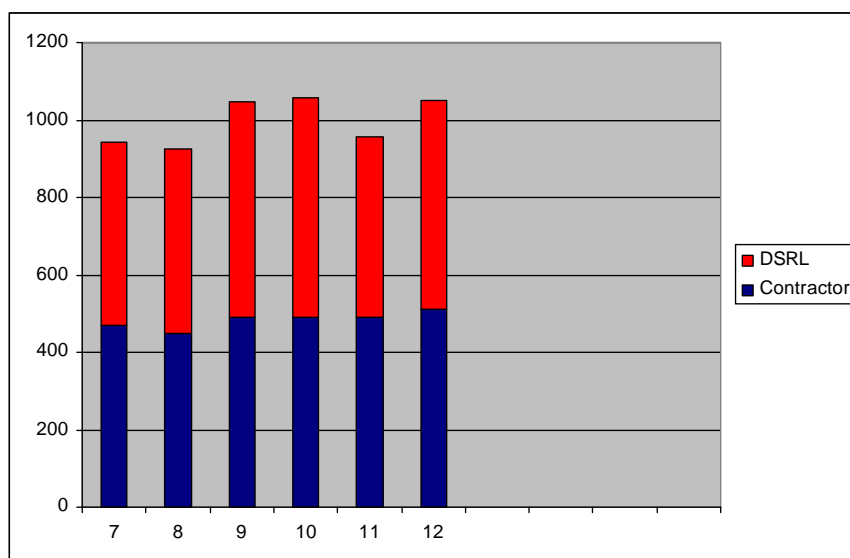
** includes actual 811 for employees and 102 for agency staff

As of December 2012 there were

- 3 new starts
- 3 resignations
- 0 dismissal
- 1 VER
- 0 Retirement
- 0 Death in Service

- DSRL employee qualifications and verified training data has now been uploaded into the Nuclear Skills Passport system.

DSRL/Contractor site access data



Note that the DSRL staff numbers are lower than the FTE data because on any given day there are certain groups of staff not on site, for example – long term sick, maternity leave, those working off site (Dounreay.com) etc.

Procurement update

- A Contract was awarded to NATAS for the services of Qualified to Certified Competent Person Asbestos with a value of £360k.

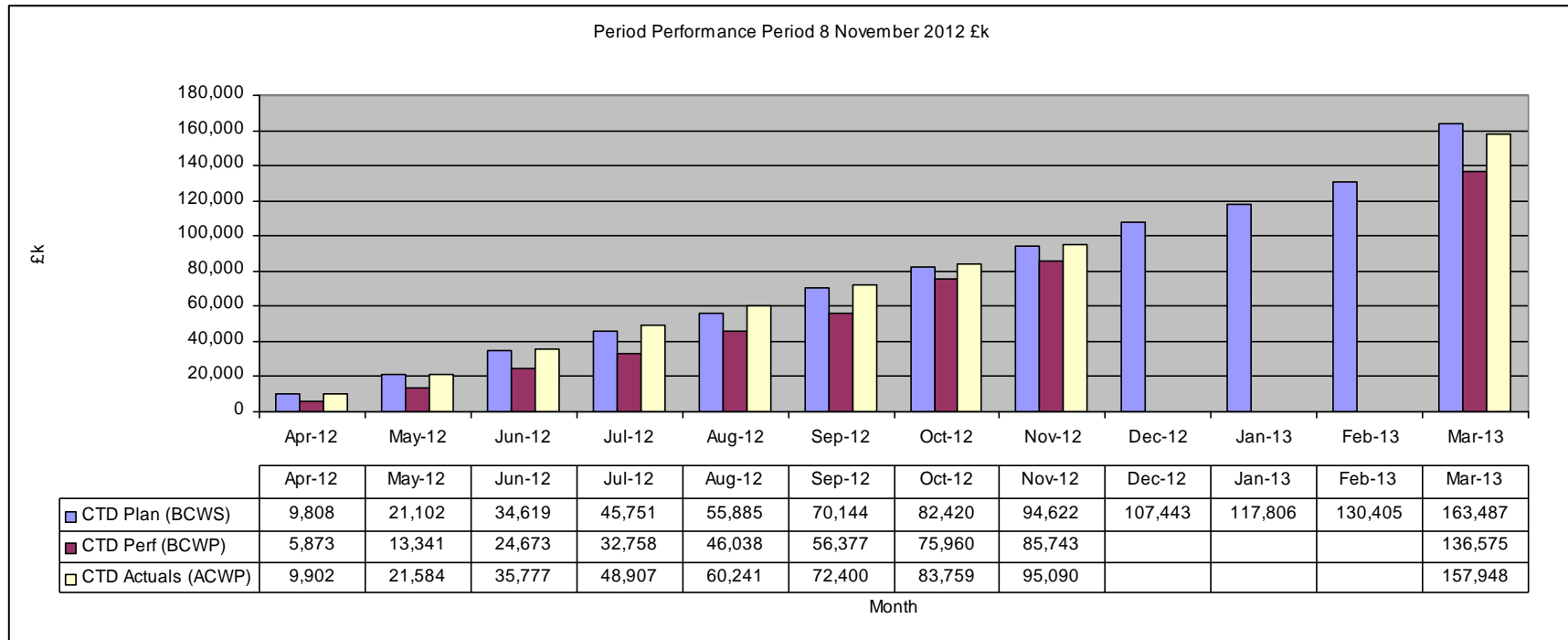
- An order has been placed with Deva Manufacturing Services Ltd for the purchase of 150 off TS141 Trushield Containers for a cost of £1.5M.

CNC Firing Range

- DSRL, on behalf of NDA propose to construct a new training facility for the Civil Nuclear Constabulary (CNC) firearms officers based at Dounreay. The original proposal was to construct the new facilities at Forss Business Park however, following a review it is now proposed to construct the new training facilities on NDA owned land south of the Dounreay site.

An information drop-in session will be held in Reay Hall on 17th January (1830-2000 hrs) to provide an update on the revised plans and the project team will be available to answer any questions you may have.

Dounreay Site Restoration Ltd
10th January 2012



GLOSSARY

| Abbreviation | |
|---------------------|--|
| DACR | Days Away Case Rate |
| DCP | Dounreay Cementation Plant |
| DSRL | Dounreay Site Restoration Ltd |
| EIA | Environmental Impact Assessment |
| ES | Environmental Statement |
| IFBS | Irradiated Fuel Buffer Store |
| IFC | Irradiated Fuel Cave |
| LLLETP | Low Level Waste Effluent Treatment Plant |
| LLW | Low level waste |
| LTA | Lost Time Accident |
| mSv | milli Sieverts |
| NDP | NaK Disposal Plant |
| OJEU | Official Journal of the European Union |
| ONR | Office for Nuclear Regular |
| PBO | Parent Body Organisation |
| PCP | Project Control Procedure |
| PFR | Prototype Fast Reactor |
| PSR | Preliminary Safety Report |
| RIDDOR | Reporting of injuries, Diseases & Dangerous Occurrences Regulations. |
| RSA | Radioactive Substances Act |
| SEPA | Scottish Environment Protection Agency |
| SID | Sodium Inventory Destruction Plant |
| TRIR | Total Recordable Incident Rate |