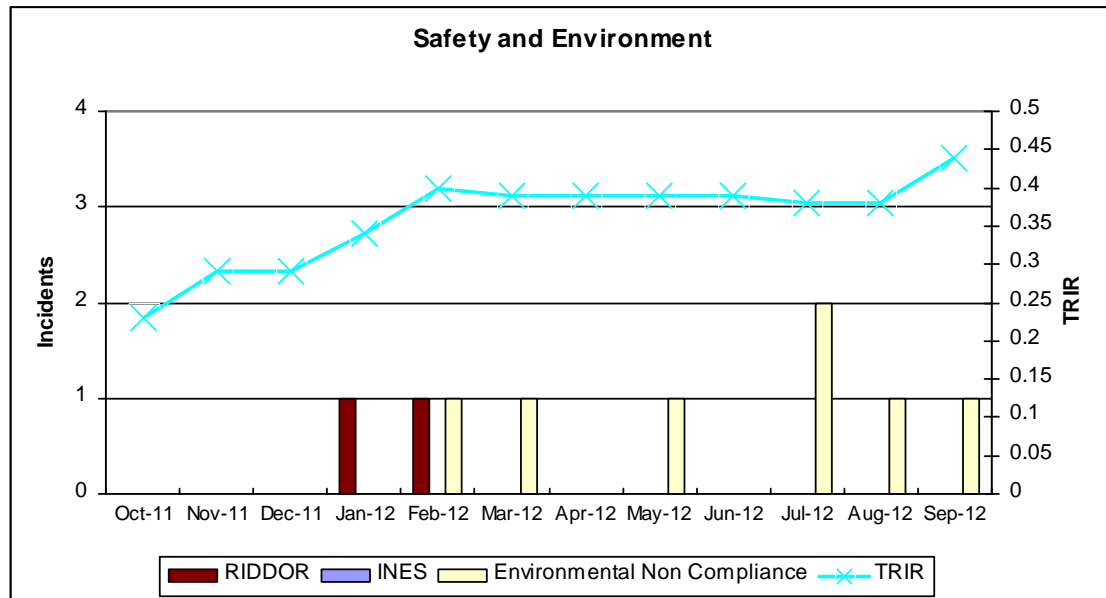


## DOUNREAY PROGRESS REPORT

Current as at 23<sup>rd</sup> October 2012

### Health, Safety, Security and Environmental Performance



- There were no RIDDOR reportable incidents in Period 6 (up to Sept 2012).
- Up to 30<sup>th</sup> September the site had recorded 227 days (2.25 million man-hours) without a >3 days LTA. NB: Since this period there has been a LTA involving damage to a finger which was pulled into sheet metal rollers. An investigation is underway.
- Johnson Controls have achieved 7 years without a 3-day LTA.
- There was one TRIR recordable injury in September resulting in two days lost time. While walking to the offsite carpark a person walked into a bollard which resulted in bruising of the torso. As a result the TRIR rating has decreased from 0.33 (as at P2 (May 2012) to 0.44 (Sept 2012) which impacts on the DACR (0.17 (May) to 0.27 (Sept).
- The highest radiation doses for DSRL and Contractor personnel (to end of Aug 2012) were 1.45 mSv and 1.77 mSv respectively. These are in line with project estimates and expectations.

- DSRL has been awarded the British Safety Council Sword of Honour and the Globe of Honour for the third and second year respectively. DSRL is only one of six companies globally who have won both awards this year.
- Health and Safety Week took place during September as DSRL's contribution to the European Safety Week which would normally take place in October. Activities for the week included:
  - Discussions between British Safety Council Development Officer and Senior Managers on "Safety, Culture and Sustainability".
  - AKT Productions, two sessions of "Think Again" for managers/leaders, and four sessions of "Only Human" for staff and contractors.
  - Two road shows covering fire prevention and asbestos.
  - Two presentations by Northern Constabulary Safety Camera Partnership.
- A Traffic Safety Challenge (to go 30 days without a breach of the Highway Code or site rules started on 13<sup>th</sup> August), aimed at improving worker knowledge of the site driving requirements and to improve driver behaviours both on and off site, commenced on 13<sup>th</sup> August. The challenge was paused following four breaches of the challenge in September – parking in the off-site car parks (1), not wearing seatbelts (2) and speeding (1). As of 30<sup>th</sup> September 2012, 24 days remain to achieve the challenge.
- SEPA met DSRL on 27<sup>th</sup> September to review progress on actions arising from August 2012 when DSRL identified inappropriate drainage points at the PFR main stack and IFBS stack. The inspection did not identify any additional unauthorised discharge routes and the action taken was part of follow up work related to the D1310 non-active drain discharge investigation.
- SEPA have now gone out to public consultation on DSRL's application for a new RSA Authorisation. The consultation runs from 2<sup>nd</sup> October to 30 November.
- On 19<sup>th</sup> September 2012 DSRL received a letter from SEPA confirming it had no major concerns with the proposed reduced Environmental Monitoring Programme.
- A site emergency exercise was held on 3<sup>rd</sup> October to test the site's emergency response arrangements. The demonstration exercise was based on a criticality accident within one of the Fuel Cycle Area facilities along with a subsidiary fire in a neighbouring facility. ONR had commented that the scenario was challenging and following the exercise reported it was a more than adequate demonstration of the arrangements in place.

### **Consolidation Status and Update**

- The last two change controls to complete consolidation have been drafted and are going through internal process. The carryover Change Control has now been approved.
- Continuing progress is being made with re-organisation in compliance with Licence Condition 36 procedures. The organisational change required to complete consolidation has been implemented.
- A matrix has been prepared to outline the requirement to achieve Project Control Procedure (PCP) compliance. This matrix has been discussed with NDA and completion criteria for each requirement with respect to consolidation is being agreed. This significantly reduces the uncertainty in the completion of consolidation.

### **Reactors**

- At PFR:
  - The Clean up Tank was size reduced and consigned as LLW.
  - The draining of A, B and C thermal syphon tanks and transfer of 7 NaK drums to the NaK Disposal Plant (NDP) for processing is now complete.
  - Transfer of spent fuel cans from the buffer store pond to the PFR Irradiated Fuel Cave (IFC) has resumed following receipt of the Krypton 85 discharge variation from SEPA. To date, 17 fuel containers (from a total of 111) has been transferred.
- At DFR:
  - batch 15 (of a total of 21) of DFR Eutectic NaK has been fully processed through NaK Disposal Plant (NaK)/Import/Export Plan (IXP) and discharged to LLETP.

### **Fuel Cycle Area Decommissioning**

- In D1203, the first phase of Billet Line A decommissioning is now complete. Airline suit entry will continue to continue decommissioning of this facility. Removal of the redundant furnace hoist has been completed.
- Sentencing tank Ion Exchange filtration work continues in D1251.
- The re-instatement of the in-cell lifting capability in the D1206 caves the programme of characterisation activities has commenced in the caves and cells.
- D1251 sentencing zinc precipitate removal progressed and preparation for (Ion Exchange) IEX operations completed.

- Work is ongoing to complete the decommissioning of High Active Sample Station (HASS) glovebox.
- Containment is being erected to commence the second phase of Billet Line A in D1203.

### **Shaft/Silo Decommissioning**

- Planning application and accompanying Environmental Impact Assessment and Environment Statement was submitted to Highland Council for phase 2 decommissioning on schedule on 19<sup>th</sup> October 2012.
- Concept design is ongoing and is expected to be complete by end of October/ early November 2012.
- The Preliminary Safety Report (PSR) is ongoing and is expected to be submitted to ONR in late November.

Optioneering work on the Shaft and Silo concept has been completed.

### **Waste and Fuels**

- On 27<sup>th</sup> Sept during routine waste operations in D2001 Waste Processing Cell operators were cutting the base of a waste drum which caused a small quantity of smoke to be release. As per site procedures, the fire brigade and shift manager responded and the smouldering was stopped. This has been reported to ONR.
- Construction at the Low Level Waste facility continues with steel reinforcement, formwork and concrete pours. The demolition vault floor is 100% complete and walls are 25% complete. The low level waste vault floor is 80% complete and walls commenced.
- The first shipment of Belgian waste is complete.
- All modules for the new Active Analysis Laboratory have been moved into position and the tie downs and interconnecting work is progressing to schedule.
- Crane camera failure resulted in a delay to active commissioning and the ability to receive contact handleable intermediate level waste at D9867. This has not impacted on the consignment of waste. The camera has now been repaired with parts from a spare with a replacement now on order.

- The Dounreay Cementation Plant (DCP) continues operation with 254 drums completed this year.
- Decommissioning of the failed supercompactor in WRACS has started. To date, the press has been lowered, the hydraulic fluid drained and work progresses in size reducing the hydraulic fluid tank and associated support unit. Conveyors have been removed and the SCADA/PLC modified. During this work the WRACS has been shutdown as the work required isolations. The operational part of WRACS will resume shortly once these isolations are lifted and work will then concentrate on two fronts; the characterisation of 200 litre drums (normal business) and the building of a containment structure (to support continued supercompactor strip out).

### **Staffing**

	<b><u>FTE Target</u></b>	<b><u>FTE Actual/Forecast</u></b>
Current	933 *	909 **
Year End outturn	933	Until consolidation is complete it is not possible to predict a forecast for year end.

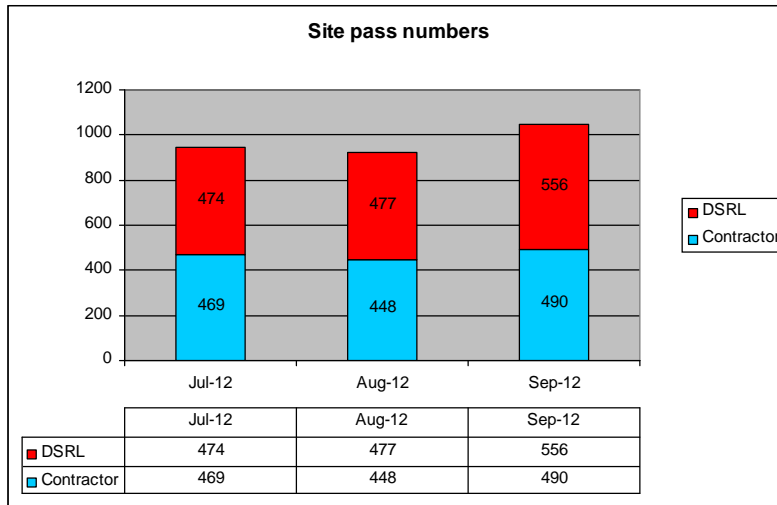
\* Target includes 848 employees and 85 agency staff

\*\* Includes actual 809 for employees and 89 for agency staff.

As of September 2012 – DSRL employee stats:

- New starts: 8 (including 6 apprentices)
- Resignations: 4
- Dismissals: 0
- Vol Early retirement: 2
- Retirements: 0
- Death in Service: 0

### **DSRL/Contractor site access data**



A Safety & Environmental Overview Report (SEOR) was presented to the Dounreay Nuclear Safety Committee (DNSC) which included an overview of the Management of Change raised since the transition to the new PBO, a timeline for organisational change and a revised PBO secondee chart. This paper was discussed with ONR.

- A pilot upload of qualifications and verified training for a sample group of DSRL employees for the Nuclear Skills passport was been successfully completed in September. Upload of data for all DSRL employees will be completed by the end of October.

### **Procurement update**

- Supplier days for the Shaft and Silo project took place in Wick and Edinburgh on 24<sup>th</sup>/25<sup>th</sup> September with good attendance and feedback received from the supply chain. At the Wick event the Chamber of Commerce's Chief Executive attended to outline benefits of membership of the Chamber and at the Edinburgh event the use of local supply chains was encouraged.

The sub-contract strategy for the first phase of procurement has been approved and OJEU notices have now been issued. The work packages include the design and build of all cranes, Non-destructive assay equipment, shaft platform and remote operated vehicles (ROV).

- A contract for the procurement of drums for use in the Dounreay Cementation Plant has been awarded. The contract was awarded to DEVA for the supply of 1,100 DCP drums at a value of approx £2.2M.
- A £2.4M order for the procurement of THORP cans for packaging product from the Unirradiated Fuel Characterisation Facility (UFCF) has been procured. This procurement is through the NDA collaboration for high integrity Stainless Steel containers.

Dounreay Site Restoration Ltd  
23<sup>rd</sup> October 2012

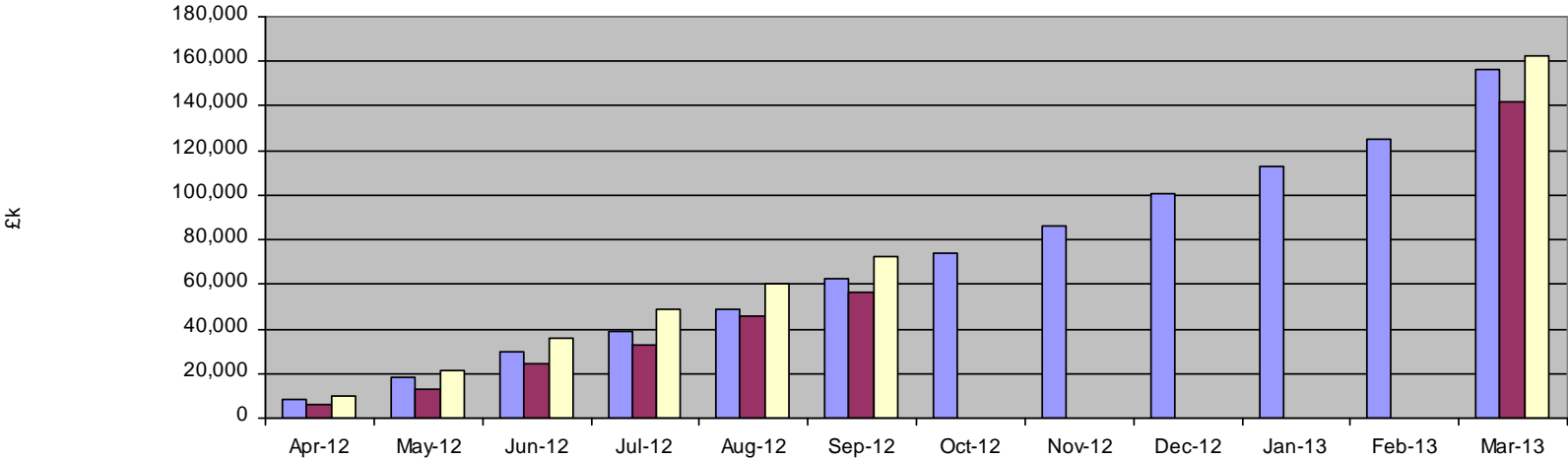
## GLOSSARY

<b>Abbreviation</b>	
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



### Cost/Schedule Graph

Period Performance Period 6 September 2012 £k



	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
CTD Plan (BCWS)	8273	18228	29912	38788	49126	62455	74201	86092	100402	112769	124742	156430
CTD Perf (BCWP)	5873	13341	24673	32758	46038	56377						141645
CTD Actuals (ACWP)	9902	21584	35777	48907	60241	72400						162151

Month