## 03/10 PERFORMANCE



Site clean-up performance report for **March 2010** 

www.dounreay.com

# New drain clears way for shaft

A £500,000 project is being carried out by local companies to reroute 300 metres of the low-active drain beneath Dounreay.

The existing drain, which takes effluent from the decommissioning of facilities to the sea discharge tanks, is located beneath the proposed construction site of the shaft and silo waste retrieval facilities.

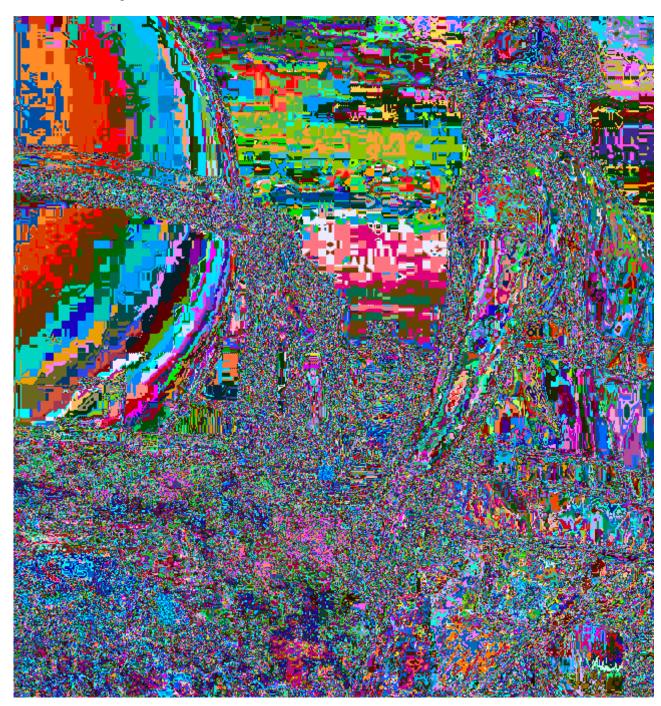
John Gunn & Son, Budge Formwork and Gow are laying a new section of drain that will allow the old section to be dug up and removed from the construction site.

This area of ground is one of the most congested at Dounreay, with many redundant cables and services still present in the ground. These date back to the days of Dounreay as a wartime aerodrome.

Project managers need to be cautious when digging up areas like this, since many services were laid so long ago that official records of their location no longer exist.

George Groat, the DSRL project manager, said six services were found in an area where official records listed just two.

The groundwork is part of the site clearance work needed for the eventual decommissioning of the shaft and silo.





months until shutdown



#### DFR

Batches 81 to 97 of primary NaK liquid metal were processed through the disposal plant during March. DSRL developed a modified processing sequence which allows each batch to cool, with minimal impact on the overall processing times, following a snag with a cooling damper.

The breeder removal project achieved a significant milestone by receiving delivery of both the new 55-tonne building crane and tool maintenance glovebox. Design and location of the Magnox flask leak testing and swab stations was finalised and one of the stations manufactured.

A contract was awarded for the design, manufacture and trialling of equipment for dismantling of the DFR reactor vault pipe work

Pond water treatment continued, with 56 m3 of water discharged.

#### **PFR**

Cutting trials for the low level waste size reduction facility were completed. The project team decided to trial a low-tech solution - band-saw rather than diamond wire - which subsequently proved extremely successful on test pieces, including hardened steel components.

Dirty dump tank removal was stopped after asbestos was discovered in areas of the steam generator building. It is expected to take until mid-May to deal with this.

All water vapour nitrogen plant equipment was removed from the JOST facility at Janetstown. Some of the specialised equipment has been moved to a storage facility awaiting a decision on whether the equipment can be redeployed on site.

Sludge cementation trials for the old effluent treatment plant were completed and the results indicate the sludge stabilisation process should be successful. The sludge has been removed from the vault and the concept design for sludge retrieval from the tanks completed.

All physical works required prior to the cessation of shifts were completed. NII decided not to call in the management of

change (LC36) safety paperwork.

#### **FUEL CYCLE AREA**

Decommissioning was completed of the last of the ex-1206 plutonium nitrate flasks.

The thorium storage bank in the former uranium recovery plant was decommissioned and removed.

Following decommissioning of glovebox no. 6, the pulsed column laboratory was declassified.

In the D1200/D1215 laboratories, decommissioning and removal of the PAL glovebox was completed.

The D1209 ventilation project commenced preparation for active operations. Decommissioning of the D2154 redundant vent plant building was completed.

#### **OTHER AREAS**

Eight small buildings were demolished in March by the minor demolitions team.

A radiological and borehole survey was carried out of Landfill 42.

The D6499 cover building was dismantled at the low-level waste disposal pits.

Work on the proposed new D3900 waste treatment facility came to an end, reflecting the change in programme priorities associated with the £150m budget cap.

#### **WASTE MANAGEMENT**

A total of 8.55m3 of raffinate from historical reprocessing was transferred to the cementation plant, taking the total for the financial year to 100.5m3, filling 634 drums.

The redundant ventilation stack from DFR was successfully cut up and consigned as

A contract notice was issued for design and build of the first two vaults for the new low-level waste disposal facility.

A total of 101 asbestos surveys were carried out in March. Asbestos removal from the D1402 and D2145 substations was completed.

Date

2010

Milestone

decommissioned

MTR reprocessing plant

Almost 500 irradiated 'breeder' elements from DFR had been de-clad by the year-end, representing 75 per cent of the work.

#### **SAFETY**

The completion of a 12th successive month without a lost-time accident earned the Dounreay Communities Fund a maximum £30,000 pay-out from UKAEA Ltd for 2009/10.

Dounreay was nominated for an international award from the British Safety Council.

#### **ENVIRONMENT**

SEPA informed DSRL that the 2009 RSA Operator Performance Assessment was evaluated as "satisfactory".

Phase 4 of the environmental support file production schedule was completed by March 31

A new environmental improvement plan for 2010/11 was approved.

Collaboration with the environment teams of both Chapelcross and Hunterston continued, with a meeting held in March at Chapelcross.

Discussions on the new carbon reduction commitment legislation took place between DSRL, UKAEA and Babcock International. Babcock indicated the CRC scheme will be administered at the highest level in the group.

A meeting was held with the NDA, NII and SEPA to discuss the site end-state and restoration plans, the approach to setting clean-up levels, the management of decommissioning rubble and rubble use in filling voids and capping the site.

#### **NUCLEAR MATERIALS**

Low-enriched uranium belonging to Atomic Energy Canada Ltd was removed from Dounreay in two separate shipments during March and delivered safely to the Chalk River nuclear site, closing out a historical contract inherited by the NDA from the UK Atomic Energy Authority.

#### **GENERAL**

Staff were briefed on the next phase of employment reductions within DSRL. Up to

**Cumulative cost** 

180 posts will disappear over the next three years.

NDA's competition for Dounreay formally commenced. Instructions were issued to DSRL staff to ensure the company's neutrality during the bidding process.

DSRL's training and development team was accredited to offer Institute of Occupational Safety and Health courses.

A total of 36 responses had been received by the deadline for submissions on the site's draft heritage strategy.

Tony Wratten started a new role as deputy managing director of DSRL. His previous position, director of assurance, has been filled by Alan Scullion.

Two senior managers from AMEC left DSRL following the dissolution of a business agreement between AMEC and UKAEA Ltd.

Dounreay won national recognition for its work to promote engineering and science in local schools, with nominations in two categories at the first Scottish awards for the Science, Technology, Engineering and Mathematics Network, STEMNET.

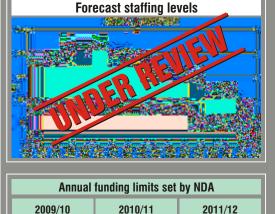
#### **COMMUNITY SUPPORT**

DSRL approved two applications for financial assistance under its socio-economic plan in March - Latheron, Lybster and Clyth Community Development Company - £8000 towards purchase of land at Rumster Forest; and Ormlie Community Association - £5000 towards the cost of a co-ordinator to help unemployed young people obtain jobs

Dounreay Communities Fund approved applications for financial assistance from the following in March:

Sculpture Classes, Crossroads Caring Scotland, 4th Wick Girl Guide Unit, Caithness Badminton Association, Poltney Bell Ringers, "Jump Natural" proposal, Reay Golf Club, CASVAG, Jackie Beales, Wick Town & County Club, Latheron Art Show, Brough Bay Association and Caithness United.

### Site closure programme at-a-glance



£166 million

£150 million

2013	Bulk liquid metal destroyed at DFR	
2014	LLW disposal site opens	
2016	Breeder removed from DFR	
2018	High-active liquor tanks and income	
2021	Fast reactor represent y pladecommissioner	
2023	C'all and A le la Contraction	
2025	A to the cleared	Interim End State - £2.6 bn
2027	Lower water site capped	
2057	Into mediate-level waste removed	
2078	Fuel and waste stores cleared	
2294	All land available for re-use	End State - £3.2 bn

NDA competition for DSRL

• Industry days for bidders

Industry days for bidders – Feb/Mar 2010
 Tendering – Winter 2010

Preferred bidder – Summer 2011

• New company takes over DSRL - Winter 2011

**WUKAEA** A UKAEA company



This performance report is produced by Dounreay communications, designed by JCI Graphic Services, Dounreay and published by Dounreay Site Restoration Ltd on behalf of the Nuclear Decommissioning Authority. DSRL is a subsidiary of UKAEA Ltd. ©2009.

Articles may be freely reproduced provided this performance report is acknowledged as the source.

Contact Dounreay Communications at: communications@dounreay.com or telephone: 01847 802121. For more information, visit: www.dounreay.com on the worldwide web and at Traill House, 7 Olrig Street, Thurso. (open 9am to 5pm, Monday to Friday).

£156.7 million