

02/10 PERFORMANCE



Dounreay Site
Restoration Ltd

Site clean-up performance report for
February 2010

www.dounreay.com

Crane lift success

A building crane in one of Dounreay's shut-down facilities has been taken down in an important stage of the building's clean-up programme.

The decontamination and waste handling facility, code named D1207, was built to serve Dounreay's chemical plants and the next door Vulcan site.

The electrical overhead travelling (EOT) gantry crane, which had a 7.5 ton capacity, was used to move large items of equipment such as flasks.

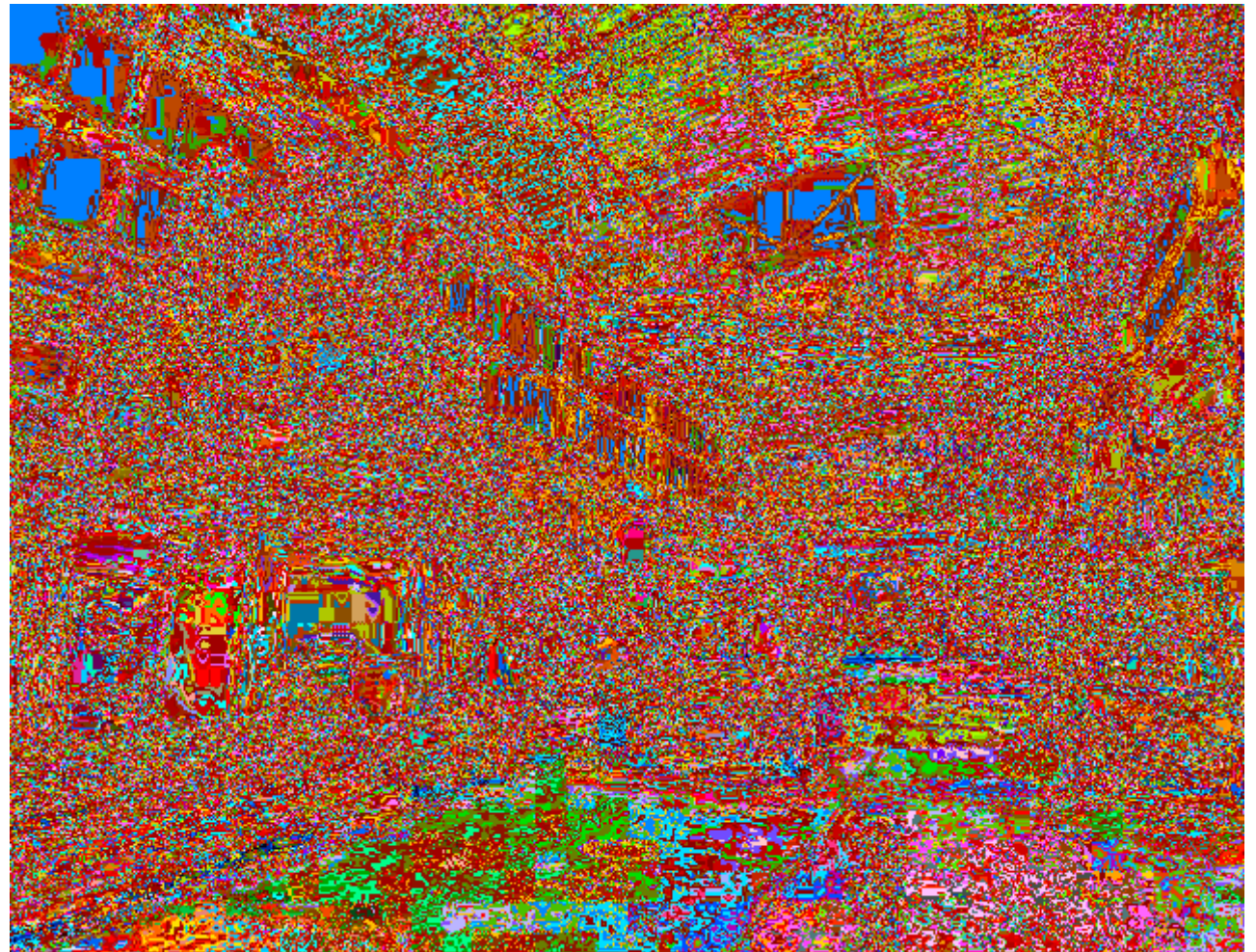
The lift was the culmination of a year's work by a team of workers from site licence company DSRL and its decommissioning sub-contractors.

Before it could take place, the team decontaminated the entire surface of the ceiling and removed the redundant ventilation extract ducting from the building.

A roof hatch was also installed to give access to the mobile crane positioned outside the building.

The team waited for a relatively calm day to carry out the manoeuvre, as there was little margin for error in lifting the 8 tonne crane, which spanned the entire width of the building.

Once the cross-travel bogie had been lifted off the crane and lowered to the floor, riggers wearing radiation protection clothing and respirators fixed



scaffold poles to the crane to prevent the slings slipping during the lift.

In one smooth move, the crane was lifted off its rails, turned ninety degrees and lowered to the floor.

The crane and bogie were cut up and sprayed with two coats of

metal paint before being loaded into ISO containers for consignment as low level waste.

DSRL senior project manager Robbie Manson said that the removal of the crane was part of reducing the radioactive hazard in the building, and another step towards its eventual demolition.

"The next phase of work will be removing the contaminated floor and some of the walls," he explained.

"We expect to be in a position early next year to begin de-sheeting the building and then to size-reduce the steel framework."

180 months until shutdown



PROGRAMME PERFORMANCE REPORT

February 2010

PROGRAMME DELIVERY

Schedule Performance Index (SPI)

Year to-date	Year-end forecast
0.98	0.99

* SPI measures work actually carried out against the agreed NDA schedule.

Cost Performance Index (CPI)

Year to-date	Year-end forecast
1.12	1.11

* CPI measures the cost of work actually carried out against the forecast agreed with the NDA. A figure of 1.0 equals the cost agreed - greater than one reflects efficiency gains.

Performance Based Incentives (PBI)

Year to-date earned	Year-end maximum forecast
£3.45 million	£4.87 million

* PBI are agreed milestones with NDA which result in payment of fee.

PRODUCTION

	February	2009 - 2010
Exempt waste removed from site:	0 tonnes	78.44 tonnes
Low-level waste processed for disposal:	440 drums	4,772 drums
Raffinate liquor converted to solid intermediate-level waste:	69 drums	584 drums

HEALTH & SAFETY

Number of reportable radiological events:	0	0
Number of events on International Nuclear Event Scale:	0	1
Number of Lost Time Accidents (LTA):	0	0
Total Recordable Incident Rate: <small>Compares injury and illness rates per 20,000 hours worked</small>	0.32	
RIDDOR reportable occurrences:	0	0
Hours worked since last LTA:	3,670,000	
Average radiation dose to DSRL workforce:	0.01 mSv	
Average radiation dose to non-DSRL workforce:	0.05 mSv	

Stated doses are one month behind, due to processing time.

ENVIRONMENT

Events reported to regulator:	0	0
Amount of paper recycled:	0 kg	30,507 kg
Amount of metal recycled:	0 kg	101,000 kg
Amount of cardboard recycled:	0 kg	18,133 kg
Particles recovered from local beaches:	0	28

PEOPLE

Full time DSRL staff:	903
Part time DSRL staff:	62
Contractor staff:	999
Gate-held passes (infrequent users):	118



A film showing camera footage obtained during the project to drain the liquid sodium coolant from the Prototype Fast Reactor (PFR) has been posted on the website's film library.

DSRL's specialist in-house design team have designed some ingenious inventions over the years to inspect the reactor's hazardous core and to drill holes to allow the sodium to drain out.

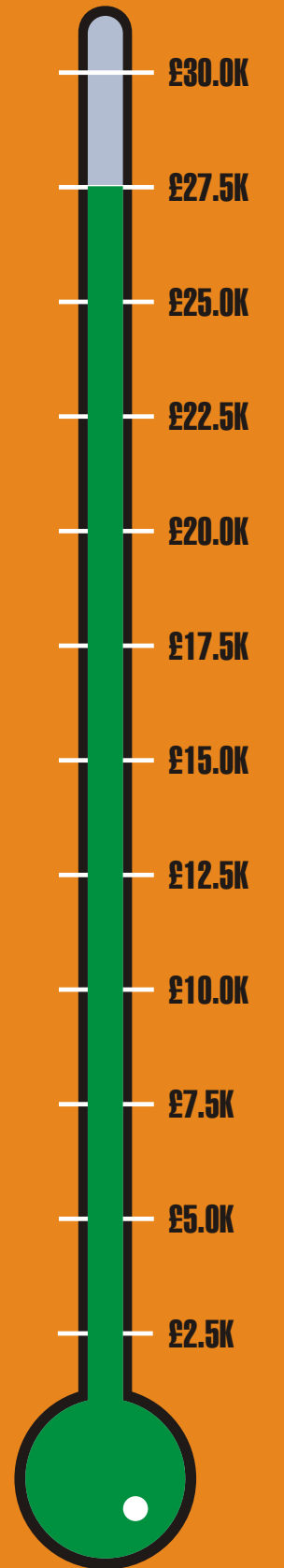
Inspections of the reactor core have been performed by remotely controlled devices resembling a giant anaconda, a one-eyed Cyclops and a child's slinky toy to name but a few; all with combined drilling and camera capability built to withstand and measure high radiation levels.

Mike Brown, reactor decommissioning unit manager said: "The reactor dismantling project is critical to the

decommissioning of PFR.

"To safely take apart the plant we need to inspect all the nooks and crannies within the reactor before we can begin the final phase of work which is to remove the reactor vessel. The design of purpose built equipment is invaluable to us.

UKAEA donates £2500 to Dounreay Communities Fund for each month without a Lost Time Accident (LTA)



Total = £27,500

DFR

At DFR, the NaK disposal plant and ion exchange plant completed a period of planned maintenance and resumed operations early in February, with improved plant performance and increased through-put.



Decommissioning of the pond continued with pond water treatment and discharge taking place. A radiation survey of the pond was completed to provide the data needed to prepare for the decommissioning of the pond concrete.

DMTR

Decommissioning of the DMTR facility continues with the removal of 65 drums from the drum store, and decontamination of the ducts in the area around the pond.



FCA

Workers in the D2900 decontamination facility have completed the decommissioning of two of the three redundant 'punit' flasks, previously used to transport plutonium nitrate liquor.

In D1207 the building crane was successfully removed, dismantled and consigned as low level waste.

Decladding of the seventeenth drum of breeder elements continued in D2001, following the repair of the in-cell decladding machine.



Shaft and Silo

Installation of a new low-active drain at the site of the proposed construction works continued.

Safety

The site set a new record for the

number of days worked without a 3-day 'lost time accident', reaching a year on February 27, 2010.

Heritage

A successful heritage workshop was held in Edinburgh, attended by representatives of the NDA, national heritage agencies and preservation organisations. A similar local work shop was held with local regeneration, tourism and heritage organisations.



Competition

The first Industry Day was held in Wick on February 5, attended by companies and consortia interested in bidding, along with members of the DSRL supply chain.

Site closure programme at-a-glance

<p>Forecast staffing levels</p>			<p>Date Milestone Cumulative cost</p>			<p>NDA competition for DSRL</p>																																									
<p>Annual funding limits set by NDA</p> <table border="1"> <tr> <td>2009/10 (confirmed) £156.7 million</td> <td>2010/11 (confirmed) £166 million</td> <td>2011/12 (provisional) £150 million</td> </tr> </table>			2009/10 (confirmed) £156.7 million	2010/11 (confirmed) £166 million	2011/12 (provisional) £150 million	<table border="1"> <tr> <td>2010</td> <td>MTR reprocessing plant decommissioned</td> <td></td> </tr> <tr> <td>2013</td> <td>Bulk liquid metal destroyed at DFR</td> <td></td> </tr> <tr> <td>2014</td> <td>LLW disposal site opens</td> <td></td> </tr> <tr> <td>2016</td> <td>Breeder removed from DFR</td> <td></td> </tr> <tr> <td>2018</td> <td>High-active liquor tanks emptied</td> <td></td> </tr> <tr> <td>2021</td> <td>Fast reactor reprocessing plant decommissioned</td> <td></td> </tr> <tr> <td>2023</td> <td>Start Land available for re-use</td> <td></td> </tr> <tr> <td>2025</td> <td>All low-level waste cleared</td> <td>Interim End State - £2.6 bn</td> </tr> <tr> <td>2027</td> <td>Low-level waste site capped</td> <td></td> </tr> <tr> <td>2057</td> <td>Intermediate-level waste removed</td> <td></td> </tr> <tr> <td>2078</td> <td>Fuel and waste stores cleared</td> <td></td> </tr> <tr> <td>2294</td> <td>All land available for re-use</td> <td>End State - £3.2 bn</td> </tr> </table>			2010	MTR reprocessing plant decommissioned		2013	Bulk liquid metal destroyed at DFR		2014	LLW disposal site opens		2016	Breeder removed from DFR		2018	High-active liquor tanks emptied		2021	Fast reactor reprocessing plant decommissioned		2023	Start Land available for re-use		2025	All low-level waste cleared	Interim End State - £2.6 bn	2027	Low-level waste site capped		2057	Intermediate-level waste removed		2078	Fuel and waste stores cleared		2294	All land available for re-use	End State - £3.2 bn	<ul style="list-style-type: none"> • Industry days for bidders – Feb/Mar 2010 • Tendering – Winter 2010 • Preferred bidder – Summer 2011 • New company takes over DSRL – Winter 2011 		
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