

06/09 PERFORMANCE



Dounreay Site
Restoration Ltd

Site clean-up performance report for
June 2009

www.dounreay.com

DFR hazard shrinks by 5000 litres

Destruction of Dounreay's biggest single hazard reached a milestone on June 16 when the 30th batch of liquid metal from the experimental fast reactor was destroyed.

Thirty batches is equivalent to some 5000 litres.

The milestone was reached a month ahead of schedule and earned the site a performance based incentive.

"The legacy of sodium and potassium in the reactor is the second highest hazard for the entire NDA estate," explained Mike Brown, reactors decommissioning unit manager.

"Its safe removal and destruction is a huge step towards completing one of the major decommissioning milestones the site has to manage."



1 8 8 months until shutdown

PROGRAMME PERFORMANCE REPORT

June 2009

PROGRAMME DELIVERY

Schedule Performance Index (SPI)

Year to-date	Year-end forecast
1.15	1.00

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

Cost Performance Index (CPI)

Year to-date	Year-end forecast
1.06	1.03

* 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
£299K	£5 million

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

PRODUCTION

	June	2009 - 2010
Exempt waste removed from site:	0 tonnes	12 tonnes
Low-level waste processed for disposal:	579 drums	1188 drums
Raffinate liquor converted to solid intermediate-level waste:	180 drums	303 drums

HEALTH & SAFETY

Number of reportable radiological events:	0	0
Number of events on International Nuclear Event Scale:	0	0
Number of Lost Time Accidents (LTA):	0	0
Total Recordable Incident Rate: <small>Compares injury and illness rates per 20,000 hours worked</small>	0.37	
RIDDOR reportable occurrences:	0	0
Hours worked since last LTA:	1,250,000	
Average radiation dose to DSRL workforce:	0.04 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:	10,110 kg	13,210 kg
Amount of metal recycled:	0 kg	26,780 kg
Amount of cardboard recycled:	3,770 kg	0 kg
Particles recovered from local beaches:	14	15

PEOPLE

DSRL:	949.9
Sub-contractors:	1104



Forty-nine radioactive particles were recovered from the seabed near Dounreay's old discharge outlet during June.

They were found and retrieved by a remotely-operated vehicle which started work on June 1. By the end of the month, it had covered just over four hectares of seabed.

Of the 49 particles recovered, nine were sufficiently radioactive to be classed as "significant" on a scale drawn up by independent experts and based on potential health effects.

This summer, Dounreay Site Restoration Ltd aims to cover 7.5 hectares of seabed close to the disused discharge pipeline

outlet.

This is the part of the seabed where the most radioactive particles have been shown to be located and where fishing is prohibited.

The work is being carried out by a local contractor, Fathoms Ltd.

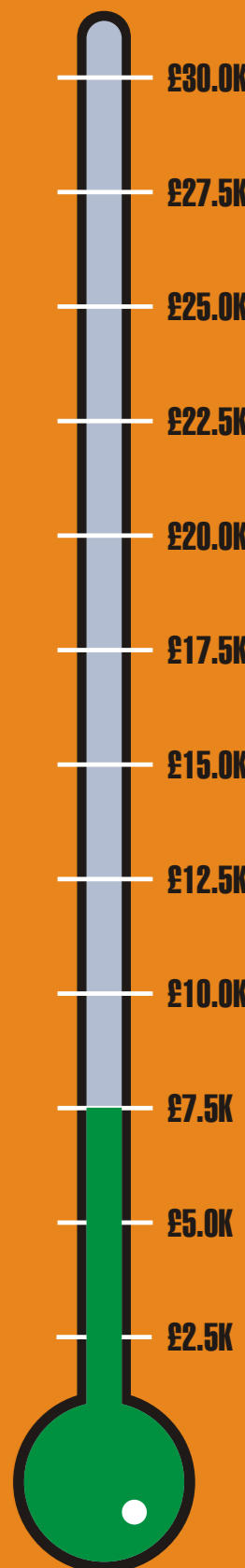
"We are focusing this year on a seabed area of 7.5 hectares to the north and west of the old discharge outlet where independent experts have assessed the most radioactive particles are located," said **Phil Cartwright**, the project

manager at DSRL responsible for the work.

"Our objective is to reduce the number of particles on the seabed and gain information that will assist planning of future particle retrieval work. We recognise we cannot remove all of the significant particles from the seabed, but in removing as many as we can we should reduce the numbers that wash ashore.

"Once we have covered this area, we will communicate the results to SEPA and the independent Particles Retrieval Advisory Group, before deciding what further work could be usefully undertaken before the weather turns in the Autumn."

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



Total = £7,500

Intermediate level waste

Good progress has been made with the infrastructure associated with construction of the D3900 intermediate-level waste treatment plant and store. The electrical sub station housing unit is now in place.



A total of 130 transports on-site of flasks containing intermediate-level waste from decommissioning were carried out.

Dounreay Cementation Plant (DCP) successfully processed a further 8.7 m³ of raffinate liquor from research reactor fuel reprocessing, taking the total for the year to 25 m³

DFR

The 30th batch of liquid metal to be removed from the primary circuit of Dounreay Fast Reactor was successfully destroyed.

PFR

Hand-over of the new pipeline from the PFR sodium tank farm to the sodium disposal plant was expected to take place at the end of first week in July.

The commencement of the reactor top redundant asbestos and PVC cable removal has been delayed as a result of finding unexpected unmarked live cables on the same cable trays as the redundant cables.



Fuel Cycle Area

Two more gloveboxes from decommissioning of the D1200 labs were decontaminated successfully in the D2900 clean-up centre. In the labs, removal of the cell walls in line 1-8 of lab 77/78 is complete.

Removal is underway of the cell roof covering in the D1217 post-irradiation examination facility.

The 13th drum of DFR breeder was declad and 49 flask moves

of intermediate-level waste carried out in a waste handling facility.

Preparatory work was completed for decommissioning of billet line B in the uranium recovery plant.

Environment

Fourteen particles were recovered at Sandside Beach until June 16 when consent for access was withdrawn.

The new RSA Authorisation application paperwork is almost complete, and on programme to be submitted to SEPA in September 2009. A document has been produced which sets out the scope of work to determine a new RSA environmental monitoring programme, commensurate with DSRL decommissioning activities. This should have a significant reduction in discharge authorisation limits.

Health and Safety

By the end of June, the site had gone 1.25 million man-hours, or 123 days, without a lost-time accident.

DSRL's emergency team and the site emergency centre supported the neighbouring Vulcan nuclear site during its annual demonstration exercise, Lonestar 09, on June 17.

Advice has been issued and posters displayed about actions that staff can take to minimise

their risk of catching the H1N1 swine flu virus. DSRL sickness absence rates are normal for the time of year.

The latest site safety challenge – to complete 60 days without a non-compliance of fire safety rules – was reset on June 29 when some wood in a drain duct smouldered during hot work in the vicinity and set off a fire alarm.

The British Safety Council carried out a week-long assessment of safety practices at Dounreay against its five-star award scheme.

Other

DSRL's engineering assurance manager visited Sellafield to explore opportunities to exchange information on engineering best practice with the chief engineer, Sellafield Sites Ltd. A large number of areas of common interest were identified and a follow-up meeting is planned at Dounreay.

UKAEA carried out a survey of all staff in the group, including employees of DSRL.

A seven-minute video, Countdown to Closure, was released by DSRL. It can be viewed at: www.dounreay.com

Site closure programme at-a-glance

<p>Forecast staffing levels</p>			<p>NDA competition for DSRL</p> <ul style="list-style-type: none"> Industry day for bidders – Winter 2009 Tendering – Autumn 2010 Preferred bidder – Spring 2011 New company takes over DSRL – Autumn 2011 																																																					
<p>Annual funding limits set by NDA</p> <table border="1"> <tr> <th>Year</th> <th>Status</th> <th>Amount</th> </tr> <tr> <td>2009/10</td> <td>confirmed</td> <td>£156.7 million</td> </tr> <tr> <td>2010/11</td> <td>provisional</td> <td>£154.8 million</td> </tr> <tr> <td>2011/12</td> <td>provisional</td> <td>£183.7 million</td> </tr> </table>			Year	Status	Amount	2009/10	confirmed	£156.7 million	2010/11	provisional	£154.8 million	2011/12	provisional	£183.7 million	<table border="1"> <thead> <tr> <th>Date</th> <th>Milestone</th> <th>Cumulative cost</th> </tr> </thead> <tbody> <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>Shaft and silo emptied</td> <td></td> </tr> <tr> <td>2025</td> <td>All redundant facilities 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> </tbody> </table>			Date	Milestone	Cumulative cost	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	Shaft and silo emptied		2025	All redundant facilities 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
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