

07/10 PERFORMANCE



Dounreay Site
Restoration Ltd

Site clean-up performance report for
July 2010

www.dounreay.com

Metal plant powers ahead

A chemical destruction plant recorded one of its best ever months in July.

More than 2500 litres of primary coolant from Dounreay Fast Reactor was destroyed safely – the second highest monthly total since operations started last year.

The liquid metal – an alloy of sodium and potassium – is one of the biggest single hazards left at Dounreay.

July's performance took the total amount of metal destroyed so far to almost 30,000 litres.

It means the plant is ahead of schedule for meeting the next performance target set by the Nuclear Decommissioning Authority for October.

Preparations have started for replacing the ion exchange column – the resin filter that traps radioactive caesium when the metal is lifted in batches from the reactor cooling circuits.

Innovation in the operation of the plant means fewer columns than originally planned are likely to be needed to complete the job. This reduces both the cost of the clean-up and the volume of waste generated, and means less exposure of workers to radiation during the changeover.





PROGRAMME PERFORMANCE REPORT

July 2010

PROGRAMME DELIVERY

Schedule Performance Index (SPI)

Year to-date	Year-end forecast
0.99	1.00

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

Cost Performance Index (CPI)

Year to-date	Year-end forecast
1.11	1.10

* 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 for project delivery
£270K	£6 Million

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

PRODUCTION

Bags of clean/exempt waste for clearance monitoring:

July	2010 - 2011
113 bags	572 bags

Low-level waste processed for disposal:

397 drums	1647 drums
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Raffinate liquor converted to solid intermediate-level waste:

45 drums	126 drums
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HEALTH & SAFETY

Number of reportable radiological events:

0	0
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Number of events on International Nuclear Event Scale:

0	1
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Number of Lost Time Accidents (LTA):

0	1
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Total Recordable Incident Rate:

0.38

Compares injury and illness rates per 20,000 hours worked

RIDDOR reportable occurrences:

0	1
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Hours worked since last LTA:

440,000

Maximum individual radiation dose (DSRL):

1.90 mSv

Maximum individual radiation dose (non-DSRL):

1.57 mSv

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

ENVIRONMENT

Events reported to regulator:

0	0
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Amount of paper recycled:

0 kg	8080 kg
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Amount of metal recycled:

3760 kg	10,300 kg
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Amount of cardboard recycled:

0 kg	4600 kg
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Particles recovered from local beaches:

0	4
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PEOPLE

Full time DSRL staff:

862

Part time DSRL staff:

67

Contractor staff:

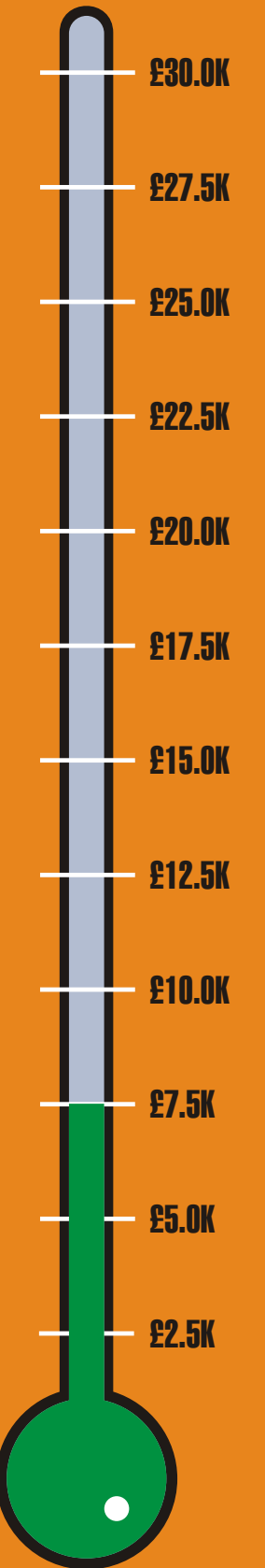
908

Gate-held passes (infrequent users):

146



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



Total = £7,500

Work started in July to clean out redundant gloveboxes in the D2900 equipment maintenance and decontamination facility.

This included the removal, pictured here, of contamination from inside the laCalhene loading glovebox that was used to transfer clean sample bottles and candle filters to the sampling and filter

gloveboxes.

Waste collected during the clean-out was consigned as compatible low-level radioactive waste.

Work also took place to complete the post-operational clean-out and decommissioning of the

primary decontamination room ventilation cabinet in the facility. This was used to decontaminate smaller, highly contaminated items

The work was carried out by a decommissioning team drawn from DSRL, Doosan Babcock, NDSL and Nuvia.

DFR

Fourteen batches of liquid metal from the primary circuit were fully processed through the disposal plant, taking the total number of primary batches to 143.

A total of 152 m³ of water was treated and discharged from the DFR ponds. This brings the total amount of water treated and discharged to 675 m³.

Work continued on the off-site assembly of the dump tank drilling equipment for a camera investigation.

Trials continued to establish the safe conditions for handling liquid metal droplets when dismantling the reactor.

PFR

Two loads of components contaminated with alkali metal were processed through the sodium inventory disposal facility, allowing the NDA target of six loads to be achieved ahead of schedule.

A specialised item of cutting equipment is being deployed to good effect on the removal of the reactor top roof cooling system. The equipment has helped minimise dose uptake by allowing pipe work to be cut remotely.

Contractors bidding for the design of the low level waste size reduction facility for reactor dismantling visited site to gain a

better understanding of the specification requirements. Tender returns for the design are due in August.

Work on the PFR dirty dump tanks resumed on July 19 but was suspended on July 21 as precaution while suspected asbestos issues within the building were investigated.

FUEL CYCLE AREA

Decommissioning of a ventilation cabinet was completed in the D2900 maintenance and decontamination facility. Post-operational clean-out of facility gloveboxes commenced.

In the former research reactor reprocessing plant, a decommissioning team continued to access residual material from the pond base during progress to remove the high active cell transfer bulge.

Post-operational clean-out was completed of lab 90 cell 1 and Lab 77 cell 11 in the D1200 suite of labs.

WASTE MANAGEMENT

Transfers of waste liquors to the cementation plant for conditioning as solid ILW recommenced following successful modifications to the storage cell. A total of 19.8m³ of raffinate was processed, filling 111 drums.

A further 18 drums were removed

from a drum store and processed as solid low-level waste while three drums that had been stuck were successfully retrieved, meeting an NDA target.

SAFETY

DSRL gave approval in principle to co-location of the Dounreay Emergency Control Centre and the Emergency Radiological Incident Centre to create a single incident control centre.

A site-wide challenge to deliver 60 examples of good practice generated 48 during July.

ENVIRONMENT

An agreement has been reached with SEPA and the new low level waste facility project to submit a RSA authorisation variation application to cover work undertaken in the planned grout plant, to be situated on the Dounreay site.

The site's Article 37 submission has been modified to take into account of SEPA comments. The submission is being finally assessed before reissued to SEPA for onward transmission to Scottish Government and Europe.

Historic Scotland responded to DSRL's draft heritage strategy and the document will now go to the site stakeholder group in September when it will also be placed on the DSRL website.

GENERAL

DSRL was notified formally of a claim to an employment tribunal by a group of ex-Nuvia staff whose shifts at PFR came to an end recently.

A film unit from Dundee University visited the site and local area to record images and interview former employees as part of a video project on Dounreay covering 20th century industrial and government sites which aims to bring an artistic interpretation to the relationship between the people and the place.

Several officials from the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) visited the site as part of the heritage programme to review DSRL information recording processes.

Babcock International Group announced the future appointment of Simon Middlemas to the post of key account director NDA. He will take up the post once a new managing director of DSRL has been appointed.

A new section for suppliers was added to the DSRL website.

Advertisements were placed for volunteers willing to serve on the board of a £4 million community associated with the development of a new low level waste disposal site a Dounreay.

Site closure programme at-a-glance

Forecast staffing levels

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	Start Landfill closure	
2025	All LLW 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

NDA competition for DSRL

- Industry days for bidders – Feb/Mar 2010
- Tendering – Winter 2010
- Preferred bidder – Summer 2011
- New company takes over DSRL – Winter 2011

Annual funding limits set by NDA

Year	Confirmed/Provisional	Amount
2010/11	confirmed	£150 million
2011/12	confirmed	£150 million
2012/13	provisional	£150 million



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