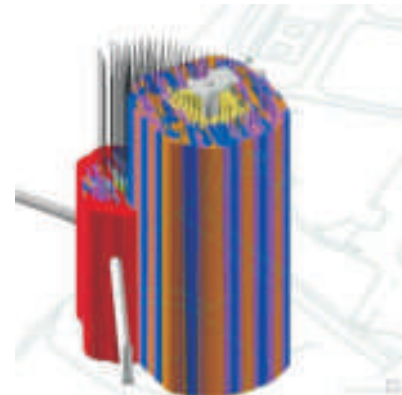


HAZARD REDUCTION AND CLEAN-UP

Shaft isolation

The last of some 400 boreholes was drilled at the shaft to establish a grout curtain around the waste, greatly reducing the amount of groundwater getting into the historic facility.



Shaft and silo waste retrieval
A shredder of the sort to be used for managing waste from the shaft and silo was installed at Janetstown as part of a mock-up of the process line.

WRACS

The low-level waste processing plant resumed production after training.

D8550

Decontamination of the shower room and control area was completed at the former plutonium criticality test cell.



DCP

Dounreay Cementation Plant continued to receive batches of high-active liquor for conversion to solid intermediate-level waste as part of its active commissioning following repairs.

Pulsed Column Lab

The first of the steel storage tanks in the pulsed column laboratory was size-reduced and consigned as waste. Mixer-settler tanks and glass vessels were removed from the glovebox.

MTR reprocessing plant

Further wash-outs were carried out of the dissolvers in the former MTR fuel reprocessing plants.

Cold trap loop

Trials have been taking place at Janetstown in support of cleansing of the SNR secondary cold trap loop at PFR.

DMTR pond

The pond floor lining was removed from the DMTR pond and work started to remove the in-cell filter from the cave.

Ground contamination

Groundwater discharging radioactive contamination in the vicinity of manhole number five has been intercepted and diverted as a result of controls put in place under a design and build contract with Jacobs and JGC.

Old diffuser

Divers carried out a survey of the extent of rock contamination around the old discharge diffusion chamber beneath the seabed.

Particles

Two companies successfully demonstrated their systems for the retrieval of particles from the seabed using remotely-operated vehicles.



Monthly Performance Report- April 2008

DEMOLITION

A water tank dating from Dounreay's days as a wartime aerodrome was demolished and the area landscaped.

A redundant office block was demolished at the high active liquor storage facility to make way for D3900 equipment.

The last of the remaining waste was removed from the demolition site of the former fuel fabrication plant D1202 and re-cladding completed of the adjoining building.

GENERAL

Dounreay Site Restoration Ltd succeeded UKAEA as the licensee on April 1, with just under a thousand employees transferring to the new company.

The site received confirmation of its annual site funding limit for 2007/08. As reported previously, this is in the region of £151 million. As in previous years, DSRL will be expected to deliver efficiency savings.

Staff were reminded of the importance of obtaining permission before accessing land surrounding the site that is let to agricultural tenants.

The UKAEA group issued a questionnaire to all staff, including employees of DSRL. The survey seeks views on issues such as safety and communication within the group. A similar survey was carried out a year ago.

Staff were urged to conserve fuel stocks amid speculation nationally about the impact of strike action at the Grangemouth refinery. The industrial dispute had no detrimental effect on site operations.

The Scottish Blood Transfusion Service collected 180 units of blood during a two-day session in the training block.

James "JR" Biggs, a secondee from AMEC, started work as head of site support services.

WS Atkins started work on a heritage strategy for Dounreay.

The Information Commissioner rejected an appeal by a journalist who was refused information by UKAEA about the storage arrangements for nuclear materials at Dounreay.

Managers and TU reps visited the Idaho and Hanford nuclear clean-up projects in the USA as guests of CH2MHILL to learn from their experiences.

SAFETY, HEALTH AND ENVIRONMENT

William Swanson won the Bill Fisher Trophy in the site director's annual safety, health and environment awards. George Trueman was runner-up. Team award went to the DSRL and Ritchies shaft isolation team, with the fire & ambulance service and safety reps runners-up.

Bill Lambie was appointed responsible person for conventional personal protective equipment.

Motorists entering the site were urged to take extra care following the installation of new security controls. A new access barrier was damaged when struck by a lorry.

The waste services unit recorded two years without a lost-time accident.

VISITORS

- NDA chairman Steven Henwood and chief executive Ian Roxburgh
- Barry Snelson and Paul Foster of Sellafeld Ltd
- Norman Harrison, chief executive, UKAEA
- Idaho National Laboratory, USA
- Wylfa site stakeholder group
- Morton Fraser, solicitors
- Mike McCartney, photographer

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. ©2008.

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04/08 PERFORMANCE



Site clean-up performance report for
April 2008

www.dounreay.com

HAZARD REDUCTION UNDERWAY AT DFR

Work is underway to destroy one of Dounreay's biggest hazards – the alloy of liquid metal that flowed through the primary cooling circuits of DFR, Dounreay's experimental fast breeder reactor.

The alloy is a mixture of sodium and potassium contained in the reactor vessel and the nine kilometres of pipework that surround the reactor.

It is a major hazard on two counts. The chemistry makes it highly reactive when in contact with air or water, and it was heavily contaminated by radioactivity during operation of the reactor until shutdown in 1977.

The alloy is being drawn from the circuitry in the lower half of the sphere to a chemical treatment plant installed in the reactor hall. Here the NaK is reacted with hydroxide solution under a blanket of nitrogen to create more hydroxide solution that is then neutralised with nitric acid in a new plant to the north of the sphere. The solution created by this process is still far too radioactive to be discharged to sea, so it is passed through filters called ion exchange columns that absorb the caesium contamination. This greatly reduces the radioactivity in the water to a level that is within limits authorised by the

Scottish Environment Protection Agency for sea discharge. The contamination absorbed on the columns is retained and stored as intermediate-level solid waste. The plant is now in the "active commissioning" phase, using an agreed number of test batches from the reactor to check the system prior to beginning full operation.

During April, a number of nozzle blockages were detected and these were cleared using a steam boiler.

Decontamination performance in the ion exchange plant has been impressive, with reduction factors in excess of one million regularly being achieved, before a pump failure on April 30 interrupted this work.

Active commissioning is expected to take four months to complete before consent is sought from regulators to begin full operation.

Destruction of the bulk liquid metal is expected to take two years to complete, and will be following by cleansing of the residues from the pipework.



203 months until shutdown



PROGRAMME PERFORMANCE REPORT

April 2008

PROGRAMME DELIVERY

Schedule Performance Index (SPI)

Year to-date	Year-end forecast
0.91	0.99

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

Cost Performance Index (CPI)

Year to-date	Year-end forecast
1.02	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	Year-end maximum forecast for project delivery
£nil	£5 million

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

PRODUCTION

	April	2008 - 2009
Exempt waste removed from site:	114 kg	114 kg
Low-level waste processed for disposal:	437 drums	437 drums
Raffinate liquor converted to solid intermediate-level waste:	6 drums	6 drums

HEALTH & SAFETY

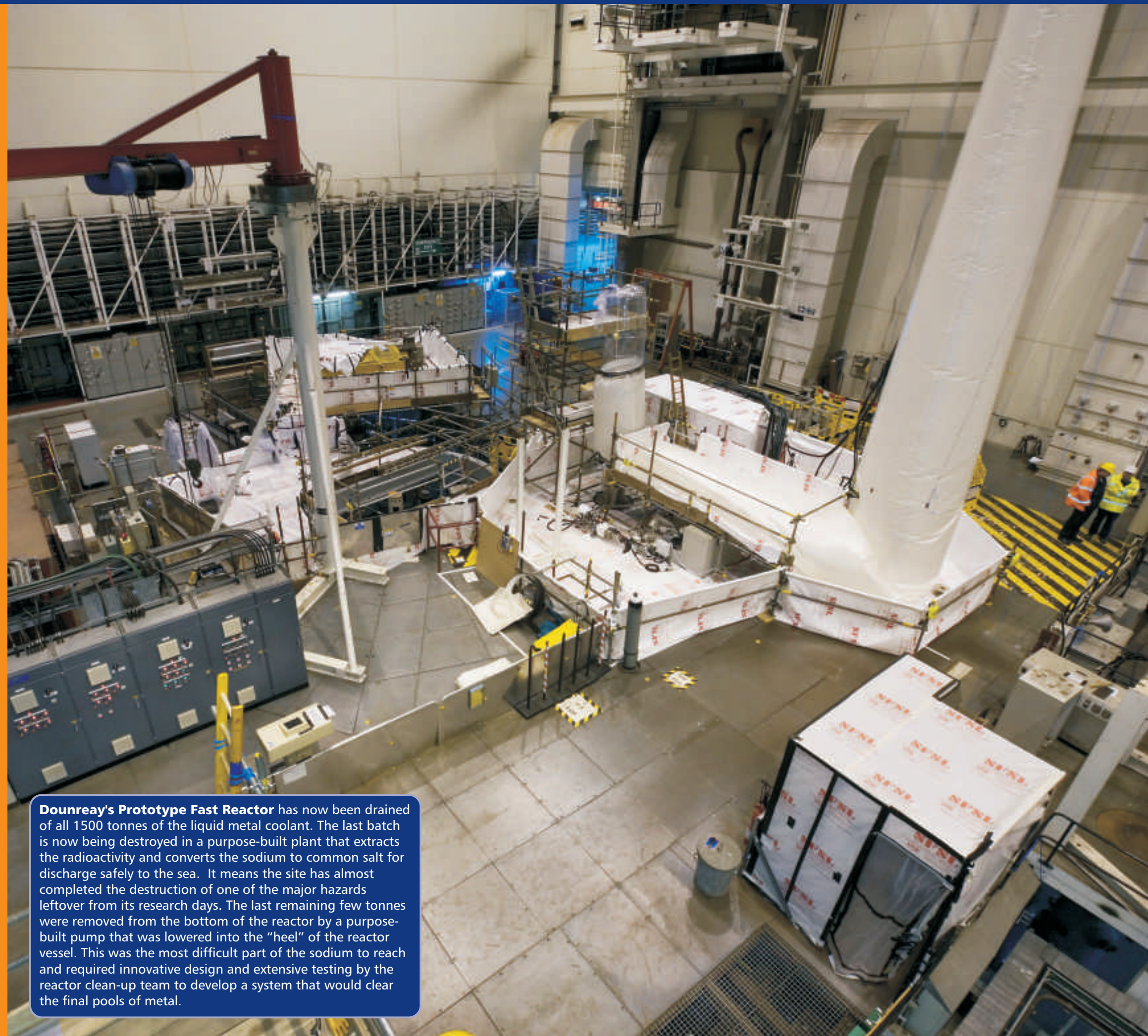
Number of reportable radiological events:	0	0
Number of events on International Nuclear Event Scale:	0	0
Average radiation dose (calendar year to date) to DSRL staff:	0.05 mSv	
Maximum individual radiation dose (calendar year to date) to DSRL staff:	1.50 mSv	
Average radiation dose (calendar year to date) to non-DSRL staff:	0.03 mSv	
Maximum individual radiation dose (in calendar year to date) to non-DSRL staff:	0.89 mSv	
Number of Lost Time Accidents:	0	0
Total Recordable Incident Rate: <small>Compares injury and illness rates per 20,000 hours worked</small>	0.34	0.34
RIDDOR reportable occurrences:	0	0

ENVIRONMENT

Events reported to regulator:	0	0
Radiological discharges as proportion of authorisation:	To be reported quarterly	
Amount of paper recycled:	None sent for recycling	
Amount of metal recycled:	9.52 tonnes	
Amount of other recycling:	10.82 tonnes	
Particles recovered offsite:	0	

PEOPLE

DSRL (full time equivalents):	931
Sub-contractors (number of passes held):	1189



Dounreay's Prototype Fast Reactor has now been drained of all 1500 tonnes of the liquid metal coolant. The last batch is now being destroyed in a purpose-built plant that extracts the radioactivity and converts the sodium to common salt for discharge safely to the sea. It means the site has almost completed the destruction of one of the major hazards leftover from its research days. The last remaining few tonnes were removed from the bottom of the reactor by a purpose-built pump that was lowered into the "heel" of the reactor vessel. This was the most difficult part of the sodium to reach and required innovative design and extensive testing by the reactor clean-up team to develop a system that would clear the final pools of metal.

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



Total = £2,500