

## Community Involvement

There are a number of ways that the LLW Repository engage with stakeholders and the wider community; from formal meetings with key stakeholders like the regulators, local authorities, parish councils, elected representatives and West Cumbria Site(s) Stakeholder Group to financial support for, and participation in, community lead initiatives.

During this quarter the LLW Repository have supported 9 local initiatives ranging from; the Drigg Gala Day, Seascale and Gosforth Primary Schools, Gosforth Amateur Dramatics, Egremont Fire Station, Whitehaven Cricket Club and Whitehaven Male Voice Choir. For a relatively small output, financial contributions vary, the benefits are ten fold. Contributions are generally backed up with involvement from a key member of staff.

This serves to raise the profile of LLW Repository in a positive light, showing the community that the site is serious about integration in community matters.



We have also introduced or enhanced a number of measures to reduce detrimental impact on the local community from LLW Repository operations. This particularly relates to heavy goods vehicle movements and traffic management issues. A recent consignment of wide loads from B38 decommissioning activities were transported through the village without undue impact on community life.

## Open House

**In the spirit of openness and transparency, the LLW Repository opens its gates.**

The LLW Repository recently opened its gates to the local community; over 100 residents of Drigg and Carleton Parish visited the site to meet key members of staff and tour the site, specifically Vault 8 and the Vault 9 construction area.

The tour was followed by a short introductory presentation supplying the context for past, present and future operations and providing an opportunity for the community to discuss or express any issues or concerns they had.

The 'open days' were considered a huge success by all involved. They not only allowed the community to air concerns they afforded LLW Repository the opportunity to showcase LLW operations and Vault 9 construction activities. The resounding message from the community was that they were totally unaware of the sheer scale of construction activities on the site – a testament to all involved!

# Quarterly Site Newsletter

1<sup>st</sup> Quarter 2009

LLW Repository News

## Major NDA Risk Eliminated

**Birse Nuclear and the LLW Repository Vault 9 Project Team formally handed over the first section of Vault 9 to the LLW Operations Team on 21<sup>st</sup> July 2009.**

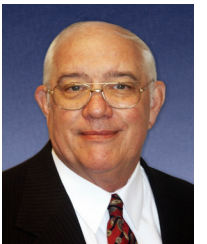
This is a tremendous success for the project and the LLW Repository site as a whole, and provides the solution to the short term capacity gap for the storage of the UK's LLW.

Since the award of the contract a major logistical exercise has been underway. The transportation by rail of 65,300te of sand and 10,300te of drainage stone has seen the necessity for the construction of a temporary off site rail loading facility south of the site near Millom, Cumbria. Other construction materials, such as steel reinforcement and drainage pipes, as well as concrete aggregate (to produce 4,800m<sup>3</sup> of concrete), have been transported to the Port of Workington by road and into the LLW Repository site by rail.

Quality control of the construction work, in particular the basal liner system has been a high priority for the team to ensure that the Environment Agency (EA) is satisfied that the vault is suitable for disposal in future years. Construction is forecasted to be completed later this financial year.



## Director's Corner



What a quarter!!! Major advances on many fronts are reviewed in this new newsletter. Leading the list in importance is the 21<sup>st</sup> July transfer of the "early storage pad" at Vault 9. This pad provides the needed space to avoid the near-term capacity gap that has been so worrisome across the entire NDA estate. It took a lot of hard work by the Birse Nuclear team and our LLWR team to successfully steer through the many challenges to this flexible solution. Success has many parents and this one does also - well done to all involved.

Similarly, the NDA, with great assistance from our National Strategy team, were able to address a major national milestone to issue the UK Strategy for the Management of Solid Low Level Radioactive Waste. The Strategy was issued for consultation on 5<sup>th</sup> June and represents more than a year's effort to develop an optimised LLW management scheme.

Many other projects are moving along nicely and these include the PCM Decommissioning, Environmental Safety Case development and, of course, our primary mission of disposing of LLW in vault 8. All of this has been done with a near-perfect safety record. More, much more to follow in the next quarter when we should have our first metal re-cycling effort underway.

Dick Raaz

### Contents

- Front Page. Director's Corner
- Major NDA Risk Eliminated
- Page 2. . . . National LLW Strategy
- ESC Supports Future Operations
- Page 3. . . . LLWR Triples Capacity to Support its Consignors
- Leading by Example
- Page 4. . . . Community Involvement
- Open House
- Milestone Summary

Milestone Description	FY 2009-10												FY 2010-11		
	1 <sup>st</sup> Quarter			2 <sup>nd</sup> Quarter			3 <sup>rd</sup> Quarter			4 <sup>th</sup> Quarter			1 <sup>st</sup> Quarter		
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
<b>Vault 9:</b>															
1. Vault 9 partial completion and handover of 300m <sup>2</sup> .	Complete 21 <sup>st</sup> July														
2. Completion of Vault 9 and project closeout.	[Gantt bar ending in July 2010]														
<b>National LLW Strategy:</b>															
3. Comment resolution and submittal of the final development operational strategy.	[Gantt bar ending in March 2010]														
4. MS4 Delivery of Rev. 1 UK LLW National Management Plan.	[Gantt bar ending in Dec 2009]														
5. Incorporate draft review comments & submit Final Outline Business Case for National LLW Strategy	[Gantt bar ending in Dec 2009]														
<b>Environmental Safety Case:</b>															
6. Submission to EA against Schedule 9 Requirement 1.	Complete 31 <sup>st</sup> March														
7. Submission to EA against Schedule 9 Requirement 3.	Complete 31 <sup>st</sup> April														
8. Complete review of impacts on ESC of Waste Treatment and Packaging Innovations.	Complete 8 <sup>th</sup> June														
9. Hydrogeological boreholes.	[Gantt bar ending in Sept 2009]														
10. Final issue of report on hydrogeological modelling work.	[Gantt bar ending in Dec 2009]														
<b>Consignor Support:</b>															
11. EA Authorisation for Metal Treatment	Complete 24 <sup>th</sup> July														
12. First shipment of metal for treatment	[Gantt bar ending in July 2010]														
13. ITT for combustible waste	[Gantt bar ending in July 2010]														
14. Re-usable HHISO containers Approved	[Gantt bar ending in July 2010]														
15. Implementation of New Consignor Contracts.	[Gantt bar ending in July 2010]														
<b>PCM Decommissioning:</b>															
16. Complete gross decontamination Magazine 4	[Gantt bar ending in Dec 2009]														
17. Complete gross decontamination Magazine 9	[Gantt bar ending in Dec 2009]														

Data Date  
24<sup>th</sup> July

## National LLW Strategy

The 'UK Nuclear Industry LLW Strategy' Consultation Document was issued on 5<sup>th</sup> June 2009 by the NDA.

This important deliverable represents nearly two years of significant efforts toward the development of an integrated LLW management programme in the UK. The consultation document sets out the proposed strategy for the management of solid LLW arisings from the nuclear industry in the UK, in response to government policy published in March 2007. The strategy will undergo a 14-week formal consultation period and revision by NDA before submittal to Government by the end of the year.



### National LLW Strategy Documents

- Strategic Review Document
- Topical Strategies for LLW Management
- National LLW Management Plan
- Strategic Best Practicable Environmental Options
- Strategic Business Cases
- LLWR Operational Strategy
- Strategic Technical Briefs
- Risk Assessment of UK LLW Strategy

The proposed strategy will provide continued capability and capacity for the safe, secure, and environmentally-responsible management and disposal of LLW in the UK for both the nuclear and non-nuclear industries through:

- Application of the Waste Management Hierarchy, with emphasis on waste avoidance, re-use/recycle, and minimisation
- Best use of existing facilities, working more efficiently and potentially extending the life of the LLW Repository as a national asset
- Development and use of new fit-for-purpose management and disposal routes for greater flexibility and options in LLW management for waste producers

In partnership with NDA, the LLW Repository National Strategy Team developed numerous strategic technical documents, option studies and reviews, and plans to inform the emerging LLW strategy and underpin the potential benefits of waste management options to the NDA for strategy development and implementation.

## ESC Supports Future Operations

The Environmental Safety Case (ESC) Project entered a new phase this quarter. The final development work is underway, prior to undertaking the final assessment calculations and producing the 2011 ESC submission. To date, we have focused on developing specifications for new activities and procuring the necessary work.

Three submissions were made by the required date to the EA, against items on Schedule 9 of the LLW Repository's Authorisation. (The fourth submission due was delivered early, in the previous quarter.)

Discussions with the EA continued on two important issues: the human intrusion cases that the EA wish to see used in the ESC; and their approach to regulating the impacts of wastes that are chemo-toxic as well as radioactive. Resolution is expected next quarter. Feedback from the EA to date has been positive indicating that "The Team is moving in the right direction".

An interim assessment has been completed of the effects of innovations in LLW treatment and packaging on the ESC. It did not identify any impacts suggesting that any of the innovations would be inconsistent with the development of a satisfactory ESC.

### Key Messages

- UK Nuclear Industry LLW Strategy Consultation Document issued on 5<sup>th</sup> June 2009 by the NDA.
- 'LLW 2009' hosted at the Rheged Centre on 22<sup>nd</sup> April.
- Completion of concrete slab construction of Vault 9 partial handover area, 29<sup>th</sup> June 2009.
- Schedule 9, Requirement 1 submitted to EA on 31<sup>st</sup> March 2009. Requirement 3 submitted to EA on 31<sup>st</sup> April 2009.
- Assessment of impact of innovations on ESC completed 8<sup>th</sup> June 2009.

## LLWR Triples Capacity to Support Consignors

The Enhanced Consignor Support Department is now staffed to deliver a full spectrum of Waste Management Services through our existing Customer Contracts.

Significant local recruiting efforts have added twelve employees to the existing core group. The group now consists of service development, service delivery, and service assurance. Waste Management Services include compaction, direct disposal, containers, metal recycling,

combustible and alternate disposal services, transport and logistics, characterisation, and waste forecast and inventory.

LLWR modified customer contracts in October 2008 to introduce Segregated Waste Services consisting of Metal Recycling, Combustible, and Very Low Level Waste. To support implementation of this initiative, EA used a blanket change process to the consignor authorisations.

The Segregated Waste Services programme and the Metal Recycling Service project are progressing through sanctioning. To date we have received 22 requests for the metal recycling service.

The commercial and technical team have been strengthened to improve customer support. We have increased our communication efforts with an enhanced web site, annual LLWR forum, and attendance at customer sites and forums.

The Customer Contracts are being revised to improve guidance on characterisation and to facilitate introduction of the new Waste Management Services.

The LLWR continues to work with Magnox and Sellafield on key improvement

initiatives for characterisation, inventory, and waste tracking. The waste forecasting and inventory initiative is in the process of being aligned with the NDA Inventory improvements.

A Waste Assurance Strategy was submitted to EA for approval. This will improve the independent monitoring of LLW consignments and help reduce the "phantom" activity.



### Key Messages

- Enhanced Consignor Support Organisation in place to provide full spectrum of Waste Management Services to the NDA estate.
- 22 requests for the Metal Recycling Service received to date.
- Changes made to EA Authorisations to facilitate Segregated Waste Services.
- Waste Assurance Strategy presented to EA.
- Waste forecasting and inventory improvement project initiated with NDA.
- Significant improvements to Customer support and communications.
- Waste hierarchy implemented at the LLW Repository with 1400 bricks and a 5te concrete block characterised as LLW.

## Leading by Example

The Plutonium Contaminated Material (PCM) Decommissioning team has focused this past quarter on waste characterisation and initial decommissioning.

Waste sampling and waste stream characterisation documents have been completed for some 1,400 bricks and a 5te concrete block classifying them as LLW instead of PCM waste. This allows disposal as LLW in Vault 8 nooks rather than storage as Intermediate Level Waste in Sellafield PCM Stores, thus implementing the waste hierarchy. Sampling plans have been completed for characterising the bituminous flooring in the magazines as LLW with sampling scheduled to start in the next quarter. A task has been initiated for metal treatment of over 400 LLW empty drums from previous PCM operations. The drums are scheduled to be loaded into re-certified Half Height ISO transport packages and shipped by rail to Studsvik in Workington during the next quarter for metal recycling.

Initial decommissioning continues with gross cleanup in Magazines 4, 9 and 10. Gross decontamination and radiological monitoring is scheduled to complete in Magazines 4 and 9 this winter ready for interim decommissioning to start removing the fixed contamination.



### Low Level Waste Repository Site

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