

**Harwell-Chilton Campus Local Stakeholder Group
Minutes of the 56th Meeting held at the HPA Training Centre
on Thursday 20th July 2006 at 7pm**

Present:

<u>Chairman:</u>	Cllr Terry Fraser (VWHDC)
<u>Secretary:</u>	Nick Hance MBE
Malcolm Andrew	AEAT Trade Unions
Natalie Bealing	CCLRC Rutherford Appleton Laboratory
Isabelle Boscaro-Clark	Diamond Light Source Ltd
Cllr Mike Brown	Upton Parish Council
Anne-Marie Coriat	Medical Research Council
John Cooper	Healthy Protection Agency - RPD
Stephen Druce	Chilton School Governors
Cllr Sarah Eccles	Sutton Courtenay Parish Council
Dick Francis	Nuclear Decommissioning Authority
Terry Garrett	Chilton Parish Council
Debbie Greenfield	CCLRC – Rutherford Appleton Laboratory
Terry Joslin	Didcot Chamber of Commerce
Tom Kyffin	UKAEA
Tony Ganner	Environment Agency
Ch/Insp. Richard Murray	Civil Nuclear Constabulary
Margaret Palling	Oxon Federation of Women's Institutes
Mike Parker	RWE NUKEM
Cllr Dave Pearce	Chilton Parish Council
David Pryor	Didcot Chamber of Commerce
Cllr John Sharp	East Hendred Parish Council
Kathleen Stevenson	UKAEA
Bill Temple	Steventon Parish Council
Jayne Thomas	Medical Research Council
David Trotman	West Hendred Parish Council
Cllr Margaret Turner	Harwell Parish Council
Tony Walker	Nuclear Installations Inspectorate
John Wilkins	UKAEA – Head of Harwell Site
Tim Williams	Vale of White Horse District Council

VISITORS

Graeme Stonell	UKAEA
Angela Vincent	UKAEA
Denise Varley	UKAEA
Alan Neal	UKAEA, Head of Site for Winfrith
David Collier	Falkland Associates
Ken Messer	Local resident
Dilys Messer	Local resident
Wendy Macleod-Gilford	Local resident
Christine Dunsdon	Headteacher, Chilton School

A total of 39 people were present

A tour of the Harwell nuclear licensed site and presentation by John Wilkins was arranged prior to the meeting.

A G E N D A

1. Chairman's remarks, apologies for absence and changes in membership
2. Minutes of the 55th Meeting held on 24th March 2006
3. Matters arising:
 - a) Update on Harwell HVLA consultation
 - b) Update on progress of the Site Lifetime Plan
4. UKAEA Licensed Site Matters
 - a) Annual Report on Safety
 - b) Annual Environmental Report
 - c) Site End State Consultation – LSG Working Group recommendations
 - d) Head of Harwell Site's Report
5. Reports
 - a) Nuclear Decommissioning Authority
 - b) HM Nuclear Installations Inspectorate
 - c) Environment Agency
6. Campus matters
 - a) Presentation by MRC
 - b) CCLRC Rutherford Appleton Laboratory
 - c) Diamond Light Source Ltd.
 - d) Campus Development
7. Any other business
8. Date of next meeting

1. Chairman's remarks, apologies for absence and changes in membership

a) The Chairman welcomed visitors and local residents to the meeting and thanked Angela Vincent for organising the pre-meeting tour of the Harwell licensed site. He introduced Alan Neal, UKAEA's Head of Site at Winfrith, and Head of Cluster-designate for the Harwell and Winfrith sites.

He asked the committee to stand for a minute's silence, in memory of Mike Brewin, the RWE NUKEM representative, who had recently been killed in a traffic accident.

b) The Secretary reported that the following members had sent their apologies:

Chris Kemp	NII (GE Healthcare inspector)
Ed Vaizey	MP for Wantage
Cllr Richard Stone	Vale of White Horse District Council
Liz Kitchener	CCLRC (RAL)
Richard Birch	RWE NUKEM
Steve Moss	UKAEA – campus development
Debbie Fisher	UKAEA Trade Unions
Graham Broadley	Wantage Chamber of Trade
Ed Eyston	Hendred Estate
Cllr Julie Mayhew-Archer	Chair - Vale of White Horse District Council

2. Minutes of the 55th Meeting held on 24th March 2006

The Minutes of the 54th Meeting were accepted without amendment.

3. Matters arising:

a) Update on Harwell HVLA consultation

Paul Atyeo reported on the consultation process to explore options with stakeholders using a Best Practicable Environmental Option (BPEO) framework for the category of Harwell's Low Level Waste - labelled as HVLA waste. From the responses so far received, he had compiled the First Written Consultation report, and the Second report would be due at the end of August 2006. He explained the process being followed.

- i) There were 24 'Attributes' that included radiological risks, industrial risks, air-water-land quality, transport, nuisances, impacts and costs.
- ii) He had compiled a 'score' for each attribute based on the rankings supplied by stakeholders. This showed that the most important attribute was 'Technical Feasibility' followed by 'Transport'. The least important attribute was 'Security' but all fell within the Mean Score levels of 3.92 (ranked 1) down to 2.63 (ranked 14).
- iii) He had ranked the Total Raw (unweighted) Scores showing that the preferred disposal option was ON2 (new engineered disposal onsite) with a score of 93 out of 120. The next options were: ON3 (as for ON2 but with a preceding storage period) with a score of 88 and ON4 (re-engineering of the existing on site disposal at the Meashill Facility) with a score of 87. With the same score (87) was OFF3 – Landfill disposal offsite to existing landfill. The least popular choice, with a score of 59, was OFF9 – indefinite storage in new above ground buildings/facilities off site.
- iv) The consultation showed that, subject to public consultation and national LLW consultation, then the Preliminary Recommendation was Option ON2 – New engineered disposal onsite – near surface. This had shown no significant weaknesses and was preferred by most stakeholders using their attribute preference markings.
- v) The possible location for ON2 would be just to the south of the Meashill Trenches; but this would be subject to the Radioactive Substances Act (RSA), planning consent, underpinning studies and a demonstration of an adequate environmental risk assessment.
- vi) The next steps would be a 12-week public consultation, publishing comments and a Final Report. This would be followed by detailed design, obtaining approvals, construction of disposal facility and followed by a post-operational period of monitoring and long term stewardship.

Mr Atyeo displayed pictures of a similar, but much larger facility, in France. He said that it was not yet too late to register as a stakeholder, who could then email him on: paul.atyeho@ukaea.org.uk if there were any further comments.

In the Q&A session, the following points were raised:

- The HVLA Facility would probably lie within East Hendred Parish. The Parish Council had concerns about the possible lifetime of the buried nuclides. It was confirmed that the inventory would include both medium half-life (less than 30 years) and long half-life radionuclides such that the facility should be considered a permanent disposal.

- It was unlikely that the existence of an HVLA Facility onsite would deter new companies from locating onto other parts of the site.
- The Facility would be designed to deal with Harwell's HVLA only and, because of transport issues, there was no immediate prospect of it becoming a national facility.
- The minimum required authorisations arose as a consequence of the Radioactive Substances Act and the Facility would require ongoing monitoring.
- The Facility would be constructed in a chalk stratum but properly engineered to minimise migration of any buried wastes.
- All wastes in the Facility would be recoverable at any time in the future.

Tony Ganner (Environment Agency) undertook to provide members with a paper describing the regulatory process for such a site. *(Action: Tony Ganner)*

b) Update on progress of the Harwell Site Lifetime Plan

Tom Kyffin gave an interim report on the preparation of the Site Lifetime Plan (or Lifecycle Baseline, LCBL), due to be issued in March 2007. The intention is to submit an accelerated decommissioning plan.

Strategy

- Most of Harwell's decommissioning work is to be completed by 2016, with all radioactive waste to be held in a 'passive state'.
- Plutonium contaminated wastes sent to BNFL Sellafield and other ILW (ie. requiring shielding), to be held in interim storage on site.
- All nuclear facilities, including the reactors, to be decommissioned and most of the site delicensed.
- The final phase includes transfer of remaining ILW off site when a route becomes available (assumed to be 2017).
- Empty the waste stores, demolish them and the whole Harwell nuclear site delicensed by 2025.

Mr Kyffin expanded on key parts of the Plan:

B462 Area

- ILW will be retrieved from the old 'tube' stores, repackaged and put into the Vault Store by 2016.
- Three new buildings are to be constructed adjacent to the existing Vault Store, and are: a) a Waste Encapsulation Plant for putting cement grout into the ILW waste transferred to the Nirex drums (Stainless steel, 500 litres each). This building is currently under construction. b) A Box Store for holding ILW produced during the decommissioning of the remaining three reactors and c) an Export Facility for repackaging waste drums into transport containers.

B459 and B220

- Some ILW will be treated and repacked in these buildings using the nuclear facilities already available there.
- B459 active handling building will be decommissioned by 2014.
- B220 will be decommissioned by 2016.

Reactors – DIDO, PLUTO and BEPO

- The Materials Testing Reactors (DIDO & PLUTO) and the BEPO reactor in H10 will be decommissioned by 2016 and the ILW stored at Harwell as an interim measure.

Liquid Effluent Treatment Plant (LETP)

- Levels of radioactive liquids and trade wastes arising at Harwell continue to decline, (currently around 20,000 cubic metres per year,) and efforts to reduce these amounts at source will continue.
- The LETP is scheduled to close in 2011 and its buildings and land remediated by 2016.

Other wastes

- For planning purposes it is assumed that High Volume Low Activity (HVLA) wastes, consisting mostly of very lightly contaminated building rubble, will remain on site.
- All other buildings will be decommissioned and demolished by 2014.

Delicensing

- The Eastern Area (formerly occupied by H7&H8, GLEEP and the Tandem Accelerator building) is to be delicensed during 2006.
- Approximately half the site to be delicensed (westwards as far as H10) to be delicensed in 2008.
- The remainder of the site, with the exception of the B462 Area to be delicensed by 2016.
- The final phase of work will be to transfer the remaining ILW off site, decommission the ILW Stores and survey and delicense the B462 complex by 2025.
- The WSA groundwater plant is currently being replaced and the new plant will close in 2025 or sooner.

In response to questions about traffic arising from ILW shipments off site, the lifetime of the groundwater treatment plant, the possible date of a National Repository for ILW and JET decommissioning, Mr Kyffin said:

- Plutonium-contaminated shipments to Sellafield would amount to two shipments per week in addition to the 20 to 30 shipments per year of LLW to Drigg.
- Site redevelopment could generate much more traffic than decommissioning.
- The timescale for the groundwater clean-up programme depends on quantifying the environmental benefits and agreeing with the Environment Agency about balancing environmental advantages of continuing to pump and treat or switching off the plant. Consequently the end-date of 2025 can only be an assumption at this stage.
- The date of the National Repository was outside the control of UKAEA, but Harwell was developing plans for the storage of reactor decommissioning wastes in a box store. These boxes incorporated adequate concrete shielding and would be easy to move to a National Repository in due course.
- Harwell is not currently planning to store ILW arising from the decommissioning of the JET facility at Culham but this had been the plan up to a few years ago. Option studies were being carried out to decide where and how JET wastes would be stored and ultimately disposed of.

4. UKAEA Licensed Site Matters

a) Safety Report for 2005-06

Kathleen Stevenson presented the report, copies of which had been sent to members.

Key Developments

UKAEA was the holder of the nuclear site licence at Harwell, and responsible for all nuclear safety issues within the site arising from work being carried out by UKAEA, staff, contractors and tenants.

- A new style Safety, Health and Environment (SHE) improvement plan, including behavioural safety and cultural issues has been implemented
- RoSPA has awarded UKAEA a Gold Medal for its safety performance in 2005
- An external audit of the International Safety Rating System (ISRS) confirmed a Level 7 award, as per previous year.
- Actions arising from the Harwell Site Wide Periodic Safety Assessment, carried out by the NII, have been completed satisfactorily.
- The certifications (ISO 9001:2000 and ISO 14001:1996) were maintained.

Radiological Safety

Detailed information was contained within Appendix (Tables 1-5) of the Report and the main findings were:

- All doses were well within the legal limit of 20mSv.
- The maximum work-related dose received by any radiation worker had been reduced to 2.32mSv and was in line with decreasing levels over the previous three years. This level might increase in future if decommissioning was to be significantly accelerated, but all work had to be ALARP (As Low As Reasonably Practicable).
- The average dose for all radiation workers was reduced from 0.20mSv to 0.13mSv .
- There had been no significant contamination problems from routine surveys and there had been one contamination incident, the consequences of which had been solely confined within the laboratory building.

Accidents and Incidents

- The number of unusual occurrences (UNORS) had risen from 1233 to 1371, but still within the range measured since 2000/2001. Reporting of minor occurrences is an indicator of a good safety culture. The number of 'reportable events' was low (4) when compared with the previous year's number (10).
- Reportable Lost Time Accidents (resulting in the worker being off work for 3 days or more) was three out of the seven Lost Time Accidents in the year. This was in line with previous years but down on 2004/2005.
- Lost Time Accidents had resulted in 39 days lost, which was well down on the 98 lost days in 2004/2005 and the same as for the year before that.
- The four significant 'events' included a) a contractor who had injured his hand while removing a motor from a roller shutter door, b) a contractor who had cut his arm on a broken window pane, c) An office worker sustained an injury whilst moving a filing cabinet
- During routine maintenance of a cell-face manipulator the manipulator slipped during its removal.

- Failure of an electrical capacitor caused a small fire that was promptly dealt with.
- There had been a small release of contamination during manipulator maintenance which was confined to the laboratory.

Emergency Planning

- A major site exercise was held in October 2005
- A successful Counter-Terrorist exercise was carried out in June 2005.

In conclusion Mrs Stevenson said that radiation doses had been reduced and there had been an increase in the number of UNORs, indicating a positive safety culture within the workforce. The number of actual safety-related events and Lost Time Accidents had fallen. Harwell's emergency arrangements had been thoroughly tested during the year.

In response to questions it was confirmed that while staff numbers had declined, the number of contractors had increased but overall the numbers working had remained constant for a number of years. To show a rate for occurrence of safety incidents the number of events per 100,000 man-hours worked could be included in future, for the years where this data had been collated. In response to a question about the effect of a grid-lock on the A34, she said that this had been taken into account and problems on the A34 wouldn't prevent Harwell maintaining control over the emergencies that could happen on site.

b) Annual Environment Report

Graeme Stonell presented the report:

Disposal of Radioactive Waste and Assessment standards

Graeme said that the format of the annual discharges report had changed but more details of particular discharges were available on request.

- All waste disposals were controlled by the Radioactive Substances Act 1993 authorisations, which were regulated by the Environment Agency.
- Authorisations under the 1993 Act had been granted on 1st May 2003 and lower limits brought in for the site. The authorisations covered radioactive discharges in the forms of liquids and gases and transfers of waste to other sites. Discharge limits were lower than before this date.
- The assessment standards had legally been set to control the Public Dose Limit to less than 1000 μ Sv (micro-Sieverts) per year but that the total discharge from any one site should not exceed 500 μ v per year. These limits were in addition to the average public dose, as a result of natural radiation (cosmic-rays, radon from the ground, etc), which was 2,200 μ Sv a year.

Annual discharges from the Harwell site

- Annual discharges of alpha particles, beta particles and tritium gas, to the atmosphere, were well below the May 2003 authorised limits.
- Discharges of alpha, beta and tritium to the River Thames were well below limits.
- Annual discharges of alpha, beta and tritium to the Lydebank Brook were well below limits.

Environmental monitoring programmes

- It was a statutory requirement of RSA93 that Harwell conducted local environmental sampling to check the effects of its discharges to the environment. These included sampling the air, local waterways and local produce, such as milk.
- The EA and Food Standards Agency (FSA) conducted their own independent surveys and reported on these to the LSG annually.
- Analyses of these samples were computed in terms of the Generalised Derived Limits (GDLs), based on an annual exposure of the general limit for a member of the public (ie 1000 μSv per year). Provided these were less than 10% of GDL, then no further investigation was required.
- Monitoring locations were extensively on and just outside the Harwell campus and extended out to Sutton Courtenay and some of the other neighbouring villages and farms. Sampling included air, rainwater, soil and vegetation, especially around the discharge points to the Brook and River Thames.
- Analyses showed that concentrations of strontium-90 in milk were a very small fraction of the 'derived' limit, and amounts of plutonium in air were at the limits of detection.
- Doses likely to arise in air, milk and vegetables, from atmospheric discharges were less than 0.1% GDL. Doses likely to arise from liquid discharges in river water, sediments, fish and groundwater varied between 1% and 5% GDL. Harwell's 'critical group' – that is the group likely to get the highest dose by virtue of their lifestyle and geographical position in relation to Harwell – would not have exceeded 20 μSv .
- Harwell doses placed in context: for instance eating a 100 grams of brazil nuts would give rise to a dose of 5 μSv , the dose to a passenger making one return airline flight to the USA per year gave 50 μSv (c.f. airline crews getting 3,000 $\mu\text{Sv}/\text{year}$) and the average natural background in Cornwall being 7,500 μSv . The average natural background around Harwell was 2,000 μSv and was slightly less than the UK average.

Non-radiological wastes

- UKAEA had successfully resolved with the EA an issue about algal "blooms" in effluent tanks.
- Over 6 tonnes of waste was disposed of and of this almost half had been recycled, re-used or recovered.

Environmental Objectives

UKAEA set environmental objectives on an annual basis.

- A total of 17 objectives had been set for 2005-6
- Examples of these included:
 - Improving the waste recycling arrangements on site by 10%
 - Decommissioning 600 metres of drainage pipes and associated manhole covers.
 - Completion of the soil vapour venting trials in the near surface region of the recently remediated Western Storage Area chemical pits.
- 100% of the environmental objectives had been achieved.

Dr Stonell concluded that all Harwell's radioactive discharges were well within the authorised limits and that doses to the public were below 20 μSv per year.

Environmental monitoring had confirmed the low impact of the discharges and all UKAEA's environmental objectives had been met.

Dr Stonell responded to questions. He explained that the sophisticated mathematical modelling, that computed doses from discharges, took into account any extra gamma dose acquired by flying in aircraft when computing the dose when working on site. Detailed borehole analyses data were available in other reports on request.

c) Site End State Consultation – LSG Working Group recommendations

The Chairman, Cllr Terry Fraser reported on the discussions of the Working Group:

The Working Group had met twice since the March LSG Meeting and explored possible End-State options for Harwell's licensed nuclear site. It had fully considered the Information Pack, as provided at the March LSG meeting, and associated documents from the NDA, and also the documents associated with UKAEA's HVLA consultation. The WP members initially stated the option choices, as they understood them, from their constituencies¹ and also considered the option choices from individual responses received by the Secretary. The WP met with UKAEA managers and the local NDA representative on 7th July and clarified a number of points.

Published NDA Strategy for Harwell:

'Land will be delicensed when clean-up is complete and released for redevelopment for science, technology and innovation uses as part of the campus.

"There are a number of key milestones, which includes the Eastern Area of the site restored (2006), liquid effluent discharges to the Thames will cease (2010), B462 waste stores RHILW operations completed (2015), Liquid Effluent treatment plant remediated (2016), B459 active handling facility decommissioned (2017, B220 radiochemistry facility decommissioned (2020), the remaining reactors completely decommissioned (2022) and the final designated site clearance by 2025'.

(NDA Strategy document p.103 (Harwell))

END STATE and the Future Use of the Land

'End-state equates to the quality of land, buildings and structures left behind when the NDA has completed the clean-up programme. Deciding on the 'end-state' is not the same as deciding on the future use of the land but the two issues are closely related. The end-state allows the site to be delicensed and used for any reasonably foreseeable purpose. Different end-states are possible for different parts. The NDA's clean-up plan provides for decommissioning and the achievement of an end-state consistent with the vision and future development plans.'

(Extracts from:- Harwell Designated Site: End-State consultation with the local stakeholder group – March 2006 (Information pack) Section 4)

In response to the points raised in discussion, the UKAEA and NDA explained:

- Local stakeholders needed to understand the difference between a 'nuclear licence' and other regulations applicable to regulating radioactivity. The

¹ Includes: County, District & Parish Councils and local interest groups - Chambers of Commerce, Trade unions and WI.

Ionising Radiations Regulations also applied to hospitals, universities and laboratories.

- UKAEA had no intention of attracting new tenants who would require a nuclear licence, but future tenants might need other regulatory ‘licences’.
- The LSG had to concentrate on the ‘End State’ (of the licensed nuclear land inside the secured site of Harwell), as specified by the NDA and not confuse this with other campus redevelopment plans outside the NDA’s remit.
- All concerned organisations had agreed that the Harwell Campus, as a whole, was designated as a science and technology business centre of national importance.
- The LSG could put forward any views it wished about the End State but it should recognise that other bodies (eg HMG) also had their views.
- The Oxfordshire infrastructure (eg roads) would need improvements to support campus development, but what was there (today) was deemed adequate for the decommissioning of the Harwell licensed nuclear site.
- GE Healthcare was not part of the NDA’s remit, but the LSG was aware that GE was decommissioning its nuclear licensed sites at Harwell and was likely to leave before the End State was due to be completed in 2025.
- The NDA was not concerned with the eventual decommissioning of the ISIS and Diamond facilities, and it was expected the facilities would remain in use for many years.
- A faster decommissioning time could be achieved but this would mean more decommissioning work (more traffic?) to be done in the earlier years. The NDA had its national priorities (eg High Level Wastes at Sellafield) but it too had indicated it favoured an accelerated clean-up of the Harwell-Winfrith cluster. The outcome would depend on national funding priorities.
- The LSG might wish to write to the NII Inspectors about their concern over the limited progress on delicensing, although it is understood that the first phase of delicensing (Pilot Area) would be approved shortly.
- NDA strategy was required to be reviewed every five years, but it was likely to be reviewed earlier as there were concurrent important national issues. (CoRWM findings, nuclear sell-offs, new nuclear power station build etc).
- The NDA was considering extending the period of consultation on ‘End State’ to 31st March 2007. (*Sec’s note: This was confirmed by the NDA at the 20th July LSG meeting*)

The WG was also appraised by Paul Atyeo of progress in the High Volume Low Activity consultation, details of which would be given to the LSG at its 20th July meeting. This was likely to conclude that there could be a permanent store of HVLA on site but was still under review. (*Sec’s note: This was reported at the 20th July LSG meeting*).

The WG recognised that LSG members needed to confer with their constituency organisations to obtain a wider view on the end-state.

The WG summarised its options as being mainly Option 3 “Full Clean Up” but opted for a slightly accelerated programme time scale of 2020.

Recommended End State for Harwell licensed nuclear site:

The WP recommends that the LSG's choice should be for 100% clean up with all nuclear wastes removed off site by 2020. No licensed nuclear businesses to be on site and no need for NII involvement after this date.

Depending on the outcome of the consultations on High Volume Low Activity (HVLA) wastes, there may be a need to be a store for such wastes remaining on site.

The Chairman invited all the LSG members to discuss the option as given. In the discussion members supported Option 3 but pointed out that the second paragraph on HVLA was incompatible with its main recommendation. It was agreed that the Working Group would meet again to resolve this point.

d) Head of Harwell Site's Report (July 2006)

Dr John Wilkins, UKAEA Head of Site for Harwell gave his report:

Safety & Environment

- There was a lost time accident when two members of staff were unwell after they were exposed to chemical odours in a laboratory. Improvements to the ventilation and arrangements for handling chemicals had been put in place.
- UKAEA would be carrying out a BPEO (Best Practicable Environmental Option) study on the management of both radioactive and non-radioactive wastes generated as part of the site restoration programme. The study would involve consultation with a range of stakeholders and more information would be issued to the LSG.
- The annual site demonstration site emergency exercise would be held on 8 November. It was expected that as part of the exercise the site klaxons would be sounded. A satisfactory Level 2 emergency exercise was held in June in conjunction with Thames Valley Police and the regulators.

Decommissioning and Waste Management Programme

- Construction work had started on the new plant for cementation of intermediate level waste held in store on the site.
- The foundations had been put in place for the new groundwater plant on the Western Storage Area. The plant was expected to be in operation by April 2007. Cementation of low activity waste recovered from the Western Storage Area was underway.
- Recovery of stored intermediate level waste and repacking into 500l stainless steel drums had continued.
- Demolition of a number of former office buildings off Curie Avenue previously used by AEA Technology and the Energy Technology Support Unit was scheduled to start around September 2006.
- A planning application was due to be submitted in the near future for a new Police Control Centre near the former reactor area of the site. This is part of the preparations for moving the site security fence and the release of the Eastern Area of the site.
- A number of expressions of interest had been received regarding the restored land in All Saints Lane, Sutton Courtenay and discussions are underway.

UKAEA Matters

The current UKAEA CEO Dipesh Shah had announced that he would not be seeking a new contract with UKAEA when his present contract expired in November 2006. Advertisements had recently been placed for a replacement.

UKAEA Restructuring

Background

The Energy Act of 2004 brought about the formation of the Nuclear Decommissioning Authority (NDA) to take responsibility for site restoration on UKAEA and BNFL (BNG) sites. As a consequence UKAEA was now a contractor to NDA, in respect of the Harwell site restoration programme. It is well understood that NDA plans 'to compete' the management of its nuclear sites and that competition for Harwell and Winfrith had been scheduled for 2009.

What is Needed for Competition?

It would be necessary to set up of Site Licensee Company, which would hold the NII site licence and EA authorisations for radioactive discharges. Most of current UKAEA staff would form part of the licensee company.

Current Position

The advent of site competition meant that "no change" was not an option for UKAEA and it was in the process of restructuring in line with a strategic review. This meant that UKAEA was being split into Site Licensee Companies (SLCs), a continuing Non Departmental Public Body (NDPB) and UKAEA Ltd to exploit commercial activities.

Site Licensee Companies(SLCs)

SLCs were being set up for Harwell/Winfrith, Windscale and Dounreay, and would come into being in 2007/08, subject to regulatory approval. Here the SLC would employ most of current Harwell site team and Alan Neal would have overall managerial responsibility for the Harwell and Winfrith sites. John Wilkins would continue as Head of Site for Harwell.

Ongoing NDPB

The Non-Departmental Public Body would be responsible for Fusion research and the JET programme at Culham. It would take on the ownership of Harwell Records & Archives and manage the non-designated land at Harwell. It would be the lead organisation in setting up the Joint Venture for Harwell Science & Innovation Campus. Steve Moss will manage UKAEA's non-designated site at Harwell from October 2006.

UKAEA Ltd (NewCo)

–It was proposed to set up new company with staff forming the Tier 1 contractor team with specialist technical, project management and consultancy services. 'NewCo' would be in partnership with companies AMEC and CH2M Hill to bid for new business in the UK and overseas. It would be bidding for Tier 1 contracts on its own sites and other sites.

Overview

All components of UKAEA (NDPB, site licensee companies, UKAEA Ltd) remain part of UKAEA for the present. There would be some changes to UKAEA "HQ" teams but no major changes to site restoration teams until site competition.

The Committee noted John Wilkins' report.

5. Reports

a) Nuclear Decommissioning Authority

Dick Francis, the NDA Harwell Site Programme Manager gave his report:

General update

On 30 March 2006, the Secretary of State for Trade and Industry and Scottish Ministers approved the Nuclear Decommissioning Authority's (NDA's) Strategy, which set out for the first time how the UK would tackle the clean-up of its historic nuclear facilities.

The NDA published the 1st edition of its stakeholder magazine *Dialogue*, following the Special Edition covering the NDA's Strategy. The magazine is published on a quarterly basis both as an electronic document accessed through the NDA website (www.nda.gov.uk) and was also available in hard copy. Readers are invited to comment on the articles and submit ideas for articles they would like to see covered in future editions. Contact Richard Flynn on 01925 802075 email richard.flynn@nda.gov.uk

The NDA Strategy and the Harwell Chilton Campus

Within the NDA Strategy entry for Harwell, the Campus is summarised as follows: The Campus, of which the designated site forms a part, is home to a wide range of research organisations and businesses. The NDA had responsibility for 110 hectares of land – approximately one-third of the total campus area. The nuclear site licence was held by UKAEA. Land would be delicensed when clean-up was completed and released for redevelopment for science, technology and innovation uses.

Site End State and Date

Mr Francis was pleased to acknowledge the progress made by the Harwell Chilton Campus Local Stakeholder Group in considering Group views about the end state and end date for the Harwell licensed site. He confirmed that the requested delivery date for Group views had been extended by the NDA from December 2006 to 31st March 2007. The LSG was free to send its response in early but it might consider that the extra time represented an opportunity to discuss further its conclusions before submitting them. In particular, the NDA encouraged Groups to achieve wide consultation within the areas or constituencies represented by Group members

Stakeholder themes from the NDA web site

The NDA's vision was to be a world leader in safe, secure and environmentally sound nuclear clean-up. Engaging openly and transparently with its stakeholders would be critical to its success in achieving this ambition.

Stakeholder Groups might have their own web sites but, alternatively, some Groups might find it helpful to utilise the NDA web site as a communications vehicle for their material. The NDA would help in such cases and some NDA sites were already using this arrangement. (*Sec's note: The Harwell LS Group provided basic contact material to the NDA in July for use on the NDA web site and expects this information to be published on the site shortly*).

b) HM Nuclear Installations Inspectorate

Quarterly Report for the Harwell Campus

The inspector presented highlights of his quarterly report (1st Jan – 31st March 2006), copies of which had been circulated to members.

Inspections

The Site Inspector had made four visits to the Harwell licensed nuclear site in the quarter and his inspections and discussions included:

- operational safety cases
- delicensing an area of the site
- divestment of Waste Management Technology Ltd from AEA Technology
- Participation in the NDA's interim and final; reviews of UKAEA's 2006/7 Long Term Plan.
- Attendance at various meetings (eg Harwell Regulatory Forum)

Routine matters

For the most part inspections and discussions revealed nothing of concern and compliance was judged to be 'adequate'. UKAEA agreed to revise a safety case involving the retrieval and processing of a number of experimental rigs from storage holes in B462. The NII and UKAEA continued to meet on a monthly basis by video-conferencing to progress routine matters.

Fire safety in B220

UKAEA had been requested to provide an intentions document outlining the necessary assurances sought in this matter (regarding the immediate evacuation of staff from the building in the event of a fire alarm). This had been received and the NII was satisfied with progress.

Annual Review of Safety

The review covered a wide range of matters including the operations of all major facilities and health and safety performance. Overall, no matters of concern arose during the review and the site was judged to performed adequately well over the previous twelve months. NII would be showing a keen interest in the need and progress of the reorganisation of UKAEA needed to meet the objectives of the NDA.

Delicensing

There were continuing discussions about the delicensing of the area of the site known as the Pilot Area (for delicensing). NII were satisfied with the safety case for delicensing the area, which depended on UKAEA being able to demonstrate that there would be no danger from ionizing radiation on the area in question. As delicensing would decrease rather than increase the area requiring a nuclear license, there would be no need to seek public consultation. The NII has agreed with UKAEA the extent of signage required to ensure that the revised boundary to the licensed site was adequately and properly marked.

c) Environment Agency Report for Harwell-Chilton Campus

Andrew Stone, on behalf of the Environment Agency, presented the report; copies of which had been distributed to members.

Nuclear regulation:

The Environment Agency's nuclear regulators for the Harwell-Chilton Campus were Tony Ganner and Andrew Stone. Tony and Andrew are both part of the national

Nuclear Regulation Group (South), based at the Wallingford office. Following the recent restructuring of the Nuclear Regulation Group (South), Andrew Stone would take over as the Lead Regulator for the Campus from August 2006 while Tony moves to regulate other Nuclear Facilities within South England and Wales.

Address: Environment Agency, Red Kite House, Howbery Park, Wallingford, Oxfordshire, OX10 8BD. Direct Dial telephone: 01491 828350 e-mail: tony.ganner@environment-agency.gov.uk; andrew.stone@environment-agency.gov.uk

Attendance at site

Visits had been made to the site on a regular basis. Additional contact was maintained by phone and e-mail in addition to formal correspondence. The EA received monthly reports from the UKAEA and its tenants on their radioactive discharges and had been placed on the public register. EA also received quarterly reports from the UKAEA on its programme of monitoring in the local environment.

Regulatory issues

- During the period EA held its annual review with UKAEA to review environmental performance over the year. The EA was pleased with UKAEA performance during 2004/5 and will work with UKAEA to ensure that future changes in the management of the site do not impact on performance.
- EA continued to work with the NDA, NII and UKAEA on the restructuring of the UKAEA into 3 separate Site Licensee Companies (at Dounreay, Windscale, Harwell+Winfrith), a new commercial company UKAEA Ltd and the remaining Non Departmental Government Body (NDPB). Locally this process should result in the Harwell and Winfrith sites being split from the existing NDPB to be managed jointly as a single 'cluster' composed of the Harwell and Winfrith sites. EA will ensure that the environmental performance of the sites is not unduly affected; indeed EA will not transfer environmental permits from UKAEA to the new Site License Company if it considered the environment might be put at undue risk.
- UKAEA continued to make significant reductions in liquid effluent disposals to the river Thames. As a result of the reductions, and at the request of UKAEA, EA had modified its water discharge consent to significantly reduce the daily volume of water permitted to be discharged to the river.
- During the period EA participated in UKAEA's demonstration of its emergency response arrangements - exercise URSULA. The exercise scenario postulated an explosion in the site ILW store, resulting in the release of a small quantity of radioactive material. The UKAEA, the Environment Agency, Emergency Services and other Agencies then exercised their response. The Nuclear Installations Inspectorate assessed the site response to this exercise.
- EA continued to work with the NDA and the NII to facilitate the decommissioning and clean up of the Harwell nuclear licensed site in an environmentally responsible manner. It looked to UKAEA and the NDA to ensure that all strategic decisions regarding the future of the site were underpinned by robust environmental assessments.

Campus Non Nuclear Issues

- The pilot remediation trial on the unsaturated zone beneath the former disposal pits in the Western Storage Area had been concluded earlier in the year. The remediation technique combined heating the ground with thermal probes coupled with vacuum extraction. Heating the ground caused the solvents trapped in the chalk to vaporise; the vaporised solvents were then extracted from the ground and trapped on filters. Early results had been encouraging and a full remediation programme was expected to commence later in the year.
- EA continued to monitor the groundwater off the site. The low groundwater levels being experienced across the area at present was expected to cause a slight increase in the measured levels of chlorinated hydrocarbons.

GE Healthcare Ltd

- Dialogue continued with GE Healthcare Ltd and the EA noted that they continued to make improvements to their management arrangements.

AEAT

- All bulk depleted uranium had been repackaged and despatched off site for recycling in the USA. AEAT was decommissioning the packaging plant and will return the building to UKAEA; they would seek revocation of the Radioactive Substances Act Authorisation in due course.

REVISS Service Ltd

- On the 2 January 2006, the EA issued REVISS with a permit regulating its use of radioactive material. Since then their performance had been measured against the permit and the EA found them compliant with it.

Discharges and Environmental Monitoring

- Radioactive waste discharges from the Campus remained within authorised limits. The UKAEA environmental monitoring regime, along with additional monitoring carried out by the Environment Agency and Foods Standards Agency indicated that discharges from the UKAEA site were very low and well within the safety limits published by the NRPB.

The Committee noted the regulators' reports.

6. Campus Matters

a) Presentation on the MRC in Oxfordshire

Anne-Marie Coriat, the Senior Unit Administrator for MRC Oxfordshire gave the presentation:

Background

The Medical Research Council was set up by Royal Charter in 1913 to tackle TB. Its aims were to support medical research across the full spectrum of biological sciences. MRC had gained 23 Nobel prizes and made major medical advances in penicillin, DNA, MRI imaging, the link between smoking and cancer, benefits of cholesterol-lowering drugs and the value of folic acid. It was the largest non-commercial source of funding for clinical trials in the UK.

MRC Mission

- To encourage and support high quality research with the aim of maintaining and improving human health.

- To produce skilled researchers, and to advance and disseminate knowledge and technology to improve the quality of life and economic competitiveness in the UK.
- To promote dialogue with the public about medical research.

MRC stakeholders and partners

It was funded by government, OSI, DFID and other government departments. The MRC had a close link with the Wellcome Trust and other medical charities. It also had links with the universities, research councils, industry and international businesses. Its stakeholders included the public, patients and carers and it worked in partnership with the National Health Service and UK health departments.

MRC gross spend by scientific area

- Health services and public health research £62M (13%)
- Molecular and cellular medicine £181M (39%)
- Neurosciences and mental health £82M (17%)
- Infections and immunity £77M (16%)
- Physiological systems and clinical sciences £73M (15%)

Its work included a £23 million programme for the most urgent health problems in the developing world (eg Malaria).

MRC Intramural programme

MRC consisted of 33 establishments, mostly within the UK but two of them were overseas. It had six Units in Oxford and three at Harwell and these consisted of Oxford City, Headington (the Churchill and JR Hospitals). The MRC's regional administrative centre was at Harwell as were the Mammalian Genetics Unit, the Mary Lyon Centre and the Radiation & Genome Stability Unit.

- The Mammalian Genetics Unit, under Prof Steve Brown, used mouse models for the study of human genetic diseases such as diabetes.
- The Mary Lyon Centre, under Prof. Bob Johnson held a national role running an ethical regime for mice.
 - It had a local role
 - It had a national role
 - Its external projects included Renal Stone disease, lung development, motor neuron degeneration, Glycine (pain) receptors and Huntingdon's disease.
- The Radiation & Genome Stability Unit under Prof. Gillies McKenna worked with the Gray Cancer Institute in the UK. There was also an MRC/CR-UK Oxford University initiative in Radiation Oncology and Biology.

MRC Harwell Vision

To create a world-class clinically applied Radiobiology Unit Research Centre, involving Oxford/Headington, including:

- Radiation physics and chemistry
- DNA damage and repair
- Tumour microenvironment
- Imaging
- Clinical trials
- Be research-focused and clinically relevant
- Be a centre for training all health care personnel in radiation Oncology & Biology.

Translational Research Goals

- To define biological processes that regulate the radiation responsiveness of tumours
- To develop therapeutic agents and strategies that target those processes
- Take these therapies into the clinic to improve outcome
- To facilitate translational/clinical applications of discoveries made by MRC-CRUK supported scientists.

b) CCLRC Rutherford Appleton Laboratory

Natalie Bealing presented her report:

- The latest space mission (STEREO) was ready for launch. It consisted of two spacecraft that will take measurements of the Sun and the Solar Wind in three dimensions. RAL was working with the University of Birmingham in the production of the Heliospheric Imagers carried in STEREO which will measure the speed and direction of the Sun's coronal ejections to the Earth for the very first time.
- Dr Mike Dunne has been appointed as Director of the Central Laser Facility.
- Professor Mike Lockwood has been elected Fellow of the Royal Society.
- Steve Kill, the RAL photographer, has been awarded Fellowship of the British Institute of Professional Photography (BIPP), one of just nine to be awarded in 2006. Fellowship is the highest qualification attainable with the BIPP and recognised distinguished individual ability and exceptional standards of excellence. Eric Jenkins FBIPP, manager of UKAEA Image Resources at Harwell, had been Stephen's 'mentor' since October 2001.
- Construction of the new user accommodation, at the north side of the UKERNA building, had been completed. It contained 62 bedrooms, all with ensuite facilities. It is to be named 'Ridgeway House' and would be officially opened on 27th July. Its first guests were expected as from 7th August.
- The CCLRC's Annual Report and Accounts had been laid before Parliament and copies would become available as from 27th July.
- As part of RAL's 50th anniversary celebrations in 2007, the Laboratory had commissioned a book, highlighting its work over the previous five decades, which would become available in late 2007.

c) Diamond Light Source Limited

Isabelle Boscaro-Clark presented the current status report on the Diamond facility:

- Synchrotron 'light' had been observed in the Diamond facility in May.
- Staff numbers currently stood at 255 and the full team of 330 would be recruited by 2007.
- The Diamond machine had been completed and the first electrons established in the Storage Ring. The first 'light' in the Beam Lines was expected in October.
- A Users Meeting had been arranged for 12-13th September and a Call for Proposals for Experiments sent out.
- 2007 would be the Launch Year for Diamond and a number of events were currently being planned:
 - An Official Opening – details to be announced later
 - The first experiments would be underway

- The inauguration of the Women's Institutes' art project involving 80 members working on a piece of artwork for the Atrium
- A Summer Charity Olympics event was being planned
- Part of the grant application, submitted in conjunction with Chilton School and Parish Council would be used for a Laser Light Show depicted on the circular building structure.

d) Campus Development

John Wilkins reported that:

- UKAEA was seeking a private sector partner to assist in campus development.
- Discussions were underway with a developer for the possible construction of a 100-200 bedroom hotel and a planning application was being prepared for submission to the local authorities.

7. Any other business

It was announced by Mike Parker (RWE NUKEM) that his company was due to be sold to Advent International, subject to agreement by the Monopolies Commission. Business relations with clients would not be affected and LSG members would be advised when the acquisition was completed. Copies of a press release were handed out to members and further details would be posted on: [info @rwenukem.co.uk](mailto:info@rwenukem.co.uk)

8. Date of next Meeting

The Secretary said that the next Meeting of the Harwell Chilton Campus Local Stakeholder Group would be at 10am (for a 10:30 start) on Friday 24th November 2006 at the usual venue (HPA Education centre Lecture Theatre).

Nick Hance MBE – LSG Secretary

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