



**QUARTERLY REPORT TO  
WEST CUMBRIA SITES STAKEHOLDER GROUP**

**1 APRIL TO 30 JUNE 2009**

This report provides a summary of the outcome of our regulatory activities at Sellafield, Windscale, Calder Hall and the Low-Level Waste Repository (LLWR) near Drigg during April to June 2009.

Our nuclear regulators attend meetings of the WCSSG and most of its sub-committees. We are happy to respond to questions raised there, or you can contact us at our Penrith office:

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We are always looking to improve our reporting and would be happy to hear your views on the format and content of this report.

## 1. INTRODUCTION

This report presents a summary of our work at Sellafield, Windscale, Calder Hall and the Low-Level Waste Repository (LLWR) at Drigg over the three months to the end of June 2009.

The report covers progress against our regulatory strategy which steers our work at nuclear sites. Our strategy sets out, among other things:

- our long term objectives;
- our expectations of the operator;
- how our strategy connects with the Environment Agency vision and goals.

### **Our role**

We aim to prevent pollution, harm to the public, to protect and enhance the environment, and to contribute to the sustainable development of the UK.

Operating and cleaning up nuclear sites generates radioactive and non-radioactive wastes. Our role as the environmental regulator is to ensure that the management and disposal of those wastes have little or no impact on people and the environment both now and in the future. We do this by both direct regulation and close working with other interested parties.

We inspect nuclear sites and assess operator's proposals, to ensure that the limits and conditions of the authorisations we issue under the Radioactive Substances Act 1993 (RSA 93), the Environmental Permitting Regulations 2008 and other relevant legislation and policy are complied with. We do this by both direct regulation and partnership working with the operators, the Nuclear Decommissioning Authority (NDA) and the Nuclear Installations Inspectorate (NII) to solve problems jointly. If you want to know more about our role in regulating nuclear sites, please follow [this link](#) on our website.

## 2. AUTHORISATIONS & PERMITS

### **2.1 Radioactive Substances Act 1993 (RSA93)**

Disposal of radioactive wastes is only permitted subject to strict limits and conditions under an RSA93 authorisation.

#### **2.1.1 Authorisation reviews**

An interim Authorisation review report for 2009/10 was received in June, identifying the issues Sellafield Ltd wish us to consider within our annual review of the Authorisation. The final report from Sellafield will be submitted by 1 October. As in previous years the review will look at potential improvements to the authorisation to further enhance protection of people and the environment and will address the operator's proposals for change.

Following our review we will consult with others as necessary prior to making our final decisions on any changes. Any proposed increases in 'site discharge limits' to account for real increases (either ongoing or projected) in discharges would normally be subject to wide public consultation.

The exercise will include a review of limits on discharges of radioactive waste to the environment to ensure that these remain appropriate in providing high standards of environmental protection while allowing the operator adequate operational flexibility. We have previously reported on an increase in discharges to air of antimony-125 due to the decanning of increasingly higher burn-up fuel from Magnox power stations. An application to increase the site limit for antimony-125 will form part of the October submission as well as proposals to reduce several other site limits.

### **2.1.2 Transfers of low level radioactive waste (LLW)**

We consulted statutory bodies, nuclear sites and relevant local authorities on a proposed variation to nuclear site authorisations to allow transfer of low level (solid) waste (LLW) via the Low-Level Waste Repository at Drigg ([LLWR](#)) for treatment or disposal at other sites (once these are open) and transfer of metal LLW directly to the metals recycling facility (operated by Studsvik) [at Lillyhall](#) for treatment (decontamination) and recycling of clean metal. These new routes will help to avoid needless disposal of these wastes at LLWR, in line with Government Policy and [NDA Strategy for LLW](#). We intend to issue a Decision Document in mid-July, covering all the conclusions we have reached and to vary all nuclear site authorisations thereafter.

Full details of the proposals and the background to them are outlined in our April 2009 Explanatory Document that we issued as part of the consultation process. A number of minor, additional changes will also be introduced for Sellafield, and the variation will be accompanied by amendments to the Compilation of Environment Agency requirements (CEAR) issued under the Authorisation.

Should any other waste management facilities become available, we will consider further variations or applications to authorise these routes, based on demonstrable environmental cases.

Sellafield Ltd was issued with a Transfrontier Shipment (TFS) certificate to authorise a small shipment to Sweden of waste oils from Calder Hall, in order to free up storage capacity.

### **2.1.3 Disposal of high volume, very low level radioactive waste (HV-VLLW)**

Waste Recycling Group (WRG) submitted an application to us for HV-VLLW disposal at Lillyhall landfill site in May, supported by an Environmental Safety Case (ESC). The site currently accepts exempt radioactive waste from nuclear licensed sites. The application is for disposal of construction, demolition and process waste. We have started to assess the application. Further information on our policy and guidance on disposal facilities for radioactive waste and regulation of radioactive waste to landfill is [given here](#) and [here](#).

The waste management company, SITA (Endecom), have told us that they are progressing with plans to seek permission to dispose of LLW at the lower end of the LLW radioactivity range and VLLW at the [Keekle Head](#) former opencast mine site, near Pica. Plans are for a facility with around 1 million cubic metres capacity over a 50 year lifespan. We understand that SITA

(Endecom) is beginning public engagement on their proposals later in the autumn. Use of these types of site would reduce the demand on the LLWR.

We will not authorise any disposals of LLW or HV-VLLW unless we are satisfied that it is safe and the environment will be protected. In particular any application must satisfy our criteria and fall within the limits that we consider acceptable for disposal. We will carry out a consultation exercise before any decision is made.

#### **2.1.4 Thorp Receipt and Storage Pond**

A number of the fuel storage ponds at Sellafield are dosed with sodium hydroxide which helps to prevent corrosion of the stainless steel cladding of AGR fuel elements. Dosing with sodium hydroxide at the Thorp Receipt and Storage pond is currently not practicable due to the potential to generate hydrogen from reaction with the aluminium present in the multi-element bottles (MEBs) stored in the pond.

The temporary variation authorising an increase in the plant limit for discharge of caesium-137 (Cs-137) and alpha and beta emitting radionuclides from Thorp Receipt and Storage (TR&S) pond expired in May. As explained in the [WCSSG report](#) for October – December 2008, this allowed increased pondwater purging to reduce chloride levels in the pond in order to protect the integrity of AGR fuel from corrosion, and prevent further releases of radionuclides into the pond water. The environmental impact of this variation is small, with the temporary Cs-137 plant limit increase representing approximately 12% of the overall site limit.

The return to the original Cs-137 plant limit for Thorp pond may continue to cause operational difficulties for the TR&S facility due to continued storage of a limited quantity of failed AGR fuel in the pond. Over time there will be a steady increase of Cs-137 released into the pond water from the failed fuel, as well as a rise in chloride concentration. Indications are that the plant limit will be challenged again in autumn. Inspections of the facility indicate that SL have improved arrangements for minimising the presence of corrosive ions in the pond.

However, we understand that it may not be possible to completely exclude chloride from the pond environment and that while fuel is stored for longer periods in un-dosed water, the current reduced purge rates, and retention of corrosive ions in the system, are unlikely to be the optimum (or best practicable means) for safe storage of sensitised AGR fuel. We expect the operator to apply to vary the Cs-137 plant limit to enable increased and sustained purging of the pond water to remove trace quantities of corrosive ions from the system.

## **2.2 Environmental Permitting Regulations (EPR)**

The Environmental Permit (previously known as the PPC permit) contains an improvement programme requiring Sellafield Ltd (SL) to review discharges to controlled waters of non-radioactive substances (e.g. heavy metals and nitrates etc). SL are currently reviewing the impact of retrieving legacy ferric

floc and processing the effluent on the sea discharge of nickel (Ni) and chromium (Cr). We expect an application to raise the permitted limits for these metals in due course. A number of minor additional changes to the permit are also expected, which we will progress this autumn.

### 3. DISCHARGES & THEIR IMPACT ON THE ENVIRONMENT

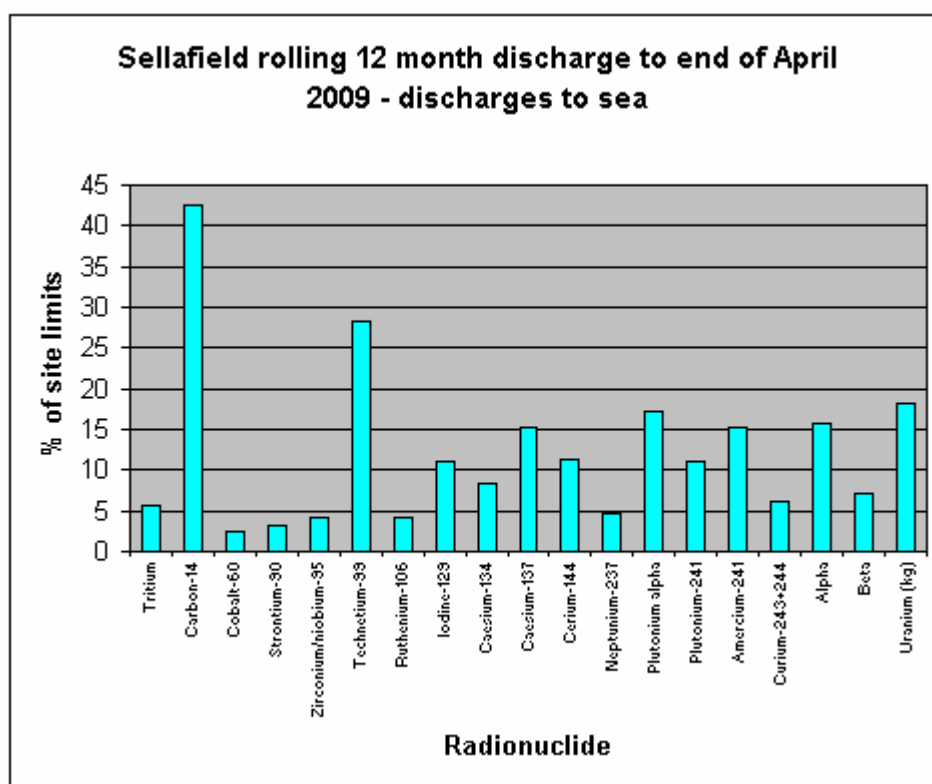
#### 3.1 Radioactive discharges

We aim to ensure that the public and the environment are protected from the radiation exposure that may result from the discharge of radioactive waste.

There were no breaches of the authorised site limits on radioactive discharges to land, sea or air this quarter at Sellafield or LLWR.

##### 3.1.1 Discharges to sea

Radioactive discharges to sea from Sellafield over the 12 months to the end of April 2009 are shown as a percentage of the authorised site limits below:



All discharges were well below the authorised limits. Note that for certain radionuclides the site limits for calendar years relate to the amount of spent fuel reprocessed ('throughput related limits').

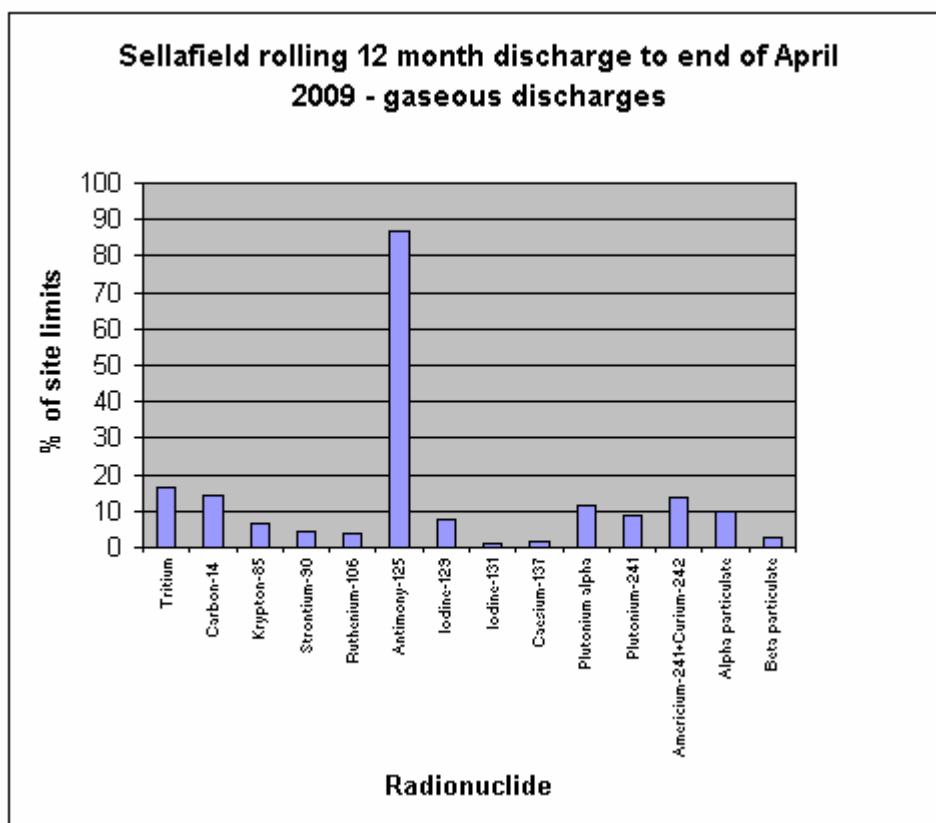
##### 3.1.2 Discharges to air

Radioactive discharges to air from Sellafield over the 12 months to the end of April 2009 are shown as a percentage of the authorised site limits in the graph below. Discharges of all radionuclides, apart from antimony-125 (Sb-125), were well below the annual (rolling 12 month basis) limits. Sb-125 is released as a consequence of the decanning of spent Magnox fuel in the Fuel Handling Plant (FHP), and the source of the increased releases is higher burn up fuel being received. Because of the potential for the limit to be breached, SL

suspended reprocessing in March 2009, to make sure that the rolling 12 month discharge stayed below the site limit. The radiological impact of Sb-125 on people and the environment, even at the recent higher levels, are very small compared to the consequences of not reprocessing spent Magnox fuel.

Sellafield Ltd resumed reprocessing in early June. We consider that resumption of Magnox reprocessing is the Best Practicable Environmental Option currently available in the absence of practicable alternatives. A decision by SL to resume the reprocessing of spent fuel is almost certain to lead to a breach of the Sb-125 limit later in the year, however we are satisfied that this would not cause any harm to members of the public or the environment.

Any breach of a limit that does arise prior to an increase in the site limit being authorised, will be considered in line with our enforcement and prosecution policy, but also taking into account our opinion that restarting reprocessing is the best option for the environment overall.



A more detailed briefing note on this issue can be viewed on the [WCSSG website](#).

### 3.1.3 Disposals to Land

In 2008, Sellafield Ltd disposed of 4600 cubic metres of solid low level radioactive waste to LLWR. No waste was transferred to other licensed premises. A total of 2,700 cubic metres of solid radioactive waste was disposed of on the premises, to the Calder Floodplain Landfill Extension Segregated Area (CLESA). These disposals were well within the annual limits specified in the RSA93 authorisation.

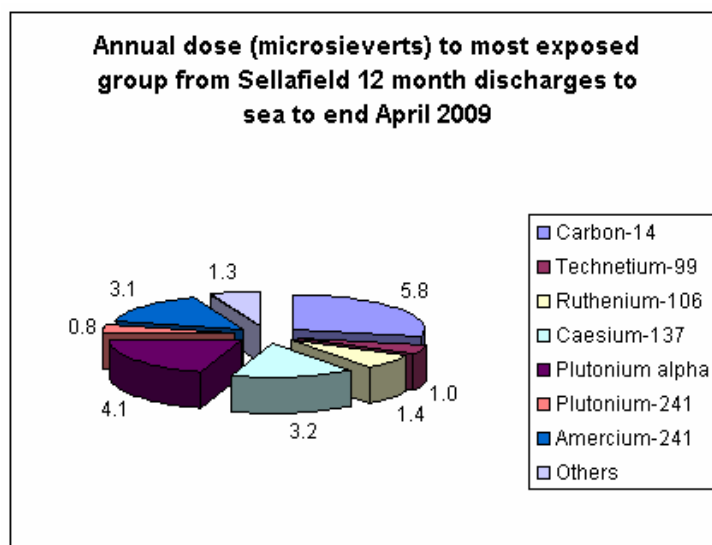
Sellafield also produced a total of almost 26,000 tonnes of non-radioactive solid waste in 2008. Over 80% of this waste was recycled.

Type of waste	Quantity of waste, tonnes	% recycled
Inert	20,000	100
Non-hazardous	4,633	32
Hazardous	1,239	2

### 3.2 Radiation doses

Radiation doses to the most exposed groups of the public from liquid and gaseous discharges from the Sellafield and Windscale sites continue to be well below the public dose limit of 1 milliSievert (mSv) per year.

We estimate that the annual radiation dose to the most exposed group of the public was around 21 microSieverts ( $\mu\text{Sv}$ ) for liquid discharges made in the 12 months to the end of April 2009. This is about 4 per cent of the constraint on dose from discharges from a single site (500  $\mu\text{Sv}$  per year) and less than one per cent of the average dose from natural background radiation in the UK. The radionuclides which contribute to this dose are highlighted below:



Radiation doses from gaseous discharges are lower than those from liquid discharges.

### 3.3 Environmental monitoring

#### ***Radioactive particles in the environment***

The beach monitoring programme remains on target for 2009/10. The particle find number and types remain broadly consistent with the trends observed during the preceding 2 full years of the programme. A total of 17 stones and 20 particles were retrieved during the first quarter of 2009/10 over an area surveyed of around 90 ha.

Meetings were held with SL and other stakeholders to review and validate the particles programme, current methodologies for monitoring, sampling, analysis etc. and to set out priorities for action and recommendations for forward work. These will further improve our assessments of hazards and risks.

The Centre for Environment, Fisheries and Aquaculture Science ([CEFAS](#)) is in the process of carrying out a further habit survey of west Cumbrian beach users. This survey will support the work that we have asked HPA's Radiation Protection Division to carry out on further developing the risk assessment for beach users. The intention is to build confidence in the existing habit data for high occupancy areas, and also to extend the survey that was carried out in 2007 to outlying areas such as Whitehaven, Workington and Silecroft. This work will help us to understand how beach users may encounter particles, and the chances of these encounters occurring.

Based on the previous habit survey, the chances of members of the public encountering particles that could cause them harm have been assessed as being very low. HPA maintains its position that, on the basis of finds to date, no special measures, such as access restrictions or placing warning signs on beaches, are necessary to protect the public.

More details are available on the following links to the [Environment Agency](#) and [Sellafield websites](#).

### ***Environmental monitoring programme***

More details of discharge and environmental monitoring data can be found in our [RIFE report](#). This is published each year jointly with the Food Standards Agency, Scottish Environment Protection Agency (SEPA) and the Environment and Heritage Service of Northern Ireland (EHS NI). The RIFE report for 2008 is currently being drafted.

## **4. COMPLIANCE ASSESSMENT AND ENFORCEMENT**

### **4.1 Site inspection & assessment**

#### ***Aqueous effluent management at Sellafield***

We carried out a team inspection looking at the management of water based (aqueous) effluents in June. Overall we found that the demonstration and application of Best Practicable Means (BPM)/Best Available Techniques (BAT) for the minimisation of radioactive discharges had improved since 2005. However, our inspection highlighted a number of areas in which SL will need to take action to assure future compliance. For example there will be a need to:

- Set out a clear vision, objectives, targets and monitoring tools within their integrated waste strategy that drive waste prevention and minimisation;
- Develop a programme for delivery of the strategy to achieve the vision;
- Recognise, standardise and implement good practice; and improve quality assurance and executive oversight.

#### ***Solids exclusion in aqueous effluents***

We are encouraging Sellafield to improve its techniques for the final filtration of aqueous effluent - work to sample the final filters at the lagoon and Sealine

3 continues as part of the programme. We continue to review the cases for application of the best available techniques to exclude entrained solids at the various facilities on the site.

### ***Plutonium Finishing and Storage (PF&S)***

Visits were made to review PF&S operations, principally related to liquid waste management, to follow up recent reported events and incidents and address outstanding plant maintenance issues. A key finding that has relevance across the rest of site is the review of the adequacy of inspection arrangements for redundant ventilation systems where there is the potential to collect and retain contamination. This was also recommendation from our team inspection of gaseous effluent management in 2007.

### ***Decommissioning***

We continue to support the NII in pushing for improved decontamination capability as decommissioning ramps up. This is particularly important for obsolete containers used to store fuel and waste in ponds and redundant flasks across the site but also to encourage innovation and best practice in segregation for other decommissioning solid waste streams.

### ***High-level Waste Plants***

We undertook a joint inspection with NII of the management arrangements for medium active waste in the Waste Vitrification Plant (WVP) breakdown cells. Both regulators are of the opinion that the Waste Management Hierarchy is now well embedded in WVP's arrangements and culture.

We also undertook a joint inspection with NII of the Highly Active Liquor Evaporation and Storage (HALES) asset care and maintenance arrangements as a follow up to our 2006 themed inspection. Most of the recommendations from the 2006 inspection have been closed out or close to being closed out – we await final confirmation from Sellafield by the end of September.

### ***Calder Hall***

The Health Protection Agency (HPA) report on check monitoring of waste in the Calder cooling tower basins concluded that the waste is exempt under the Radioactive Substances (Substances of Low Activity) Exemption Order.

### ***LLWR Vault 9***

We continue to inspect the construction of Vault 9. There have been some issues with the stone for the drainage layer. The stone must ensure drainage capacity is adequate for up to around 150 years, and must not puncture the membrane layer. These issues have been resolved by enhanced materials screening. Progress is slightly behind schedule but LLWR remain confident there will be no storage capacity gap.

### ***Management of LLW***

We met with NDA and other regulators to review the National [Nuclear LLW Strategy](#) consultation issued in June. We are reviewing LLWR's strategy for non-compactable waste monitoring and improved verification monitoring.

Vault 9 construction development is slightly behind schedule but anticipated to be ready to start receiving LLW for storage in July. Vault 8 is still being used for disposals but is anticipate to be full later in 2009.

### ***Developments at LLWR***

LLWR intend to apply for planning permission to maintain 'higher stacking' of ISO containers in Vault 8 until around 2014 (when a decision on the sites ESC should have been made). LLWR have indicated they intend to make a case for leaving the Vault 8 ISOs in place permanently in the 2011 Environmental Safety Case. They believe this will minimise the need for imported capping materials and have no, or very limited impacts in terms of dose. We will review and comment on any planning application received and assess any proposals from the LLWR when received in 2011.

LLWR have also indicated an intent to apply for planning permission to extend the timescale for demolition of buildings used to handle plutonium-contaminated material (PCM), and to construct a cap over existing disposals in the trenches and Vault 8. Some of the buildings previously scheduled for demolition may be re-used, and effective scheduling of demolition will maximise re-use of material on site.

### ***SIXOP***

SL presented the findings of its recent review of the SIXEP Operating Plan (SIXOP) in May. The SIXOP contains 42 original recommendations in 4 groups, covering plant robustness, future challenges and BPM, optimising solids storage capacity and retrieval and contingencies.

## **4.2 RSA Improvement Conditions**

### ***IWS submissions***

Updated Integrated waste strategies for Sellafield, Windscale & Calder Hall were submitted in June.

### ***LLWR***

We will shortly be publishing our review of 'Requirement 2', which presented interim assessment information on the LLWR's Environmental Safety case (ESC), prior to submission of the full case. This review made a number of recommendations to LLWR. LLWR are continuing to undertake further work to support their developing ESC and we meet regularly to review progress and advise on developing issues. Examples of key ongoing work include examination of the potential impacts of innovations work (e.g. revised waste packaging), development of options to optimise disposals (e.g. considering options for trench remediation and capping) and assessment of non-radiological impacts. We expect a final ESC, addressing all EA recommendations to be delivered by May 2011.

We have received responses from LLWR on a number of other improvement conditions addressing BPEO for current on site disposal practices, assessment of activity on site, cap and cut-off wall integrity and monitoring of groundwater contamination. We are reviewing these and will feed back to LLWR any issues arising.

LLWR Ltd held its annual LLW forum in April at the Rheged Centre at Penrith. The event provided an opportunity to review the developments in LLW management over the past 12 months. Further information is given [here](#).

### ***Environmental Permit (EPR) improvement programme***

Sellafield are looking for a major variation of the EPR permit in 2010, however currently we don't anticipate there to be any major issues. Discharges of nickel and chromium could challenge the EARP 'concentrates' process limits (see section 2.2) and SL has also developed a long-term schedule of developments within Legacy Ponds & Silos that will impact on the EPR permit.

## **4.3 Enforcement**

### ***Inactive tank farm***

We issued a warning letter and enforcement notice to Sellafield Ltd in May following breaches of the EPR permit at the inactive tank farm that occurred between September and November 2008 (see [previous WCSSG reports](#)). These included inadequate arrangements for the operation, maintenance and inspection, unauthorised discharges and failure to notify the EA.

### ***Legacy Ponds and Silos (LP&S)***

We issued a warning letter to Sellafield in June regarding redundant sampling ports and penetrations in ventilation ducts and stacks which had not been adequately sealed. The operator resolved most of the issues at the time of the original inspection in November 2008, and some final improvements will be made this year. The event did not have the potential to cause a significant impact on public or the environment. We will keep the situation under review.

### ***Follow-up on previous enforcement actions***

We are continuing to press for characterisation of sludges and sediments from contaminated drains, following the cleaning of the lagoon drainage system. Work to check whether there are any potential sources of contamination and uncontrolled migration into the drainage system is continuing.

## **4.4 Environmental events and incidents**

### ***Condensate leaks***

#### **1. Magnox Reprocessing Plant**

A SL Board of Inquiry report into a leak, and the on-site contamination it caused from a ventilation condensate drain pipe, first reported on 23 January 2009 (see [last WCSSG report](#)) was received in May. This highlighted a number of significant shortcomings in design, installation, maintenance and inspection and reporting. We consider that Sellafield Ltd may not have used the Best Practicable Means to prevent the escape of radioactive waste into the ground and our investigation into this incident continues, in collaboration with the NII.

#### **2. Medium Active Tank Farm**

We are planning a joint inspection into a condensate leak at the medium active tank farm (see [WCSSG reports](#) for Jan-March) with NII. It was noted that pipe which leaked is not included in safety and BPM cases for the facility. There are a number of similarities in root causes with the condensate leak above and this has highlighted the lack of clarity in a number of areas associated with asset ownership and maintenance. We expect increasing attention to addressing these vulnerabilities, and the potential for environmental

impact to be identified at the earliest opportunity in maintenance and inspection programmes.

### ***Contaminated Fan Housings***

SL updated us on the event reported [last quarter](#) on the contaminated redundant fan housings outside the Product Finishing and Storage (PF&S) facility, revealed during routine health physics survey and thought to be due to the accumulation of active liquors in the ducting from the blanking of the fan outlets to a stack. Given the known issues of other events, we expect inspection arrangements to be better at identifying potential leakage across all assets and facilities, in particular to prevent sources of ingress into ventilation systems, as well as managing any arisings that do develop.

### ***Magnox Swarf Storage Silos***

There has been an increase in liquor arisings in some of the sumps in the cavity between the primary and secondary containment of some of the silos. SL are investigating the source. Currently the sump arisings are discharged into the waste silos. We continue to monitor developments closely and plan to take a substantial look at this issue as part of our groundwater protection inspection which is planned for September.

### ***Drain contamination***

We visited Magnox Reprocessing Product Finishing and Storage (PF&S) as part of our investigation of drains in the area where, earlier alpha contamination had been found around the surface water and low active drains (LAD) serving the Magnox Plutonium Finishing Plants. The redundant drains are to be excavated and disposed of. Inadvertent cross-connections between acid and rainwater drains, and historical contamination on the PF&S roof may have caused some of the observed contamination.

## **5. OTHER WORK AREAS**

We work with the site licence companies (SLCs), parent body organisations (PBOs), NDA, NII and others to make sure the environmental impact of day-to-day operations and decommissioning activities on nuclear sites is minimised, and that the risks posed to our environment are reduced. This section highlights some of the progress this quarter.

### ***Hazard and risk reduction***

The Environment Agency's Board visited the Sellafield site in May to consider the historical legacies at the site (principally the 'Legacy Ponds and Silos') and future challenges that we face. The visit reinforced the serious nature of the hazards and that clean up and risk reduction remain absolute priorities, with realistic plans to address the uncertainties in delivering them. The visit re-emphasised that high level commitment for the clean up programme is needed to ensure continued funding.

### ***New Environment Agency Corporate Strategy***

We are consulting on a new corporate strategy, which focuses on adaption to, and mitigation of climate change. Sellafield Ltd. plays a pivotal role in many areas, not least hazard reduction and the decommissioning of the major part of the UK's nuclear legacy. Along with our Director of Environment and Business, we took part in a panel discussion of environmental priorities at Sellafield's World Environment Day in June.

Details of the strategy are available [here](#).

### ***Integrated Waste Strategy (IWS)***

IWSs have been submitted from Sellafield, Windscale & Calder Hall. We are undertaking a IWS review project with contractor support and progressing well with information gathering against the specification. The project has the following specific objectives:

- Provide an independent perspective on issues, priorities, opportunities, limitations and shortcomings in the IWSs;
- Environmental reviews of priority issues that need to be addressed, with outcomes that support our compliance assessment and forward planning, and the means of communicating our work to wider stakeholders.

### ***Integrated Fuel Management***

We are continuing to press NDA for an integrated strategy for nuclear materials and spent fuels, in particular their condition and status and a review of storage conditions. SL is implementing a strategy for corroded fuels. All parties are keen that this maximises flask availability, and does not restrict operation of FHP and progress of the MOP.

We attended the Oxide Operating Strategy Regulatory Forum (OOSRF) at which the NDA described the next steps for producing the Oxide Fuel Strategy. An options paper will be issued for the next quarter, drawing on the details of the Nuclear Materials and Spent Fuels Topic Strategy Paper, existing studies and some new work.

We attended the Magnox Operating Programme (MOP) Regulatory Forum. The MOP aims to ensure that all spent Magnox fuel, other than 'legacy' fuels currently stored in First Generation Magnox Storage Pond at Sellafield, is reprocessed by 2016. Despite a small shortfall on reprocessing in 2008/09, the MOP remains broadly on target. However, the programme is vulnerable to interruptions, examples being the suspension of reprocessing due to the Sb-125 issue, slow progress to date on reprocessing of corroded fuel currently in FHP, and potential mechanical breakdowns in the Sellafield reprocessing plants. With NII, we are pressing SL to develop contingency plans to deal with the consequences of any significant interruptions that may occur.

A meeting with NII, SL and NDA discussed proposals for alternative technologies to Magnox reprocessing to mitigate against failures in the MOP. This included developments and R&D in design and technologies for drying, packaging and storing of intact wetted fuel and options for corroded and legacy fuels. The EA and NII have agreed to a joint regulatory position on the need for contingent options, which should be practicable and viable to the inventory at Sellafield, and operations in FHP.

SL are continuing to assess triple stacking of AGR fuel containers in FHP, current indications are that subject to regulatory approval the necessary modifications may be in place to implement this option by December. The EA and NII expect consideration of all practicable storage and retrieval arrangements and their impact on future pond utilisation, and fuel storage

strategy development. We therefore expect SL to have fully reassessed its BPEO for spent fuel management.

We have provided comments to NII on a NDA(RWMD) response to queries from DECC on the effects of higher burn up on the disposability of spent fuel.

### ***LTP10 development***

Through a tripartite working group, we are supporting the LTP2010 build project which launched in May with an intensive first phase of assurance at the programmes level. The LTP review (required as part of the M&O contract within the first 18 months of the new PBO) will address uncertainties in the previous LTP, and deliver a better and more realistic plan. The LTP10 will cover the 16 years of the contract baseline (2010 to 2026).

We have adopted joint regulatory positions with NII on our reservations on the impact of slippage in the LTP on high hazard and environmental risk reduction programmes.

The recommendations of the PBO led PAIS reviews will be incorporated into the planning process, and expertise will be drawn from the parent bodies to challenge the technical risks within the programme and assist in the build of LTP 2010. We have also encouraged SL and NDA to commission an independent review of the process and the clean up programme.

### ***Asset care***

We have played a part in steering the development of new *Overarching Principles for Asset Management, Maintenance and Asset Care* at Sellafield has been agreed by all parties and will be endorsed by SLC executive and NDA. The principles are consistent with good practice across industry, and we will continue to check progress on implementation on site.

### ***Other consultations, events and guidance .***

The consultation on incorporating RSR into [EPR](#) closed in May. Further information is available on the DECC website. EPR in this second phase of implementation (EPR2) next April will also include water discharge consents and groundwater authorisations. Under EPR2, it is for instance proposed that the Environment Agency has new regulatory powers over the early development of a future deep geological repository for higher activity waste.

DECC are consulting on proposals for a future [exemptions regime](#) under the Radioactive Substances Act 1993 and the Environmental Permitting Regulations 2010. This will replace existing Exemption Orders and will impact on clearance criteria and exclusions for radioactive material and waste, options for re-use, recycling and disposal as well as the regulation of VLLW. The consultation runs until 4 September 2009.

Statutory Guidance and a revised [UK Strategy for Radioactive Discharges](#) will be published in July, but not in force until October or November. This will enable us to publish our Radioactive Substance Regulation Environmental Principles.

We were represented at the US EPA convention in Albuquerque, New Mexico and presented on the Land Quality programme at Sellafield and collaborative working with the US EPA.