



HM NUCLEAR INSTALLATIONS INSPECTORATE

SELLAFIELD, CALDER HALL AND WINDSCALE

WEST CUMBRIA SITES STAKEHOLDER GROUP

**REPORT FOR THE PERIOD MAY TO AUGUST 2010 TO
THE DECOMMISSIONING SUB-COMMITTEE MEETING:
7 September 2010**

FOREWORD

This report is issued as part of the Health and Safety Executive's commitment to make information about inspection and regulatory activities relating to the above sites available to the public. It is for distribution to members of the West Cumbria Sites Stakeholder Group (WCSSG) Decommissioning Sub-Committee and covers activities associated with the regulation of decommissioning safety at Sellafield, Calder Hall and Windscale.

These reports are distributed six monthly and will be available on the Internet. Site Inspectors of HM Nuclear Installations Inspectorate (NII) attend the Decommissioning Sub-Committee of the WCSSG meetings and will be happy to respond to any questions raised there. Any other person wishing to inquire about matters covered by this report should contact HSE, Nuclear Safety Directorate Information Centre on 0151 951 4103.

This report will be put onto the HSE Website at <http://www.hse.gov/nsd/nsdhome.htm> under "Local Liaison Committee Reports"

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1. Introduction

1.1 Proposed Changes to HSE's Nuclear Directorate

In the previous report, we described the position on the restructuring of the HSE's Nuclear Directorate of which NII is a part, and how the proposed changes had been put on hold due to the impending General Election. The new Government has still to make a decision on this issue.

2. Generic Issues Relevant to Decommissioning

2.1 Lifecycle Baseline

The Lifecycle Baseline is the plan of work underpinning the contract between Sellafield Ltd and NDA to run the Sellafield, Windscale and Capenhurst sites.

NII, OCNS¹ and the Environment Agency have maintained oversight of the development of the Lifecycle Baseline to ensure that health, safety, security, environmental protection and risk management are appropriately considered at an early stage. However, it is not our role to agree or endorse such plans. We have advised the licensee that some of the Lifecycle Baseline dates are unacceptable to us; we are concerned about certain deferrals, as we believe the revised timescales do not represent what can be achieved so far as is reasonably practicable.

We support the licensee's initiative to develop a Performance Plan from the Lifecycle Baseline that we hope will provide programme acceleration and performance improvements, and deliver remediation in more appropriate timescales. However, the reduced Annual Site funding Limit for the site has constrained this acceleration to the 5 high hazard areas (the 4 LP&S facilities and HLWP's) and the current indicated accelerations will not re-establish the remediation timescales indicated in the earlier LTP's. The Performance Plan will be the focus of the regulators' efforts in the immediate future.

NII is implementing a revised strategy for regulating against the requirements of Licence Condition 35 (Decommissioning). NII intends to approve the process for selecting, justifying and controlling changes to milestones and Sellafield Ltd has already identified key milestones within the Lifecycle Baseline in accordance with this revised strategy. The prime purpose is to promote transparency and provide regulators with the ability to more readily monitor progress of major hazard and risk reduction projects on the site.

We have noted that some of the medium term performance targets recently identified by the NDA for programme delivery at Sellafield are less demanding than the Specification dates set by NII (the Specifications referred to are legal instruments, which seek improvements in the storage of ILW currently held in legacy plants and facilities), we will be discussing this with the NDA.

¹ Office of Civil Nuclear Security

2.2 Integrated Change Programme (ICP)

The ICP work streams will form an integral part of Sellafield Ltd's Performance Plan and we have continued to monitor this. The separate programmes of work under the ICP will involve substantial effort and changes by the licensee, and require commensurate attention and commitment by ourselves to achieve the necessary regulatory assurance.

We have advised Sellafield Ltd that we are currently concerned about the lack of robust underpinning of how ICP performance improvements will be delivered and that we have still to see real evidence of change on the ground. Sellafield Ltd is looking to provide this evidence and the necessary underpinning. All the regulators are monitoring this situation closely and we have advised the licensee that, if there is little evidence of improvement by the end of the current planning year, we will consider the need for further regulatory action in line with our respective enforcement policies.

2.3 LC 35

We have continued to engage with Sellafield Limited on the development of improved arrangements for Licence Condition 35. This Condition requires a licensee to make and implement adequate arrangements for decommissioning plants and facilities that could affect nuclear safety, and to produce and implement decommissioning programmes.

Sellafield Limited has begun to roll out its new, improved arrangements, but there is still a significant amount of work to do. This is partly because of the need for its arrangements to reflect the large scope and complexity of decommissioning work, as decommissioning is now one of the main operational activities on the Sellafield site. However, we are satisfied with the progress being made to date.

2.4 LC 36 Control of Organisational Change

The reduced funding received by Sellafield Limited for the Sellafield, Windscale and Capenhurst sites has led it to pursue a voluntary severance programme and to terminate the contracts of a large number of agency workers. As there are possible impacts on safety due to the loss of key staff, we are examining Sellafield Ltd's justifications under Licence Condition 36, which applies to changes to resources and structures that have the potential to impact on nuclear safety. This is to confirm that Sellafield Ltd has fully considered the potential impact of the proposed changes and that they will not compromise continued nuclear safety.

3. Nuclear Decommissioning Projects

3.1. Legacy Ponds & Silos (LP&S) Operational Nuclear Safety

We have continued with our programme of planned inspection to gain assurance of Sellafield Ltd's compliance with licence conditions and key plant specific improvements. No significant concerns were raised following our

inspection of Emergency Arrangements for legacy facilities and Operating Rules for the Pile Fuel Cladding Storage Silo. An inspection of decision making processes revealed a number of inconsistencies with respect to procedural adherence. Sellafeld Ltd has accepted our findings and responded with an improvement programme for decision making processes in the Decommissioning Directorate.

Sellafeld Limited has recently reported two events to the NII both of which have occurred in the Magnox Swarf Wet Storage Silo (MSSS). We are reviewing Sellafeld Ltd's response to these events and considering the need for formal enforcement action. Our enforcement decisions will be based on guidance set down in the HSE's Enforcement Policy Statement and Enforcement Management Model.

3.2 Legacy Silos Projects

We continue to monitor progress made by Sellafeld Ltd towards retrieval of the inventory from these facilities.

Of note is the active commissioning of the 3rd Extension Liquor Activity Reduction project in the MSSS. This is an important hazard reduction project and contributes to the work to prepare the plant for retrieval of the radioactive inventory. This work was finally permissioned on the 16th July. As previously reported this project had for a number of reasons failed to meet programme dates. To date progress is slow and Sellafeld Ltd has encountered some technical problems, we will continue to monitor the safety and the progress of this important hazard reduction project.

Also of note is the active commissioning of a new argon passive off-gas system in the Pile Fuel Clad Storage Silo (PFCS). Previously we reported that we were confident that the work would be delivered safely, this still remains the case, however, recent issues related to inactive commissioning have delayed this work by 3 weeks.

A key focus for us has been on ensuring through inspection and assessment that Sellafeld Ltd has adequate arrangements for its interaction with the NII on the future permissioning of a number of activities. A disadvantage with Sellafeld Ltd's current arrangements is that the retrieval projects require significant permissioning activities to allow the granting of Licence Instruments. In order to allow NII to focus on the more safety significant activities we are currently trialling the use of a more flexible approach, termed flexible permissioning, for a number of such activities.

Under these arrangements recently, we have discussed with Sellafeld Ltd the use of the MSSS building crane for lifts greater than 10.5 tonne, currently this is restricted to 2.5 tonne. Recent consideration of documents and site inspections have indicated that Sellafeld Ltd is making good progress with this work, although behind programme, and will seek 'agreement' under these flexible permissioning arrangements in the near future. This work demonstrates progress towards preparation for retrievals in this facility.

3.3 Legacy Ponds Projects

We have continued to challenge Sellafield Ltd on ensuring full availability of the emergency pumping system in the First Generation Magnox Storage Pond. This has now been achieved. We have been disappointed with the repeated project delays in achieving full availability of this system.

We continued to monitor Sellafield Ltd's progress in meeting the short term milestones, covering the Pile Fuel Storage Pond, put in place in August 2009 and referred to in previous reports. Five out of the six milestones were successfully completed but difficulties were encountered with the bulk desludging of an area of pond floor under the east washdown area. The work, undertaken before the milestone date of 31 March, involved using a remote operated vehicle (ROV) to remove the sludge. After the first pass of the ROV camera inspections showed that very little sludge had actually been moved. This has resulted in Sellafield Ltd having to carry out significant modification work to the ROV, which will keep it out of service until later in the year. We will continue to monitor progress in this area. Milestones and targets for the next year are to be agreed in line with the revised Licence Condition 35 arrangements recently put in place by Sellafield Ltd.

As noted in the last report, Sellafield Ltd has failed to meet the Intermediate Level Waste (ILW) Specification, part 325 (b) which requires that at least 90% of the total volume of potentially mobile ILW accumulated as sludge in the First Generation Magnox Fuel Storage Pond shall be stored in modern stainless steel containment by the 1 August 2010. Sellafield Ltd has made some limited progress towards meeting the requirements of the Specification. We are currently determining whether Sellafield Ltd has done everything so far as is reasonably practicable to satisfy the Specification and our deliberations will inform the decision on whether there is a need for further enforcement action, as guided by HSE's Enforcement Policy Statement and Enforcement Management Model. We will consider the nature of the challenge and the inherent uncertainties associated with remediating a legacy facility such as the First Generation Magnox Storage Pond. Sellafield Ltd has stated that it is committed to meeting the scope of the Specification as soon as is reasonably practicable and we are satisfied that major hazard and risk reduction is the main focus of Sellafield Ltd's activities.

We are continuing to monitor progress on the major construction projects, Sludge Packaging Plant 1 and Local Sludge Treatment Plant. We have raised some detailed technical issues relating to these projects over the last quarter.

3.4 Decommissioning Zones 2&3

Sellafield Ltd has met a significant regulatory requirement prior to its due date of 1 August 2010, by complying with Licence Instrument No 324(c), which relates to B243. The Licence Instrument was issued under LC 32(5) and specifies that the licensee shall not accumulate radioactive wastes except in a place and manner approved by the Executive. The Specification was one of

number issued in 2000 as a result of regulatory concerns regarding the storage of Intermediate Level Waste (ILW) in facilities on the site, with the aim of seeking improvements to the management of the waste by specified dates.

We are satisfied that Sellafield Ltd has made continual progress with B243 since 2000. The work has involved removal of waste that could be removed, the carrying out of various modifications to improve and modernise the waste storage, and provision of a new facility for retrieval of the remaining waste that is now stored safely. This aligns with NII's strategy for Sellafield Ltd to continue to reduce hazards and risks on the site. The licensee has provided a programme for the retrieval of the remaining waste, including steps to reduce the amount that will have to be categorised as ILW. We expect Sellafield Ltd to deliver this programme and we will monitor its progress against this.

NII issued Licence Instrument No 784 dated 23rd August 2010, to allow Sellafield Ltd to begin decommissioning a redundant ventilation system in the Product Finishing Plant within the Separation Area. The work that Sellafield Ltd's project team had done to reduce the risk to workers in accordance with the ALARP principle in this project was particularly notable.

3.5 Windscale

Sellafield Limited has informed us that some of the Windscale decommissioning projects will stop owing to the current site funding limits. We have sent a letter asking Sellafield Limited, the parent company, to justify the deferral - particularly of Pile 1 decommissioning, and to demonstrate that its decision-making fully considered both the short and long term safety implications. Also, we have advised Sellafield Ltd (Windscale) that it is important that it captures and retains the knowledge of the project teams before they are dispersed.

3.6 Calder Hall

No decommissioning work to report.

3.7 Baseline Surveys of Contamination

We continue to be supportive of Sellafield Ltd's Baseline Survey initiative. These surveys are intended to identify and catalogue leakages of radioactive material outside buildings on the site. Improvements to LC 34, which requires that radioactive materials and wastes are controlled, contained and monitored to prevent leakage and escape, have resulted in good engagement between the site and regulators. Sellafield Ltd has provided a draft programme that it has populated with milestones to enable monitoring of its implementation.

3.8 Sellafield Contaminated Land & Groundwater Management

The NII and EA continue to work closely with Sellafield Ltd in ensuring that its contaminated land and groundwater management programme progresses satisfactorily. Sellafield Ltd has provided an update on the current status of

this work and will be providing a range of factual and interpretive reports for comment to the NII and EA during September 2010. Sellafield Ltd has stated that there are no plans for further characterisation or remediation of the trenches in the short to medium term and both the NII and EA have requested justification for this. The trenches were used for waste storage in the early days of the site, and as such fall well below modern standards for waste storage. Sellafield Ltd is making good progress with its borehole (monitoring well) maintenance and redevelopment programme. We are monitoring this programme to ensure that Sellafield has an adequate network of boreholes.

As part of the Land Quality Safety Case review, Sellafield Ltd has produced a document 'The Principals and Guidance Manual' and we intend to provide feedback on this. Additionally, we also intend to provide input into an update on the short term contaminated land and groundwater strategy that Sellafield Ltd is producing this year.

3.9 Sep Area Ventilation Project

We are satisfied with Sellafield Ltd's progress towards replacing the old Separation Area ventilation system with a modern system. This is an enabling project, as the new system will allow other planned decommissioning projects to commence when it is complete. Progress in construction of the main elements has continued and in past months the new substation has been completed and foundations for the main plant room have been cast. Work has been brought forward in relation to the new reinforced concrete stack and installation of foundation piles has commenced.