

Decommissioning Directorate Report to the Decommissioning Sub-Committee

Stephen Le Clere, August 2011

Directorate Business & Safety Performance Statistics

End Jan 2011 (Period 10) – End Aug 2011 (Period 5)

RIR Recordable Incident Rate	0.50 for Decommissioning Directorate (This is lower than the Sellafield Site Statistic which is 0.52 for the same period)			
LTAR Lost Time Accident Rate (Rolling 12 month rate)	0.31 for Decommissioning Directorate (This is lower than the Sellafield Site Statistic which is 0.36 for the same period)			
<p>Since last Sub-Committee (March 7th) to the end of Period 5, there have been 10 recorded accidents (site total 31) of these 7 were lost time accidents (site total 22) 5 of which are also reportable to RIDDOR (site total 16). Of these 5, 2 were classed as Major Injuries.</p> <p>The major injuries first included a tragic road accident when a banksman stumbled into the path of a Mobile Elevated Working Platform (MEWP or 'cherry picker'). The individual suffered significant crush injuries and was, at one point, in a critical condition. The individual has subsequently made a good recovery albeit with a life-changing loss of limb.</p> <p>The second injury also involved an individual stumbling, this time at a boot barrier, landing awkwardly on the hand and fracturing the wrist. The individual is still recovering.</p>				
CPI Cost Performance Index	1.03 This is a slightly positive metric meaning that each pounds worth of work was delivered for 97p meaning a cost saving of 3p in every pound spent.			
SPI Scheduled Performance Index	0.89 This means that 89% of the scheduled work was delivered within the period.			
Performance Based Incentives (PBIs) 2011/12	Total	On Target	Achieved	At Risk
Magnox Swarf Storage Silo (MSSS)	8	3	1	4*
First Generation Magnox Storage Pond (FGMSP)	7	6	-	1[†]
Pile Fuel Storage Pond (PFSP)	6	4	-	2[†]
Solid Waste Storage Silo (PFCS)	5	3	-	2[†]
Site Remediation & Decommissioning Projects (SR&DP)	3	2	1	-
Decommissioning Directorate	29	18	2	9

* Includes one PBI classed as a 'super-stretch' target. Actual work is slightly ahead of the Performance Plan schedule.

At risk are (i) completion of Silo Emptying Plant construction – mitigation plans are being developed to maintain schedule, (ii) Safety committee approval of routine cooler (later compartments) operations – hit by loss of key personnel, and (iii) liquor management preparation (early compartments) – also hit by key personnel loss, however currently subject to wholesale strategy review intending to significantly accelerate overall delivery.

† Includes one PBI classed as a 'super-stretch' target. Work is ahead of the Performance Plan schedule.

‡ Includes one PBI classed as a 'super-stretch' target. Work is also considered slightly at risk relative to the performance plan schedule. Canned Fuel Export to the element examination cave is subject to facility leaseholder negotiations; however the Performance Plan date is still achievable.

‡ Both PBIs classed as a 'super-stretch' targets, work for both is actually ahead of the Performance Plan schedule

Decommissioning Directorate Update

- To aid incentivisation of LP&S hazard reduction performance the NDA have included some 'super-stretch' PBI targets for the first time this financial year. These pull certain milestone dates forward considerably, and offer rewards should Sellafield Ltd improve on the already aggressive Performance Plan milestone dates. The Directorate has chosen to **report progress against the 'super-stretch' dates** where applicable, and therefore a substantial number are considered at risk. Compared to the Performance Plan, however, most of the progress is on or ahead of target.
- Since the previous report, **Jim French** has taken over from Russ Mellor as **Executive Director for Decommissioning, Sellafield**. Russ Mellor had an extended tenure here at Sellafield, and the groundwork has been set for Jim French to push progress forward into the more operational phases of decommissioning. Jim was previously the President of the Savannah River Site in the US and brings with him a wealth of experience in decommissioning programme portfolio delivery.
- As mentioned in the **safety summary** above, this year saw a tragic **road accident** when a banksman stumbled into the path of a Mobile Elevated Working Platform (MEWP or 'cherry picker'). The individual suffered significant **crush injuries** and was, at one point, in hospital in a critical condition. The individual has subsequently made a good **recovery** albeit with a life-changing loss of limb. A subsequent **Board of Inquiry** has been held, with some actions for improvement completed or underway. The root cause was concluded to have been an inadequate separation distance between the vehicle and the individual during transit.

Decommissioning Project Area Updates

Pile Fuel Storage Pond

- **Five Tonnes of contaminated material**, consisting of four skips, has been **moved out of the pond**, achieving a performance milestone for the team. This is particularly significant as the team had to resolve a number of issues with the skip handling machine. The removal of the solid waste, in addition to the sludge already removed from the pond floor & placed in the sludge corral, is a visible demonstration of the progress being made on the retrievals programme.
- The PFSP also **assisted the recovery operations at Fukushima** by transferring a considerable amount of Ion Exchange material to Japan to enable water clean up activities to commence sooner.

First Generation Magnox Storage Pond

- **Continuing risk reduction** through the isolation of redundant effluent and sludge pipelines in the FGMS is an ongoing programme. **High Level Service Line (HLSL) pipes have been removed** from facility where possible. Where dose constraints made removal of the HLSL impractical,

eleven hammocks have been installed to support and capture the HLSL pipework and provide increased levels of protection.

- The **preparation for the Skip Handler return to service** has made appreciable **progress**, with the machine moving under its own power on the pond for the **first time in over 11 years** recently. The Skip Handler is a crucial piece of equipment for future high-hazard reduction
- **Schedule delay continues to impact FGMS D-Bay Operations**, with unexpected remote manipulator mechanical failures posing a significant setback in preparation for 'clean & seal' activities to improve containment. This issue has now been overcome and extensive work with the regulator has now established a **forecast completion date later in September 2011**. Witnessed demonstration trials are nearing completion and mobilisation of the equipment to the Sellafield site is already underway.

Magnox Swarf Storage Silo

- **Liquor Activity Reduction (LAR)** associated with the mobile inventory within the facility continued to progress well after an outstanding performance last year. The LAR team also received an **Award of Excellence** in the URS Pyramid Awards 2011 for their work. This is a **significant risk reduction** step for this high-hazard facility and will underpin many years of future operation.
- In the Silos Direct encapsulation Plant (**SDP**) building site area, a **crane block unexpectedly fell** from an overhead crane during testing. This large and heavy item fell from considerable height and **could have resulted in injury**. The Health & Safety Executive carried out a subsequent investigation, and issued a formal **Improvement Notice**. Several improvements have been identified (particularly in legacy configuration control) and the notice has now **been successfully formally closed out**. Also successfully closed out was the longer-term Improvement Notice issued associated with disconnected analysers in the MSSS facility.

Pile Fuel Cladding Silo

- The **Licence Instrument** permitting the start of construction of the Retrievals facility has been granted by the Office for Nuclear Regulation and **work has begun on the superstructure build**. The foundations for this facility were completed in 2009, and the construction of the new superstructure and control room is the next stage in readying the plant for waste retrievals.
- **Contracts totalling £160 million are in place** with external suppliers to cover construction of the superstructure, design and build of the retrieval modules and provision of a crane to handle the 60te boxes of retrieved waste.

Site Remediation & Decommissioning Projects (SR&DP)

- Although **water ingress** and degradation continues to be an issue with the older facilities in a care and maintenance state, **activities are progressing to improve environmental protection**.
- Activities to **dismantle, and remove to ground, the large Pile Chimney filter gallery** at the top of Pile Chimney No1 will be **accelerated this year** to remove degraded material and to improve the seismic withstand capability of the structure. This is a substantial amount of work with **over 650 tonnes of material to be lowered** from the top of the building.