

Decommissioning Directorate Report to the Decommissioning Sub-Committee

Stephen Le Clere, March 2011

Directorate Business & Safety Performance Statistics April 2010 (Period 1) – End Jan 2010 (Period 10)

RIR Recordable Incident Rate	0.43 for Decommissioning Directorate (This is lower than the Sellafield Site Statistic which is 0.61 for the same period)			
LTAR Lost Time Accident Rate (Rolling 12 month rate)	0.21 (This is lower than the Sellafield Site Statistic which is 0.36 for the same period)			
Since last Sub-Committee (Sept 7 th) to the end of Period 10, there have been 3 recorded accidents (site total 29) of these 1 was a lost time accident (site total 19) which as also reportable to RIDDOR (site total 18). 2x industrial workplace (inc. 1x back injury during lifting (RIDDOR)), 1x tumble on stairs due to weather conditions				
CPI Cost Performance Index	1.11 This is a positive out-turn meaning that each pounds worth of work was delivered for 89p meaning a cost saving of 11p in every pound spent.			
SPI Scheduled Performance Index	1.00 This means that 100% of the scheduled work was delivered within the period.			
Performance Based Incentives (PBIs) 10/11	Total	On Target	Achieved	At Risk
Magnox Swarf Storage Silo (MSSS)	6	4	2	-
First Generation Magnox Storage Pond (FGMSP)	7	1	4	2*
Pile Fuel Storage Pond (PFSP)	3	1	-	2**
Solid Waste Storage Silo (PFCS)	3	1	2	-
Site Remediation & Decommissioning Projects (SR&DP) and Windscale	3	-	3	-
Decommissioning Directorate	22	7	11	4

* Schedule delay impacting all FGMSP D-Bay Operations (and therefore the two associated PBIs) due to additional necessary trials reassessing the application and sealing technique. These are required after early performance issues identified in testing.

** Combination of several factors including severe winter weather impacting operations, equipment failure and greater than predicted pond debris, has led to delay in sludge corral filling. Seven double day shifts and concerted efforts to recover as much time as possible, milestone delayed till mid-March. Metal fuel skip for transfer to the site Fuel Handling Plant is on target for skip being *ready* to transfer for March PBI date, however receipt into FHP has yet to be confirmed.

Decommissioning Directorate Update

- The **Legacy Ponds & Silos** teams have produced detailed '**Performance Plans**' outlining the steps that each of the four high-hazard facilities will be taking, in preparing to start inventory retrievals. These Performance Plans **aggressively and safely accelerate** the dates associated with **risk and hazard reduction**. Performance Plans, covering the lifetime of 'operational' decommissioning will be finalised, along with the rest of Sellafield site by the end of this financial year.

Performance Improvement Action Plans (PIAPs) have been produced that detail the accelerations that are being implemented, and also the potential further milestone opportunities,

- The Decommissioning Directorate has been subject to a period of intense and ongoing stakeholder engagement and scrutiny, including in-depth Union and Regulatory engagement. Thus far, this has yielded generally good and constructive feedback, however clarity and transparency of communications is an ongoing challenge.
- At the start of February a **small (~20ml) volume of high radioactivity alpha-bearing substance was discovered** in the First Generation Plutonium Purification Plant within the Separation Area. This was near a vent extract of a highly contaminated cell, and ongoing investigations are centred on this as a source of the contamination. The liquid is now cleaned up and **at no point was there harm to personnel or the environment**.

Decommissioning Project Area Updates

Pile Fuel Storage Pond

- Real and visible progress is now being seen in the PFSP with the installation of the 2-tonne Sludge Hood (a bulk sludge movement tool) and, **for the first time in 47 years**, movement of a metal fuel skip. Sustained performance has unfortunately been frustrated by severe winter conditions and some equipment limitations; however operations are very much underway, retrieving sludge material into modern stainless steel containment.

First Generation Magnox Storage Pond

- **Continuing risk reduction** through the isolation of redundant effluent and sludge pipelines in the FGMSP is an ongoing programme with several key operations now complete.
- Progress has also been visible in preparing high hazard waste buffer vessels for the **Sludge Packaging Plant**, which will receive the FGMSP sludge wastes. As well as the final roof concrete pour being completed, the **assembly of the first of three large 33m long, 240 tonne, stainless steel vessels** has commenced on site.
- There has been substantial **schedule delay impacting all FGMSP D-Bay Operations** due to additional necessary trials reassessing the application and sealing technique intended for use in the legacy bay. These extra trials are required after early performance issues identified in scheduled testing. Successful engagement with regulatory stakeholders is also

essential to successful completion. Site application activities are now planned for later in 2011.

Magnox Swarf Storage Silo

- **Liquor Activity Reduction** associated with the mobile inventory within the facility has now **exceeded its stretch target** exporting 180m³ or over 1100 TBq of radioactive liquor before the end of this financial year. This is a **significant risk reduction** step for this high-hazard facility and will underpin many years of future operation.
- Five out of six new containment pumping systems have now been successfully installed in the older parts of the facility, substantially **improving the existing containment systems**. The final installation is estimated for completion later in 2011.
- Difficult mechanical handling challenges have been tackled in trials of waste movements for the Silos Direct encapsulation Plant (**SDP**). **Underpinning of the treatment technology** of the MSSS wastes **is crucial for ultimate hazard reduction**

Pile Fuel Cladding Silo

- Contracts for the Engineering, procurement and Construction of the major civil works and the provision of the major site crane for facility waste retrieval are now in the final stages of award.
- The **superstructure construction safety case**, a **significant and challenging** legal submission, has now been prepared and **ready for Regulatory endorsement**.

Site Remediation & Decommissioning Projects (SR&DP) and Windscale

- There has been a very **visible change in the Sellafield skyline** as the replacement Separation Area Ventilation (**SAV**) discharge stack is being completed. This **124m chimney** will replace the existing primary ventilation for a number of important facilities and is a positive **and key enabling step in ultimate hazard reduction** for LP&S and the Sellafield site.
- **Severe weather** in December has posed a considerable challenge for the care and maintenance teams in the legacy facilities. Water ingress and problems associated with sustained freezing conditions have been tackled as they have arisen.
- On **Pile Chimney No1** there is important ongoing work associated with chimney 'headgear'. This work will **lower the redundant structure** to the ground **ready for dismantling**.
- Some activities in these areas of decommissioning are being slowed because they have little risk of serious consequence. This permits priority to be applied to the high hazard LP&S facilities.