



HUNTERSTON A

**STAKEHOLDER REPORT FROM
SITE CLOSURE DIRECTOR**

MARCH 2017

**HUNTERSTON A
SITE CLOSURE DIRECTOR'S REPORT TO THE SITE STAKEHOLDER GROUP
THURSDAY 2 MARCH 2017**

Hunterston A continues to make good progress on our programme of work to Care and Maintenance. We continue to be adequately funded by the NDA and remain committed to addressing the nuclear liabilities at Hunterston A in a safe, secure manner with care for the environment.

1 SAFETY OVERVIEW

1.1 Safety Review Performance

It has been 33 months since the last Lost Time Accident (LTA) on site and both the Total Recordable Incident Rate (TRIR) and Day Away Case Rate (DACR) for site remain at zero. We have however, had two first aid case injuries on site since the last report, in both cases the injuries were very minor in nature, one being a graze to the head and another a minor chemical splash to the eye.

The "Target Zero" campaign continues to be implemented on site and across the whole Magnox fleet. Over the past three months the focus has been on 'Emergency Planning' (December), 'Waste Awareness' (January) and 'Asset Management' (February). The topic focus point changes weekly over the course of the month and is discussed at all meetings held on site. Target Zero posters are displayed at prominent locations on site to ensure it is well communicated to the workforce. The current theme for March is 'Workplace Transport Safety'.

The site continues to support the Company Safety Improvement Plan and the introduction of company Common Processes, with recent work being focussed on Workplace Transport Safety and Risk Assessments respectively.

The Hunterston Safety Representatives, who are well supported on site, continue to meet fortnightly and provide valuable support and feedback to management regarding safety and welfare concerns on site. The Site HESAC meets bi-monthly and is chaired by Site Closure Director and the EHSS&Q Manager to discuss relevant topics including safety performance with the Safety Representatives.

Since the start of the New Year the site has been rolling out a safety culture workshop entitled "*What does Safety mean to me?*" which focusses on the personal choices made by each individual to ensure that that person works as safely as possible and keeps his / her colleagues and workplace safe. This workshop has been described as "impactful" and has been very well received by those groups who have attended to date.

2 DECOMMISSIONING PROGRESS

2.1 Clean and Drain Pond Project

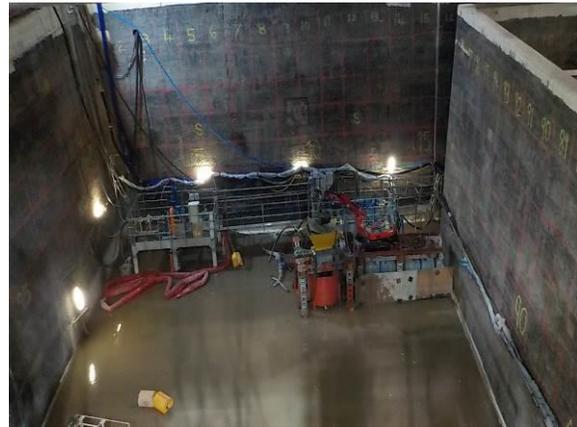
The Sludge Retrieval equipment has now been set up in Bay 8. The Sludge Retrieval work continues to be challenging however progress is being made. Ultra High Pressure (UHP) water jetting in Bay 6 is now complete and the equipment withdrawn from the area. All fixed furniture in Bay 4 has been removed and decontamination work is now complete and ready to be surveyed.

Work is also underway to improve the capabilities for processing sludge from the PPS to SRT1.

- *639m² of 1078m² of concrete surfaces have been shaved.*
- *Approximately 160m³ of water remaining in Pond.*
- *1578 of 1626 pontoons have been removed.*



Bay 4 grid marked ready for Monitoring Surveys



Sludge Retrieval Equipment set up in Bay 8

2.2 Solid Active Waste Bunker Retrieval (SAWBR) Project

SAWBR has made good progress against the last quarter with over 70 packages of waste recovered. The 500th package was safely recovered on Tuesday 7 February 2017 which was a significant milestone enjoyed by the delivery team.

At the time of writing, 505 packages of waste have been safely and compliantly recovered from the SAWB Bunkers. Recoveries from Bunker 3 so far suggest a completion date of July 2017.

The Project team is currently planning the work activity around safe break through into Bunker 2 which will follow Bunker 3 clearance. The SAWB waste retrieval operations are currently three months ahead of the planned schedule and represents excellent progress against the sites hazard reduction mission.



2.3 Wet Intermediate Waste Retrieval & Encapsulation Plant (WILWREP)

During a routine Licence Condition 21 (Commissioning) inspection of WILWREP the site's ONR Inspector raised concerns over the standards and discipline shown in the completion of certain commissioning records. Following an investigation Magnox were able to demonstrate to the Inspector that adequate controls were in place and that at no point were there any safety concerns related to the commissioning activities. This issue had originally stemmed from the unique nature of the transfer of the WILWREP project from a contractor to Magnox under a specific set of unusual circumstances. Additionally some difference in interpretation of terminology caused some concern with ONR with regard to handling of minor design changes. Magnox were able to demonstrate that their processes had been followed correctly and that safety was not compromised and both issues were closed out very quickly.

Having completed the active ventilation system commissioning, the retrieval pump manipulator equipment active commissioning was successfully completed. With these systems completed the final permission was granted from the Site Closure Director and ONR to proceed with the first active package.

The first active drum was retrieved, encapsulated and transported to the ILW Store on Tuesday 31 January 2017. The second active drum was retrieved, encapsulated and transported to the ILW Store on Monday 13 February. The third drum is currently in the waste retrieval stage and it is anticipated to be in the ILW Store by Friday 24 February.



These early active commissioning drums have been successful with minor commissioning observations being raised. WILWREP was inspected by the Nuclear and Environmental Safety Committee (NESC) on Monday 6 February. The inspection was very complimentary about the progress being made and the operational standards being shown on the facility.

The objective of the project remains to progress to active commissioning in a safe and effective manner, delivering compliant encapsulated packages for storage in the Intermediate Level Waste (ILW) Store.



***Drum #1 being lowered into the XST
In WILWREP***



Drum #1 in the XST on route to ILW Store

2.4 Solid Intermediate Level Waste Encapsulation (SILWE) Project

The overbuilding structural steelwork is complete with the PVC cover installation now substantially complete. The site continues to be very busy with the mobilisation of various sub-contractors to paint the structural concrete walls and floors, install the electrical equipment, install the ventilation plant and equipment and install the shielded windows.

At the offsite testing facility all mechanical and electrical installation work (including the motor control centres and the programmable logic control cubicles) has been successfully completed. The Principal Contractor has substantially completed conveyor and grout system setting to work. The MCC and PLC panels have completed input and output testing and are undergoing interlock software system testing. It is anticipated that full integrated testing of the control system, grout plant and conveyor system will start in the next quarter at the offsite facility. The Principal Contractor continues to maintain a good standard of safety performance on the project.



Overbuilding Looking East



Electrical Primary Containment and HVAC Process Cell Roof



Grout Plant at ITF (Integrated Test Facility)



Conveyor Assembly at ITF.

3 PEOPLE

3.1 Site HR & Occupational Health

Our transition to the new organisation is nearly complete and we are now embedding the changes, making minor adjustments as required, and back to 'business as usual'.

Our next transition at Hunterston will be to combine the two Closure Director posts at Hunterston and Chapelcross. This means that I will in the near future be handing over to John Grierson, Scottish Region and Chapelcross Closure Director. John is a very experienced Closure Director and has worked with Magnox for the majority of his career and will bring a wealth of experience to the role. In moving to one Closure Director for the two sites we are following the lead of Harwell and Winfrith in the south of England and Berkeley and Oldbury in the south west of England. We are also exploring when we can remove the requirement for 24/7 shift operations. We are currently scoping the work to achieve this and are targeting an earliest implementation date of autumn 2017, although we require establish the plan further before we can underpin what is sensibly and safely achievable. The transition is likely to involve changes to the infrastructure as well as changes to management arrangements and necessary approvals. All affected employees are aware of the forthcoming change and formal consultation will commence when greater detail is known.

How the HM Government Reforms will apply to Magnox remains a topic that is of much interest to our employees. The current position is as follows:

We are still waiting for HM Government to publish the regulations that would implement the proposed £95k cap ("the cap") on public sector exit payments, which is part of the Enterprise Act. Based on information raised during the passage of the Enterprise Bill, the definition used to determine which organisations would be covered by this intended legislation is derived from Office for National Statistics (ONS) data, which means that it is expected to be applicable to Magnox.

Similarly, as the ONS classifies Magnox as a public sector organisation, our final salary pension schemes are in scope for reform by HM Government. These reforms are currently being consulted on and all final salary scheme members have been sent a letter and booklet outlining the proposals. Discussions are ongoing with the national trade unions regarding these proposals.

In Magnox we recognise that this is not a straightforward subject for many people and, as such, pension presentations have been scheduled at all of our sites during the consultation period to help employees understanding of the potential changes to final salary pension schemes. Presentations were held at Hunterston on Thursday 23 February.

Regular communication updates have been provided to ensure our employees are aware of the position in relation to the application of HM Government reforms to Magnox.

Overall health of the workforce remains good, although overall sickness levels remains above our Company target due to long term sickness cases. However, these cases are reducing in number with some of our employees who have had serious health issues have recently made good recovery and are now back to work.

4 ENVIRONMENT (January 2016 to December 2016)

4.1 Radioactive Discharges

Solid

Low Level Waste (LLW) disposals to the Low Level Waste Repository (LLWR) continue. 203.3 m³ of LLW was disposed of during the twelve month period from January 2016 to December 2016. There is no limit on the volume or radioactivity content of LLW being disposed of under the site RSA authorisation. The main contribution to these waste consignments was redundant plant and equipment generated during decommissioning operations.

Liquid

The main sources of liquid radioactive discharges during the period January 2016 to December 2016 was dewatering of the pond and routine waste water arisings from the site active drain system.

Radionuclide or Group of Radionuclides	Annual Limit	Activity discharged (January 2016 to December 2016)
Tritium	30 GBq	0.46 GBq
Caesium-137	160 GBq	0.31 GBq
Plutonium-241	2 GBq	0.23 GBq
All alpha emitting radionuclides not specifically listed taken together	2 GBq	0.64 GBq
All non alpha emitting radionuclides not specifically listed taken together	60 GBq	1.56 GBq

Gaseous

The main contributions to gaseous radioactive discharges were ventilation systems operating in contamination controlled areas and reactor vessel 'breathing'.

Authorised Outlet, Group of Outlets or other discharge route	Radionuclide or Group of Radionuclides	Annual Limit	Activity discharged (January 2016 to December 2016)
All authorised outlets taken together.	Tritium	100 MBq	56.4 MBq
	All other radionuclides (excluding tritium)	3 MBq	0.98 MBq
Discharges made as a consequence of reactor breathing	Tritium	3 GBq	0.65 GBq
	Carbon-14	200 MBq	56.4 MBq

4.2 Non-radiological Environmental update

Surveillance and analysis of the sewage treatment works effluent continues to ensure compliance with the discharge licence. Treated sewage effluent from the plant continues to be independently assessed by SEPA throughout the year. Results from SEPA and an off-site independent laboratory verify that the sewage treatment works reed beds continue to work efficiently to maintain good quality effluent.

Monitoring of resources such as water, electricity and fuel continues to determine where use can be minimised. Site objectives and targets for resource use are being monitored and reviewed and any actions are being completed as planned.

Over the period January 2016 to December 2016, 100% of the non-radioactive hazardous waste, 99% of the non-radioactive non-hazardous waste, and 100% of the non-radioactive inert waste produced at Hunterston A was sent for re-use or recycling. Only 2.5 tonnes of waste was disposed to landfill during that period.

In November 2016 the site successfully demonstrated its compliance with ISO14001 Environmental Management Systems standard in support of Magnox Ltd retaining its company ISO14001 accreditation.

4.3 Environmental Events

There were no environmental events in the period January 2016 to December 2016.

5 RADIOLOGICAL SAFETY

Explanatory note: The maximum permissible dose to a radiation worker in the UK is 20mSv (milliSieverts) in a calendar year. The average annual radiation dose to the UK population from all sources is 2.6mSv. Collective dose is usually measured in man.milliSieverts. For example, if ten people were each to receive 0.1milliSieverts during a particular task, then the collective dose for the task would be 10 people x 0.1mSv each = 1 man.milliSievert.

Doses for the calendar year 2016 are as follows;

- *Approximately 186 employees received a total collective dose of 15.655 man.mSv between them*
- *Approximately 509 contractors received a total collective dose of 124.487 man.mSv between them*
- *The highest individual dose received by an employee was 4.309 mSv*
- *The highest individual dose received by a contractor was 6.639 mSv*

The majority of dose accrued in 2016 has been from a combination of the pond decommissioning project and other site projects. All doses in these projects have been prior-assessed, planned and are tracked throughout the project duration to ensure that no limits are exceeded and that doses are kept as low as reasonably practicable.

5.1 Radiological Events

There were no radiological events in the period from October to December 2016.

6 EMERGENCY PREPAREDNESS

On Wednesday 23 November 2016 the site successfully demonstrated the proposed future contingency arrangements to a team of ONR and Magnox assessors with two short exercises: one a leg injury in a metals decontamination facility and the other, an injured party suspended from a scaffold platform. Both exercises went very well, with all involved demonstrating prompt, professional and pro-active approaches. The exercises were also observed by a large group from the Scottish Ambulance SORT team.

With this major milestone completed, the focus shifts back onto continuing the demonstrations of both contractor and Magnox teams' contingency arrangements. There is also a series of communications packages being rolled out across the site, showing how the contingency response organisation will look once we move away from full-blown emergency arrangements.

ONR are ready to issue the site with License Instrument to permission the adoption of the new arrangements which will happen towards the end of March 2017, once all areas have demonstrated their ability to respond to an event and all the communication packages have been fully rolled out.

Hunterston and Chapelcross sites have moved to sharing a single Emergency Preparedness Officer (EPO). One advantage of which is that Chapelcross have already gone through the transition to contingency arrangements and therefore the EPO brings that experience and any learning with him when making the same changes at Hunterston.

The Contingency Arrangements, with command and control coming from the Site Control Room, are a more proportionate response to the type of 'emergencies' the site is likely to face in the future and through these exercises the site has proven that a faster reaction to the situation is provided without having to wait for the more traditional control centres to be set up.

The exercises always provide valuable learning opportunities, with, for example, a high concentration of actions in the Control Room being recently observed. This learning will be taken forward into future exercises and will inform the final implementation of the contingency arrangements, including any learning points being fed back to the Magnox central Emergency Preparedness team.

7 SOCIO-ECONOMIC AWARDS

There was a total of **16** applications in 2016/17 (**13 successful, 2 rejected and 1 cancelled**). Any new applications received from March will be for 2017/18.

Please see below the table of applications that have been successful in receiving awards this year:

MAGNOX SOCIO-ECONOMIC SCHEME 2016/17 - HUNTERSTON AWARDS		
APPLICANT	DETAIL	AWARD
Largs Rotary Club (<i>£300 Award Returned</i>)	Dragon Boat Charity Race – Youth Boat	0
Street Beatz Dance School	Holdalls - Dancers for Competition Events	£450
Largs Events	Schools Kites Project – Largs Event 2016	£500
St Andrews Congregation	Bosendorfer Piano Restoration Project	£500
West Kilbride Out of School Care	Children’s Learning Equipment	£253
Maritime Volunteer Service Ardrossan Unit	Safety Equipment for Motorboat	£903
Friends of Portencross Castle	Toilet and Septic Tank Project	£10,000
Largs Colts Football Club (<i>see picture below</i>)	Largs Youth Teams Training Kits	£540
West Kilbride Festival Committee	West Kilbride Christmas Lights 2016	£250
Prestwick Caledonian Youth FC	Training and First Aid Equipment	£250
Dalry Burns Club	Prizes & Trophies for Schools Competition	£400
Organic Growers of Fairlie	New raised fruit tree and vegetable beds	£800
Largs Community Resilience Team	ID Badges for Volunteer Team	£389
Fairlie Community Council	Computer and Printer	£548
TOTAL		£15,783



8 SITE VISITS AND KEY DATES

Hunterston A Site continues to attract the right kind of interest through our good safety and business performance. A selection of visitors and key dates during the period included:-

DATE	EVENT / VISIT
1 December	NDA Site Assessment Group (SAG) Review - Mark Raffle, Laura Baker, Gill Thomas
15 December	Glasgow University students visit HNA
20 December	ONR Fire Inspection – Ray Casaar ONR Fire Inspector
20/21 December	Tony Wratten - Magnox EHSS & Q Director
10 January	Hunterston SJC Meeting
12/13 January	The Japan Atomic Power Company
19 January	James Beckwith - Human Resources Director
23 January	Andrew New - Head of Procurement and Supply Chain
25 January	Site Closure Director Update to SSG Chair, Rita Holmes and SSG Vice-Chair, John Lamb & Magnox Socio-Economic Local Review Panel Meeting
27 January	Patricia Gibson MP Kenneth Gibson MSP
23 -26January	Rob Eales ONR – ONR Inspection
7/8 February	Nuclear Safety Environmental Council
21 February	Hunterston Site Review by Magnox Executive
23 February	Rachel Hewlett – Pensions Presentations
22 February	Site Closure Director Update to SSG Chair, Rita Holmes and SSG Vice-Chair, John Lamb & Magnox Socio-Economic Local Review Panel Meeting
2 March	Hunterston Quarterly SSG Meeting, Lauriston Hotel, Ardrossan

9 END NOTE

As highlighted above, this is my last SSG as Hunterston A Site Closure Director, a post I took up in September 2014. It has been my pleasure to lead the site over the past thirty months and to engage with the SSG. I take particular pride in the excellent safety and environmental performance of the site, the progress being made to safely process the Intermediate Level Waste (ILW) on the site and the support given to local organisations through the Magnox Socio-economic scheme.

I wish everyone every success as the site moves towards achieving Care and Maintenance state by Summer 2024.