



HUNTERSTON A

SITE STAKEHOLDER GROUP REPORT

SITE DIRECTOR – MARK BLACKLEY

MARCH 2022

HUNTERSTON A
SITE DIRECTOR'S REPORT TO THE SITE STAKEHOLDER GROUP
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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 SITE DIRECTOR OVERVIEW

Hunterston A site is part way through its Care and Maintenance Preparations (C&MP) phase of decommissioning which, subject to NDA approval and funding, is currently forecast to complete by October 2030 based on the current decommissioning strategy.

The sites COVID secure arrangements remain active and constantly under review. The site took proactive measures when the new omicron variant emerged and returned our Social Distancing requirements back to two metres, minimised close working on site and re-enforced the requirement for high level of hygiene and strongly encouraged home testing prior to attending site. The COVID secure arrangements remain suitable and sufficient and will be due review at end of February when more relaxations may be implemented.

There were no significant nuclear / conventional / radiological safety or security issues over the reporting period. The site has managed to safely deliver decommissioning work on site for the last 11 months with no Lost Time Accidents. The Magnox EHSS&Q Executive Team completed a review of the sites EHSS&Q arrangements and performance on the 16 February 2022. The site received positive feedback from the Executive committee and no concerns were identified.

There has been some excellent progress in a number of areas during the reporting period. The Higher Activity Waste team have now retrieved more than 62Te of Intermediate Level Waste to the Store since 1 April 2021. This exceeds the stretched target for the Year. Good progress is being made on improvements to welfare facilities, replacement of water damaged open floor gratings and Durbar walkways in both reactors and demolition of the Learning & Development Building

I am pleased to report that in addition to other vacancies that are being filled for the first time in a number of years, we are in the assessment and selection process for four trainee Radiological Protection roles, and we are advertising for two craft apprentices.

More details on some of these highlights are within the appropriate sections of this report.

2 SAFETY OVERVIEW

2.1 Safety Review Performance

Safety Performance on site is good. The site has managed to safely deliver decommissioning work on site for the last 11 months with no Lost Time Accidents. Our Total Recordable Incident Rate (TRIR) continues as part of the 12-month rolling total at **0.44** as a result of the single trip event reported March 2021.

We have had one (minor) First Aid case injury occurring during this period, a slight graze to the back of hand.

The Site did however have to call an ambulance to site in response to a person taking unwell on site (not work related). The individual was provided care and attention and then taken to A&E for further assessment. The individual has since returned to his normal duties. The sites First Aiders and Site Contingency Arrangements were enacted successfully.

The sites COVID secure arrangements remain active and constantly under review. The site took proactive measures when the new omicron variant became the new threat to site. We returned our Social Distancing requirements back to two metres, minimised close working on site and re-enforced the requirement for high level of hygiene and strongly encouraged home testing prior to attending site. The COVID secure arrangements remain suitable and sufficient and will be due review at end of February when suitable more relaxations may be implemented.

Target Zero continues to raise awareness on various topics such as reintroduction/refreshing awareness of Human Performance Tools and the current campaign of Radiological Protection. Human Performance has been instilled into Magnox way of working for a considerable time now but with new workfaces opening, new contractors and new personnel on site it is a timely refresher as is the Radiological protection campaign - this is seen as day job, but we must keep our focus and awareness on this hazard and not become complacent as the radiological hazard reduces through decommissioning processes.

The Magnox EHSS&Q Executive Team completed a review of the sites EHSS&Q arrangements and performance on the 16 February 2022. The site received positive feedback from the Executive committee and no concerns were identified.

In parallel to the EHSSQ Exec Review, Magnox Non-Executive Directors (NED's) visited the site to undertake an oversight review of sites progress and to get an understanding of the challenges and opportunities that may present as the site continues with the decommissioning of A Site. Again, the site received positive feedback from the visiting group.

The site Fire Safety Management group meet regularly to review the sites general fire safety arrangements to ensure they are effective and appropriate. The ONR Fire inspectors will be undertaking an inspection of the sites Fire Life Safety arrangements in March.

The sites reporting culture remains strong and healthy. We continue to receive over 100 Q Pulse reports every month and each report is assessed/reviewed appropriately either immediately or at the daily safety and compliance meeting and categorisation screened at the weekly event review meeting.

The site safety representatives meet fortnightly at the Local Safety Forum and bi-monthly HESAC (Health, Environment and Safety Advisory Committee)meetings. These meetings are well supported by Safety reps from Magnox and contracting partners and Magnox management and provide valuable engagement, cooperation and opportunity to address any issues/concerns and improvement raised on site including any suggested changes being introduced before implementation by Magnox. As a result of this engagement, phase one of the sites welfare facilities is well under way which is due for completion at the end of March 2022, with phases 2 and 3 following in the next financial years.

2.2 Emergency Arrangements

The sites Accident and Emergency Contingency Arrangements remain suitable and ever ready. The Site Contingency Teams undertake training exercises frequently to test and ensure that the Contingency arrangements remain suitable for the events that could foreseeably occur.

New working at height rescue equipment was demonstrated on site this month and an access contractor has purchased it and trained the full team in its use. It's refreshing to see that new innovative equipment is being recognised and utilised on site.

The site Security Guards frequently test there Silent Hours Contingency Arrangements during working shifts. These exercises and desktop scenarios that each team undertake on various threat considerations or other challenging scenarios are created by the site to test the arrangements.

All learning from these exercises is shared with all security guards and team leaders.

4 DECOMMISSIONING PROGRESS

4.1 Solid Intermediate Level Waste Encapsulation (SILWE) Project

The SILWE facility exists purely to encapsulate the 3M³ packages containing the solid waste retrieved/recovered from SAWBR with a grout mix. It is expected to take up to three years to encapsulate approximately 1500 stainless steel packages. Once encapsulated, the packages will be in their disposable state.

The SILWE Project continue with preparations for the commencement of Phase 2 Commissioning in April of 2022. Phase 2 will conclude with plant operations being managed via the SILWE control room.

In support of the next phase, the project has recently completed grouting operations on one 3M³ box as well as carrying out a dry fines



transfer into a 3M³ drum. A significant degree of learning was gained by running these sequences.

With the Robotic and Ventilation packages of work nearing completion, the project plan to transition into Phase 3 Commissioning in June of 2022, with Active Commissioning forecast to commence in the first quarter of 2024.

4.2 Hunterston Reactor Project / Plant & Structures

The reactor remedial repairs comprise two separate contracts, *Reactor Remedial Repairs* and *Reactor Interim Roof Remedial Works*. The appointed Principal Contractors for these contracts are Celadon, led by NSG Environmental and HLS McConnell respectively.

Reactor Remedial Repairs

The Reactor Remedial Repairs works programme has completed removal of all external cradle rails from both reactors and painting of exposed brackets, following the removal of the rails.

Works to replace water damaged open floor gratings and Durbar walkways in both reactors (approximately 90 separate locations) is now substantially complete in Reactor 1 and has started in both sectors of Reactor 2.

Scope to repair 27 column bases across both of the reactor buildings has also now commenced. The full scope of work on site is due to be completed by May 2022.



Reactor Interim Roof Remedial Works

The Reactor Interim Roof Remedial Works started on site in January 2022 with reassurance surveys and safety netting to secure a system inside the reactors under the roofs as a fall arrest measure. The reassurance monitoring is scheduled to complete in February and one half of Reactor 2 has been netted to date.

The main works to arrest water ingress to the roofs by applying a SIKA protection system will continue on, following completion of the fall arrest works and is due to be completed by early Autumn 2022.

Learning and Development (L&D) Centre Demolition Works

Plant and Structures are also undertaking a small-scale demolition project.

The appointed Principal Contractor is KDC.

This work has started on site as scheduled and the Contractor has mobilised and has commenced setting up



the site. The demolition project has a duration of approximately five weeks.

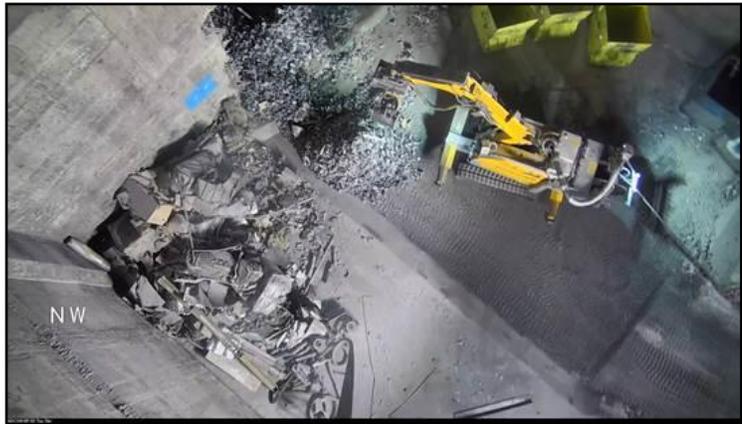
4.3 Solid Active Waste Bunker Retrieval (SAWBR) Project

The SAWBR facility was constructed to recover solid HAW (Higher Activity Waste) from within the site's five HAW bunkers. This is achieved by using remotely operated vehicles (ROV's) to fill hoppers that are then tipped into RWM (Radioactive Waste Management Ltd) approved 3m³ stainless steel boxes. The initial breakthrough into Bunker 5 was achieved in March 2014 and Bunkers 5, 4, 3 and 2 have been sequentially emptied to date.

The SAWBR facility continues to operate, processing waste from Bunker 1, with good progress being made in the period between December 2021 and February 2022, returning the plant back into service after the Christmas shutdown.

To date, the SAWBR team have safely exported a cumulative total of **199 3M³** boxes from Bunker 1 to the ILW Store - this equates to **120 Tonnes** of Bunker 1 waste. This brings the total of 3M³ boxes exported from SAWBR (all bunkers) to **1092 Boxes**. In this financial year, over **59 tonnes** of waste to date have been processed through SAWBR. Additional hours are being worked in SAWBR to help the company achieve its overall HAW targets for the year. The site's target has been revised and is now at **62 tonnes**. It is forecast that the bulk retrieval of waste from Bunker 1 should be completed by summer 2022.

The plant was shut down to allow planned, routine maintenance in SAWBR at the end of January for a week, providing an opportunity to progress non-process dependant maintenance activities and housekeeping tasks within the facility. The plant has since been returned to service and continues to export filled boxes of waste.



Bunker Waste Recovery Operations, showing a Brokk sorting waste from Bunker 1

4.4 Wet Intermediate Level Waste Retrieval & Encapsulation Plant (WILWREP)

The WILWREP facility was designed and constructed to recover and encapsulate Intermediate Level Waste (ILW) sludges, resins and acids stored in site tanks. The plant is now undergoing a reconfiguration to allow the processing of ILW Nitric acid, stored within the Acid Storage Facility. WILWREP operations personnel are assisting with these works and are also providing support as required to Waste Projects work on the

Pond Purge Sump Retrieval and Encapsulation Plant (PPSREP) – which is being installed for retrieval of sludges at a different location on site.

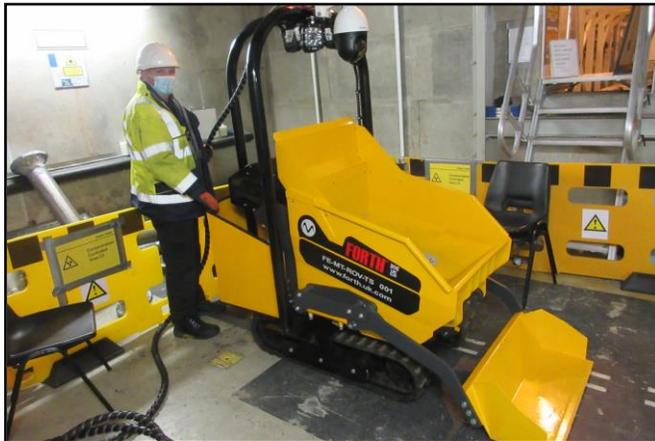
In parallel with the Waste Projects work mentioned above, the WILWREP Operations team has completed inactive commissioning and operator familiarisation of the new “Dumper Bot” and once permissions are in place this will be deployed into Sludge Retention Tank 3 (SRT 3).

The Dumper Bot will allow the team to remotely separate solid items of debris from the remaining sludge in SRT3 leading to completion of clearing the tank of both solid waste items and the remaining residual sludge. It is expected that these activities to clear SRT3 will take around two months.

Once SRT3 is cleared the Bot will be moved to SRT2 to complete the same task in that tank.



Residual sludge and miscellaneous debris in Sludge Retention Tank 3 in WILWREP



Dumper Bot during operator training within clean conditions prior to being deployed to the WILWREP inner tent.

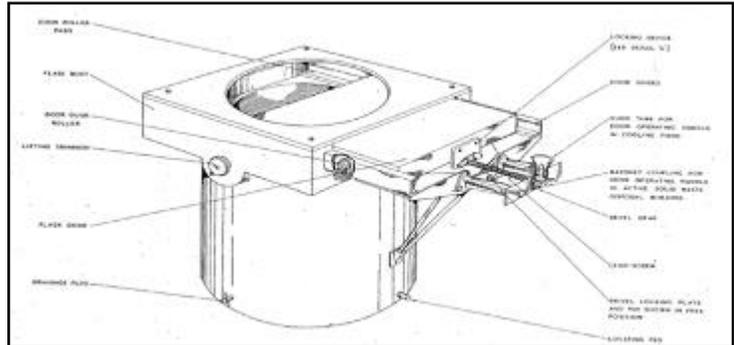
4.5 Ponds Programme

Ponds ILW Retrieval

Good progress with design and approvals has been made in-period in support of the three key ILW scopes within the Pond at Hunterston A. Quarter 1 2022 will see the ILW within the West Stop Log Harbour Workshop and the Magnet screen transferred and

handed over to High Active Waste along with several consignments of ILW being transferred to SAWBR via the SAW flask. Weekly sessions have commenced with HAW, Maintenance and Operations to ensure that the work is fully enabled and that all parties and appropriately engaged.

Waste segregation is currently ongoing within the Pond thus ensuring waste follows the correct waste route. Waste transfers both from the West Stop log Harbour Workshop and from the SAW flask are anticipated to take place from the end of February and throughout March. The DPAF for the Magnet Screen will be presented to the committee at the forthcoming review scheduled for the 1 March 2022.



Photograph and drawing of Solid Active Waste Flask

New Effluent treatment Plant (NEffTP)

Work to design and install a New Effluent Treatment Plant within the Low-Level Waste Transfer Facility at Hunterston A is progressing well. This system will facilitate the eventual diversion of current miscellaneous effluent streams which will in turn enable wider decommissioning of site by creating redundancy in the systems and tanks currently still in use.

Manufacturing contractor Barr and Wray have now completed their scope which integration contractor JGC then assembled as far as was practicable at their Thurso site throughout December and January in order to minimise the work required onsite at Hunterston A. JGC mobilised for Hunterston on 14 February and are now completing their mechanical installation scope. EC&I integration will follow with installation being forecast complete by the end of March 2022.



NEffTP mechanical components shown partially assembled at JGC's facility

5 PEOPLE

5.1 Site HR

Recruitment continues to be a key focus and several opportunities are being advertised external to the Company to meet our current work delivery and for future succession. As well as sourcing experienced candidates we are also recruiting trainee positions. We are currently advertising for Craft Apprentices to commence at Hunterston this September and are also progressing through the assessment and selection process to recruit several Radiological Technician Trainees. In addition, several longstanding Agency Supplied Worker positions have also been agreed to be filled through a Magnox New Starter Employment Contract, providing greater security for the site in retention of skills and personally for the individuals.

We have recently received the results of the Employee Engagement Survey that was conducted across the NDA estate and in the forthcoming weeks will be reviewing the feedback specific to Hunterston to identify trends and from this develop an action plan with required improvements.

From April we will be introducing new Performance Management arrangements **Valuing Individual Performance (VIP)** which has been developed including feedback from employees and external benchmarking. The new arrangements are to assist in improving the value that Performance Conversations can bring through an increased focus on developing skills and supporting wellbeing.

It will also provide flexibility in its application to ensure the conversations are right for employees in terms of their role, aspirations, development, or support required.

5.2 Occupational Health

COVID cases continue to fluctuate and these and other absences due to health have not impacted on our ability to progress work. Sickness trends have continued to reduce.

Mental health and wellbeing of our employees continue to be a focus with our Hunterston Wellbeing Group and Mental Health First Aiders continuing to provide valuable articles with information and suggestions of how the workforce may improve their health and wellbeing through the four pillars of good health.

- ***Eat Well***
- ***Sleep Well***
- ***Move Well***
- ***Relax Well***



6 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 2022, to the end of January, are as follows:

- *Approximately 122 employees and visitors received a total collective dose of 0.652 man.mSv between them*
- *Approximately 129 contractors received a total collective dose of 0.902 man.mSv between them*
- *The highest individual dose received by an employee was 0.129 mSv*
- *The highest individual dose received by a contractor was 0.065 mSv*

The majority of dose accrued in 2022 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.

7 ENVIRONMENT (January 2021 - December 2021)

7.1 Radioactive Discharges

Solid

Low Level Waste (LLW) disposals to the Low Level Waste Repository (LLWR) continue. 78.94m³ of LLW and VLLW with a total activity of 1.4 GBq was disposed of during the twelve-month period from January 2021 to December 2021. There is no limit on the volume or radioactivity content of LLW and VLLW being disposed of under the site EA(S)R Permit. The main contribution to these waste consignments was decommissioned plant, equipment, and materials generated during decommissioning operations.

Liquid

The main sources of liquid radioactive discharges during the period January 2021 - December 2021 were decontamination of various areas within the cartridge cooling ponds building, liquors generated through wet waste recovery and encapsulation processes, and routine waste water arisings from the site active drain system.

Radionuclide or Group of Radionuclides	Annual Limit	Activity discharged (Jan 2021 - Dec 2021)
Tritium	30 GBq	0.010 GBq
Caesium-137	160 GBq	0.056 GBq
Plutonium-241	2 GBq	0.003 GBq
All alpha emitting radionuclides not specifically listed taken together	2 GBq	0.003 GBq
All non-alpha emitting radionuclides not specifically listed taken together	60 GBq	0.054 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 (Jan 2021 - Dec 2021)
All authorised outlets taken together.	Tritium	100 MBq	0.3 MBq
	All other radionuclides (excluding tritium)	3 MBq	0.383 MBq
Discharges made as a consequence of reactor breathing	Tritium	3000 MBq	469.16 MBq
	Carbon-14	200 MBq	56.04 MBq

7.2 Non-radiological Environmental update (January 2021 - December 2021)

Treated sewage effluent from the plant is not currently being independently assessed by SEPA due to SEPA Covid restrictions on visiting Site. Results from an independent off-site laboratory analysis verify that the sewage treatment works reed beds continue to work efficiently to maintain good quality effluent in compliance with the sites CAR discharge licence.

Monitoring and trending of data for resources such as water, electricity and fuel continues to determine where use can be minimised, in line with the site Environmental Management System. Over the period January 2021 to December 2021 the site used 16.60 Terra Joules (Tj) of energy; 15.85 Tj attributed to electricity consumption and 0.75 Tj attributed to fuel use in site vehicles, equipment, and generators. In the same 12-month period the site water consumption was 10,740m³. The site continues to report carbon equivalent emissions data as per the new company process.

New reporting requirements have been put in place for waste disposal and recycling with new reporting groups being established for use in the company unified dashboard. Over the period January 2021 to December 2021 a total of 78.00 tonnes of waste was collected for consignment from site (which was for recycling, recovery, or composting). There were no consignments for disposal to landfill. This gives a recycling rate of approximately 100%.

7.3 Environmental Events

There were no significant environmental events between September 2021 and December 2021.

8 SOCIO-ECONOMIC / STAKEHOLDER UPDATE

The electronic application form for the socio-economic scheme can be found on our external website at <https://www.gov.uk/government/collections/magnox-working-with-our-communities>

Millport Town Hall Update

The £2m project received £50,000 NDA funding in April 2021 towards the transformation of the derelict town hall building to a heritage/conservation centre, arts/culture centre and community hub.

The project is progressing well, the contractor was appointed in September 2021 and the builders are now making progress, having fitted the first of the new windows this month. This is despite delays with the discovery of asbestos, bad weather over the winter months and the unexpected find of coal and a well in the basement to contend with.

In December the project received an uplift of £364k from the Scottish Government Regeneration fund to compensate for the price increases on materials and to cover the additional £49k incurred with the asbestos removal.

Six individuals are now employed, two temporarily through Covid recovery. The National Lottery funded a Community Liaison Officer who is now in post and is working on a big event, organised for Easter to engage with the community.

A revised opening date is towards the end of 2022.



Concept design of the main hall



Millport Town Hall Trustees finally getting the keys for the building

9 SITE VISITS AND KEY DATES

Hunterston A Site continues to attract the right kind of interest through our good safety and business performance. Below is a selection of visitors / key dates during the period, although there is still a reduction in visits over the period due to the Covid Pandemic.

DATE	EVENT / VISIT
Thursday 2 December	Scottish site Stakeholder Group Meeting (<i>Microsoft Teams Meeting</i>)
Thursday 2 December	Hunterston Decommissioning Teleconference Update by Site Director, Mark Blackley to Hunterston SSG Chair, Rita Holmes and SSG Vice Chair Stuart McGhie. (<i>Microsoft Teams Meeting</i>)
Wednesday 8 December	Magnox Safety Reps Conference 2021 (<i>Microsoft Teams Meeting</i>)
Wednesday 5 January	Site Director's Return to Work Briefing - (<i>Microsoft Teams Meeting</i>)
Wednesday 26 January	Hunterston Decommissioning Teleconference Update by Site Director, Mark Blackley to Hunterston SSG Chair, Rita Holmes and SSG Vice Chair Stuart McGhie. (<i>Microsoft Teams Meeting</i>)
Wednesday 16 February	EHSS&Q Exec Review / Non- Executive Director Susan Jee attending