Hunterston A Site Report to SSG Meeting on 4 June 2020

Site Director for Hunterston A

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, will be completed by August 2027.

The current focus is on recovery of Intermediate Level Wastes (ILW) wastes from various facilities on the Site and decommissioning of the Cartridge Cooling Ponds (CCP).

General Statement on COVID-19

In late March the Hunterston A site was put into a safe and secure state. Since then the focus has been on business continuity, maintaining the safety and security of our sites, focusing on the welfare of all our people and suppliers, supporting our communities, maintaining value for money and additionally, preparing to restart our physical work.

The company has started to consider the complex arrangements on how we will restart our physical operations, get ourselves, our sites and all of the associated arrangements ready. A restart group has been established and is currently developing detailed procedures, quality plans and schedules.

Safety Performance

Safety Performance on site continues to be good and it has now been 71 months (at end of May 2020) since the last Lost Time Accident (LTA). The Total Recordable Incident Rate (TRIR) remains at 0.00.

The consistency in our safety performance may in part be a product of the company-driven Target Zero campaigns which are designed to raise awareness and maintain safety focus whilst delivering the decommissioning of Hunterston A Site. The campaign is aimed at all persons who work on Magnox sites and continues to be well received as we strive for Zero Accidents, Zero Incidents and Zero Harm.

Decommissioning

SAWBR (Solid Active Waste Bunker Retrieval)

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 $3m^3$ 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.

Progress to recover the wastes from Bunker 1 continue to progress albeit at a slower rate than the wastes from Bunkers 5-2. This is due to the higher probability of fuel fragment carry over form the stations operational phase. Detailed sorting of the waste via the remote vehicle is carried out before loading into waste buckets. These buckets are then put through a Fuel Detection System to provide assurance that the waste can be safely discharged into the stainless steel storage box.

As of 29 May 2020, the total package count stands at **938** $3m^3$ boxes of solid HAW safely recovered with Bunker 1 recoveries contributing 46 of these $3m^3$ boxes. No boxes have been processed since 20 March 2020.

The project expects to complete against a forecast outturn total of 1110 $3m^3$ boxes by summer 2022, factoring in the slower rate of processing and the impact of COVID-19.

WILWREP (Wet Intermediate Level Waste Retrieval and Encapsulation Plant)

The WILWREP facility was constructed to recover liquid HAW (Higher Activity Waste) from associated sludge, acid and resin tanks around the site. Following retrieval into a RWM (Radioactive Waste Management Ltd) approved $3m^3$ stainless steel container the waste contents are mixed with encapsulant powders and a sacrificial paddle to achieve an immobilised waste form within the $3m^3$ stainless drum.

The plant has been in its operational phase since October 2018 and the Operating Experience gained has enabled the team to overcome some significant technical challenges as they have progressed waste recoveries

Sludge Retention Tanks Nos 3, 2 and 1 have now been cleared of bulk sludge with a cumulative total of **132** drums now achieved. Activities to consolidate the residual materials into one tank have been progressed since early 2020 and the plant is ready to recover the final 15-20 drums worth of residual materials. This was expected to take around eight weeks, whereupon the plant was to be handed over to Waste Projects in order to reconfigure the plant to commence processing of the acid waste stream, however due to the impact of COVID-19 it likely that the remnant sludge recovery work will now be completed in late autumn 2020.

SILWE (Solid Intermediate Level Waste Encapsulation)

The SILWE facility exists purely to encapsulate the waste recovered from SAWBR with a grout mix. This is expected to take up to 3 years to encapsulate approximately 1500 stainless steel boxes. The Principal Contractor (Balfour Beatty) has now completed all site construction activities and the pre-commissioning and integration of installed plant and equipment.

This facility is required to fully grout (encapsulate) the 3m3 packages containing the solid waste retrieved through Solid Active Waste Bunkers Retrievals (SAWBR) project. Once encapsulated, the containers will then be in their disposable state.

All elements of plant are electrically and mechanically installed within the SILWE facility and inactive commissioning activities have started and various snags are currently being worked through prior to completing inactive commissioning.

Active commissioning remains on schedule to start in early 2022.

Reactors Care & Maintenance Preparations

This project is currently undergoing a strategic review, which has placed both the Weather Envelope replacement and the Risk Based Deplanting work on hold. The following essential activities will continue in 2020/21.

- *Interim Roof Repairs*
- *Removal of Runway Beam (roof level)*
- *Reactor Walkways*
- *Column Base Remedial Issues*
- *Asbestos Containing Materials (ACMs)*

Ponds Programme

The Pond team continue with the deplanting of the Pond Purge Sump which will provide the required access to allow the sump contents to be removed and treated.

Work to rationalise the sites liquid effluent systems is underway and as well as decontamination and removal of redundant tanks also includes provision of a new effluent treatment plant.

The existing Modular Active Effluent Treatment Plant remains in service but does require suitable care and attention to ensure it can continue to meet its duty.

Asset Management

A review of Site Assets was completed towards the end of financial year 2019/20 by the Site Engineering Department, the outcome of which underpins the rolling Site Five Year Asset Care Investment Plan and a Local Strategic Asset Management Plan (LSMAP).

The purpose of the LSAMP being to identify key plant areas / equipment that are essential for the delivery of the Site Management Summary Schedule (SMSS) and to ensure Investment in these key items is understood and underpinned.

The Site Five Year Asset Care Investment Plan prioritises where funding is required to either replace or remediate plant or equipment. To date, Hunterston has completed the first year of its re-Inspection surveys following the Asbestos Management Surveys of last year. These re-inspection surveys enable us to understand and manage Asbestos within our facilities. There were no major issues identified and all minor issues removed or mitigated.

The extensive Inspection and Testing Programme of the Electrical Distribution System which commenced last year was completed as was the replacement of the ageing HV switchgear and Safety Circuit Tripping batteries, this together with further rationalisation of our Electrical Distribution system has delivered improvement in Electrical Safety with other planned improvements in this area including review of backup Power Supply Units and replacement of the ageing main Electrical Distribution Transformers

Civil repair to building structures continues with a patch and repair strategy adopted in those facilities nearing the end of their operational life and where appropriate additional investment in those facilities required to support the SMSS.

Alongside the execution of these projects preparations are now underway to scope the work planned for financial years 2020/21 and 2021/22 commencing with general civil building defects identified as part of Site Licence Condition 28 routine inspection programme and refurbishment of the Welfare facilities across the site.

Waste Management

The site, in line with the waste hierarchy, has successfully managed to divert all its radioactive Low Level Wastes (LLW) from the Low Level Waste Repository (LLWR) utilising alternative approved routes, and has therefore not sent any wastes to the repository for long term storage.

In the reporting period from October 2019 to March 2020, the site has continued to consign radioactive waste for combustion and Very Low Level Waste (VLLW) disposal - these disposals are in line with the Magnox Joint Waste Management Plan. There is no limit on the volume or radioactivity content of LLW being disposed of under the site EA(S)R authorisation. The main contribution to these waste consignments remains redundant plant and equipment generated during decommissioning operations. Conventional waste, both hazardous (special) waste and inert waste, has been sent off-site for recycling, minimising the quantity of waste held on site. Further non-hazardous waste was sent for recycling with minimal quantities sent to landfill.

People

A business case was approved by the Magnox executive in December 2019 for the potential move to a four Day Working Week across both the Scottish Sites. The case included both business and personal benefits and aligns the Hunterston A and Chapelcross to the standard working pattern across the majority of the Magnox sites. Following a period of consultation with the workforce, and successful ballot, plans are now in place to move to this working arrangement on a 6 month trial.

The planned of implementation was 30 March this year however this has now been postponed, to a future date yet to be agreed, due to the pause of site activities in relation to COVID-19 precautions.

Community

The last Hunterston quarterly Site Stakeholder Group (SSG) Meeting was held on Thursday 5 March 2020 at the Waterside Inn, Seamill, West Kilbride.

In response to the current Coronavirus pandemic, all non-essential staff at Hunterston A, that are available for volunteering, are being deployed to support frontline services in the local community.

Also, through the NDA funded Magnox Socio Economic Scheme, £25,000 has been provided to North Ayrshire Council to support the North Ayrshire and North Coast Food banks.

In 2019/20 there were 10 successful applications to the Magnox Socio-Economic Scheme totalling over £260K. This includes the first payment of £250K, with the second £250K to be paid in 2020/21, of a £500K award to North Ayrshire College at Kilwinning.

Distribution:

Meeting Attendees