



Magnox

Harwell Site Stakeholder Group (SSG)

16th September 2021

Dr Andrew Munro

Site Director - Harwell & Winfrith

Magnox - Harwell Site

- Covid-19
- Site operations
- Health, Safety, Security, Environment and Quality
- Current Programmes
- Magnox Socio-Economic Scheme



Covid-19

- First Lockdown (Mar 20)
 - Site shutdown to monitoring & surveillance only within a 3-day period.
 - 16 weeks in full shutdown.
- Re-start
 - Commenced start of Jun 20.
 - Back in full operations by mid-Sep 20.
- Health Protection Controls / Covid-Secure Workplaces
 - Compliance with Company Standard (S-192) based on latest Government advice.
- Covid-19 cases
 - Small handful of unconnected positive Covid-19 cases for people based at site.



MAGNOX

Site Operations

- Operational Levels
 - L1 (Full) to L5 (March 20 lockdown).
 - Site currently open for normal business and fully operational (L1).
- Site Programmes
 - Maintaining Full Production Levels
- Budgets and funding for 2021/22
 - Continue as planned.
- Lifetime Plan Review



Magnox

Health, Safety, Security, Environment & Quality

Conventional Safety

- Harwell **TRIR 0.27** (TRIR 0.35 at the last SSG meeting).
- No injuries since Feb 21.
- Injuries at other sites have led to a safety stand down and Target Zero initiative continues for targeted improvement campaigns monthly.

Regulatory Issues

- **Site Emergency Arrangements** - actions placed by ONR after joint safety and security exercise in November 2019; unable to carry out site-wide exercise since then due to the number of people required to get together and the Covid-19 pandemic.
- Many virtual exercises carried out on a variety of topics and training continued.
- ONR witnessed exercises on 15th Sep, 13th Oct and 3rd Nov 21.
- Licence Condition 17; Management System – an improvement plan is ongoing, planning to complete in 2022; and ONR updated regularly on progress.



Magnox

Health, Safety, Security, Environment & Quality

Environment

- Pollution Inventory not submitted to EA on-time as it was realised there was an error in the historical procedure used to prepare the inventory;
 - Revised inventory submitted after the date set in the permit.
 - EA assessed this as a breach of the site EPR Permit with no environmental impact.
- Requirement to make a record of liquid discharges within 40 days of discharge not possible due to delays in analysis by contracted lab.
- Difficulties in recruiting a replacement Head of Environment for the region led to a previous incumbent being seconded back into the role until Mar 22.



Magnox

Current Programmes

- Nuclear Material Transfers (NMT)
- Remote Handled Intermediate Level Waste (RHILW) retrievals
- Legacy waste shipments (LLW / VLLW)
- LETP land remediation
- ODP disposal
- Decommissioning programmes



Magnox

Nuclear Material Transfers

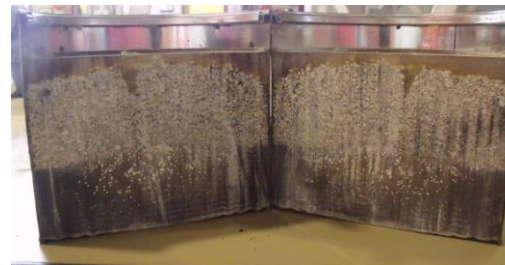
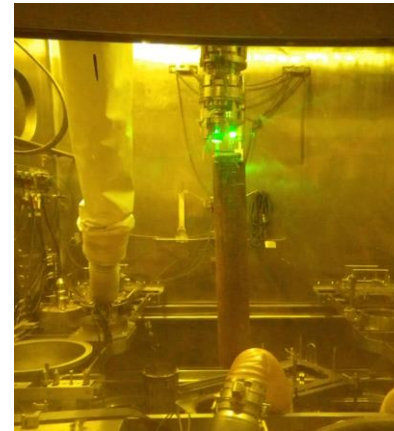
Numbers April 2021

- 4857 (4707) drums shipped to-date
- 73.1% (70.8%) of total drums
- 27% (23.4%) of activity (Bq) removed
- 75-77% drums complete by Mar 22
- Project completion 2024-25
- Gemini moves start Nov 21
- Capenhurst moves underway and 77% complete
- Rate dependent on receiving site/plant availability



Remote Handled Intermediate Level Waste (RHILW) retrievals

- ILW retrievals - 192 Tubes remaining
- WEP active commissioning resumed – 38% complete
- Waste Requiring Additional Treatment (WRATs) polymer encapsulation progressing well
- Long Can cutting techniques being developed
- RM1 re-commissioning and radon abatement in progress
- Grit blasting techniques for tube store decontamination being trialled inactively.



Legacy Waste Shipments (LLW/VLLW)

- Gamma Assay
- Assist the site disposing of legacy waste
- Waste is analysed using High Resolution Gamma Spectrometry
- Data interpreted and activity assessments calculated to allow for disposal
- Waste packages include Pactec bags® and Smartlift® bags, wheelie bins and dolav boxes.



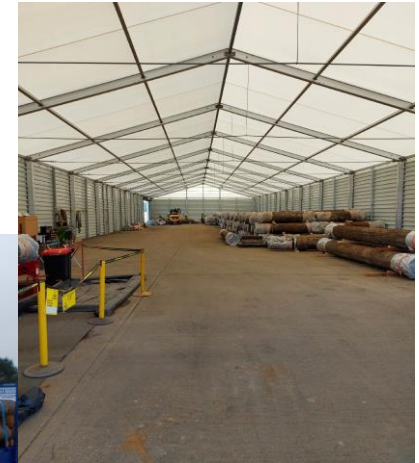
LETP Land Remediation

- From May 2021
 - Excavation and disposal of approximately 6,000 metric tons of waste material
 - Removal, remediation and reinstatement of final section of original access roadway.
- Look ahead
 - Icknield Way pipeline removal
 - Completion of validation and verification works
 - Site demobilisation this calendar year.



Off-site Discharge Pipe Disposal Progress (Jul – Sep 21)

- Disposal of off-site discharge pipeline commenced in Jun 21
- Undergoing off-site decontamination using ultra high pressure water jetting at contractor site
- Material recycled back into the metal market
- 192 pipes shipped off-site to-date (12 pipes/shipment)
- Completed by Dec 22.



Decommissioning Programmes

B220



- Radiological characterisation plan underway
- Decommissioning strategy optioneering study nearing conclusion (final selection 14th Oct)
- Isolation and electrical overlay strategy
- Lessons learned – knowledge gathering from across Magnox and external industry.

B459



- Project commenced Feb 21
- Base data collected
- Asbestos surveys to be undertaken
- Isolation and electrical feasibility study.



Decommissioning Programmes

B418

- Linear Accelerator Complex
- Awaiting asbestos survey results
- Characterisation plan complete
- POCO and characterisation contract to be placed early 2022.

B351.15/.28



- Nuvia labs/office buildings
- Funding secured for next phase
- Radiological survey commenced
- Ecological survey complete
- Abestos survey contract placed
- Electrical/mechanical isolations contracts placed
- Physical works to commence in Feb 22.



Magnox

Decommissioning Programmes

B404

- Main administration buildings and workshops
- Work due to commence from Jan 22

B551

- Analytical labs
- Office building and health physics labs
- Largest demolition project in the Magnox fleet in 2021/22
- Decommissioning & demolition completed
- **4-weeks ahead of schedule**
- **On budget**
- [*Time lapse video after presentation*](#)



Magnox

Magnox Socio-economics – 2021/22

Funding for Soc-ec Support across the 12 Magnox sites remains unchanged at £1,020,035 for this financial year of which £838,000 is still available.

Harwell successful applications as of 1/09/21:

- **Chilton Girl Guides £704** – promotional banners, Guide Books and Badge books
- **River Room Project, All Saints' Church £893** – Purchase of tables

For further information and to check eligibility, go to:

<https://www.gov.uk/government/collections/magnox-working-with-our-communities>

If you would like to discuss a potential application then please get in touch with:

Applications up to £1,000 contact Emma Burwood: Emma.burwood@magnoxsites.com

Applications over £1,000 Contact Haf Morris: Haf.e.morris@magnoxsites.com or tel: 07912799820



Magnox