

# Environment Agency Report

## Oldbury Site Stakeholder Group

October 2022

This report covers our regulation of Magnox Ltd. at Oldbury Site and related issues, including the Coronavirus pandemic, from August to October 2022.

### Radioactive substances regulation

We regulate radioactive waste disposals to the environment. We do this through environmental permits that contain limits and conditions aimed at minimising wastes and protecting the environment. We check compliance with the permits by making regular site inspections.

Working with colleagues across the Environment Agency we may also regulate other activities, including surface water discharges to surrounding water bodies and emissions to air.

We record our regulatory compliance interactions in Radioactive Substances Compliance Assessment Reports (RASCARs). These summarise the type of work we have undertaken, describe any non-compliance or observations of good practice, and include actions or recommendations from our findings. They are public register records and can be provided on request. please see the 'further information' section at the end of this document to find out how to request public register records.

### Permitting

Magnox holds a radioactive substances activity permit under the Environmental Permitting Regulations (EPR) at the Oldbury site (EPR/GB3435DG). No changes have been made to the permit since the last SSG meeting.

### Compliance activities

We are in regular contact with the Head of Radiological Protection and Environment to ensure we are aware of progress on decommissioning, progress on actions and recommendations and any emerging issues at the site. These discussions continue to include updates on Covid-related issues such as number of Oldbury staff infected or isolating. We remain satisfied that environmental performance is not being adversely affected by current Covid-related absences or broader impacts.

Since the last SSG we have carried out a decommissioning strategy inspection. In August we visited the site to inspect significant project areas including: Silt Lagoon 3 and the foreshore; the Turbine Hall; the Active Effluent Treatment Plant; FED waste vaults; location for new infrastructure; permit compliance sampling points and the radiochemical lab. We followed this up in a joint inspection with the Berkeley site inspector of the decommissioning strategy. This took place as a hybrid meeting both at Berkeley site and remotely on the Microsoft Teams platform. We were provided with relevant documentation in advance of the inspection, and given comprehensive presentations on the day. The staff we spoke to during both parts of the inspection were knowledgeable, open to questioning and committed to compliance. We identified no non-compliances with the site permit.

In September we visited the site for the Annual Review of Safety Security and Environment for Oldbury, Berkeley and Hinkley Point A. The content was wide-ranging

and comprehensive. We made a number of recommendations to ensure the meeting is more useful in future years. On the same day we visited the site to visit the ponds and to discuss plans for future management of the pond voids. We will keep the SSG updated on this topic.

We attended an initial quarterly regulatory interface meeting covering the 3 sites in September. This was a successful face-to-face meeting which can now be held virtually if required. As with the AROSSE, we made a number of recommendations to ensure this meets all regulators' needs in the future.

We continue to have regular engagement with the site, including remote meetings and updates. We will continue to check compliance with the permit by undertaking inspections. In the coming quarter we intend to inspect solid radioactive waste disposals. This inspection will be performed jointly with the Berkeley site inspector and will involve our new Nuclear Waste Assessment Team Assessor.

In addition to our own inspection activities we also review, on a fortnightly basis, Magnox reports of operational events and incidents that have occurred on site. We follow up on these where appropriate. There have been no events or incidents of significant concern to us in the period since the last SSG.

### **Environmental impact**

The site environmental permit requires the operator to monitor and assess the impact of discharges on the environment.

The results of Magnox's environmental monitoring programme (EMP) indicate that the environmental impact from permitted discharges remains low. Magnox's results continue to be consistent with our independent programme, and do not indicate any results of concern or significant change from previous years.

The Environment Agencies and Food Standards Agency carry out independent environmental monitoring around nuclear sites. These monitoring programmes support our regulatory function and provide reassurance that public radiation exposures are low and within legal limits. The results of this work are published annually and the latest report, "Radioactivity in Food and the Environment 2020" (RIFE 26), is published on the GOV.UK website.

<https://www.gov.uk/government/publications/radioactivity-in-food-and-the-environment-rife-reports>

The report for 2020 continues to show that total doses to the public, from permitted discharges and direct radiation around nuclear sites, remained below the legal limit. Radioactivity from natural background, rather than nuclear sites, continues to be the more significant source of exposure to communities in all areas of the UK. Anthropogenic radioactivity in the environment, from the nuclear industry and from past testing of nuclear weapons, accounted for less than 0.2% of the exposure to the UK population. Berkeley and Oldbury sites are considered together for the purposes of RIFE because the effects from both sites contribute to the same area.

The RIFE report presents an assessment of annual radiological dose to individuals in the local population who are most exposed to radiation from each nuclear licensed site (known as the 'representative person'). In 2020, the total dose to the representative person from

all pathways and sources of radiation from the Oldbury and Berkeley sites combined was less than 5 microsieverts, unchanged from 2018 and 2019. This is less than 0.5% of the UK National dose limit of 1000 microsieverts and less than 0.2% of the average annual radiation dose we all receive from all sources including natural sources of radiation (2700 microsieverts/year).

### **Discharges from site**

The site's environmental permit requires Magnox to use best available techniques (BAT) to minimise the generation of radioactive waste, and minimise any permitted releases into the environment. Disposal of wastes, as solids, liquid or gases, can only be made via permitted routes or by transfer to permitted sites. Limits are set in the permit to control the maximum level of radioactivity that can be discharged to the environment as gaseous or liquid discharges over a rolling 12-month period. Reports of the liquid and gaseous discharges to the environment are submitted to us on a monthly basis, and the results of the environmental monitoring programme are submitted quarterly. We examine these reports and report on their performance through a RASCAR.

Both liquid and gaseous discharges from Oldbury continue to be at levels well within permitted limits. Discharges of all measured gaseous and liquid radionuclides remained below 1% of their relevant annual limits. Although these discharges remain low, it is noted that the relative level of these discharges may fluctuate as the decommissioning programme evolves.

### **Higher activity waste management**

We are working jointly with Office for Nuclear Regulation to consider the management of Intermediate Level Wastes (ILW) as part of the decommissioning and reactor dismantling process. This includes consideration of wastes transferred between Magnox sites to allow for consolidated treatment or storage, providing a more effective programme of waste management across the Magnox fleet.

### **Enforcement**

We have not taken any enforcement action at Oldbury in the period since the last SSG meeting.

### **Sustainable development**

We are supporting Magnox with the development of its sustainability strategy. We have shared our learning from integrating sustainable development goals into our business. In particular, we shared our experience of working on the Oxford-Cambridge (OxCam) Local Natural Capital Plan. Over the coming months, we will support Oldbury in developing its thinking in this area and broader opportunities for improving environmental performance and outcomes throughout the decommissioning process at Oldbury.

### **Further information**

A public register service is available on the GOV.UK website at:

<https://environment.data.gov.uk/public-register/view/index>

Alternatively, you can request access to public documents directly by contacting the Customers and Engagement Team in the Wallingford office. Please email

[WTenquiries@environment-agency.gov.uk](mailto:WTenquiries@environment-agency.gov.uk)

Further information on our role in regulating the use of radioactive substances and related activities on nuclear licensed sites can be found on the Environment Agency pages of the GOV.UK website at:

<https://www.gov.uk/government/publications/nuclear-regulation-in-the-environment-agency>

Our enforcement and sanctions policy is publicly available on the GOV.UK website at <https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy>

Public Health England has placed guidance on ionising radiation dose comparisons on the GOV.UK at:

<https://www.gov.uk/government/publications/ionising-radiation-dose-comparisons>

The Environment Agency's lead nuclear regulator for the Oldbury site is Rebecca Cleverley. Rebecca is part of the national Nuclear Regulation Group (South) (NRG South) which is based at the Environment Agency's Wallingford office in Oxfordshire.

NRG South undertakes environmental regulation of radioactive substances on nuclear licensed sites in southern England. It works closely with the local Environment Agency teams in those areas as well as external bodies such as the Office for Nuclear Regulation.

Members of the local Wessex Environment Agency team cover the site for general (non-radioactive substances) environment protection matters such as regulation of groundwater, contaminated land, waste management and water abstraction.

**Address:** Environment Agency, Red Kite House, Howbery Park, Wallingford, Oxfordshire, OX10 8BD

**Email:** [rebecca.cleverley@environment-agency.gov.uk](mailto:rebecca.cleverley@environment-agency.gov.uk)