

Environment Agency Report

Oldbury Site Stakeholder Group

May 2022

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

Coronavirus: Nuclear site regulation operational update

The Environment Agency's priority remains to protect people and the environment. We have set out how we are doing this across the many areas we regulate, advise or interact with the public, for example, flood defence, flood warning, environmental sampling, permitting, angling and fisheries, waterways management and billing (see [GOV.UK](https://www.gov.uk)).

- We are fully operational, with a balance between office attendance and staff working from home.
- Frontline staff have returned to near normal regulatory work, including physical site inspections, where appropriate.
- All frontline staff follow guidance to reduce their risk of contracting or transmitting coronavirus.

We have maintained regulatory activities at Oldbury, throughout including in-person site visits as well as using remote working arrangements where practicable and effective to do so.

Please see our published statement for further information at <https://www.gov.uk/government/news/coronavirus-environment-agency-update>.

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.

Sitting alongside the permit is a document called the Compilation of Environment Agency Requirements, Approvals and Specifications (CEAR). The CEAR is used to specify further detailed requirements, approvals or agreements, for example conditions containing “or otherwise agreed in writing by the Environment Agency”. In April we issued an update to the Oldbury CEAR which made the following changes:

- Removed a permitted ventilation outlet as it has been physically blanked and will not be used again.
- Removal of short-lived radionuclides from those listed for its annual bulk analysis of liquid discharges. These nuclides have all decayed through at least 10 half-lives since the site was declared fuel free in 2016, and were reported as less than the minimum detectable activity in bulk analysis in the 5-year period 2016-2020.
- Oldbury is intending to contract out its environmental monitoring analysis. We changed the wording in one of the requirements to reflect this change.

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.

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 year we intend to inspect:

- BAT decision-making for decommissioning strategy & plans
- Management of gaseous waste discharges
- Solid radioactive waste disposals
- Environmental leadership

In addition to our own inspection activities we also review, on a weekly 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) indicates 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. A report 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 may include consideration of wastes transferred between Magnox sites to allow for consolidated treatment or storage and provide a more effective programme of wastes management across the Magnox fleet.

Enforcement

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

Sustainable development

We are supporting Magnox with the development of its sustainability strategy. We have provided technical advice and shared our learning from our own experience of implementing sustainable development goals into our business, which includes flood and coastal risk management capital works. 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

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.

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