

Environment Agency Report

Oldbury Site Stakeholder Group

May 2021

This report covers our regulation of Magnox Ltd. at Oldbury Site and related issues, including the Coronavirus pandemic, over the period January to May 2021.

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)).

In brief:

- We are fully operational, with the majority of our staff working from home in accordance with government guidelines.
- Our frontline staff have returned to near normal regulatory work including physical inspections.

Please see our published statement for further information at

<https://www.gov.uk/government/news/coronavirus-environment-agency-update>.

The Environment Agency continues to offer the option of using temporary [regulatory position statements \(RPSs\)](#) until June 2021, however, Magnox's intention is only to these in the event that Covid-19 causes business interruptions that prevents it from meeting its obligations.

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.

We also regulate and control other activities through our environmental permits, including surface water discharges to surrounding water bodies and emissions to air.

Radioactive Substances Compliance Assessment Reports (RASCARs) summarising our inspections, and any non-compliances found, are publicly available documents.

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.

We have updated and re-issued the Compilation of Environment Agency Requirements, (CEAR). The CEAR is used to specify further detailed requirements, approvals, or agreements where the permit allows. These requirements are clearly linked to the permit condition from which they arise.

The reasons for the changes to the CEAR are shown below.

- To introduce the date when Magnox needs to supply us with a Site Wide Environmental Safety Case and Waste Management plan (by 31 December 2024 for the Oldbury site). These documents are required to support any decisions made by Magnox in relation to the final stages of decommissioning and necessary to underpin a determination of the permit to facilitate this.
- To clarify the witness sampling procedure in the event of the Environment Agency contactor not being available when the witness samples are due.

Both the environmental permit and associated CEAR are publicly available documents.

Compliance activities

We have regular contact with the Head of Radiological Protection and Environment to ensure that we maintain oversight of decommissioning projects, progress on actions and recommendations, and any emerging issues at the site. We continue to have regular engagement with the site, including remote meetings and the routine tripartite (Magnox, EA and ONR) updates. We will also continue to check compliance with the permit by undertaking inspections. Under the current Covid arrangements, we will, where possible, undertake the main part of these inspections remotely. We will then arrange shorter 'in-person' follow-up visits to the site, in line with government guidelines.

We have undertaken two remote inspections for Oldbury since the last SSG:

- An inspection of Magnox's management of equipment, spares and stock, discontinued equipment, and redundant equipment, to ensure permit compliance and resilience.
- An inspection to review the operator's higher activity waste management practices and arrangements. This was conducted jointly with the Office for Nuclear Regulation.

In advance of both inspections we were provided with company and site documentation relating to the inspection topic. We spoke with the Magnox staff with key responsibilities in both areas of inspection. The staff appeared knowledgeable and committed to permit compliance. We found no non-compliances with the environmental permit. We provided advice and guidance, and made a number of recommendations. The recommendations are being addressed by Magnox, and we will follow up progress during our routine engagement.

In addition to our own inspection activities we also review, on a weekly basis, Magnox documents and reports of operational events and incidents that have occurred on site. We will follow-up on these where appropriate, but there have been no events or incidents of significant concern to us in the period.

Enforcement

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

Discharges from site

The site's environmental permit requires Magnox to use best available techniques (BAT) to manage its operations, and ensure their impacts on the public and wider environment are minimised. Disposal of wastes – as solids, liquid or gases can only be made via permitted routes or by transfer to permitted sites. A report of the liquid and gaseous

discharges to the environment, and the results of the environmental monitoring programme must be submitted to us on a periodic basis. 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, for the period January - March 2021.

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 are consistent with our independent programme, and do not indicate any results of concern or significant change from previous years. Now, following the ponds drain, Magnox has reviewed its programme with some proposals for change. We are assessing this review and have asked for clarification on some of the points.

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 2019" (RIFE 25), is published on the GOV.UK website.

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

The report for 2019 continues to show that total doses to the public, from permitted discharges and direct radiation around all 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.

The RIFE report presents a yearly assessment of 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 2019, 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. This is 0.5% of the UK National dose limit of 1000 microsieverts and less than 0.2% of the average annual amount of radiation we all receive from natural sources (2700 microsieverts/year).

Radioactive 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 provide a more effective programme of wastes management across the Magnox fleet.

Following the refusal of planning permission to transfer redundant ILW pond skips to Hinkley Point A, Oldbury will be incorporating sampling into its skip reduction project in order to provide robust characterisation information.

Management of conventional non radiological (Directive) wastes

We have recently developed internal guidance to regulators on the management of groundwater and conventional wastes during the final stages of decommissioning. We are working with the industry to ensure that the recognition of the importance of managing site based activities to protect groundwater and ensure safe management of conventional wastes is central to any decisions on decommissioning of sites.

The Oldbury site has submitted a Waste Recovery Plan to the Environment Agency to support its proposal to re-use non-radioactive (construction and demolition) waste material instead to fill voids on site created during the decommissioning process (for example, the demolition of the Turbine Hall). The plan is currently with our National Permitting Service advisors for advice on whether a compelling case has been made to permit this. We will update the next SSG meeting with progress.

Business planning

We have completed our structured business planning process for the year. This site-based review provided a retrospective look at our activities on site during the 2020/21 year, as have been reported to previous SSG meetings. The review has enabled us to make a judgement on where our efforts need to be focussed in the coming year. We plan to undertake 4 inspections at the Oldbury site in the coming year looking at: low level waste management; environmental monitoring; asset management; and environmental leadership.

Sustainable development

We have initiated discussion with Magnox on the development of the Magnox sustainability strategy. This has included a joint exchange of approaches using 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 be discussing opportunities to benefit the environment throughout the decommissioning process at Oldbury.

Environment Bill

Following an announcement in the Queen's Speech that the Environment Bill would form part of the government's legislative programme, the government has recently announced that the delayed Environment Bill is expected to return to Parliament on 26 May for a final commons debate. Whilst this will not fundamentally affect the Environment Agency's regulation of nuclear sites, the passage of the Environment Bill will provide enabling measures that may offer opportunities to simplify and enhance the regulatory framework for UK regulated industry. We will report on the implications of this Bill in subsequent SSG's.

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 publically 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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