

# Environment Agency report

## Harwell Site Stakeholder Group

March 2022

This report covers the Environment Agency's regulation of the Harwell Nuclear Licensed Site and related issues for the period between September 2021 and March 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 on 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 flexibly from home and the office.
- Our frontline staff have returned to near normal regulatory work including physical inspections.
- All staff, wherever they are working, are following guidance to reduce their risk of either transmitting or contracting coronavirus.
- Please see our published statement for further information:  
<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 inspections at Harwell.

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 available to the public on request.

### Permitting

Magnox holds two permits under the Environmental Permitting Regulations (EPR) at the Harwell site: one covers the nuclear licensed site (PB3598DX, the 'nuclear' EPR permit); the second covers smaller areas outside the nuclear licensed site boundary (PB3198DJ, the 'non-nuclear' EPR permit).

No changes have been made to either permit since the last SSG meeting, however, we are advising Magnox on our requirements for both permits in relation to applications for partial surrender that are likely to arise when work at the LETP is concluded.

## **Compliance activities**

We check compliance with the permit by making regular inspections at Harwell. We issue RASCARs for all inspections to summarise the inspection, including any identified non-compliances, actions, recommendations and observations of good practice.

We receive and assess a range of monthly reports from the site. We maintain regular dialogue with the operator to ensure we are kept in touch with any emerging issues at Harwell and with progress on actions.

We are continuing to hold weekly meetings with the Environment Manager, who has kept us informed of activities and the impact of covid-19 at the site.

We have produced a new inspection plan for the financial year 2022/23 and plan to inspect the permit compliance arrangements for the following topics:

- Quarter 1 inspection: Management of Liquid Discharges;
- Quarter 2 inspection: Asset Management;
- Quarter 3 inspection: Management of HAW;
- Quarter 4 inspection: Radioactive waste management.

In Quarter 3 we undertook an inspection of the site's environmental leadership and culture; this was a joint inspection with Winfrith as both sites have shared management arrangements and leadership team.

During the inspection we talked to members to the Harwell leadership team, project team, waste team and environment team. Our objective was to understand the approach to environmental management, levels of environmental awareness, the environmental organisation and resources at Harwell. The inspection was very positive with a number of areas of good practice being identified, including the work done by the site's senior management team to promote the prominence of environmental issues, the additional recruitment and strengthening of the environmental capability on site, and the use of the Local Environmental Forum and HESAC to engage site staff and raise the profile of environmental protection. We made some recommendations regarding environmental training and development however our key concern, at the time, related to the outstanding appointment of a permanent environment manager. We note that since this inspection, Harwell have successfully appointed a permanent environment manager.

The Quarter 4 inspection was carried out on the 8 and 9 March 2022. The inspection was split into two parts, the first was a joint inspection with ONR on the management of solid low level radioactive waste. The second part of the inspection looked at the management of non-radioactive controlled and hazardous waste. At the time of writing this report, the inspection is still being completed. No non-compliances were identified and we noted good progress with the recycling of the off-site disposal pipeline (ODP) and the removal of historic bulk waste from site.

## **Environmental impact**

The site environmental permit requires the operator to monitor and assess the impact of discharges on the environment. This monitoring demonstrates that the impact of the site on the environment is low.

The Environment Agencies and Food Standards Agency also carry out independent environmental monitoring around nuclear sites. These monitoring programmes support our

regulatory function and provide reassurance that public radiation exposures are 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.

[Radioactivity in food and the environment \(RIFE\) reports - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/collections/rife-reports)

This is the 26th edition of RIFE containing information on radiation exposures (doses) to the public and radioactivity levels in the environment during 2020. It covers locations near to nuclear licensed sites, industrial and landfill sites, and non-nuclear sites. It also reports on regional monitoring away from these sites, which provides data on background radiation levels.

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’). For the Harwell site, the representative person in 2020 was an adult living near the site, which is the same potential exposure pathway as identified in previous years. The primary source for the attributed dose is from direct shine radiation. In 2020, the attributed total dose to the representative person from all pathways and sources of radiation from the Harwell site was 8 microsieverts which is less than 1% of the UK National dose limit of 1000 microsieverts and less than 1% of the average annual amount of radiation we all receive from natural sources (2700 microsieverts/year). The RIFE report notes that the total dose remains broadly similar to those from previous years.

### **Incidents and enforcement**

There have been no new incidents or enforcement actions reported since the last SSG report.

In our last report to the SSG we reported an event from the 11 June 2021 where the site had been unable to make a record of an aqueous discharge within the timescales specified in the site's EPR 16 Permit (PB3198DJ). We noted that the event was part of a wider issue identified at Magnox associated with difficulties in their supply chain. We continue to engage with Magnox Support Office to support their compliance.

### **Discharge reports**

The site's environmental permit requires Magnox to use the best available techniques (BAT) to produce the minimum amount of radioactive waste, and minimise disposals into the environment. Disposal of wastes – as solids, liquid or gases can only be made via permitted routes or to permitted sites. The site is required to report liquid and gaseous discharges to the environment to us on a regular basis. We examine these reports and produce a RASCAR for them. Copies of the discharge reports and the RASCARs are available on request. See the ‘further information’ section at the end of this document to find out how to request them.

### **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 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 Harwell site and its tenants is Matthew Castle. Matthew 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 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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