

Berkeley Site Stakeholder Group Report

This report covers our regulation of Magnox Ltd. at Berkeley Site and related issues over the period January to October 2020

Radioactive Substances Regulation

We regulate radioactive waste disposals and discharges to the environment. We do this by placing limits and conditions in environmental permits, which helps us to ensure that radioactive waste discharges are minimised and that the environment is protected. We carry out regular checks of Magnox's compliance with our regulatory requirements.

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).

In brief:

- We are fully operational, with the majority of our staff working from home.
- Our frontline staff have returned to near normal regulatory work including physical inspections.
- We have published a series of temporary regulatory position statements (RPSs). RPSs are national arrangements that allow for limited relaxations of regulatory requirements provided certain circumstances and conditions are met. They clearly set out the standards that must be adhered to. The RPSs issued at the beginning of the pandemic have and will continue to be reviewed, and extended or withdrawn as necessary.

Please see our published statement for further information¹.

Corona Virus Operational Pause

As a result of the Coronavirus (Covid-19) pandemic, Magnox made the decision to pause operations at Berkeley in March 2020. In preparation for the pause, Magnox carried out a number of activities to bring the site to a passively safe state, and to reduce any potential environmental risks. This included the shutting down of gaseous ventilation systems, and the sampling and compliant discharge of liquid wastes. We maintained regular contact with Magnox throughout this period, and were able to review plans and supporting assessments to ensure Best Available Technique (BAT) was employed.

Our priority has remained to protect people and the environment, and to support those we regulate through the Coronavirus pandemic. Whilst we always expect operators to take all

¹ <https://www.gov.uk/government/news/coronavirus-environment-agency-update>

reasonable steps to comply with regulatory requirements, during this time we recognised that operators may have been unable to comply with certain conditions of their environmental permits. We therefore published a number of time-limited Regulatory Position Statements (RPS) to help minimise risks to the environment and human health where compliance could not be achieved. Each RPS set out when it applied, and specific conditions and requirements that the operator must comply with.

Following publication of the RPSs, Magnox informed us of their intention to use two of the RPSs, relating to monitoring emissions (RPS C7) and the reporting of data, returns and other records (RPS C10) on 30th April 2020. Details of Magnox's use of these RPSs are included in the environmental discharges and monitoring section below.

These RPSs expired on 30th September 2020, by which point Magnox had returned to compliance with the conditions of its permit. We have since published replacement RPSs, which operators will need to seek agreement to use, should they be again unable to comply with their permit as a result of the Coronavirus pandemic. Details of the RPSs are available at <https://www.gov.uk/government/collections/covid-19-regulatory-position-statements>.

Return to Work

Following the operational pause, Magnox began the process of returning to work and restarting operations at site. Magnox developed quality plans, including environmental, to ensure all relevant aspects of environmental compliance were considered. As with the operational pause, we maintained regular contact with Magnox throughout the return to work phase. We were able to review these quality plans, as well as supporting documents and assessments to ensure environmental risks were appropriately considered and BAT was employed.

Site Regulation

Throughout the operational pause we had weekly meetings with the Head of Radiological Protection and Environment, who has kept us informed of activities to bring the site back into normal operations through the use of quality plans. These meetings have now moved to bi-weekly as the site has moved into normal operations.

Following the return to work, we have re-established our regular engagements including remote meetings and the routine tripartite (Magnox, EA and ONR) update. We will continue to check compliance with the permit by undertaking inspections, where possible remotely, but if necessary and in line with government guidelines, at the site.

In February, prior to the operational pause, we carried out a joint inspection with the ONR looking at high activity waste (HAW) handling, storage, segregation and records management. We did not find any non-compliances with the permit. We provided recommendations relating to potential improvements in Magnox's procedures and documentation.

Our assessments and any non-compliances identified are detailed through Radioactive Substances Compliance Assessment Reports (RASCARs). These reports are placed on our public register. In addition to our own inspection activities we have also reviewed

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Page 2 of 5

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 or interest to us in the period.

Enforcement

We have not taken any enforcement actions at Berkeley in the period since the previous SSG meeting.

Environmental Permitting

As discussed at previous Berkeley SSG meetings, we have received an application to vary Berkeley's permit to add two new approved gaseous discharge outlets and to raise the permitted gaseous discharge limit for tritium (tritium is a radioactive isotope of hydrogen) to 1 terabecquerel (TBq) a year from the current discharge limit of 0.02 TBq. This is to produce long-term waste packages for the Geological Disposal Facility (GDF) which will lead to additional discharges of gaseous tritium.

We carried out a consultation with the public on this permit variation application towards the start of the year.

The determination date for this application depended upon the decision reached by the EU on the Article 37 data report described in the section below. As a result of receiving the Article 37 opinion from the European Commission (EC) we are now able to proceed with our determination of the permit variation application. We will make a decision on the permit variation taking account of the responses to the consultation and the impact to the environment, people and wildlife.

Article 37

A data submission to the EC is required under Article 37 of the Euratom Treaty whenever the permitted discharge limits at a nuclear site are increased.

Early in October the European Commission opinion was received that the implementation of the modified plan for the Berkeley site, both in normal operation and in the event of the accidents is not liable to result in radioactive contamination, significant from the point of view of health, of the water, soil or airspace of another Member State, in respect of the provisions laid down in the Basic Safety Standards Directive.

Discharge Reports

Berkeley is required to report liquid and gaseous discharges to the environment to us on a regular basis. We assess these to check compliance with the site permits. The site discharge reports and our assessments are placed on the public register.

Liquid and gaseous discharges from Berkeley were within the permitted limits and notification levels prior to entering the period of operational pause. Analysis results for samples collected during the pause have been received and are being reviewed currently.

Environmental Monitoring

Nuclear sites are required to carry out a rigorous environmental monitoring programme (EMP) that requires the operator to monitor and assess the impact of their discharges on the environment.

During the Covid-19 Pandemic operators have been able to use Regulatory Position Statements (RPS's) that allow for limited relaxations of regulatory requirements, provided certain circumstances and conditions are met. They clearly set out the standards that must be adhered to. Further details on the current RPSs can be found here

<https://www.gov.uk/government/collections/covid-19-regulatory-position-statements>

At Berkeley, Magnox utilised RPS C7 and C10 during the pause period however they continued to collect samples of active vent systems. These samples have now been analysed and we have received the results of the analyses within the quarter 1 and 2 monitoring period. These are currently being reviewed by us.

Additionally, the Environment Agencies and Food Standards Agency carry out independent environmental monitoring around nuclear sites. The results of this work are published in our annual Radioactivity in Food and the Environment (RIFE) report. We suspended our contracted sampling programme at the beginning of March due to the pandemic, though all quarter 1 samples had been taken. Work restarted on the Environment Agencies monitoring programme in June, with the majority of Q2& Q3 samples being collected. We will continue to follow Government guidelines with Safe Systems of Work in place, with the aim of minimising any gaps in our monitoring.

The monitoring data for the calendar year 2018 was published in RIFE report 24 (RIFE 24) in October 2019, and can be found at:

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

Further information

The Environment Agency's Lead Regulator for Berkeley Site is Sophie Gallagher, based in the Environment Agency's Nuclear Regulation Group (South) (NRG(S)).

NRG(S) is responsible for the environmental regulation of radioactive waste disposals on or from nuclear licensed sites in southern England (and in south Wales, on behalf of Natural Resources Wales). We also work closely with the local Environment Agency teams in Wessex Area in relation to other Environment Agency roles and responsibilities.

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

customer service line 03708 506 506

floodline 03459 88 11 88

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Page 4 of 5

<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>