

# Environment Agency report to the Hinkley Point Site Stakeholder Group.

October 2020

## Introduction

This report covers the Environment Agency's regulation of the Hinkley Point A & B nuclear sites and related issues for the period July 2020 to September 2020.

## 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 <sup>(1)</sup> 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.
- 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 The RPSs issued at the beginning of the pandemic have and will continue to be reviewed, and extended or withdrawn as necessary.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 information <sup>(1)</sup>.

## 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 also check compliance with these permits by making regular inspections at Hinkley Point A & B.

Radioactive Substances Compliance Assessment Reports (RASCAR) detailing our inspections and any non-compliances found, are available on the Public Register <sup>(2)</sup>.

We maintain regular contact with the sites by telephone and e-mail in addition to our formal correspondence and visits to the sites.

## Hinkley Point A

In April, decommissioning operations at Hinkley Point A were paused. Prior to the pause the site provided us with a risk based plan. The plan identified those operations and activities, required by the permit, Magnox would need to suspend at Hinkley Point A due to limited resource availability. This included the shutting down of its ventilation systems (with the

exception of the R2 vent, the Non-Combustible Active Waste (NCAW) store vent and the effluent treatment plant vents) and suspending all analysis of environmental monitoring samples. In lieu of this, at Hinkley Point A, Magnox applied to use provisions contained in regulatory position statement (RPS) C7 to allow them to suspend environmental monitoring and reporting until September 2020 and they advised us of their intention to use RPS C10, which allowed a relaxation to timescales for some of the reporting requirements. Magnox have now resumed normal environmental monitoring at Hinkley Point A and are no longer using the RPSs.

The site has returned to near normal operations. We are continuing to hold weekly meetings with the Head of Radiological Protection and Environment, who has kept us informed of activities at the site during the weekly maintenance inspections of operational areas (such as the operational vents). We are also continuing with monthly waste management project meetings to provide advice and guidance remotely on the application of Best Available Techniques (BAT) for some of key decommissioning projects planned at site. We have written to the site and attended meetings to ensure BAT is applied to the management of radioactive aqueous waste at site in the future.

In light of the COVID-19 pandemic and response, we have revisited our programme of regulatory activities set out in the Site Environment Review. We have advised Magnox of what we now expect to be the priorities for the remainder of 2020-21 and provided them with an updated inspection plan, which we will keep under review.

## **Hinkley Point B**

Our work at Hinkley Point B (HPB) has been focussed on the following themes and issues over the last three months;

We conducted a joint inspection with the Office for Nuclear Regulation (ONR) on licence condition 28 - Examination, Inspection, Maintenance and Testing (EMIT). This inspection consisted of a series of remote inspections with relevant staff including system engineers via video conference. We then undertook a visit to site on the 4th of August to follow up on key issues, including corrosion on the Gas Turbine Fuel Oil Tanks (GTFOTs). From our inspection we were satisfied that arrangements for maintenance were adequately managed and no non compliances were identified against the site's environmental permit. We did raise an action regarding improving the availability of consumable spares from stores for the Tritiated Water Storage Tanks (TWST) and will track progress as part of our routine regulation.

The joint inspection with ONR due to take place in early April on solid radioactive waste (focusing on license condition 32, 33 and 34, 'accumulation', 'disposal', and 'leakage and escape of radioactive wastes) was postponed due to the Covid-19 Pandemic and is scheduled to take place on 27/28th October 2020.

We have also been involved in engagement on several long running projects including the Guidance on Requirements for Release of Nuclear Sites from Radioactive Substances Regulation (GRR) and the start of de-fuelling and decommissioning plans for the site.

## Events and enforcement

### Hinkley point A

Prior to pausing activities at Hinkley Point A, Magnox advised us of two events;

As previously reported, Magnox advised us that, during preparation for a filter change at Hinkley Point A, they identified that there was a discrepancy between the type of filters that should be installed in the R2 vault and pond water treatment plant vent systems and the type that had been installed when the filters were last changed. This arose from different specifications in the vent design and the work order for fitting the replacement. Magnox submitted a fact find report which has stated that a low flow filter was installed in place of a high flow filter. Their investigation determined that there was no impact on particulate abatement performance from the incorrect filter having been in place. We asked Magnox to carry out testing of the differential pressures across the filters at Hinkley Point A and to review past results to determine if there was a difference between the incorrect filters and the new filters. This has been completed and Magnox have indicated all tests show they have been performing within limits.

We have now received the results from the routine monitoring of gaseous discharges at the site and these are currently being reviewed to ensure that there is no impact to the environment. However, the placement of the low flow filters did shorten the life of the filter which resulted in the creation of more radioactive waste than should have been the case. Hinkley Point A's permit requires them to apply Best Available Techniques to minimise the volume of radioactive waste disposed of.

The second event relates to the leakage of two low level waste storage drums. These drums were moved to the waste store and placed on bunds to manage and contain the leak. These drums were then checked weekly during the period of reduced operations on site. Magnox is currently making arrangements to over-pack these drums and carry out their disposal via the Low Level Waste Repository framework.

Following notification of the event we requested that all of the drums in the waste store were inspected. This action was delayed due to the site pause. Since returning to site a more detailed inspection of the drums in the waste store has been carried out and 2 further leaking drums have been identified. These have also been moved to the bunded area in the waste store. Magnox is undertaking a root cause investigation to determine why the drums leaked and why they were not identified earlier. Whilst there is no impact to the environment from the leaking drums the permit requires Magnox to check, at an appropriate frequency, the effectiveness and maintenance of systems, equipment and procedures to ensure that the best available techniques are in place to minimise volume and activity of waste. We are waiting for Magnox to conclude their investigation and provide their findings, including actions that they have taken. We will then consider this and whether any enforcement action needs to be taken, in accordance with our enforcement policy.

### Hinkley Point B

Following issues with the Gas Bypass Plant (GBP) in November 2019, reported previously, the Quarterly Notification Level (QNL) for gaseous Carbon-14 (C-14) discharges is no longer being exceeded. In response to the event we served a warning letter. I have now seen

evidence that the majority of remedial actions to prevent a re-occurrence have been completed. I continue to engage with the site to track the remaining actions.

On the 16th September we were notified of a potential non-compliance with the stations environmental permit following a dispatch of desiccant (Intermediate Level Waste, ILW) to Tradebe Inutec at Winfrith in Dorset for treatment and final disposal. There was a disparity in the weight of the drums containing the desiccant recorded on the consignment note, which allows the waste to be transferred off site. This difference in weight has meant that the radioactivity of the shipment was incorrect on the waste consignment note. We believe this has led to the radioactivity of the waste shipment being underestimated. The environmental impact of this error is minimal because the waste still meets the Waste Acceptance Criteria (WAC) for the receiving site and is now being safely stored at Tradebe Inutec; however it is important that information relating to radioactive waste consignments is accurate.

In addition to this issue the consignment was sent under the incorrect transport category, which is regulated by the Office for Nuclear Regulation (ONR). We are liaising with ONR on this event. The station have launched an investigation, which is being completed at a corporate level and we are reviewing non-compliance with the site environmental permit. We will update on any outcomes at the next SSG meeting.

## **Discharge reports**

The operators at Hinkley Point A and B are 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 Hinkley Point A 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.

The liquid and gaseous discharges from Hinkley Point B were below any notification levels and within permitted limits. We have continued to receive the required discharge returns throughout the Covid-19 Pandemic.

## **Environmental impact**

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 Hinkley Point A, 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.

EDF has taken all samples required by its environmental monitoring programme this year including for quarter 3 (June –Sept). HPB applied to use Regulatory Position Statement C7 in May as some external measurement laboratories closed, but has since confirmed that they no longer have a requirement to use it. RPS C7 expired on the 30th of September. The station will need to re-apply to use the newly issued RPS C20&21 (valid 1st October 2020 to 30th January 2021) if they have issues with compliance against their permit within the specified scope of the relevant RPS in future.

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 <sup>(3)</sup>. 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.

## Further information

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 section <sup>(4)</sup> of the GOV.UK website.

The Environment Agency's Lead Regulator for the Hinkley Point A site is Tracy Braithwaite. The Environment Agency's Lead Regulator for the Hinkley Point B site is Victoria Thomas.

Tracy and Victoria are Nuclear Regulators and part of the national Nuclear Regulation Group (South) which is based at the Environment Agency's Wallingford office in Oxfordshire.

The EA's Nuclear Regulators undertake environmental regulation of radioactive substances on nuclear licensed sites in southern England. They work closely with the local Environment Agency teams in those areas as well as external bodies such as the Office for Nuclear Regulation.

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

<sup>2</sup> <https://www.gov.uk/access-the-public-register-for-environmental-information>

<sup>3</sup> <https://www.gov.uk/monitoring-radioactivity>

<sup>4</sup> <https://www.gov.uk/government/publications/nuclear-regulation-in-the-environment-agency>