

Environment Agency report to the Hinkley Point Site Stakeholder Group.

June 2022

Introduction

This report covers the Environment Agency's regulation of the Hinkley Point A & B nuclear sites and related issues for the period March 2022 to June 2022.

Coronavirus: Nuclear site regulation operational update

We continue to keep the incidence of Coronavirus under review to ensure we can continue to maintain regulatory activities at Hinkley Point A & B.

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 ⁽¹⁾.

We maintain regular contact with the sites between visits to the sites.

Hinkley Point A

We remain informed of activities and events at the site that are of regulatory interest and ensure the site responds appropriately to any environmental or regulatory concerns that might arise. We have reviewed our regulatory interaction with the site. We continue to attend weekly meetings with site personnel including the Site Director, the Head of Environment and for waste projects, and with ONR as needed. We do not anticipate that this will result in a reduced level of regulatory oversight of the site and will review these arrangements as required.

In May this year we carried out an inspection of the management system encompassing low-level waste, very low-level waste and out of scope wastes. We found no non-compliances. We also introduced our area Directive waste compliance officer to Hinkley Point A, and I was accompanied on a site tour by our new nuclear waste assessment team officer and Hinkley point C's environment officer. The aim of the site tour and introduction

of the area teams is to ensure a more integrated approach to waste management at Hinkley point A.

We have also been advised that meetings have been held between Hinkley Point A and Hinkley Point B to begin to understand potential synergies between the decommissioning and waste management programmes of both sites pending handover to Magnox of the HPB site following de-fuelling.

We have been consulted regarding a planning application for additional concrete batching plant at the facility. Whilst we have yet to respond to the Local Planning Authority, we recognise that this concrete batching facility is required to package waste in accordance their best available technique (BAT) case. We are intending to respond on this basis to the planning application.

We have been notified of further bowing of the upper gabion sea wall defences at Hinkley Point A. Hinkley Point A are planning to undertake works to temporarily relieve pressure on the upper gabion wall system and additional works are required to ensure that coastal erosion in the north-west side of the site adjacent to Hinkley point C does not take place. Hinkley Point A have consulted the Environment Agency to enquire if these works require a flood risk activity permit as the works are adjacent to a conservation area which includes the foreshore beyond the site. We have advised that the works are excluded from the regulations and that Hinkley can apply this exclusion.

Hinkley Point B

We continue to hold routine meetings with the Environmental Safety Group (ESG), station management and Independent Nuclear Assurance (INA), in addition to relevant external bodies such as the Office for Nuclear Regulation (ONR). These routine interactions allow us to remain informed of any relevant activities and events at the site of regulatory interest, which is particularly important with the End of Generation (EoG) approaching in July 2022.

On the 30th of March we attended the Annual Review of Environment, with managers from the Nuclear Regulation Group (NRG) and the Wessex area team. The meeting included a tour of the station, looking at issues relevant for the upcoming defueling. The meeting provided a good summary of the environmental performance of the station over the last year and looked forward to potential issues with permit compliance at the EoG. We were reassured by measures that the station has put in place to prevent a re-occurrence of the transformer fire event, which resulted in oil being discharged to the beach.

In the previous stakeholder report we mentioned the two inspections (Discharges and Asset Management) undertaken at the end of January, but for which the full conclusions were not available. We can now report that for both inspections no non-compliances were identified. The main focus of these inspections was to review arrangements for when the

station enters its defueling period including what will happen to discharges at the EoG and preparations for asset care over the lifetime of the station.

The majority of radioactive discharges are anticipated to significantly decrease when the reactor is shutdown; however, there is expected to be some increased aqueous discharges associated with the fuel storage pond, due to the increased movements of fuel as the station begins the process of defueling.

We were also reassured that HPB is liaising with the Nuclear Decommissioning Authority (NDA) regarding the care of long-term assets, as they will become the eventual owners of the site once it enters decommissioning. Whilst we found no non-compliances there were several actions and recommendations to promote continuous improvement and ensure that the station is prepared for the significant change to their life cycle.

On the 12th of April we conducted a joint inspection with the Office for Nuclear Regulation (ONR) to review the Control of Major Accident Hazards (COMAH) regime at the station. This regime is focused on the safe storage of certain bulk chemicals, including oil to prevent a major accident like the Buncefield disaster.

As part of the inspection, we conducted a site tour looking at the main areas of chemical, oil and gas storage. We reviewed the management arrangements for the COMAH regime, again with a focus on defueling and whether any chemicals can be removed when the reactor is shut down and reviewed the processes for redundant tanks and plant.

No formal actions were raised as part of the inspection, but a number of requests and recommendations were made to aid further improvements, including investigating and remedial works on a bund wall penetration, removal of diesel tanks no longer required and dates and plans for refurbishment or remedial works to address observed corrosion. We were pleased there had been several improvements made since our last inspection the previous year, including the COMAH working group being re-instated, which should help the station to manage and prioritise COMAH issues more effectively in future.

Our next planned inspection is with the ONR again in August to look at defueling once the reactors have shut down.

Finally, we determined and re-issued the HPB Radioactive Substances permit at the end of February. The changes made include.

- *The gaseous minor discharge limit has been increased from 2% to 4% following a BAT assessment produced for a reheater leak on reactor 4. Please note the annual permit limits are not affected.*
- *Added the option for a Very Low-Level Waste (VLLW) disposal route, which will allow the station more routine options to dispose of this waste as they enter their defueling/ decommissioning phase.*

Events and enforcement

Customer service line **03708 506 506**

Floodline **03459 88 11 88**

Incident hotline **0800 80 70 60**

Hinkley point A

As part of the inspection in May we reviewed changes to the management system arrangements and inspection processes put in place by Magnox in response to our letter following the notification of leaking drums within the non-combustible active waste store. We are satisfied that the changes made to the management system arrangements seek to ensure packaging arrangements take account of non-radioactive waste properties and that arrangements for the inspection of drums in the non-combustible waste store result in early identification of problems.

Between 2019 and 2021 Hinkley point A advised us of a number of events relating to errors made in both the external laboratory and the laboratory Hinkley point A. We have not yet received Magnox's audit report and will progress our enforcement response on the basis of information available. We will take account of similar events that have occurred on other Magnox sites as a result of the external laboratory, in determining our enforcement response. We are satisfied that Hinkley point A have addressed the immediate concerns raised in their investigation reports and actions put in place to mitigate a reoccurrence. We will assess these changes in an inspection in July 2022 will share our findings with the SSG in our next report.

Hinkley Point B

Pond Water Loss

In January we were informed by the station that during a routine sample of the pond water, a valve was inadvertently left open, which resulted in a loss of 3m³ of pond water to the Active Effluent Treatment Plant (AETP). This resulted in increased radioactivity in the aqueous discharge to the Environment.

Since the last Stakeholder report we completed our compliance assessment on the pond water loss and recorded two non-compliances against the station's radioactive substances environmental permit.

These were for not following the station management system procedures (condition 1.1.1) and for not using the Best Available Techniques (BAT) to minimise the radioactivity of discharges to the environment (condition 2.3.2 (a)). All were classified at our lowest level Compliance Classification Score (CCS) of 4, which means that the harm to the environment was negligible on this occasion.

The station undertook an investigation and recommended several human factors interventions. In addition, we also placed some actions on the station which included investigating fitting engineered control measures to prevent or warn of a valve being left open, with water flowing into the fuel storage pond and a review of the station action levels, following changes that may occur due to defueling. The station has acted promptly

with regards to our actions and are already preparing to fit some 'spring-back' valve mechanisms on key valves in the Active Effluent Treatment Plant (AETP) to prevent them being left open in future.

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.

Hinkley Point A

The liquid and gaseous discharges from Hinkley Point A were below any notification levels and within permitted limits.

Hinkley Point B

The liquid and gaseous discharges from Hinkley Point B were below any notification levels and within permitted limits.

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.

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 (2). We will continue to follow Government guidelines with Safe Systems of Work in place, with the with regards to our monitoring of the environment and foodstuffs. The 2020 Rife report has now been published here: [Radioactivity in Food and the Environment, 2020 \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/91111/rife-report-2020.pdf) and the 2021 report is in preparation.

We are currently reviewing a Best Available Techniques (BAT) assessment for the HPB's Environmental Monitoring Program (EMP). This was an action we placed on the station in their Site Environment Review (SER) to review the EMP for discharges anticipated during defueling and against our best practice guidance for environmental monitoring [764 11 Environmental radiological monitoring \(publishing.service.gov.uk\)](https://www.gov.uk/guidance/best-practice-guidance-for-environmental-monitoring). Due to the anticipated decrease in gaseous discharges, it is likely there may be a reduction in some environmental monitoring. We will confirm any changes through our regulatory assessment of the submission through a Radioactive Substances Compliance Assessment Report (RASCAR).

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 ⁽³⁾ 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 Senior 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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¹ <https://www.gov.uk/access-the-public-register-for-environmental-information>

² <https://www.gov.uk/monitoring-radioactivity>

³ <https://www.gov.uk/government/publications/nuclear-regulation-in-the-environment-agency>