

Environment Agency report to the Hinkley Point Site Stakeholder Group.

February 2022

Introduction

This report covers the Environment Agency's regulation of the Hinkley Point A & B nuclear sites and related issues for the period November 2021 to February 2022.

Coronavirus: Nuclear site regulation operational update

We have continued to maintain regulatory activities at Hinkley Point A & B including in-person site visits as well as using remote working arrangements where practicable and effective. The sites continue to operate a hybrid system for their workforces of operational presence and homeworking.

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 continue to hold routine meetings with the Head of Radiological Protection and Environment, the internal regulator and the Site Director. This allows us to remain informed of any relevant activities and events at the site of regulatory interest and to ensure the site responds appropriately to any environmental or regulatory concerns that might arise. We also hold separate meetings with the office of nuclear regulation to discuss and share both concerns and good practice that have been identified during inspections.

In November 2021 we carried out an inspection on asset management at Hinkley Point A. No non compliances were identified. Recognising that the NDA is developing its guidance on the management of assets at nuclear sites we found that HPA had made significant progress in the development of its asset management framework, including the

development of an asset management database and procedures for management of assets on site. This is an improvement on the previous inspection. The asset management database (AMD), annual Plant Health Committee meetings and their asset management investment plan show how assets are prioritised on a risk basis, how the risk is reviewed and managed and how critical assets are identified and included in the site investment plan. We have made recommendations to the site to ensure that all assets are included on the asset management database, however we were pleased to hear about the continuing development planned in this area.

Hinkley Point B

We continue to hold routine meetings with the Environmental Safety Group (ESG), station management, 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.

In the previous report we informed you of a minor leak on reactor 4 re-heater that had initially developed when the reactor was returned to service in February 2021. This has resulted in the leakage of reactor gas to the secondary circuit causing slightly elevated discharges of radionuclides through the permitted minor discharge route.

We have been monitoring the situation closely and agreed that the station would need to apply for a permit variation to increase their minor route gaseous discharge limit from 2% to 4% of the total permit limit, if these discharges reached 70% of the original 2% limit. The station informed us in December 2021, that minor gaseous discharges had now reached this level and they applied for a permit variation on the 14th of December 2021. It should be noted that increasing the minor discharge gaseous limit will not increase the overall annual gaseous discharge limits set in the permit. We are currently reviewing the application for the minor permit variation, including supplementary documents supplied such as the Best Available Techniques (BAT) assessment.

As part of their permit variation application, the station also requested the addition of a new waste route for Very Low Level Radioactive Waste (VLLW) to specialist landfill sites. This will allow the station to dispose of concrete rubble arising from preparatory work in the flask bay in advance of defueling. Additional arisings of VLLW wastes that could also be disposed of via this route are expected to increase, as the station ends generation. This is an established waste route that is already used by other nuclear sites and at the receiving site, disposals are covered by their own environmental permit.

At the end of January, we undertook two inspections. The first focused on radioactive discharges to ensure the Best Available Techniques (BAT) are being applied. During this inspection there was a particular focus on how the discharges will change as the station

enters defueling and if any changes to monitoring equipment, operation, or arrangements will be required to maintain compliance with the permit.

The second inspection was on asset management, with the focus on defueling to determine the funding and process for investment in assets, with the expected change in management company for the HPB site.

We are still writing up our findings for the inspections above and will report back in the next stakeholder report.

We are planning our next inspection in conjunction with ONR in April to look at the Control of Major Accident Hazards (CoMAH) regime, again with a focus on defueling and whether the station will be able to remove some of the chemicals held as part of the CoMAH regime, at the point of EoG, to ensure effective hazard reduction at the station.

Events and enforcement

Hinkley point A

We have reviewed the report submitted to us with the findings of Magnox's investigation into leaking waste drums. We have concluded that this event constituted 3 non-compliances with the conditions of their environmental permit. We are satisfied that there was not any significant associated environmental impact, and we classified the non-compliances as 'minor' non-compliances in accordance with our compliance classification scheme (CCS). We have also concluded that a warning letter should be issued to Magnox, in line with our enforcement policy. In addition, we have provided on-going regulatory advice and guidance to Magnox and we have placed regulatory actions on Magnox, in addition to the action they have already identified and carried out to prevent a repeat event.

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. When we have received Magnox's audit report we will determine whether any further enforcement response is required. We are satisfied that Hinkley point A have addressed the immediate concerns raised in their investigation reports and actions put in place appear to have been effective. This matter will be subject to a further inspection in July 2021.

Hinkley Point B

Release of oil to the Beach following Transformer Fire

On the 19th of August 2021, Hinkley Point B informed us that there had been a fire in a transformer. Fire suppression actions led to the station discharging oil and fire water to the beach. We attended the site on several occasions to investigate the cause and monitor the

subsequent environmental clean-up, including the approval of some of the remedial plant to re-route the site water discharge.

After a review of the all the evidence in the case, Hinkley Point B were served a warning letter by the local Wessex Area Team for a breach of their Water Discharge Permit (Consent 101266). In addition to this warning letter, the site also received a re-charge invoice for the EA resource involved in the investigation and recovery of the incident.

The station have undertaken a full investigation into the incident, and how the drainage system became overwhelmed, leading to the discharge of oil. This investigation sets several actions to make improvements and to prevent a future occurrence. These actions include having a fire water management plan, improving maintenance of stand-by equipment, and looking at whether the volume of fire water can be reduced. We have also asked Hinkley Point B to look at fitting alarms to the blind sump on site, to provide a real time indication of the drainage system becoming overwhelmed. We will follow up on the remedial actions as part of our routine regulation.

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 discharge to the Environment- although it is noted the discharge was below any station actions levels. We are currently undertaking a compliance assessment and will report back our findings in the next stakeholder report. The station are undertaking a human factors assessment alongside our compliance review to determine how such errors could be reduced 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://publishing.service.gov.uk) and the 2021 report is in preparation.

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>