

28 October 2016

Introduction

This report covers the Environment Agency's regulation of Hinkley Point A & B nuclear sites and related issues for the period June 2016 to October 2016.

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 the 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 put on the Public Register^[1].

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

Our work at Hinkley Point A (HPA) has been focussed on the following themes and issues in the last quarter:

- In July we wrote to Magnox about their option assessment reports regarding redundant pond skips from three other Magnox sites (Oldbury, Sizewell A and Dungeness A). In this letter we accepted the conclusions in the study, which is that the decontamination of pond skips at HPA using milling does not represent Best Available Technique (BAT). The study further concluded that the Intermediate Level Waste (ILW) skips should be sent to HPA for packaging and interim storage and that the larger number of skips classified as Low Level Waste (LLW) should be sent

directly for disposal from the three donor sites and not sent to HPA for processing or storage.

- We remain in dialogue with Magnox regarding the remediation of the historic diesel contamination on the HPA site. We granted the relevant permits required in the summer and Magnox's contractors have consequently undertaken the remediation work over the summer and into the autumn. The remediation work continues and has now entered a second phase. The remediation works should be complete before Hinkley Point C (HPC) site dewatering starts to affect water flows beneath the HPA site.
- In September we attended the Annual Review of Safety and Environment held at Oldbury. This year the review was a joint review for the Hinkley Point A, Oldbury and Berkeley sites reflecting Magnox's new regional approach.
- We continue to monitor the progress of the project to remove the remaining residues from the site storage tanks as well as the other waste projects on site, such as the sludge/resin tank consolidation and the Fuel Element Debris projects.
- An inspection of the site's arrangements for sentencing of wastes with low levels of radioactivity is planned for November 2016 along with meetings regarding site decommissioning and waste projects.

^[1] <https://www.gov.uk/access-the-public-register-for-environmental-information>

Hinkley Point B

Our work at Hinkley Point B (HPB) has been focussed on the following themes and issues in the last quarter:

- In July we carried out an inspection focused on the conventional combustion (PPC) plant. No significant issues were identified during this inspection; however there were a number of minor findings. An example of these was inconsistent cleaning of the secondary containment bunds under oil storage tanks.
- In July we also we carried out an inspection focused on solid radioactive waste management. The operator has invested in equipment to improve assessment and preparation of waste for offsite disposal. No significant issues were identified during the inspection.
- In September we carried out an inspection focused on gaseous radioactive waste management. We noted that the operator has improved the reliability of the gaseous sampling cubicles over the past year. No significant issues were identified during the inspection; however, there were a number of minor findings. An example of these was the need for improved information sharing between System Engineers and Environmental Safety Engineers.

Events and enforcement

In May the operator at HPB reported a statistically unusual gamma radiation measurement at a beach location. The measurement had been made in March and should have been reported “without delay” as specified in the CEAR. The reasons for this non-compliance were not established until after the June SSG. We issued a RASCAR identifying one permit non-compliance, which actioned the operator to ensure the “without delay” notification requirement is met in future. The operator is now trialling a new procedure to meet that requirement.

There were no significant environmental events or enforcement at Hinkley Point A.

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 and a digest of information is available via the Environment Agency application ‘What’s in your backyard?’ facility ^[2].

Liquid and gaseous discharges from Hinkley Point A and B were within the permitted limits and notification levels during this period.

Environmental impact

Nuclear sites are required to carry out a rigorous environmental monitoring programme 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.

In the RIFE report the Hinkley Point sites are considered together for the purposes of environmental monitoring because the effects of both are on the same area. The report presents a yearly assessment of radiological dose to the group of people in the local population who are most exposed to radiation from the sites. In the latest report for 2014 (RIFE-20)^[3], the total radiation dose to this group of people as a result of discharges and radiation shine from the sites was very low at 0.022 mSv/year. This is about 2% of the Government dose limit of 1 mSv/year and even smaller compared to the average amount of radiation we all receive from natural sources, which is approximately 2.2 mSv/year. The RIFE report for 2015 is planned to be issued in November 2016 and will be downloadable from the link provided for the 2014 report.

^[2] <http://apps.environment-agency.gov.uk/wiyby/default.aspx>

^[3] <https://www.gov.uk/monitoring-radioactivity>

Responding to the Stop Hinkley group

Our routine programme of environmental monitoring is designed to provide additional reassurance that the operators' environmental monitoring programmes are providing valid results. This, together with our regulation of emissions from the site, ensures that radiological doses to the most exposed members of the public continue to be low.

Following our meeting with the Stop Hinkley group in October 2015, we undertook additional sediment sampling in the River Parrett in March and August of 2016. The March samples were analysed for radioactivity in the same way as our routine environmental monitoring samples; particle size analysis has provided useful information on grain size and the origin of the sampled sediments. We are waiting for results from the August samples.

We provided a short report to Stop Hinkley in July 2016 based on the results of the sampling in March 2016. The results show that the activity of Caesium-137 decreases with distance from the river mouth. This is consistent with increasing grain size and decreasing influence of marine sediment with distance from the mouth of the river. The report concludes that the results obtained are consistent with historic data on radioactivity in the environment around Hinkley Point and that they do not suggest that radiation doses to members of the public will differ significantly from published values within the RIFE report.

Once the analysis results for the August sampling have been received we will update our initial report and provide a copy to Stop Hinkley and to the SSG.

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^[4] of the GOV.UK website.

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

The Environment Agency's Lead Regulator for the Hinkley Point A site is Robert MacGregor. The Environment Agency's Lead Regulator for the Hinkley Point B site is Richard Lee.

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

Robert and Richard 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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