

27 October 2017

Introduction

This report covers the Environment Agency's regulation of Hinkley Point A & B nuclear sites and related issues for the period June 2017 to October 2017.

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 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 June the regulators for both HPA and Hinkley Point B (HPB) conducted an inspection on the site's arrangements for management of radioactive gaseous discharges. No non-compliances were identified although a small number of recommendations/ observations were made.
- We have held meetings with the various project teams who plan to build new plants for dealing with site wastes. These include the Interim Storage Facility (ISF), the Modular Intermediate Level Waste

Encapsulation Plant (MILWEP) and the Pre-Conditioning Facility (PCF). These have covered how these projects will meet permit requirements both before and after they become operational.

- We continue to monitor the progress of the other site projects to remove the remaining residues from the site storage tanks as well as the other waste projects on site, such as the sludge and resin tanks consolidation and the Fuel Element Debris projects.
- In September EA staff attended the South West Magnox sites' Annual Review of Safety and Environment held at Oldbury. We discussed the sites' performance over the last year and their future programme of decommissioning and waste processing.

Hinkley Point B

Our work at HPB has been focussed on the following themes and issues in the last quarter:

- In June we carried out an inspection focussed on characterisation and management of Low Level Waste (LLW). This included procedures for consigning waste for off-site incineration. We did not identify any non-compliances but made a recommendation, about sharing experience of how EDF sites manage contractor provision of high resolution gamma spectroscopy, which is used for determining the radioactivity within LLW.
- In August we carried out an inspection of compliance with the conventional combustion plant permit. This included a review of arrangements for managing historic contamination of the site with non-radioactive materials. We did not identify any non-compliances although we made recommendations about improved record

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

keeping. We also identified good practice with handling hazardous chemicals.

- In September we witnessed sampling of LLW destined for incineration. We were satisfied that the samples were representative of three different waste streams. In October our contractor tested a whole consignment of LLW, including the sampled waste streams. This is part of work to verify the operator's process for characterising LLW that is sent for off-site disposal. The conclusion of this work will be reported at the February 2018 SSG meeting.

Events and enforcement

No enforcement action has been necessary at Hinkley Point A.

In June the operator at Hinkley Point B reported that a Final Delay Tank had been discharged to sea before testing for Cobalt-60 was complete. The test result confirmed that the measured value was below their action level. This did not affect compliance with the permitted discharge limit to sea. However, we concluded that the failure of the written management system was a non-compliance with the permit and confirmed that in a RASCAR. We are satisfied with the operator's actions in response to this incident.

The main site surface water interceptor on the B site has been rebuilt and has been working satisfactorily since July.

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 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 2015 (RIFE-21)^[2], the total radiation dose to this group of people as a result of discharges and radiation shine from the sites was very low at 0.016 mSv/year. This is about 2% of the Government dose limit of 1 mSv/year and an even smaller percentage of the average amount of radiation we all receive from natural sources, which is approximately 2.2 mSv/year. We expect to issue the RIFE-22 report for 2016 in October 2017.

Dredging from Bridgwater Bay

You may have seen news reports relating to the dredging of sediment from Bridgwater Bay, which is associated with the Hinkley Point C development. Concerns have been raised about the radioactivity within the sediment to be dredged. Marine sediment sampling is included in both the A and B sites' environmental monitoring programmes and the Environmental Agency's independent monitoring programme. The levels of radioactivity present in the sediment are very low and the associated radiological doses to even the most exposed members of the public are also low (see the RIFE report for further

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

details). The disposal of the dredged material at the Cardiff Grounds disposal site has been permitted via a Marine Licence issued in 2014 by Natural Resources Wales (NRW). The disposals (which have not yet taken place) are still subject to NRW approval after sampling and testing of the dredged material has taken place, which will include a range of radionuclides.

Habit survey

In August the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) undertook a survey on behalf of the Environment Agency and the Food Standards Agency to determine the habits and consumption patterns of people living, working and pursuing recreational activities in the vicinity of the Hinkley Point nuclear licensed sites. The data from this survey will be used to inform our future radiological dose assessments published in the yearly RIFE reports. The results of this recent survey will be compiled into a report that will be published in late 2017. The report will be made available on the CEFAS website^[3].

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.

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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^[3] <https://www.cefas.co.uk/cefas-data-hub/search-publications/>

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