

30 October 2015

Introduction

This report covers the Environment Agency's regulation of Hinkley Point A & B nuclear sites and related issues for the period June to September 2015.

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 permit 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 has been focussed on the following themes and issues in the last quarter:

- In June we attended the site to discuss plans to trial the use at Hinkley Point A of an innovative technique to decontaminate the walls of spent fuel ponds. This technique (called "elution") has the potential to decontaminate pond walls with reduced worker radiation doses compared to other decontamination techniques. We (and ONR) challenged the trial methodology as we did not believe it represented Best Available Technique (BAT). This was mainly because the trial would have resulted in around 3-4 tonnes of secondary solid radioactive wastes

being created. The site is now reconsidering its approach.

- In July we provided a response to Magnox regarding its planned changes in waste strategy for ILW across the Magnox fleet. These changes had been outlined in a number of documents which Magnox provided to us and which we have assessed. We have now accepted that the changes in strategies for ILW represent Best Available Technique (BAT) but have noted that more work to underpin these strategies is required before implementation of some of these changes.
- In July the site provided a comprehensive review of its environmental monitoring programme with a view to making it more targeted and proportionate to the current levels of discharge from the site (and the low levels of radioactivity seen in the local environment). We have now assessed this review and while the planned changes are broadly acceptable, we have asked for more monitoring to be undertaken than the site review proposed.
- Dialogue is continuing between ourselves and Magnox regarding the remediation of the historic diesel contamination on the HPA site. Magnox is now planning to remediate the contamination in 2016 to ensure that it is not adversely affected by Hinkley Point C (HPC) site dewatering.
- We continue to monitor the progress of the project to remove the residues from the site storage tanks.

Hinkley Point B

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

- In July we carried out a two day inspection to review the site's management of environmental monitoring data and their

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

management of the District Survey Laboratory. The District Survey Laboratory's principle function is to ensure that the site's Environmental Monitoring Programme is delivered. Some analysis of discharge samples is also carried out here. We noted considerable improvement in the quality assurance arrangements, with additional audits having taken place. We reviewed a sample of training records and found good evidence of appropriate training taking place. We concluded that the operator is complying with their permits, although we noted some improvements are required to the laboratory floor to meet best practice standards. EDF Energy has responded positively and agreed to make the necessary improvements.

- In August we carried out an inspection focussed on solid radioactive waste management. We reviewed selected records relating to waste management and maintenance of equipment, which all demonstrated compliance with the permit. We also visually inspected radioactive waste management operations on site and found that management is appropriate for permit compliance.
- In August we carried out an inspection to review the operator's arrangements with respect to the 'combustion plant' on site. The operator has a separate environmental permit covering the exhaust emissions from the gas turbines that provide back-up power supplies. This inspection included reviewing monitoring data, record keeping and maintenance. We found the areas assessed to be adequate. We made a recommendation about some non-radioactive waste being inappropriately stored within a compound. The operator has since made improvements to rectify this.

Events and enforcement

In July, we assessed two Hinkley Point A investigation reports into two separate events in May and June. Both of these events were connected with the management of liquid discharges. In both events, the site standards fell short of our expectations, with insufficient care and attention being paid by site staff being a contributing factor. These events did not lead to any additional release of radioactivity to the environment. We have recorded these events as two non-compliances with the permit. We will be checking on the progress of the site actions in response to these two events in our inspection in November.

There were no events or enforcement at Hinkley Point B.

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

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

annually in the report “Radioactivity in Food and the Environment” (RIFE-19)^[3].

In RIFE-19, the Hinkley Point sites are considered together for the purposes of environmental monitoring because the effects of both are on the same area. The RIFE 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 2013, 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. 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 each year which is around 2.2 mSv/year.

Meeting with the Stop Hinkley group

In October, we met with the Stop Hinkley group, following a request from them to discuss environmental monitoring. They raised a number of specific questions about the environmental monitoring we undertake. Our programme of 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 doses to the most exposed people continue to be low.

Whilst we believe our existing programme is suitable, we are considering carrying out some limited additional monitoring to reassure the Stop Hinkley group.

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.

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

^[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. Tim Fediw is the Lead Regulator for Hinkley Point B.

Robert and Tim 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 Tim 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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