

# Environment Agency Report to the Hinkley Point Site Stakeholder Group

29<sup>th</sup> June 2018

## Introduction

This report covers the Environment Agency's regulation of Hinkley Point A & B nuclear sites and related issues for the period February 2018 to June 2018.

## 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<sup>[1]</sup>.

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 four months:

- In April we attended a South-West regional waste meeting at Oldbury. This meeting was attended by ourselves, the Office for Nuclear Regulation and Magnox. The meeting discussed the various plans and strategies that Magnox is pursuing to retrieve, process and make passively safe the higher activity waste inventories it has

on the three sites making up the South-West regional group of sites (i.e. Hinkley Point A, Oldbury and Berkeley).

- The site has recently suffered a number of gaseous particulate sampler failures. This is being investigated and is likely to be due to poor quality parts fitted by maintenance contractors. This issue is likely to affect other Magnox sites and potentially other nuclear Operators. This information has been shared with the industry both by Magnox and the EA.
- We have re-permitted the two surface water outfalls from the site. These carry mainly rain/surface water from site along with some minor inputs of process water (e.g. general service water, treated sewage effluent). These permits were erroneously surrendered around three years ago. The re-permitting of the outfalls has allowed the permit conditions to be updated in-line with modern practice.
- In April, Magnox supplied a BAT report for the packaging and encapsulation of spent ion exchange resin with polymer. This waste is classed as a higher activity waste. This has been assessed by our Nuclear Waste Assessment Team (NWAT) and comments supplied to Magnox. A meeting is being held in June to discuss these.

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

- The site has written to us to request the recognition of two new stack discharge points within the permit. The site's permitted discharge limits will not be changing but the permit requires the more significant discharge points to be recognised in the permit, while minor ones are recognised in a supporting document. The stacks in question are for the new Modular Intermediate Level Waste Encapsulation Plant (MILWEP), which is currently being built on site and for an existing building which will be used to compact drums of sorted fuel element debris which will then be placed into 6m<sup>3</sup> Robust Concrete Boxes (RCBs). To support this request we asked for and subsequently received reports from Magnox on how secondary arisings of radioactive waste (i.e. gaseous releases)-will be minimised using BAT (Best Available Technique) in each building as well as estimates of the likely quantities of these secondary wastes.

## Hinkley Point B

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

- In February we carried out a joint inspection of the Active Effluent Treatment Plant, with the Office for Nuclear Regulation and a member of the operator's Internal Nuclear Assurance function. We identified two permit non-compliances, relating to training procedures and records. We also made recommendations, about training of staff on secondment and signs on a sludge tank.
- In May we carried out an inspection on the Gas Bypass Plant and coolant chemistry management. No con-compliances were identified and we noted some examples of good practice.
- We received the final reports on work to verify the operator's process for characterising Low Level Waste (LLW), which is sent offsite for incineration. There was good correlation between gamma spectroscopic measurements made by the operator's contractor and our independent contractor. There was also broad agreement between the waste samples analysed by our contractor and the activity ratios predicted by the waste stream fingerprints. We were satisfied that the operator's characterisation arrangements were sufficient for permit compliance.
- In June we took part in Exercise Nighthawk which provided a successful test of our off-site role in responding to an on-site nuclear emergency.

## Events and enforcement

No enforcement action has been necessary at Hinkley Point A or 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.

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

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incident hotline  
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floodline  
03459 88 11 88

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 2016 (RIFE-22)<sup>[2]</sup>, the total radiation dose to this group of people as a result of discharges and radiation shine from the sites was very low at 0.013 mSv/year. This is about 1-2% 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.

The updated Habits Survey for Hinkley Point, based on surveys in July 2017, has been issued<sup>[3]</sup> and will be used to inform the RIFE Report for 2017 (RIFE-23), which will be published towards the end of 2018.

### **EA attendance at the Hinkley Point A SSG meeting in June 2018.**

Unfortunately the EA nuclear regulators for the Hinkley Point A & B sites are both on leave on the 29<sup>th</sup> June 2018 and therefore are unable to attend the SSG meeting. Please accept our apologies for this.

If you have any questions relating to this report or our regulation in general, please get in contact using the details on this page.

### **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<sup>[4]</sup> 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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<sup>[2]</sup> <https://www.gov.uk/monitoring-radioactivity>

<sup>[3]</sup> The 2017 Habits report will be published on the CEFAS website ([www.cefas.co.uk](http://www.cefas.co.uk)) around the end of June.

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