

27 February 2015

Introduction

This report covers the Environment Agency's regulation of Hinkley Point A & B nuclear sites and related issues for the period October 2014 to January 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.

We maintained 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:

- Remediation/containment of the historic diesel contamination on the site to ensure that it is not adversely affected by Hinkley Point C site dewatering.
- In January we met with Magnox and the Office for Nuclear Regulation to discuss progress with the Fuel Element Debris characterisation project.
- We continue to engage in dialogue with Magnox over the planned changes to waste strategies across the fleet. Documents outlining these changes will be supplied to us in the next few months and these will be assessed by Office for Nuclear Regulation and ourselves.

- We continue to monitor the progress of the project to remove the sludge and resin from the site storage tanks. The site is now dealing with the residues which remain in one of the tanks.
- We continue to engage in dialogue with Magnox over the transfer of RSRL sites to Magnox Ltd, as well as other planned/potential changes to management structures/systems.

Hinkley Point B

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

- In October we carried out an inspection focussing on solid and gaseous radioactive waste management. We reviewed the method by which the radioactivity of solid waste disposals is calculated and noted continued improvements to the methods used. We found that waste segregation is adequate for permit compliance. We reviewed trends in gaseous discharges.
- In November 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. An outstanding modification to the plant to improve environmental protection has been completed.
- In January, the operator held an Annual Review of the Environment with us. This meeting provided a forum to review environmental performance over the past year and discuss priorities for the coming year.

In January we reviewed the operator's compliance with the Control of Major Accident Hazards Regulations (Comah). These regulations are aimed at ensuring that certain hazardous substances are appropriately stored and that emergency arrangements are in place. We noted that some infrastructure, although satisfactory, still requires improvement. A programme of improvements has been agreed.

- In February we will review outage waste management jointly with the Office for Nuclear Regulation.
- We are participating in 'Exercise Blackbird 3'. This exercise, which will take place in June 2015, will include mobilisation at a national level. This exercise will test the ability of the site and other organisations to respond in an emergency situation. Our main role is advising on possible contamination of surface waters and disposal of wastes.

Events and enforcement

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

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^[1].

Liquid and gaseous discharges from Hinkley Point A were well within the permitted limits and notification levels in the period.

In February, EDF Energy notified us that discharges of gaseous Carbon-14 for Nov 14-Jan 15 exceeded the quarterly notification levels in the permit by about 3%. We set 'notification' levels that are considerably below

the permit limits, to allow us to monitor performance of the site. The permit requires the operator to notify us if they exceed the level and provide a report detailing the reasons. In this instance, the R4 outage and a recent in-service failure of the gas bypass plant have contributed to temporary increases in discharges.

We have reviewed the reports and we are satisfied that the operator has ensured that discharges are minimised as far as possible.

We set permit levels that take into account such discharges, which are a normal part of operating a nuclear power station.

Discharges remain well within permitted limits and are well controlled.

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 annually in the report "Radioactivity in Food and the Environment" (RIFE-19)^[2].

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. The majority of this radiation dose is due to radiation shine from the sites and therefore the contribution of discharges to this radiation dose is very small. The 0.022 mSv/year radiation dose is far below the Government Dose limit of 1 mSv/year and even smaller compared to the average amount of radiation we all receive

^[1] <http://apps.environment-agency.gov.uk/wiyby/default.aspx>

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

from natural sources each year which is around 2.2 mSv/year.

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 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.

Hinkley Point A:

Dr Robert MacGregor

Telephone: 01491 828379

E-mail: robert.macgregor@environment-agency.gov.uk

Hinkley Point B:

Tim Fediw

Telephone: 01491 828445

E-mail: tim.fediw@environment-agency.gov.uk

Address for both Robert and Tim:

Environment Agency
Red Kite House
Howbery Park
Wallingford
Oxfordshire
OX10 8BD

^[3] <https://www.gov.uk/government/publications/nuclear-regulation-in-the-environment-agency>