

## Introduction

This report covers the Environment Agency's regulation of Oldbury nuclear power station and related issues.

## Radioactive substances regulation

### Permitting

No changes to the Environment Permit have been made since the reissue of the Permit in November 2011. The Permit's accompanying CEARAS<sup>[1]</sup> document was slightly amended in December 2011 to simplify the reporting requirements regarding solid waste transfers and to add a new condition requiring an independent inspection of the site's management system associated with liquid flow measurement. This condition has been added to all nuclear site permits in England and Wales.

### 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 Oldbury. Radioactive Substances Compliance Assessment Reports (RASCAR) detailing our inspections and non-compliances found are put on the Public Register.

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

- Assessment of the planned changes to the organisational structure of the site.

- Assessment of a Best Available Technique study regarding discharges of gaseous wastes prior to cessation of generation.
- Assessment of the status and repairs necessary to the manholes in the main cooling water discharge ducts.
- Assessment of the proposed gaseous monitoring strategy for post-generation operations.
- Investigation into the non-compliant discharge from the water treatment facility in December 2011.
- Investigation and assessment of the site's remedial plans for the pond water treatment system's pipe work.

### Discharge reports

The operator at Oldbury is required to report liquid and gaseous discharges to the environment and transfers of radioactive wastes to other sites on a regular basis. These reports are placed on the public register and a digest of information is available via the Environment Agency website- 'What's in your backyard?' facility<sup>[2]</sup>.

Liquid and gaseous discharges from Oldbury are at levels well within the requirements of its permitted limits. No Quarterly Notification Levels (QNLs) have been exceeded in the period.

<sup>[1]</sup> Compilation of Environment Agency Requirements, Agreements and Specifications.

<sup>[2]</sup> <http://www.environment-agency.gov.uk/homeandleisure/37793.aspx>

## Enforcement

We have investigated the discharge of effluent that occurred from the main water treatment plant in December 2011. This effluent was deemed not compliant with the relevant permit as for two hours the pH of the discharge did not meet the Permit requirement. The environmental impact of the discharge would have been negligible given the size of the receiving water body (i.e. the River Severn) but the loss of control warranted further investigation.

The site has conducted a thorough investigation of the event and identified the reasons for the discharge occurring. It has also identified a number of actions that need to be undertaken so that such an event does not reoccur. We have reviewed this investigation, spoken to the investigation team and inspected the facility where the discharge originated. We are satisfied with the site's actions. In line with our enforcement policy we will record this non-compliance as a CCS 4 (which is our lowest category of non-compliance) and we will take no further regulatory action at this time. The site is to keep us informed of the progress of the actions that arose from their investigation.

## Environmental impact

In the site permit we specify a rigorous environmental monitoring programme that requires the operator to monitor and assess the impact of their discharges on the environment. This monitoring demonstrates that the impact of the site on the environment is low.

Additionally, the Environment Agencies and Food Standards Agency carry out independent environmental monitoring around nuclear sites. The results of this work are published annually and the latest report "Radioactivity in Food and the Environment 2010" (RIFE 2010) has recently been published on the Environment Agency website<sup>[3]</sup>.

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<sup>[3]</sup> <http://www.environment-agency.gov.uk/homeandleisure/110353.aspx>

In the RIFE report, the Oldbury and Berkeley 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 2010, the total dose to this group of people was 0.011 mSv. This radiological 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 from natural sources each year which is 2.2 mSv.

## 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 website<sup>[4]</sup>.

The Environment Agency's Lead Regulator for the Oldbury site is Robert MacGregor. Robert is a Nuclear Regulator and part of the national Nuclear Regulation Group (South) and is based at our Wallingford office.

While his principal office is in Oxfordshire, Robert provides expertise on the environmental regulation of radioactive substances on and from nuclear licensed sites in southern England and Wales. He also acts as the Lead Nuclear Regulator for GE Healthcare's nuclear licensed sites and works with local Environment Agency teams in Oxfordshire, Gloucestershire, Wiltshire, Buckinghamshire, and South Wales.

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<sup>[4]</sup> <http://www.environment-agency.gov.uk/business/sectors/32517.aspx>