

# Environment Agency Report to Berkeley Site Stakeholder Group

For SSG Meeting 12 July 2017 - This report covers our regulation of Berkeley Nuclear  
Licensed site.

## Radioactive substances

We regulate radioactive waste disposals to the environment. We do this through an environmental permit that contains limits and conditions aimed at minimising wastes and protecting the environment. We check compliance with the authorisation by making regular inspections at Berkeley.

## Site Regulation

Since the last SSG, carried out the following site inspections

1. In June, we inspected the liquid effluent management arrangements at Berkeley. In general we were satisfied that management of liquid effluent met permit requirements.

We have asked Berkeley to review their planning and management arrangements for the management of liquid effluents across the site, as individual buildings and facilities are decommissioned.

## Other Work

We have worked with Berkeley site to:

- Ensure the operator develops a programme and estimate of planned gaseous emissions from decommissioning of the whole site, to meet requirements for Article 37 of the Euratom Treaty

During the remainder of 2016/17, our work will focus on the following themes and issues:

- *Consider progress on the operators future application of Robust Concrete Boxes (RCB's) as a potential replacement for Ductile Cast Iron Containers for ILW storage within the Intermediate Storage facility (ISF)*
- *Consider waste management arrangements for radioactive and non-radioactive wastes generated and released from the site.*

## Discharge Reports

Berkeley site is required to report their liquid and gaseous discharges at quarterly intervals and provide bulked effluent samples six-monthly for extended analysis.

We review the data provided by the operator to assess compliance with the environmental permit. These are detailed in Radioactive Substances Compliance Assessment Report (RASCAR). These reports are placed on the public register.

The most recent discharge date, for the first quarter of 2017, indicate that the discharge trends are consistent and continue to remain within permitted limits.

We have requested that Berkeley site reviews predicted gaseous emissions and trends during subsequent decommissioning work, to consider future permitting requirements.

## Site Permit Compliance

There have been no non compliances noted during recent inspections.

## Permit Variations

There have been no recent variations to the permit.

## Environmental reporting

The environmental reporting from site and corroborated evidence through our independent monitoring, indicates that the dose to individuals and members of the public from discharges from the site continue to remain very low. Total dose from all pathways approximate to levels less than 1 % of the national dose limits set to protect members of the public<sup>1</sup>.

## ILW Management

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<sup>1</sup>[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/563010/RIFE21.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/563010/RIFE21.pdf)

*Intermediate Level Waste (ILW) retrieval and conditioning work is progressing after some delays due to equipment outage.*

*Although this work will significantly de-risk and address legacy hazards, the retrievals project represents a difficult logistical challenge-very much a lead and learn process for the remainder of the Magnox fleet. We are working very closely with the Office for Nuclear Regulation (ONR) to assess the retrieval and conditioning work to ensure this work is appropriate and that best available techniques (BAT) are used to minimise discharges and impact to the environment.*

## Consultation on the UK Advanced Boiling Water Reactor design

We are working with ONR and Natural Resources Wales to assess the design of the Hitachi-GE UK Advanced Boiling Water Reactor (ABWR). The ABWR design is proposed for use at a new nuclear power station, near to the current Oldbury A station.

We have now published a compilation of the responses to this consultation, which is available from the consultation website: <https://www.gov.uk/government/consultations/gda-of-hitachi-ge-nuclear-energy-ltds-uk-advanced-boiling-water-reactor>.

## Commenting on reactor designs

In addition to our consultation, the assessment process seek external engagement and participation. The reactor design company is encouraged to publish detailed design information on its website and update it as new information becomes available. Anyone can view that information and comment on it.

The design company is required to respond to questions and comments about their design. We are able to see both question and response so that we can consider these in our assessment.

The comments process for the UK ABWR opened on 6 January 2014 and closes on **15 August 2017**.

Information on the assessment of new nuclear power station designs and our regulatory requirements are available on our website:

<https://www.gov.uk/government/collections/assessing-new-nuclear-power-station-designs>

And ONR's website:

<http://www.onr.org.uk/new-reactors/index.htm>

If you wish to make a comment about the UK ABWR design via Hitachi-GE's website, Hitachi-GE will respond to the comments and issues raised through this process:

[http://www.hitachi-hgne-uk-abwr.co.uk/make\\_a\\_comment.html](http://www.hitachi-hgne-uk-abwr.co.uk/make_a_comment.html)

We will use these, where relevant, to help inform our assessments of the UK ABWR. We will publish our conclusions on the acceptability of the UK ABWR in a 'decision document', which we intend to issue in December 2017.

## 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 page in the UK government website<sup>2</sup>.

## Nuclear Regulators

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<sup>2</sup><https://www.gov.uk/government/organisations/environment-agency>