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## Environment Agency Report to Berkeley Site Stakeholder Group

Nov 2009 – Jan 2010  
For SSG Meeting Wednesday 3 February 2010

## Radioactive substances

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

### Authorisation Review

We regulate radioactive waste disposals to the environment. We do this through authorisations that contain limits and conditions aimed at minimising wastes and protecting the environment. We undertake a 'periodic review' of the authorisation on an annual basis to ensure the conditions are appropriate to the plant and decommissioning operations that are being undertaken. We reviewed the Berkeley authorisation in December.

### Site Inspection

We continue to make inspection visits to the Berkeley Site. Since the last SSG meeting we have visited the site 2 times and carried out an Annual Review of Performance and looked at:

- Control and supervision arrangements
- Preparations for care and maintenance
- Consideration of the Agency's periodic review of their authorisation
- In addition to our own inspection activities, we routinely review the operator's reports of events and incidents occurring on its site.

### Permit Variations

In December we made a minor change to the permit at Berkeley, as a result of national initiatives to improve waste management arrangements and implement changes. There were consultations in relation to the changes carried out between April and July 2009 and August and September 2009, respectively.

- The authorisation has been updated to reflect existing discharge routes,

the discharge routes that no longer formed part of the licensed site have been removed. No changes were being made to the limits within the authorisation.

- Formerly, transfers of radioactive waste to the LLWR were solely for disposal. No options were available to process wastes to separate the radioactive from non-radioactive portions, if practicable. The authorisation has now been varied on all nuclear licensed sites to facilitate new arrangements for metal recycling.
- We use a Monitoring Certification Scheme (MCERTS) for air, water and soil monitoring. MCERTS enables us to establish common standards for Operator self-monitoring. Following a consultation, we have applied this self-monitoring to liquid effluent flow on nuclear sites regulated under the Radioactive Substances Act 1993 (RSA93). This will help to ensure that flow data sent to us is reliable and accurate, and that site operators and/or companies who measure the flow of liquid waste are working towards the same standard.

Also in December 2009 we received a request from the Berkeley Site for a further minor change to their permit to allow for the installation of a new Ventilation System for the Shielded Area on the Site and replace the existing Ventilation system with one more suitable for the future operations on the site. The request for this minor change will not change the limits set on gaseous discharges from the Berkeley site.

### Discharge Reports

Nuclear sites are required to routinely report to us their liquid and gaseous discharges to the environment and transfers of radioactive wastes to other sites. We review this information and place these reports on the public register.

### Environmental Impacts

The site's authorisation contains a specification to carry out an environmental

monitoring programme, to monitor and assess the impact of their discharges on the environment. The monitoring data from this programme indicates the radiological impact on the environment is low.

In addition, along with the Food Standards Agency we conduct an independent environmental monitoring programme. Due to their proximity the Berkeley and Oldbury sites are treated together. The results of this programme are published in an annual report, "Radioactivity in Food and the Environment" (RIFE). For the area around Berkeley and Oldbury, the RIFE report states that, "concentrations in the aquatic environment were generally similar to those in recent years, though gamma dose rates were generally slightly higher in 2008". The RIFE report (RIFE-14) covering the calendar year 2008 was published in November 2009 and can be downloaded from our website<sup>1</sup>.

It also reports that the impact from the Berkeley and Oldbury sites, during 2008, was less than 0.005 milli-Sieverts from both radioactive gaseous and liquid discharges, this constitutes less than 1% of the dose limit for members of the public. The total dose to the most exposed members of the public, taking account of direct irradiation from the site, was attributed to be 0.041 milli-Sieverts (or approximately 4% of the dose limit). This was almost entirely due to direct radiation.

## Enforcement

Since our last report we have not taken any enforcement action and do not have any actions pending against Magnox South for their operation of the Berkeley Site.

## Nuclear Sector Plan

Following the publication of the new Nuclear Sector Plan, which can be downloaded from

our website<sup>2</sup>, as reported to the last SSG meeting. The 2008 Sector Report has now also been published and is available on our website.

## New Nuclear Build

Though not specifically related to the regulation of the Berkeley site, developments with regard to potential new build are included to inform the SSG.

The Government recently published results of its Strategic Siting Assessment for new nuclear power stations at 11 prospective sites which included Oldbury, South Gloucestershire as one site that might be suitable for such purposes..

The Department for Energy and Climate Change (DECC) has published a draft Nuclear National Policy Statement (NNPS) for consultation. The statement sets out which sites are suitable for Nuclear New Build. The NNPS is one of six National Policy Statements launched as part of the 'Consultation on National Policy Statements for Energy Infrastructure'. The Nuclear NPS and the Overarching Energy NPS should be read together.

We gave advice on three areas: 'flooding', 'coastal erosion' and 'access to cooling waters'. We also commented on the Government's 'Appraisal of Sustainability' report. Our advice to Government has now been published in the draft NNPS.

The Government was satisfied that the nominated site at Oldbury is potentially suitable for the deployment of one or more new nuclear power stations by the end of 2025.

The NNPS consultation will include a mix of national events and local drop-in exhibitions at the sites named. Meetings near Oldbury are scheduled for the first week in February

<sup>1</sup> [http://www.environment-agency.gov.uk/static/documents/Business/rife14\\_final.pdf](http://www.environment-agency.gov.uk/static/documents/Business/rife14_final.pdf)

<sup>2</sup> <http://publications.environment-agency.gov.uk/pdf/GEHO0709BQGI-e-e.pdf>

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in Thornbury. Staff from the Environment Agency will also be present at these events to answer questions about our role in Generic Design Assessment and in nuclear new build generally.

We will be responding to DECC's consultation and our formal response will be published on our website in due course.

Further details of how to respond and information about the events can be found on DECC's website<sup>3</sup>.

### **Flood Risk**

As part of a national initiative we are appraising nuclear site operators awareness of flood risk issues on their sites. This includes awareness of the 'Flood Warning Direct' system which is available to everyone to provide flood warning by telephone, mobile, fax or pager and by SMS text.<sup>4</sup>

### **New Corporate Report**

We have now published our new corporate strategy, Creating a better place 2010-2015, which can be downloaded from our website<sup>5</sup>.

### **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 our website<sup>6</sup>.

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<sup>3</sup> <https://www.energynpsconsultation.decc.gov.uk/>

<sup>4</sup> <http://www.environment-agency.gov.uk/homeandleisure/floods/38289.aspx>

<sup>5</sup> <http://publications.environment-agency.gov.uk/pdf/GEHO1109BQXE-e-e.pdf>

<sup>6</sup> <http://publications.environment-agency.gov.uk/epages/eapublications.storefront> Search for keyword 'RSR'

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