

# Bradwell Site LCLC

Report for June - December 2017

**This report covers our regulation of Bradwell site and related issues.**

## Radioactive substances

We regulate radioactive waste disposals to deliver the best outcome for the environment. We do this by placing limits and conditions in the environmental permits that help us ensure radioactive waste discharges are minimised and the environment is protected.

## Stakeholder Communications

No further correspondence arose from the permits we issued in March 2017.

We attended meetings at Mersea Island (October) and Bradwell Village (December) to explain our roles for Bradwell A site, plus our permits and the findings of our independent monitoring.

We have now received a request from Magnox Limited for variation to reflect the site's intended entry into Care & Maintenance. We intend to consult on the application due to the significance of the change in manning level, even though limits will decrease.

Our regulation of any proposed new build reactor is outside the scope of this report.

## Site Inspection

We have not undertaken compliance inspections of the Bradwell Site since the last LCLC meeting as our regulatory focus was on agreeing the regulatory process for entry into Care and Maintenance. Therefore we met staff from the site on several occasions to provide regulatory advice and guidance on decommissioning activities.

We assessed monitoring returns and have trended releases to show that levels have been safe during the treatment of the Fuel Element Debris. We prepare Radioactive Substances Compliance Assessment Reports (RASCARs) detailing our reviews of monitoring reports or assessments of best

available techniques (BAT). If we find any non-compliances these are detailed in our RASCARs. During the period since the previous LCLC we did not identify any non-compliances.

Generally, we remain satisfied, for the Bradwell site, that Magnox achieves a good level of compliance with our regulatory requirements. However we have written to site about several similar incidents involving the processing and storage of radioactive waste.

## Regional working

Magnox is working closer as a south east region and is forming more links with its sites at Dungeness A and Sizewell A. We have written to site about our concerns on the level of resource available from Sizewell A to take over Bradwell activities. Part of our role is to work with Office for Nuclear Regulation on deciding if both sites are ready for Bradwell to enter into Care & Maintenance.

## Permit Variation

As mentioned above the next variation will decrease limits. The variation is to set (reduced) regulatory requirements on process and environmental monitoring. Site have already surrendered a number of non-radioactive permits. We will notify the LCLC when consultation begins on the application.

## Discharge Reports

Nuclear sites are required to routinely report to us their liquid and gaseous discharges to the environment. We review these reports for compliance which is detailed in a RASCAR, and subsequently placed on the public register.

Overall the levels of gaseous and liquid discharges remain far below the levels when Bradwell was an operating power station.

From an environmental impact perspective the discharges are not significant and remain consistently low when compared to permit limits.

## Environmental Monitoring

We have carried out sampling and analysis for our independent environmental monitoring programme, which was expanded when the site was processing Fuel Element Debris. With the completion of this processing, environmental monitoring will return to previous baseline levels from January 2018.

The independent monitoring data indicates that the levels of radioactivity found in the environment remain low and close to background levels. The environmental monitoring information should provide the public with further reassurance about the behaviour of radioactivity in the local environment and confirmation that the impact from permitted discharges is not radiologically significant.

The site's permit also contains a requirement to carry out a suitable environmental monitoring programme, to monitor and assess the impact of their discharges on the environment. The monitoring data from Magnox's programme continues to indicate the level of radioactivity in the environment is low.

## Environmental Impacts

We published in October our independent monitoring of environment annually in RIFE reports, along with independent monitoring of the food-chain, which is carried out by the Food Standards Agency.

The latest report, "Radioactivity in Food and the Environment 2016" (RIFE 2016) is published on the Food Standards Agency website at:

<http://www.food.gov.uk/science/research/radiologicalresearch/radiosurv/rife>

The RIFE report presents a yearly assessment of radiological dose to individuals

RIFE 22 includes an annual assessment of radiological dose to the group of people in the local population identified as being most exposed to radiation from the Bradwell site. In 2016, the total dose to this group of people was 0.036 milli-sieverts (an increase from 0.017 milli-sieverts in 2015).

This radiological dose is far below the UK Government dose limit for members of the public from man-made sources of 1 milli-sieverts per year and can be compared to the average dose to the population in the UK from all sources of radiation which is around 2.7 milli-sieverts per year.

## Further Information

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