

Introduction

This report covers the Environment Agency's (EA's) regulation of Oldbury nuclear power station and related issues in the period since the previous Oldbury SSG meeting on 27 January 2016

Radioactive substances regulation

Change of Lead Regulator

Rob Green took over from Peter Reynolds as the Environment Agency's lead regulator of Oldbury on 1 April 2016.

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

We inspected the arrangements Oldbury has in place review techniques and operations. We found that the internal assurance programmes at Oldbury complied with the requirements of their permit.

Reactor Vessel Venting

We reviewed a proposal from Oldbury to move to passive venting of the reactor vessels following defueling. A similar arrangement has been implemented at other defueled Magnox power stations. We agreed that the proposal is BAT because energy use would be considerably reduced and the long-term maintainability of the discharge lines would be improved.

We anticipate that the dose from emissions from the passively vented reactor vessels will be negligible. Emissions of particulate matter containing beta/gamma emitting radionuclides

will be initially be monitored at monthly intervals under the new arrangements. Tritium and carbon-14 emissions will be measured at weekly intervals during the commissioning period. The monitoring intervals will be reviewed as more data on emissions becomes available.

Storage of IONSIV's

The transfer of IONSIV's from Dungeness A and Sizewell A into the Oldbury cooling ponds was completed on 21 February. No adverse trends in liquid effluent emissions from the cooling pond have been detected since the IONSIV's were placed in the pond.

Permitting

We are reviewing Oldbury's water abstraction and discharge permits. Where needed we will revoke or vary the permits to ensure they provide effectively regulation under current operating conditions, without placing an unnecessary cost or regulatory burden on Oldbury.

The variations have been delayed by unanticipated legal and policy complexities. We now expect the variations to be issued by the end of the second quarter of 2016.

Enforcement

We have not taken any enforcement actions at Oldbury in the period since the previous Oldbury SSG meeting.

Discharge Monitoring

The operator at Oldbury is required to report liquid and gaseous discharges to the environment on a regular basis. These reports are placed on the public register and a digest of information is available via the Environment Agency website's 'What's in your backyard?' facility^[1].

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

Reports received from Oldbury indicate that radioactive gaseous discharge rates continue to decline. Both gaseous and liquid discharges are at level well within the requirements of its permit limits. No Quarterly Notification Levels (QNLs) were exceeded during the quarter January to March 2016.

Environmental Monitoring

We consulted with the Food Standard Agency before agreeing to the changes to the Oldbury environmental monitoring following defueling of the reactors. We believe that the revised programme is proportionate and meets BAT (Best Available Technique) requirements.

The terrestrial environment is mainly impacted on by emissions to atmosphere. Routine gaseous emissions from Oldbury are low. The potential impact of emissions resulting from an abnormal event has reduced considerably now that the reactors are defueled.

The revised terrestrial monitoring programme is as follows:

- Terrestrial spot dose rate measurement: quarterly sampling at seven locations approximately evenly distributed at a distance of about one kilometre from the site, (Previously 28 locations were sampled.)
- Passive shades: monthly at five distributed locations 1 km to 2 km from site. (13 locations were sampled previously.)
- Soil sampling is unchanged. One sample is collected annually at a location downwind of site under prevailing wind directions.
- Herbage sampling is reduced from five samples to one annual sample.

Monitoring of foodstuffs - fish (when available) and milk (collected quarterly from three farms) - will continue as before. The sampling frequency may change in future depending on emissions trends.

The marine environment is mainly impacted on by liquid effluent discharges. Monitoring of the marine environment will largely continue as before. The single change is that contamination monitoring of fishing gear is no longer required. No further changes are expected until the cooling pond at Oldbury is decommissioned.

Looking forward:

During past year Oldbury has made considerable progress in removing both radioactive and non-radioactive hazards from the site and has entered a new operational phase: preparations for care and maintenance.

We are satisfied that management of change arrangements are in place to develop organisational structures and management procedures that will ensure Oldbury continues to meet its permit conditions once preparations for decommissioning start on site.

We will continue to monitor the changes underway at Oldbury to provide assurance that the impact on the environment is minimised.

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 GOV.UK website ^[2].

The Environment Agency's Lead Regulator for the Oldbury site is Rob Green, who is part of the Nuclear Regulation Group (South) team and is based at our Wallingford office.

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^[2] <https://www.gov.uk/government/publications/nuclear-regulation-in-the-environment-agency>