



Joint Berkeley/Oldbury Site Stakeholder Group

Building C11 South Gloucestershire & Stroud College,
College Green, Berkeley GL13 9PA

Wednesday 27 September 2023

Meeting starts at 13.00, refreshments served from 12.30.

A G E N D A

- | | | |
|-------|-----|--|
| 13.00 | 1. | Welcome |
| 13.05 | 2. | Election of Chair & Vice Chair Berkeley and Oldbury site |
| 13.15 | 3. | Apologies for absence |
| 13.20 | 4. | Minutes of Meeting held on 11 May 2023
a) Accuracy
b) Matters arising |
| 13.25 | 5. | Site Director Reports for Berkeley & Oldbury –
Mark Pitts & Chris Burden Site Directors |
| 13.50 | 6. | Magnox Corporate Update – Bill Hamilton |
| 14.00 | 7. | NDA Update – Simon Napper |
| 14.10 | 8. | Berkeley Railhead – Simon Napper |
| 14.20 | 9. | ONR Reports – Paul Jenneson, Berkeley & Oldbury |
| 14.30 | 10. | Environment Agency Reports -
Peter Reynolds, Berkeley & Rebecca Cleverley,
Oldbury |
| 14.40 | 11. | AOB – Dates for 2024 meetings |

**BERKELEY AND OLDBURY ON SEVERN SITE STAKEHOLDER GROUPS
SUMMARY OF KEY POINTS ARISING AT THE MEETING HELD AT
OLDBURY CONFERENCE CENTRE ON WEDNESDAY 11 MAY 2023**

- Mr Malcolm Lynden welcomed members to this joint meeting of the Site Stakeholder Groups for the Berkeley and Oldbury Sites. It was noted that Mr Mike Heaton, Site Director was recovering following a recent heart attack. Members expressed their best wishes for a speedy recovery.
- Mr Mark Pitts and Mr Chris Burden, acting Site Directors, reported on recent activities at the Sites. There had been no significant safety or environmental issues at either Site since the previous meeting.
- At Berkeley a start had been made on the retrieval of radioactive waste contained in cans in Vault 3. The first contract had been placed for the project to remove the former Boiler Houses which circled around the reactor buildings; the metallic waste currently stored within the Boiler Houses would be cleaned as necessary before being sent off site for recycling.
- At Oldbury good progress was being made with cutting redundant cables to complete the electrical isolation of the former Turbine Hall so that the buildings could be demolished. Some items of redundant furniture and equipment from the Site and the Technical Centre were being donated to local charitable organisations.
- Members were informed of consideration currently being given to the future treatment of the Oldbury Silt Lagoon 3 area. The area had become a wetland during operation of the power station when it had been used for pumping silt dredged from near the cooling water system but since operations had ceased the area had become scrubland. Consideration was now being given to restoring the area to wetland. This would be the subject of consultation with the local public during the coming months.
- Mr Bill Hamilton reported on Magnox corporate issues and reports were provided by representatives of the Nuclear Decommissioning Authority, the Office for Nuclear Regulation, and the Environment Agency.
- Mr Gould and Mr Howdle of Rolls Royce SMR Ltd gave a presentation on the development of the design of a Small Modular Reactor and the progress of the design through the generic design assessment process.
- Mr Lynden reported on recent activities on behalf of the Groups.

**BERKELEY AND OLDBURY ON SEVERN SITE STAKEHOLDER GROUPS
MINUTES OF THE MEETING HELD AT THE OLDBURY CONFERENCE
CENTRE, ON WEDNESDAY 11 MAY 2023**

PRESENT:

Mr M Lynden (in the chair)	-	Oldbury on Severn Parish Council
Mr A Acton	-	Oldbury on Severn Parish Council
Cllr Mrs L Ashton	-	Berkeley Town Council
Cllr S Chandler JP	-	Hamfallow Parish Council
Cllr C Davies	-	Stinchcombe Parish Council
Cllr C Parkinson	-	Thornbury Town Council
Cllr D Power	-	Chepstow Town Council
Mr B Roberts	-	Thornbury Chamber of Commerce
Mr J Stanton	-	Co-opted member
Mr K Sullivan	-	Oldbury on Severn Parish Council

IN ATTENDANCE:

Mr S Napper	-	Nuclear Decommissioning Authority
Mr P Jenneson	-	Office for Nuclear Regulation
Mr P Reynolds	-	Environment Agency
Ms A Presdee	-	Gloucestershire County Council
Ms G Ellis-King	-	South Gloucestershire Council
Mr D Gould	-	Rolls Royce SMR
Mr P Howdle	-	Rolls Royce SMR
Mr A Bates	-	Western Gateway
Cllr L Redman	-	Hinkley Point SSG (Observer)
Mr M Pitts	-	Acting Oldbury Site Director
Mr C Burden	-	Acting Berkeley Site Director
Mr W Hamilton	-	Magnox
Ms K Baxter	-	Magnox
Mr A Murdoch	-	Magnox
Ms A Lamacraft	-	Magnox
Ms E Vaughan-Lewis	-	Magnox Communications
Mr A Mitchell		
Mr G Wheeler		
Ms B French		
Mr G Vaughan-Lewis		
Mr T Hellen		
Mr P Hazelwood		
Mr M J Davis (Secretary)		

WELCOME

- 1 Mr Lynden welcomed everyone to this joint meeting of the Berkeley and Oldbury on Severn Sites' Stakeholder Groups.

APOLOGIES FOR ABSENCE

- 2 Apologies for absence were received from Cllr G Langdon, Ms R Cleverley, Cllr B Tipper, Cllr J Crook, Ms V Heselton, Dr J Cordwell, Cllr M Riddle, Cllr N Easby, Cllr I Bamfield and Cllr D Griffiths.

MINUTES OF PREVIOUS MEETING

(a) Accuracy

- 3 The minutes of the joint meeting of the Berkeley and Oldbury SSGs held on 25 January 2023 were approved as an accurate record.

(b) Matters arising

Rebranding of Magnox (para 10 refers)

- 4 Mr Vaughan-Lewis asked about the cost of the anticipated rebranding of Magnox and questioned whether this funding could be used more effectively on other things. Mr Hamilton said that the costs would be approximately £50k. He emphasised the importance of this rebranding as the name Magnox had no relevance for the sites which would be transferring to the company during the next decade. Mr Lynden said that at a meeting during the past week the Chairs of the various SSGs had given their support to the proposal to rebrand the company.

SITE DIRECTORS' REPORTS

- 5 It was noted that Mr Mike Heaton was recovering following a recent heart attack. Members expressed their best wishes for a speedy recovery.
- 6 In the absence of Mr Heaton, Mr Pitts was acting Site Director for Oldbury and Mr Burden was acting Site Director for Berkeley. They reported on recent activities at the Oldbury and Berkeley Sites, drawing particular attention to the following:
- (i) There had been no significant safety or environmental events at either Site since the previous meeting. Both Sites were supporting the “no mow May” initiative to promote biodiversity.
 - (ii) The retrieval of canned radioactive sludge from Vault 3 at Berkeley had commenced using the R4 processing facilities. Over 1400 cans of sludge and some 500 containers of waste remained to be retrieved from Vault 3. Following a planned outage in June it was anticipated that wastes would be retrieved from Vaults 1 and 3 concurrently.
 - (iii) The first contract had been placed for the project to remove the former Boiler Houses which circled around the Berkeley reactor buildings. It was anticipated that this whole project would take some eight years. A further contract would be placed in due course to cover the processing of

the metallic waste currently held within the boiler houses to put it in a suitable condition for despatch off site for recycling.

- (iv) Good progress was being made at Oldbury with the cutting of cables to isolate the former Turbine Hall area so that demolition could take place. In the cooling ponds area, the pond skip crane had been moved to a final parked position and isolated. A start had been made on the construction of a vacuum filling facility for transferring liquid radioactive waste into containers.
 - (v) Items of equipment which had become redundant at the Oldbury Site and the Technical Centre were being donated to local organisations and charities.
 - (vi) An Oldbury apprentice, Lewis Collins, had received a highly commended award in a national competition amongst other apprentices.
- 7 In reply to a question from Mr Stanton, Mr Pitts explained the careful process which was followed to ensure that all hazards had been removed before cutting into redundant cables.

UPDATE ON OLDBURY SILT LAGOON 3

- 8 Ms Baxter, Mr Murdoch and Mr Napper gave an outline of current intentions in relation to the future treatment of the former Silt Lagoon 3 at Oldbury. They pointed out that during operation silt from dredging had been pumped into this area and had created an area of wetland in which birds were able to roost. Since the end of operations Silt Lagoon 3 had become an area of scrubland. It was noted that there was a planning condition for the Silt Lagoon 3 area to be restored after its intended use. Consideration was now being given to the possibility of restoring the area to wetland. It was proposed that there should be a community event during the coming summer to describe proposals which were being considered and seek views of the community on the future treatment of this area of land.
- 9 During discussion the following points were noted:
- (i) This consideration was related only to the area of Silt Lagoon 3. Silt Lagoons 1 and 2 formed part of the designated area identified for new power station construction.
 - (ii) The area had been farmland before its use as a silt lagoon and the requirement to restore the land to its former use could be interpreted as a requirement to return it to agriculture.
 - (iii) Consideration would have to be given to the practical arrangements for increasing the water level on this land to create a wetland.
 - (iv) Mr Hazelwood who had an interest in birds expressed support for the return of the lagoon area to wetland.

- (v) It was considered unlikely that any future electricity generation system installed on the site would use a cooling system which involved pumping silt onto an area of land.

MAGNOX CORPORATE UPDATE

- 10 Mr Hamilton reported on Magnox corporate issues. He drew particular attention to the following:
 - (i) A new website, magnoxstakeholdergroups.com, had been established to provide information on each of the SSGs.
 - (ii) Gwen Parry Jones had been appointed as the first Chief Executive Officer of Great British Nuclear. She was replaced as CEO of Magnox Ltd by Rob Fletcher.
 - (iii) Consideration was being given to the rebranding of Magnox Ltd to reflect its future role. The future company name was likely to have an associated “strap line” which gave an indication of the company's role and objectives.

NUCLEAR DECOMMISSIONING AUTHORITY

- 11 Mr Napper reported on current NDA issues, drawing particular attention to the following:
 - (i) Following the stakeholder summit held in Edinburgh in September 2022 it was proposed that such meetings should be held every two years in the future with the next meeting to be held in Cumbria. An online event would be organised later in the current year and regional events would also be organised.
 - (ii) The Government was currently inviting views on managing radioactive substances and nuclear decommissioning. The consultation period would be open until 24 May and all views would be welcome.
 - (iii) Socio economic support was being given by NDA to the Sutherland Spaceport having regard for the value of this project in the area of Dounreay.
- 12 Referring to the consultation on radioactive waste, Ms French drew attention to the different approaches between England and Scotland in relation to waste disposal. Mr Napper said that the approach favoured by the Scottish Government would not avoid the need for geological disposal of high-level waste. Mr Hamilton said that the government's consultation document drew together many issues, some of which, such as the treatment of very low level waste, were already covered by existing regulations.

- 13 Mr Stanton said that he would be responding to the government's consultation on behalf of the SSG and invited members to contact him with any issues they would like to see raised.

OFFICE FOR NUCLEAR REGULATION

- 14 Mr Jenneson reported on ONR's regulatory and inspection activities in relation to the Berkeley and Oldbury Sites. Reports on regulatory activities at each Site had been circulated to members in advance of the meeting.
- 15 Mr Jenneson said that he had attended an annual review meeting of safety, security and environmental performance at the Berkeley, Oldbury and Hinkley Point Sites. The overall site performance across the Sites was considered to be adequate and no new issues had been identified.
- 16 Mr Jenneson said that he had been pleased to see the progress at each Site, the important milestones reached, and the important new projects being started. He said he had no concerns of safety significance to bring to the attention of members.

ENVIRONMENT AGENCY

- 17 Mr Reynolds reported on the Environment Agency's regulatory activities in relation to the Berkeley and Oldbury Sites. Ms Cleverley had been unable to attend this meeting.
- 18 Mr Reynolds outlined the Agency's inspection activities at the Sites which had given satisfactory results and he gave an indication of future inspection plans.
- 19 Cllr Chandler said that he looked forward to seeing the Agency's next report on its inspections at Berkeley which was to be on Best Available Techniques and decision making.

UPDATE FROM ROLLS ROYCE

- 20 Mr Gould and Mr Howdle, representing Rolls Royce SMR Ltd gave details of their work on the development of Small Modular Reactor plant. The following points were noted during discussion:
- (i) Compared with large nuclear power plants, a small modular reactor could produce relatively more output for the space it occupied.
 - (ii) Rolls Royce was producing designs for Small Modular Reactor plants but would not fulfil the role of a developer for the construction of power stations using this design.
 - (iii) SMR plant would be manufactured in a factory, transported to site in modules which were of a size which could be transported by road, and then assembled on site.

- (iv) The Rolls Royce SMR design was based on well established PWR technology and used fuel which was readily available.
 - (v) The use of forced draught cooling towers increased the number of sites which were available for potential development.
 - (vi) In addition to supplying electricity for the grid, small modular reactors could supply power or heat to other processes. The ability to manage the demand required by these other processes gave flexibility in relation to the output of electricity available for supply to the grid.
 - (vii) Information on the Rolls Royce SMR design and its progress through the generic design assessment process was available on the Rolls Royce SMR website.
- 21 Mr Lynden felt that a proposal to establish a small modular reactor plant at Oldbury would be welcomed by the local public and questioned whether the SSG should establish a sub-group to provide a focus for any local issues relating to the development of such a plant. Members felt that it would be premature to take such action of this stage.

CHAIR'S UPDATE

- 22 Mr Lynden reported on meetings he had attended recently on behalf of the Group. He pointed out that it would be appropriate at the next meeting to elect chairs and vice chairs for these groups.

ANY OTHER BUSINESS

Mr Bill Gill

- 23 Mr Mitchell drew attention to the fact that Mr Bill Gill had passed away recently. Members expressed their appreciation of the contribution which Mr Gill had made as a member of this Group.

DATE TIME AND PLACE OF NEXT MEETING

- 24 It was noted that a date for the next meeting would be held in September 2023 on a date to be confirmed in due course.

MJD
16 May 2023

ONR Site Report

Magnox Ltd – Berkeley

ONR Site Report

Magnox Ltd - Berkeley

Report for period: 1 April – 30 June 2023

Authored by: P Jenneson, Nominated Site Inspector

Approved by: I Phillips, DFW Delivery Lead

Issue No.: 1

Publication Date: July-23

ONR Record Ref. No.: 2023/35846

Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed to members for the Berkeley Site Stakeholders Group and are also available on the ONR website (<http://www.onr.org.uk/lrc/>).

Site inspectors from ONR usually attend Berkeley Site Stakeholders Group meetings where these reports are presented and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

Contents

- 1. Inspections 4
- 2. Routine Matters 5
- 3. Non-Routine Matters 7
- 4. Regulatory Activity 8
- 5. News from ONR 9
- 6. Contacts 9

1. Inspections

1.1. Date(s) of Inspection

ONR inspectors carried out inspections on the following dates during the report period 1 April 2023 to 30 June 2023:

- 23 & 30 May 2023
- 22 June 2023

2. Routine Matters

2.1. Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

- The conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
- The Energy Act 2013;
- The Health and Safety at Work etc Act 1974 (HSWA74); and
- Regulations made under HSWA74, for example the Ionising Radiations Regulations 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).

The inspections entail monitoring the licensee's actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of Magnox Ltd Berkeley covered the following:

- modifications to plant, equipment and safety cases;
- plant construction and/or commissioning;
- decommissioning; and
- security

Members of the public, who would like further information on ONR's inspection activities during the reporting period, can view site Intervention Reports at www.onr.org.uk/intervention-records on our website www.onr.org.uk.

Should you have any queries regarding our inspection activities, please email contact@onr.gov.uk

2.2. Other Work

The site inspector continued to assess the Magnox Ltd proposal to increase the number of concrete boxes (CBs) stored in the Interim Storage Facility (ISF). ONR is content Magnox Ltd has the arrangements in place to adequately modify the ISF safety case to allow the stacking of CBs in the ISF.

The site inspector held regular meetings with the Site Director and weekly keep-in-touch meetings with the operational staff on site. At these meetings they discussed regulatory issues, site incidents, future permissioning and progress with significant decommissioning milestone delivery.

3. Non-Routine Matters

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee's response, including actions taken to implement any necessary improvements.

There were no such matters or events of significance during the reporting period.

4. Regulatory Activity

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed 'Licence Instruments' (LIs) but can take other forms. In addition, inspectors may take a range of enforcement actions, to include issuing an enforcement notice.

- No LIs, enforcement notices or enforcement letters were issued during this period.

5. News from ONR

For the latest news and information from ONR, please read and subscribe to our regular email newsletter 'ONR News' at www.onr.org.uk/onrnews

6. Contacts

Office for Nuclear Regulation
Redgrave Court
Merton Road
Bootle
Merseyside
L20 7HS
website: www.onr.org.uk
email: Contact@onr.gov.uk

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Office for
Nuclear Regulation

ONR Site Report

Magnox Ltd – Oldbury

ONR Site Report

Magnox Ltd - Oldbury

Report for period: 1 April – 30 June 2023

Authored by: P Jenneson, Nominated Site Inspector

Approved by: I Phillips, DFW Delivery Lead

Issue No.: 1

Publication Date: July-23

ONR Record Ref. No.: 2023/35847

Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed to members for the Oldbury Site Stakeholder Group and are also available on the ONR website (<http://www.onr.org.uk/llic/>).

Site inspectors from ONR usually attend Oldbury Site Stakeholder Group meetings where these reports are presented and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

Contents

1.	Inspections	4
2.	Routine Matters	5
3.	Non-Routine Matters	7
4.	Regulatory Activity	8
5.	News from ONR	9
6.	Contacts	9

1. Inspections

1.1. Date(s) of Inspection

ONR inspectors carried out inspections on the following dates during the report period 1 April 2023 to 30 June 2023:

- 19 April 2023
- 17 May 2023
- 28 June 2023

2. Routine Matters

2.1. Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

- The conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
- The Energy Act 2013;
- The Health and Safety at Work etc Act 1974 (HSWA74); and
- Regulations made under HSWA74, for example the Ionising Radiations Regulations 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).

The inspections entail monitoring the licensee's actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of Magnox Ltd Oldbury covered the following:

- management of operations including control and supervision;
- plant construction and/or commissioning;
- emergency preparedness;
- decommissioning;
- conventional (non-nuclear) health and safety;
- security

Members of the public, who would like further information on ONR's inspection activities during the reporting period, can view site Intervention Reports at www.onr.org.uk/intervention-records on our website www.onr.org.uk.

Should you have any queries regarding our inspection activities, please email contact@onr.gov.uk.

2.2. Other Work

The site inspector walked down the Oldbury Magnox Ltd site with the Site Director and discussed a number of issues such as asset management and the construction of a new facility on the site.

The site inspector held regular meetings with the Site Director and weekly keep-in-touch meetings with the operational staff on site. At these meetings they discussed regulatory issues, site incidents, future permissioning and progress with significant decommissioning milestone delivery.

The site inspector held a periodic meeting with safety representatives, to support their function of representing employees and receiving information on matters affecting their health, safety and welfare at work.

3. Non-Routine Matters

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee's response, including actions taken to implement any necessary improvements.

There were no such matters or events of significance during the reporting period.

4. Regulatory Activity

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed 'Licence Instruments' (LIs) but can take other forms. In addition, inspectors may take a range of enforcement actions, to include issuing an Enforcement Notice.

- No LIs, Enforcement Notices or Enforcement letters were issued during this period.

5. News from ONR

For the latest news and information from ONR, please read and subscribe to our regular email newsletter 'ONR News' at www.onr.org.uk/onrnews.

6. Contacts

Office for Nuclear Regulation
Redgrave Court
Merton Road
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Merseyside
L20 7HS
website: www.onr.org.uk
email: Contact@onr.gov.uk

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Environment Agency Report

Berkeley Site Stakeholder Group

August 2023

This report covers our regulation of Magnox Ltd. at Berkeley Site and related issues over the period May 2023 to August 2023.

Radioactive substances regulation

We regulate radioactive waste disposals and discharges to the environment. We do this by placing limits and conditions in environmental permits, which helps us to ensure that radioactive waste discharges are minimised, and that the environment is protected. We carry out regular checks of Magnox's compliance with our regulatory requirements.

We also regulate and control other activities through our environmental permits, including surface water discharges to surrounding water bodies and emissions to air.

Radioactive Substances Compliance Assessment Reports (RASCARs) summarising our inspections, and any non-compliances found, are made available to the public on request.

Permitting

Magnox holds a radioactive substances activity permit under the Environmental Permitting Regulations (EPR) at the Berkeley site (EPR/ZP3893SG). No changes have been made to the permit since the last SSG meeting.

Compliance activities

We keep in contact with Berkeley site via remote meetings at monthly intervals to stay up to date on the status of decommissioning projects, progress on actions and recommendations arising from previous interventions and any emerging issues at the site.

We review Magnox's reports of operational events and incidents that have occurred on site on a weekly basis. We follow up on these reports where events have a significant environmental impact or are a possible indicator of wider issues. There have been no events or incidents of concern to us in the period since the last SSG.

We visited Berkeley site in May to review arrangements for assessing best available techniques (BAT). We made a minor recommendation, on recording the reasons for decisions when Magnox staff periodically review BAT assessments and decide that no changes to the BAT assessment are required. Magnox has taken action on our recommendation. We will meet with staff at Berkeley again this quarter to discuss in more detail their process for more assessing complex BAT cases, and for integrating the BAT assessment process into their project management arrangements.

In July, we carried out an inspection on environmental leadership at Berkeley site and visited MILWEP (the Modular Intermediate Level Waste Encapsulation Plant). We were satisfied with the commitment of the leadership team at Berkeley, and with arrangements in place, to minimise the environmental impact of operations at Berkeley. We believe there is scope to develop performance indicators that will support decision-making and environmental performance in the period leading up to entry into Care & Maintenance.

MILWEP was commissioned recently. The operators we spoke to at MILWEP have a good understanding of the environmental aspects and impacts of the plant are actively looking for opportunities to improve environmental performance. We expect improvements to be made as operational experience increases.

We plan to inspect permit compliance arrangements at Berkeley on the following topic areas over the remainder of the 2023 financial year:

- Quarter 3: Site drainage and spillage management
- Quarter 4: Follow-up on previous inspections on asset management arrangements and decommissioning strategy

Environmental impact

The site environmental permit requires the operator to monitor and assess the impact of discharges on the environment. The results of Magnox's environmental monitoring programme continue to be consistent with our independent programme, and do not indicate any results of concern or significant change from previous years.

The Environment Agencies and Food Standards Agency carry out independent environmental monitoring around nuclear sites. These monitoring programmes support our regulatory function and provide reassurance that public radiation exposures are low and within legal limits. The results of this work are published annually and the latest report, "Radioactivity in Food and the Environment 2021" (RIFE 27), is available on the GOV.UK website at:

<https://www.gov.uk/government/publications/radioactivity-in-food-and-the-environment-rife-reports>

As reported at the previous SSG, data provided in the RIFE report for 2021 show that total doses to the public, from permitted discharges and direct radiation around nuclear sites, remained below the legal limit. Radioactivity from natural background, rather than nuclear sites, continues to be the more significant source of exposure to communities in all areas of the UK. Anthropogenic radioactivity in the environment, from the nuclear industry and from past testing of nuclear weapons, accounts for less than 0.2% of the exposure to the UK population.

Discharges from site

The site's environmental permit requires Magnox to use best available techniques (BAT) to manage its operations and to ensure their impacts on the public and wider environment are minimised. Disposal of wastes – as solids, liquid or gases can only be made via permitted routes or by transfer to permitted sites. Magnox must also carry out a programme of environmental monitoring. They submit a report of the liquid and gaseous discharges to the environment, and the results of the environmental monitoring programme to us at quarterly intervals. We assess these against the requirements of the permit and record this in a RASCAR.

Liquid and gaseous discharges from Berkeley remained within their 12-month rolling permitted limits during the six months from January to June 2023. Gaseous carbon-14 discharges for the 12-months to June 2023 stood at 993 megabecquerels or 19.9 % of the permit limit of 5 gigabecquerels for carbon-14. Gaseous emissions of beta emitting

particulates reported over the same period were 0.74 megabecquerels or 3.7% of their permit limit of 20 megabecquerels. All other monitored radionuclides or radionuclide groups in gaseous or liquid discharges were less than 1% of their annual discharge limits.

An increasing trend in carbon-14 and beta emitting particulate emissions to atmosphere reported since the third quarter of 2022 has become apparent, although emissions remain well below permit limits. Over the next quarter, we will review the detail of the reports and the methodology used at Berkeley measure discharges, in order to better understand the reasons for the recent trends.

Enforcement

We have not taken any enforcement action at Berkeley in the period since the previous SSG meeting.

Further information

The Environment Agency's Lead Regulator for Berkeley Site is Peter Reynolds, based in the Environment Agency's Nuclear Regulation Group (South) (NRG(S)).

NRG(S) is responsible for the environmental regulation of radioactive waste disposals on or from nuclear licensed sites in southern England (and in south Wales, on behalf of Natural Resources Wales). We also work closely with the local Environment Agency teams in Wessex Area in relation to other Environment Agency roles and responsibilities.

Address Environment Agency, Nuclear Regulation Group, Red Kite House, Howbery Park, Wallingford, Oxfordshire, OX10 8BD

Regulator Email peter.reynolds@environment-agency.gov.uk

A public register service is available on the GOV.UK website at:

<https://environment.data.gov.uk/public-register/view/index>

Alternatively, you can request access to public documents directly by contacting the Customers and Engagement Team in the Wallingford office. Please email

WTenquiries@environment-agency.gov.uk

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 pages of the Gov.UK website at:

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

Our enforcement and sanctions policy is publicly available on the GOV.UK website at

<https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy>

Public Health England has placed guidance on ionising radiation dose comparisons on the GOV.UK at:

<https://www.gov.uk/government/publications/ionising-radiation-dose-comparisons>

customer service line 03708 506 506

incident hotline 0800 80 70 60

floodline 03459 88 11 88

Page 3 of 3

Environment Agency Report

Oldbury Site Stakeholder Group

September 2023

This report covers our regulation of Magnox Ltd at Oldbury Site and related issues from May to September 2023.

Radioactive substances 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 check compliance with the permits by making regular site inspections.

We also regulate and control other activities through our environmental permits, including surface water discharges to surrounding water bodies and emissions to air.

We record our regulatory compliance interactions in Radioactive Substances Compliance Assessment Reports (RASCARs). These summarise the type of work we have undertaken, describe any non-compliance or observations of good practice, and include actions or recommendations from our findings. They are public register records and can be provided on request. Please see the 'further information' section at the end of this document to find out how to request public register records.

Permitting

Magnox holds a radioactive substances activity permit under the Environmental Permitting Regulations (EPR) at the Oldbury site (EPR/GB3435DG). No changes have been made to the permit since the last SSG meeting.

Compliance activities

We check compliance with the permit by making regular inspections at Oldbury. We issue RASCARs for inspections to summarise the findings of the inspection. This includes any identified non-compliances, actions, recommendations and observations of good practice.

We have regular 'keep in touch' with the Head of Radiological Protection and Environment to ensure we are aware of progress on decommissioning, progress on actions and recommendations and any emerging issues at the site. The Magnox Internal Assessor joins our keep in touch meetings and our site inspections where possible.

Since the last SSG we have carried out two inspections at Oldbury site.

In June we visited the site to inspect arrangements for the disposal of gaseous radioactive waste in August we inspected arrangements for the disposal of solid lower activity radioactive waste. We toured both reactor buildings to inspect key equipment related to the gaseous discharge programme.

In August we visited the site to inspect arrangements for the disposal of lower activity solid radioactive waste. On our site tour we were able to inspect the whole cycle of the waste process from creation to disposal.

For both inspections Oldbury provided us with relevant documentation in advance of the inspection. We also saw further documentation, including completed quality plans and check sheets relevant to the individual inspections. The staff we spoke to during both inspections were knowledgeable, committed to compliance and open to questioning. We identified no non-compliances with the site permit.

In June we attended a quarterly regulatory interface meeting with Office for Nuclear Regulation and Magnox. These meetings cover Oldbury, Berkeley and Hinkley Point A sites. Magnox presents programme updates, and answers questions on performance indicators for each site covering areas of interest such as environmental protection, sustainability, waste, asset management and maintenance.

In addition to our own inspection activities we also review, on a fortnightly basis, Magnox reports of operational events and incidents that have occurred on site. We follow up on these where appropriate. There have been no events or incidents affecting permit compliance in the period since the last SSG.

Environmental impact

The site environmental permit requires the operator to monitor and assess the impact of discharges on the environment.

The results of Magnox's environmental monitoring programme (EMP) indicate that the environmental impact from permitted discharges remains low. Magnox's results continue to be consistent with our independent programme, and do not indicate any results of concern or significant change from previous years.

The Environment Agencies and Food Standards Agency carry out independent environmental monitoring around nuclear sites. These monitoring programmes support our regulatory function and provide reassurance that public radiation exposures are low and within legal limits. The results of this work are published annually and the latest report, *Radioactivity in Food and the Environment 2021 (RIFE 27)*, was published on the GOV.UK website in November 2022.

<https://www.gov.uk/government/publications/radioactivity-in-food-and-the-environment-rife-reports>

The report for 2021 continues to show that total doses to the public, from permitted discharges and direct radiation around nuclear sites, remained below the legal limit. Radioactivity from natural background, rather than nuclear sites, continues to be the more significant source of exposure to communities in all areas of the UK. Radioactivity in the environment, from the nuclear industry and from past testing of nuclear weapons, accounted for less than 0.2% of the exposure to the UK population. Berkeley and Oldbury sites are considered together for the purposes of RIFE because the effects from both sites contribute to the same area.

The RIFE report presents an assessment of annual radiological dose to individuals in the local population who are most exposed to radiation from each nuclear licensed site (known as the 'representative person'). In 2021, the attributed total dose to the representative person from all pathways and sources of radiation from the Oldbury and Berkeley sites combined was 0.013 millisieverts. This is an increase from the last 3 years where the total dose has been less than 0.005 millisieverts. RIFE attributes the increase in dose to direct radiation from the Berkeley site. This is not regulated by the Environment Agency. This

equates to approximately 1% of the UK National dose limit (the annual limit for radiation exposure for a member of the public) of 1 millisievert, and 0.5% of the average annual radiation dose received by everyone from all sources including natural sources of radiation (2.7 millisieverts/year).

Further information, including the most recent breakdown of the average individual dose to the UK population by source of exposure, is available on the UKHSA website here <https://www.ukhsa-protectionservices.org.uk/radiationandyou/>

Discharges from site

The site's environmental permit requires Magnox to use best available techniques (BAT) to minimise the generation of radioactive waste, and minimise any permitted releases into the environment. Disposal of wastes, as solids, liquid or gases, can only be made via permitted routes or by transfer to permitted sites. Limits are set in the permit to control the maximum level of radioactivity that can be discharged to the environment as gaseous or liquid discharges over a rolling 12-month period. Reports of the liquid and gaseous discharges to the environment are submitted to us on a monthly basis, and the results of the environmental monitoring programme are submitted quarterly. We assess these against the requirements of the permit and record this in a RASCAR.

Both liquid and gaseous discharges from Oldbury continue to be at levels well within permitted limits. Discharges of all measured gaseous and liquid radionuclides remained below 1% of their relevant annual limits. Although these discharges remain low, it is noted that the relative level of these discharges may fluctuate as the decommissioning programme evolves.

Enforcement

We have not taken any enforcement action at Oldbury in the period since the last SSG meeting.

Further information

A public register service is available on the GOV.UK website at:

<https://environment.data.gov.uk/public-register/view/index>

Alternatively, you can request access to public documents directly by contacting the Customers and Engagement Team in the Wallingford office. Please email WTenquiries@environment-agency.gov.uk

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 pages of the GOV.UK website at:

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

Our enforcement and sanctions policy is publicly available on the GOV.UK website at <https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy>

Public Health England has placed guidance on ionising radiation dose comparisons on the GOV.UK at:

<https://www.gov.uk/government/publications/ionising-radiation-dose-comparisons>

The Environment Agency's lead nuclear regulator for the Oldbury site is Rebecca Cleverley. Rebecca is part of the national Nuclear Regulation Group (South) (NRG South) which is based at the Environment Agency's Wallingford office in Oxfordshire.

NRG South undertakes environmental regulation of radioactive substances on nuclear licensed sites in southern England. It works closely with the local Environment Agency teams in those areas as well as external bodies such as the Office for Nuclear Regulation.

Members of the local Wessex Environment Agency team cover the site for general (non-radioactive substances) environment protection matters such as regulation of groundwater, contaminated land, waste management and water abstraction.

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