

Bradwell Local Community Liaison Council (LCLC) (Meeting No. 74)

Agenda

Wednesday, 29 March 2023

Via ZOOM Meeting to commence at 1000 Hrs

Introduction	Brian Main
Apologies for absence	
Approval of the previous minutes – Meeting 28 Sept 2022	
Matters arising from the previous minutes	
Bradwell Site Director's Report	Sohail Ashraf
Nuclear Decommissioning Authority Update	Simon Napper
Magnox Corporate Update	Bill Hamilton
Environment Agency Site Inspector's Report	Peter Reynolds
LCLC chairman's feedback	Brian Main
LCLC Constitution Review	Brian Main
Any other business	

Date and time for next meeting – 27 September 2023

Close

Please be reminded following a request from the Chairman, any requested amendments to the previous minutes should be submitted to the LCLC Secretariat in writing prior to the meeting:
bradwell.communications@magnoxsites.com.

Bradwell Site LCLC

Draft Minutes of the 73rd Local Community Liaison Council (LCLC) Meeting
Held virtually via Zoom at 10am on Tuesday 29th September

Attendance

LCLC Executive

Brian Main	-	LCLC Chairman
Cllr John White	-	Deputy Chairman

LCLC Members

Sohail Ashraf	-	Bradwell Site Director
Peter Reynolds	-	Environment Agency
John McNamara	-	Nuclear Decommissioning Authority
Simon Napper	-	Nuclear Decommissioning Authority
Cllr John Noble	-	Bradwell Parish Council
Kirsty Ramsden	-	Magnox Communications
Tracey Finn	-	SSG Secretariat (outgoing)
Cathryn Prichard	-	SSG Secretariat (in coming)
Cllr Jean Allen	-	Bradwell-on-Sea Parish Council
Cllr Steph Nissen	-	Colchester Town Council
Bill Hamilton	-	Magnox External Affairs Director
Cllr Tony Fittock	-	Latchingdon Parish Council
Terry Burns	-	Essex County Council

Members of the public in attendance

Bea Chandler
Dr Andrew Blowers
Ian Clarke
Linda Gemmill

Shannon Bowie-Wooler	-	Minute Taker
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I INTRODUCTION

- 3198 Chairman welcomed new members to the LDLC. Chairman explained that a new welcome pack will be sent to new members to explain the structure.

Kirsty Ramsden informed the LCLC that Tracey Finn, will be retiring at the end of 2022 and the LCLC thanked Tracey for all of her hard work over the years and wished her a happy retirement.

Kirsty introduced Cathryn Pritchard as the incoming SSG Secretariat.

II APOLOGIES FOR ABSENCE

Chair informed of any apologies received

III APPROVAL OF THE PREVIOUS MINUTES – MEETING 2nd March 2022

- 3200 Minutes approved as true reflection

Chairman asked for any changes to be emailed to himself or Secretariat so these can be added.

IV MATTERS ARISING FROM PREVIOUS MINUTES

- 3201 No matters raised, and Chairman confirmed that previous outstanding matters will be covered during the presentations.

V BRADWELL SITE DIRECTOR’S REPORT

Sohail Ashraf, Site Director for Bradwell and Sizewell A delivered, his report and highlighted the following:

3202 Safety and environment:

- Regular campaigns on specific safety topics included security controls and awareness.
- All workforce currently under-taking human performance training, mandatory for all workforces including contractors. Breakout sessions getting back to basics covering cultures and mindsets towards safety.
- No first aid incidents to report since last meeting.

3203 Bradwell annual inspection

- Fourth annual Bradwell care and maintenance inspection ongoing, inspection began in August 2022 and expected completion date December 2022. Inspection will cover over 200 tasks including the first five-yearly routines. This inspection will include:
 - Integrity of buildings
 - Instrumentation and maintenance systems
 - Drone technology is being used to maximise efficiency
 - Sonar inspections, data set to explore possible land erosion – no change has been seen in last four to five years.
 - Planning permission has been submitted to Suffolk Council for the transportation of Solid Radioactive Waste from Bradwell to Sizewell. This is the waste from the inspection – gloves, overalls etc. As there is no disposal facility at Bradwell, permission has been sought for the transportation of waste via existing vehicles as part of the annual inspection campaign. Sizewell A has the facilities to package and dispose of this waste.

3204 Magnox – Apprentices

- 40 Apprentices started at Magnox in September, roles include Mechanical and Electrical apprenticeships.
- Two second year Health Physics apprentices are supporting the inspection at Bradwell this year, and have said '*Bradwell is a great place to learn and develop our skills, we are looking forward to our time here*'

3205 Magnox socio-economics – 2012/22

- Magnox has supported a number of projects under the Socio-economic funding, current spend £9,165,583 across all 12 sites.
- 79 projects have been supported via Bradwell Socio-economic funding, and £693,332 has been spent.
- The NDA has supported Socio-economics with an additional £7,014,979 across 18 projects.
- **10-year Magnox anniversary story**, Full report available via [Magnox working with our communities - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61234/Magnox_working_with_our_communities_-_GOV.UK.pdf)

3206 Bradwell socio-economic funding applications 2022-2023

- Application for £10,000 of funding has been received by Kelmer Blackwater Reserve to create better access to the Nature Reserve. Volunteering and community opportunities will be created through this project.
- Good neighbour funding limit per application raised to £2,000; £6,000 allocation per site.
- Current successful funding applications:
 - Bradwell U Fest - £13,824 over three years (£2,408 in 2022/23)
- Applications of more than £2,000 are managed by Haf Morris. For further information please contact Haf Morris and/or Kirsty Ramsden.

3207 Matters arising

- Question from previous LCLC meeting regarding the future of the graphite core. Baseline is to dispose of the graphite core offsite using the Geological Disposal Facility when this becomes available. Magnox continues to work with the NDA to explore methods of disposal. Currently the graphite core does not need any further monitoring; it is securely and safely contained within the reactor. Rolling programme of decommissioning (RPD) does involve further tests of graphite following research that will be undertaken from Trawsfynydd.

Sohail Ashraf invited questions from the LCLC

Cllr John White: Currently in fourth inspection, around 200 tasks but this does include tasks for the fifth year?

Sohail Ashraf: We will use the data gathered from previous inspections and use this to plan for how we approach further inspections, ensuring we are taking an efficient approach to inspections.

Cllr John White: Graphite, thermally, does the heat increase or decrease as it has been many years since it stopped reacting?

Sohail Ashraf: In terms of the core itself, there is a temperature indicator that is monitored.

Ian Clark: Under 3181 of the previous meeting, there were two questions to carry forward.

1. What is the purpose of the old outfall structure, now that active discharges have now stopped.

Sohail Ashraf: There is no current purpose, in our decommissioning plan we recognise that we need to inspect. There will come to a time where we need to decommission those structures. We will review this in line with other sites such as Sizewell, where we are working to repurposing,

potentially for bird colonies. There is no current timeline, I will take that as an action. These will be indicative.

2. Purpose of pilots and transmission lines, and timeline of removal.

Sohail Ashraf: This will be for the National Grid to answer as it does not fall into our scope.

Is there an update on the final clearance of the site?

Sohail Ashraf: We are looking at a rolling decommissioning plan, we are reviewing how Trawsfynydd is being decommissioned and we may remain with a care and maintenance strategy. That leads to final site clearance in approximately 50 years.

Andrew Blower: Concern about Graphite on the site, over time the graphite will deteriorate to some degree and would have to be dealt with via removal or recycling. I had anticipated that this would have to be achieved by the end of the century, is it now that you will keep it in storage until there is room for this to be moved. Is it your intention to move the graphite by the end of the century?

Sohail Ashraf: As technology develops, this may change how we remove the graphite. Currently our strategy remains the same.

Cllr Steph Nissen: With regards to 3177 of previous minutes, discussion of adverse weather, what are the plans as we move into the winter season.

Sohail Ashraf: We have 24/7 security; remote monitoring and we are carrying out reviews of the current structures and routine maintenance is continuing. Last year, we did have some adverse weather and we have plans in place to monitor for the future. As part of the inspection campaigns this will continue, we are working together with the suppliers.

Cllr Steph Nissen: I just want to confirm that you have plans in place to deal with this?

Sohail Ashraf: That is correct.

Tony Fittock: There may possibly be some movement out of the facility to recycle at other sites, recently a charge from Essex County Council regarding transport monitoring programme. This would indicate that there is a limit of 170 packages. Would the movement require planning permission?

Sohail Ashraf: The current applications are for the waste transport between Sizewell, Bradwell and Dungeness. Further applications will need to be made; the current strategy is based on an available geological disposal facility. This is being looked at within the wider NDA.

John Noble: You spoke about security, how long will there be 24/7 security?

Sohail Ashraf: We demonstrate through our assurance arrangements and working with our regulators, making enhancements on the site to move to unmanned security site. We will need to evidence it meets the regulatory requirements we. There will still need to be visits to site, and we are developing the plan. Unable to provide timescale for this, it is about managing the safety and security of the site. The LCLC will be kept up to date.

VI NUCLEAR DECOMMISSIONING AUTHORITY UPDATE

Simon Napper, Stakeholder relations

Simon delivered his update and highlighted the following points

3208

New Ministers

- Following the appointment of a new Prime Minister, there have been a number of changes in government.
 - Sponsoring department BEIS, has a new Secretary of State, the Rt Hon Jacob Rees-Mogg
 - Number of new junior ministers have been appointed to the department, role of Energy Minister will be announced in due course.

3209

NDA working

- NDA will continue to operate on a hybrid working model with a mix of home-working and office-based work. Many people who have joined the business during the pandemic and greater office working will enable people to meet and get to know others in their teams.
- Currently personnel are working on average 2-3 days a week in the office.
- We will also continue to meet stakeholders in the way they wish. So some may wish to have in-person meetings while others will continue to have virtual meetings via Zoom and Teams.

3210

Annual Report and Accounts 2021-2022

- The ARAC notes some of the highlights of the past years activities [NDA Annual Report and Accounts 2021 to 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/104444/2021-2022-ARAC.pdf)
- Completion of the process of moving all operating companies from the Parent Body Organisation model to direct subsidiaries and the adoption of a new Group Operating Framework of four pillars.
- Major skyline change at Sellafield with removal of diffuser on top of the 125m Windscale Pile Chimney.
- Dounreay has retrieved 1800 tonnes of radioactive sodium from its Prototype Fast Reactor. Dounreay will join Magnox in 2023.

3211

AGR Transfer

- Hunterston B stopped generating on 7 January 2022 and defueling has now commenced. This will take several years to complete. Once the station has been certified as fuel-free, ownership will transfer to NDA and Magnox will begin the process of decommissioning.
- Hinkley Point B stopped generating on 1 August 2022 and will begin defueling shortly.
- All the fuel will be transferred to Sellafield for storage until a GDF is ready.
- Cost of defueling and decommissioning the seven AGR reactors is to be met by the Nuclear Liabilities Fund.

3212

GDF Siting Process

- There are now four Community Partnerships, three in West Cumbria and one in Lincolnshire. Community Partnerships are a further step in an exploratory, fact-finding and discussion process with the local community about hosting a GDF.
- Discussions are ongoing with other communities about whether to join the process. As the project will last over 100 years, it is imperative to have community engagement at every level.
- Geophysical surveys have been completed off the Cumbrian coast. The ideal solution would be to have waste come to a facility on land, and vaults and tunnels under the sea. This is an exercise to map the geology under the sea in the inshore coastal zone. Awaiting results.

3213 NDA – “Keeping the conversation going”

- Held in central Edinburgh on 7th & 8th September, around 170 people participated across the UK. This was the first in-person NDA event in three years and acted as a great opportunity to provide an update on the new group structure and organisational plans.
- All the SSGs and LCLCs from across the country were represented at the event, special point was made to ensure inclusion of stakeholder in the discussion panels following the formal presentations. Each operating company provided presentations on progress and upcoming places, this included current group-wide programmes on social value, sustainability and skill levels.

Simon invited questions from the LDLC

Chairman thanked Simon for his comprehensive update.

**VII MAGNOX CORPORATE UPDATE,
Bill Hamilton, External Affairs Director – Magnox**

Bill delivered his presentation and highlighted the following points:

3214 Regeneration

- Magnox has an exciting future ahead; scale and scope will be doubling in the coming years. Magnox’s mission remains unchanged and just as vital – being responsible for the safe and secure decommissioning of 12 nuclear sites and operation of one hydro-electric plant. Current budget is around £500m per annum. and will rise to £1bn per annum.
- Magnox aims to position themselves to be achieve current and future missions. They will need to transform and have launched a regeneration programme. Programme aims include refine what Magnox will look like in the future; what will they represent and how they want to be recognised as a business. Workforce will play an essential part in this work to help define the vision, mission, and values.

3215 Future Missions

- Future Missions team, led by Nigel Houlton, is responsible for Magnox’s strategy for integrating new decommissioning work scope into existing portfolio.
- Two key aspects are the joined up working of Magnox and Dounreay under a single licensee board by April 2023 and transferring and decommissioning EDF’s seven advance gas-cooled reactor sites, post defueling.

3216 External Communications

- Magnox engage closely with local communities and stakeholders via networks such as the SSG, but to reach a wider audience a wide range of media including
 - Traditional media – newspapers, radio, TV and online news
 - Social networks such as LinkedIn ([Magnox Ltd: Overview | LinkedIn](#)), Twitter ([Magnox Limited \(@magnoxsites\) / Twitter](#)) and YouTube ([MagnoxSites - YouTube](#))
 - Research being undertaken as to potential engagement to a younger audience using TikTok and Instagram.

3217 Employment Engagement

- Earlier in the year, Magnox ran an engagement survey with employees, these highlighted areas of ongoing improvement that the company wanted to address. These included ensuring that there were more opportunities to celebrate collective accomplishments and received updated information about Magnox’s forward-looking strategy.

- Proud that Magnox teams won four awards at the NDA awards for their ongoing commitment to delivering the mission. The awards spanned sites including Wylfa, Dungeness and Harwell, as well as recognising individual contributions in the areas of safety and our important staff networks.

3218 Delivery – Spotlight on Asbestos

- Magnox have firm commitment to removing and remediating asbestos from sites, work has been ongoing and significant project milestone have been achieved. This work follows significant success during 2021/22, when more than 24,500m² of asbestos was removed across the Magnox fleet, exceeding the target set by the NDA.
- Work at Wylfa and Hinkley Point are key contributors to delivering the company's overall target.
- Project at Hinkley Point to remove asbestos from the reactor 1A Boiler House, which involved around 100,000 hours of work has been concluded. Area larger than 1.5 football pitches was cleared by hand.
- The deaerator asbestos removal project at Wylfa, is now over the halfway marks and are making great strides into their 2022/23 targets.

3219 Magnox Socio-economic Scheme

- In support of the NDA's responsibilities under the Energy Act 2004, Magnox manages and disperses a funding portfolio of around £1.02million each financial year across the 12 Magnox sites. In 2021/22, the full £1.02m was disseminated across the 12 sites.
- Over £100,000 to support large transformational project. Up to £10,000 capital expenditure projects helping build sustainable communities. Up to £2,000 for small, good neighbour funding projects close to Magnox sites of £6,000 is ringfenced for each site annually.
- In addition, six projects totally £964k were directly funded by the NDA and managed by Magnox bringing nearly £2m worth of investments to local communities in 2021/22.

Further information on the schedule can be found via [Magnox working with our communities - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/magnox-working-with-our-communities)

Bill invited questions from the LCLC

Chairman thanked Bill for his comprehensive report.

VIII ENVIRONMENT AGENCY SITE INSPECTOR'S REPORT
3220 Peter Reynolds, EA Inspector

Full report available as part of the meeting pack. Peter delivered his report verbally and highlighted the following points:

- Monthly meetings take place between site and the Environment Agency, and reviews all reports including, environmental monitoring and discharge reports. No unusual trends to report.
- Incident in 2019, following the discovery of water in a final waste site has now been closed off. Magnox has produced documentation detailing the learning and what action will be taken in the future. Further details can be made available via request.
- Current interest includes vaults complex, where there has been an ingress of ground water, reports have been requested from Magnox regarding the pathways that the water is entering. Magnox have been asked for a review on how they will be dealing with this, this has been completed and is currently under review. Outcome to be discussed at next

meeting. Reactor voids, small amount of water ingress is under investigation as part of the maintenance campaign. Awaiting proposal of future actions.

- Site visit took place yesterday (27th September), happy with the overall management of the site.

3221 Peter invited questions from the LCLC

Ian Clark: Regarding the ingress of water and the vaults, has it been considered that there was an egress of water?

Peter Reynolds: Well, it is certainly possible in theory if the vaults weren't emptied. To clarify when the water was first detected, it was retrieved from the vaults and disposed of by incineration. The vaults are well below the water table and would suspect that there would not be egress. If it was to be left there and build up, there would be that risk. We have asked Magnox for a long-term solution to prevent this risk in the future.

Bea Chandler: How often is the site inspected in person?

Peter Reynolds: We do an annual inspection as the site is largely unmanned throughout the year, inspections are timed for when there is work underway at the site.

Ian Clark: Across estuary, there has been damage to the sea defences caused by storms and tidal surges. How do evaluate the condition of the sea defences?

Peter Reynolds: I will have to come back to you on that question, it is a not an area that I am fully conversant with, and I am not sure to what extent we are responsible and to what extent the Marine and Maritime Authority is.

IX LCLC CHAIRMAN'S FEEDBACK

3222 Chairman delivered his report verbally and highlighted the following.

Number of meetings of SSG and LCLC chairs, all have been attended. Chairman aware of the differences between Bradwell and other sites, and as other sites moving towards care and maintenance will have ongoing discussions with the fellow SSG chairs, currently moving towards the same or similar road as Bradwell.

John provided feedback on the NDA summit, majority of points have been covered by the NDA and Magnox presentation. The conference was one of the better ones attended, particular interest in Magnox and to hear how the other three legs of the NDA were performing. Also of interest was the need for an increased workload as more sites go into decommissioning, and the current succession planning, and plans on how to encourage a younger workforce to apply to roles within the field.

X Review of Constitution

3223 Copies have been sent to the LCLC group members, Chairman asked for questions or comments on the draft document.

Chairman asked if the Bradwell LCLC (Local Community Liaison Council) should remain as a LCLC or take on the name of Site Stakeholder Group?

Cllr Tony Fittock offered the following comments:

- 3234 Recent report of Young Nuclear Safety Professions, which put forward recommendations on how SSGs work within the community, could be investigated and how we can better incorporate the younger generation and the local community.

Chairman: It would be helpful to have constructive comments on the constitution, our membership is from recommendations from local councils. Is there something wrong with the construction which will help us increase engagement.

Cllr Tony Fittock: Current constitution states that the Chair will remain in place for three years, and there is a review at the AGMs. The new constitution will remain for five years, and there would be no review at AGM. In terms of engagement, there is no element for public commentary.

Chairman: This section is included in the membership section, which includes press.

Cllr Tony Fittock: At local councils, there is a short section set aside for the public to make comments.

Chairman: Within our meetings, we all comment throughout the meetings.

Cllr Tony Fittock: Under the report, it does state that the Terms of Reference should be clear as to where the community can attend.

Chairman: Could you please put that in writing? We would like positive constructive comments on the constitution covering that area.

- 3235 Dr Andrew Blowers: There is a difference between the practice, and the constitution which has been proposed and is unduly restrictive and detailed in parts would like to draw attention two points:

Opening Paragraph, mainly focused on the site, but takes account of wider policy issues and developments – this statement is very unspecific, this LCLC is about the Bradwell A site, therefore the wider developments should be concerning this site and not new build development on the adjacent site. This statement should be modified to make it clearer that we are looking at wider development and policy in the context of Bradwell A site.

Chairman response: Policy issues and developments, are as broad as can be worded. It is primarily site focused, as we are funded as an NDA organisation to primarily be Bradwell Site A focused, but we will consider the wider policy. I feel that this is very open.

Dr Andrew Blowers: I do not wish to take it further I just feel it would be improper to get into the conversation around the wider government discussion on new nuclear build.

My second point is, Chairman and Members must be of a calibre and background which inspires local trust and confidence. How would this be decided, will they be interviewed if so, who will be responsible? I feel this is difficult to maintain.

Chairman response: If someone has elected this person such as parish, local and district councils we would assume that they have public confidence. This is for voting members.

Dr Andrew Blowers: This statement would be redundant, as this only applied to elected members who are able to vote.

Chairman: I agree that statement is redundant.

Dr Andrew Blowers: Is a five-year elected term appropriate?

Chairman: This is an NDA recommendation for LCLC and SSGs, this does mean that the chairman can be re-elected if voted for.

Dr Andrew Blowers: Regarding voting and non-voting members, in most SSGs they have officers who have the ability to vote and are not members of the local/parish/district councils. I would oppose this, as Bradwell LCLC appears to be an outlier. I would recommend that this be abandoned and we move in line with the other SSGs within the NDA fleet.

Chairman: The distinction between non-voting and voting members, should be those who have been voted in by the local people. We have had situations where people who have appeared to be representing a group / organisation, should not have had been there as representative.

Dr Andrew Blowers: I feel that this is a conservative and cautious approach, and I would say from my own point of view, I am a member of various NDA groups and previous chairman of a government committee those would be the qualifications that the LCLC would be looking for. I feel the current process is too restrictive, as they would need to apply to be members and they do not become full members and you have to produce a membership list.

Chairman: I take that point. I agree with you. That distinction should be removed.

Dr Andrew Blowers: Can I ask what it means that email capability should be provided to all members? There is also no mention of social media in this constitution as we are moving into the 21st century.

Chairman: I think this is a NDA recommendation, I am not sure on the technical aspect of this and possibly means that we will make the materials available by other means.

Chairman asked the LCLC elected members for their views on the current constitution, as a first draft needs to be submitted to the NDA for finalisation. How do we proceed?

3236 John Noble: We looked at the original constitution, try to bring it into the 2022 and there is several repeated items. Happy to sit and go through this.

Valerie Blowers: Bill mentioned that the NDA is trying to reduce bureaucracy, and I felt there is a large amount of bureaucracy in this document.

Chairman: We have halved the document, and we are still working through this

Cllr Tony Fittock: There has been good debate on this, and I feel this needs to come back as part of the next AGM. I think it would be good practice to look at both the NDA recommendations and the report from the young nuclear safety professionals and get a document that is reflective of the need now and in the future. I will be happy to take this away, to circulate to all members. It needs to be clear to all members that there will be a change to the constitution, and if they would like to comment then they need to attend the AGM.

Chairman: We have lost a large number of members since the site went into care and maintenance, and the changes have been circulated to all members. I agree that the AGM would be a good place to present the changes, but we cannot keep delaying. I would appreciate the report being sent to the secretariat,

Discussion took place regarding trying to increase joining the LCLC, and we will go out to the parish councils again and try to entice Parish Councils back to the meetings. Kirsty Ramsden confirmed that there is a large membership list, meetings are advertised on the website and social media is used to advertised meetings upcoming meetings. Tracey Finn confirmed that press

notices, are not used post covid and we have looked at whether these methods are useful, and we do not have very many people come along to the meetings because of this.

At the next NG100, Cllr Tony Fittock will raise the topic and ensure that people are aware of what the meetings are for and raise awareness.

XI ANY OTHER BUSINESS

3237 Dr Andrew Blowers offered the following comments

Climate Change, discussions with the NDA on a national level as well as the ONR and there will be a workshop next week which some of the stakeholders are attending. I will be speaking on the question of regulation, and climate change. The only observation I wanted to make to this meeting, I understand that they are now taking into consideration the implications of climate change, but only up to a point and that point really seems to be the medium-term future and not beyond that.

Pace of sea-level change is accelerating and will continue to do so whatever happens to global temperatures. We should not be complacent and would urge Magnox, NDA, ONR and EA to take the latest information more seriously, regarding the tipping points and the possibility of accelerating changes which can have severe implications.

This site must be cleared by the end of the century, as conditions cannot be predicted. Radioactive waste must not be kept on site past the end of the century.

Chairman has requested a site visit for new members. Sohail offered 26th October 2022, John Noble, Varie Blowers and Cllr Tony Fittock would like to attend. Sohail will circulate the visitors request forms and these would need to be completed prior to attendance.

XII DATE AND TIME OF NEXT MEETING—

3238 AGM to take place 29th March 2023 via Zoom

Environment Agency Report Bradwell Local Community Liaison Council March 2023

This report covers our regulation of Magnox Ltd. at Bradwell Site, over the period September 2022 to March 2023.

Coronavirus: Nuclear site regulation operational update

The Environment Agency's priority remains to protect people and the environment. We have set out how we are doing this across the many areas we regulate, advise on or interact with the public, for example, flood defence, flood warning, environmental sampling, permitting, angling and fisheries, waterways management and billing (see [GOV.UK](https://www.gov.uk)).

The Environment Agency published time-limited regulatory position statements to cover specific circumstances whereby we relaxed normal regulatory requirements when, for reasons beyond their control, operators were unable to comply with certain regulatory requirements because of the impacts of Covid-19.

We have withdrawn all regulatory position statements apart for two, on unused coronavirus PPE or test kits, which are due to be withdrawn on 30 June 2023. Bradwell site has not made use since June 2020 of any of the regulatory position statements we published in response to the Covid-19 epidemic.

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 minimized 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 Bradwell site (EPR/ZP3493SQ). No changes have been made to the permit since the last LCLC meeting.

Compliance activities

Bradwell site is managed by Magnox staff based at Sizewell A. We hold monthly remote meetings with Sizewell A's environmental management team, and participate in routine tripartite (Magnox, EA and ONR) updates projects or emerging issues at Bradwell site.

We review Magnox reports of operational events and incidents that have occurred on site. We follow-up on these where appropriate. Magnox reported in September 2021 that groundwater ingress into the waste vaults complex had been detected. (The vaults were emptied of waste when the site was readied for entry into Care & Maintenance.) Groundwater entering the vaults has been pumped out into containers and disposed of by incineration. Magnox are investigating solutions. They have reviewed options and propose long term measures to manage the condition of the vaults in a best available techniques (BAT) assessment report, which has not yet been signed off. We will engage with Magnox on possible solutions to arrive at one with minimal impact on the environment.

We carried out an inspection in September 2022 of management arrangements during the Examination, Maintenance, Inspection and Testing (EMIT) campaign carried out in autumn 2022. Our inspection confirmed that external areas of the Bradwell site were neat and tidy. The top surface (the cap) of the North End area, where low levels of radioactive contamination are present, appeared to be in generally good condition. We found the radioactive or non-radioactive waste generated during the EMIT campaign to be suitably segregated and stored. We were satisfied with the waste management arrangements we observed at Bradwell site during our inspection and did not find any non-compliance.

In October 2022 we reviewed the environmental aspects and impacts register at Bradwell site. We recommended that Magnox consider how best to incorporate into the register long-term risks of degradation of assets during the time that Bradwell site is in its quiescent state (also called Care & Maintenance).

We examined the arrangements for training and appointing environmental staff at Bradwell site. We were satisfied that sufficient numbers of suitably qualified staff are employed to provide advice on radioactive or non-radioactive waste management at Bradwell site.

Enforcement

We have not identified any permit non-compliances or taken any enforcement action at the Grove Centre in the period since our last report to the Local Community Liaison Committee in September 2022.

Discharges from site

The site's environmental permit requires Magnox to use best available techniques (BAT) to manage its operations and 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. A report of the liquid and gaseous discharges to the environment, and the results of the environmental monitoring programme must be submitted to us on a periodic basis. We examine these returns and report on their performance through a RASCAR.

The discharges from Bradwell site are reported annually, within three months of the end of the calendar year. We received the annual discharge returns for Bradwell site for the 2022 calendar year on time, in February 2023.

Liquid radioactive effluent discharges and most gaseous emissions are based on standard reporting values because the dose impact of these emissions is expected to be very low. The standard reporting values are derived from the average of discharge values measured over an appropriate period. In the case of the reactor buildings, emissions were measured from when defueling was completed in 2006, until 2010. Magnox periodically monitor emissions and compare the results with standard reporting values. If the measured result is greater than a standard reporting value plus four standard deviations from the mean, Magnox will reassess the standard reporting value. Emissions from the reactors were most recently monitored in September 2022. No change to standard reporting values was required.

Discharges from mobile extraction units (MEU's), when used during inspection and maintenance work, are monitored when required and reported in total.

Discharges of active liquid effluent from the site have ceased. Rainwater drains to a single point on site (the Main Drains Pit) and is periodically discharged to the Blackwater Estuary. Activity concentrations measured in the main drains pit from February 2015 until January 2017 were averaged to derive initial standard reporting values for liquid discharges from Bradwell site. Reporting values were re-assessed in early 2020 using data collected in 2019. This assessment resulted in a small increase to the standard reporting values but did not indicate any significant impact on the environment. None of the activity concentrations measured in 2022 were unexpectedly high or low.

Environmental impact

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), has been published on the GOV.UK website:

[Radioactivity in food and the environment \(RIFE\) reports - GOV.UK \(www.gov.uk\)](https://www.gov.uk/rife-reports)

The RIFE report presents an assessment of annual radiological dose to individuals (termed 'the representative person') in the local population who are most exposed to radiation from each nuclear licensed site. In 2021, the total annual dose to the representative person from all pathways and sources of radiation from Bradwell site was 6 microsieverts and was slightly up from the dose of less than 5 microsieverts recorded in 2020. The increase was attributed to changes in the estimate of direct radiation from the site.

The report for 2021 shows that doses to the public, remained well below the legal limit of 1000 microsieverts for anthropogenic sources of radiation. The annual dose in 2021 is also below the dose constraint of 300 microsieverts to members of the public from discharges and direct radiation. The average annual radiation dose received in the UK from all sources of radiation is 2700 microsieverts. (Radioactivity from natural background is a more significant source of exposure than nuclear sites, to communities in all areas of the UK.)

Bradwell site's permit requires Magnox to carry out a programme of environmental monitoring to monitor and assess the impact of discharges on the environment. Magnox report on the results of this programme annually. Results of the of Magnox's environmental monitoring programme for the 2022 calendar year do not indicate any areas of concern or significant change from the previous year, and are consistent with results of the Environment Agency's independent programme.

Further information

James Heavingham will replace Peter Reynolds as the Environment Agency's Lead Regulator for Bradwell Site on 1 April 2023. James is 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 work closely with the local Environment Agency teams in **Essex 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

Regulators' Email james.heavingham@environment-agency.gov.uk
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>