

Bradwell Local Community Liaison Council (LCLC) (Meeting No. 72)

Agenda

Wednesday, 2 March 2022

Via ZOOM Meeting to commence at 1000 Hrs

Introduction	Brian Main
Apologies for absence	
Approval of the previous minutes – Meeting 8 Sept 2021	
Matters arising from the previous minutes	
Bradwell Site Directors Report	Sohail Ashraf
Nuclear Decommissioning Authority Update	John McNamara
Environment Agency Site Inspector's Report	Peter Reynolds
LCLC chairman's feedback	Brian Main
Any other business	

Date and time for next meeting – 28 September 2022

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

Draft Minutes of the 71st Local Community Liaison Council (LCLC) Meeting

Held virtually via Zoom at 10am
Wednesday 8 September 2021

Present:

LCLC Executive:

Brian Main
Cllr John White
Mrs Nikki Harman

LCLC Chairman
Deputy Chairman
Minute Taker

LCLC Members:

Cllr Peter Banks
Jonathan Jenkin
Peter Reynolds
Sohail Ashraf
Kirsty Ramsden
Bill Hamilton
Cllr Paul Burgess
Cllr Carlie Mayes
Cllr John Noble
Donna Walton
Cllr John Akker

West Mersea Town Council
Nuclear Decommissioning Authority
Environment Agency
Bradwell Site Director
Magnox Communications
Magnox Communications
Althorne Parish Council
Maldon District Council
Bradwell Parish Council
Braintree District Council
West Mersea Town Council

Bold type - denotes voting members

Members of the public in attendance:

Bea Chandler
Pam Grimes
Dr Andrew Blowers
Varrie Blowers

1. INTRODUCTION

3129 The Chairman Brian Main opened the meeting at 10:00am. Brian welcomed those present, including those new to the meeting.

2. APOLOGIES FOR ABSENCE

3130 Brian Main confirmed apologies had been received from:

Ian Clarke
Judy Lea
Cllr Julie Gooding
Cllr Kevin Lagan

Member of the Public
Maldon Society
Rochford Borough Council
Maldon District Council

3. APPROVAL OF THE PREVIOUS MINUTES

3131 The LCLC minutes resulting from the 70th Meeting held on 3 March 2021 were approved.

4. MATTERS ARISING FROM THE PREVIOUS MINUTES

3132 Brian Main raised a concern that the Terms of Reference for Bradwell LCLC needs to be reviewed. It was agreed the Magnox SSG Secretariat will circulate the current Terms of Reference before next meeting and for the document to be considered for review on the next Agenda.

5. SITE REPORT: Update

3133 Sohail Ashraf, Bradwell Site Director, provided outstanding answers to questions raised in the LCLC 70th meeting on 3 March 2021.

3134 Minute 3101:

There are generators on site for Outage and emergency use. Everyday electrical supply is from National Grid.

3135 Minute 3102:

- There are strict control measures in line with EA compliance arrangements, which are well documented.
- There have been 130 packages (110 from Dungeness) delivered to Bradwell.
- Staff are on site 24/7 to provide waste support and security.

Sohail Ashraf gave a PowerPoint presentation to update attendees about site activities since the previous LCLC meeting. The following key points were noted:

3136

Safety and Environment

- 3137
- Continue to adhere to Government guidance on Covid
 - Recent site safety campaigns have included working at height and degrading assets, forthcoming campaigns include transport and vehicle safety
 - There has been one first aid incident since last report

- Strengthened arrangements and worked with Environment Agency to ensure wider aspects of learning captured and considered following Draft Radioactive Substances Compliance Assessment Report (RASCAR)
- RASCAR (reported March 2021 LCLC) – liquid believed to be groundwater, discovered in September 2019 in a container of low-level waste consigned from Bradwell to off-site waste treatment facility

Security Strategy

- 3138
- Reviewing current security strategy to support future improvements / innovation
 - Will work with regulators and other stakeholders, including Bradwell LCLC, over the next few months

Bradwell – 1,000 days

- 3139
- 1,000 days since the site formally entered care and maintenance
 - Opportunity to celebrate the innovation, dedication and the teamwork of all those involved. Thank you to LCLC for your continued support

Care & Maintenance: Annual inspection

- 3140
- Third Bradwell C&M mobilisation continues to December
 - Includes:
 - inspecting integrity of buildings, instrumentation and maintenance systems
 - in-service plant and equipment items maintenance
 - Around 700 maintenance routines delivered at Bradwell throughout a typical year. This mobilisation covers around 200 tasks

Magnox socio-economics – 2021/22

- 3141
- £1,020,035 funding across 12 Magnox sites this year
 - No new applications for Bradwell to date although discussions on-going. Updates from last year's recipients:
 - Saltmarsh Deli Community Interest Company (£27k) – created post of consolidator operator and offers local produce hampers
 - Keep It Local (£18k) – £12k remaining to be allocated
 - Sense of Place Coordinator (£40k/annum over three years) – preparing for release of second tranche of funding

For information, and to check eligibility, visit:

<https://www.gov.uk/government/collections/magnox-working-with-our-communities>

Sohail Ashraf opened the meeting for questions.

3142

Cllr Carlie Mayes asked what feedback do Magnox require once grant funding has been given through the socio-economic fund?

3143

Kirsty Ramsden from Magnox Communications answered this question and confirmed a feedback report and photos are a requirement.

3144 Brian Main asked when there will be an opportunity to visit the site.

Action: Sohail Ashraf will propose dates to the LCLC.

3145 Cllr John Noble asked about the strategy for reducing Waste Operative personnel.

Sohail Ashraf is unable to answer this now, still looking into numbers.

3146 Cllr Paul Burgess referred to the trench breach in the Environment Agency' Report; would like to be comforted that adequate controls have been commissioned and there has been no further breaches.

Sohail Ashraf was able to confirm that repairs have been effective and will be tested at outage.

3147 Cllr Peter Blanks referred to outage phase and would like clarification on terminology. Sohail Ashraf explained "outage" means mobilising a team for maintenance inspection.

3148 Andrew Blowers referred to ILW store and would like to be provided with a statement of where and how many packages have been delivered and what the future capacity and shipments will be.

Sohail Ashraf had already confirmed the MOSAIK[®] packages statistics in the previous LCLC meeting.

Paul Burgess confirmed:

130 Bradwell

110 Dungeness

25 Empty

260 Overall Total.

Action: Sohail Ashraf thanked Paul Burgess for confirming and confirmed that Bradwell is virtually at capacity and will confirm up-to-date figures at next LCLC meeting.

3149 Cllr John Akker referred to the slides about Security and Safety and asked a. any update on the GDF in Cumbria and b. the ongoing issues of flooding on Bradwell site.

Jonathan Jenkin (NDA) answered point a. in that no further developments can be provided.

Action: Sohail answered point b. in saying he would have to refer to his team and report back.

3150 Cllr Carlie Mayes asked whether flooding/climate change, subsidence/heave issues has been researched before the storage facility was built on site.

Sohail confirmed that the safety case was investigated prior to permission to build the ISF Building and continues to be monitored.

3151 Brian Main thanked Sohail Ashraf for the opening presentation.

6. NUCLEAR DECOMMISSIONING AUTHORITY (NDA) UPDATE

3152 Jonathan Jenkin provided a presentation and main points noted:

3153 COVID 19 Response

- NDA Group continues to respond to the impacts of the Covid pandemic
- Good progress in restarting site operations across the NDA Group since the first lockdown
- Reduction in staff presence at some sites (e.g., Sellafield)
- NDA Corporate Centre staff continuing to work from home except essential office access
- Health, safety and wellbeing of staff remains our top priority
- NDA is reorganising into a more cohesive structure, "One NDA". This is to ensure the subsidiaries are working collaboratively to a business plan.

Business Plan 2020-2024

- Sets out NDA Group spending plans and priorities for financial years 2021 – 2024
- Incorporates 2020 Spending Review settlement

Annual Reports and Accounts

The NDA's Annual Report and Accounts has been recognised by the National Audit Office (NAO) as an example of best practice amongst public sector organisations.

Strategy 4

- Our Strategy must be reviewed at least every 5 years.
- Current Strategy was published in 2016.
- Final approved Strategy published 31 March 2021.

NDA Sustainability Report

We published our first Sustainability Report on 8 March 2021. We have a unique role, charged with the mission to clean up the UK's earliest nuclear sites safely, securely and cost-effectively - but we also have a unique opportunity to invest in our people, our communities and by protecting the environment for long-term future use. We are committed to making the journey towards delivering our mission a sustainable one.

3154 Jonathan Jenkin opened the floor to questions on the NDA for the report.

3155 Cllr Carlie Mayes referred to the Consultation Strategy and Business Plan and wanted to know the percentage return on feedback from stakeholders.

Jonathan Jenkin was unable to give the figure and will report back findings next meeting.

3156 Cllr John Akker asked what does the NDA mean and refer to in "public interest" and community involvement?

Jonathan Jenkin advised public interest and community engagement is very important to the NDA. Therefore LCLC/SSG are chaired independently, and members of the public are free to attend. The NDA is accountable to Government.

3157 Cllr Peter Blanks wanted clarification on when the existing EDF-owned nuclear sites come to

decommissioning where the funding is coming from – will it be from the taxpayer as of the Magnox sites?

Jonathan Jenkin advised that EDF has a liability fund and had to financially secure and provide the decommissioning of their sites. The Government may have to top up funds to ensure it covers estimated costs and this will be transferred to NDA.

- 3158 Andrew Blowers commented on the NDA Strategy and believed it should give prioritisation to Bradwell for site clearance.

Jonathan Jenkin assured Andrew Blowers that the timescale for final site clearance has not been set in stone. Bradwell is on a flexible strategy and reviewed on a site-by-site basis across the fleet. Impacts of climate change will be one of the factors to prioritise one site over another.

- 3159 Cllr Paul Burgess asked whether funds are secure.

Jonathan Jenkin assured that NDA funding is guaranteed for decommissioning of Magnox fleet.

- 3160 Brian Main thanked Jonathan Jenkin for his report.

7. ENVIRONMENT AGENCY SITE INSPECTOR'S REPORT

- 3161 Peter Reynolds shared a report and highlighted the following:

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).

In brief: We are fully operational, with most Environment Agency staff working from home.

Our frontline staff have returned to near normal regulatory work including physical inspections.

Communications with Magnox: Bradwell site is managed by Magnox staff based at Sizewell A. In response to the Covid19 pandemic we held weekly teleconferences with Sizewell A environmental staff.

Inspections: We undertook an inspection (at Sizewell A, on 18 August 2021) of the Bradwell management system regarding records management and knowledge retention. We found the arrangements generally satisfactory and did not find non-compliance.

Enforcement:

NON-CONFORMING WASTE DISPOSAL As noted in our report to the LCLC in March 2021, free liquid was discovered in September 2019 in a container of low-level waste (LLW) consigned in May 2019 from Bradwell to an off-site waste treatment facility. Rainwater had entered the waste package while it was stored outdoors at Bradwell in a container that was not fully weatherproof.

The presence of free liquid contravened the waste acceptance criteria of the receiving site. We recorded CCS Category 3 (minor environmental impact) breaches of two permit conditions relating to the need for management systems to be sufficient to achieve compliance with the permit, and to the requirement to use best available techniques to minimise the volume of radioactive waste generated on Bradwell site, and a CCS Category 4 (negligible environmental impact) breach of the permit requirement to meet the conditions for acceptance of the site receiving the waste. By the time the free liquid was discovered all accessible low level radioactive waste (LLW) had been disposed of from Bradwell site and all intermediate level

waste (ILW) was securely stored. However, the event provides opportunity for institutional learning to avoid similar problems at other decommissioning sites in future.

There are many aspects involved in safely managing radioactive waste as a site enters its end-state. We expect ongoing work will be required to safely manage waste under these conditions.

We will continue to engage with Magnox on this topic with aim of optimising radioactive waste management arrangements.

WATER LEAK INTO VAULTS COMPLEX A water leak into the vaults complex at Bradwell site was detected in September 2020. Magnox identified the source of the leak - groundwater entering the vaults via an inadequately sealed trench - early on and developed an engineering solution to stop water ingress.

Repair work was completed by the end of March 2021. Magnox has pumped some of the effluent from the vaults into storage containers, ahead of disposal, and intends to complete the work within the next two months. Magnox took samples of the water for analysis, which showed that low levels of radioactivity were present. The ingress of groundwater into the vaults generated additional radioactive liquid effluent, although the levels of radioactivity in the effluent are low. This breached the condition of the Bradwell site permit that requires Magnox to use best available techniques (BAT) to minimise the volume and activity of radioactive waste produced on site that requires disposal on or from the site. We recorded a CCS Category 4 (insignificant impact) breach of this condition because we assessed the environmental impact of the incident as low. We consider the root cause of the event to be inadequate engineering to prevent avoidable radioactive waste generation. We noted that the engineering systems designed to detect ingress worked as intended and provided early warning of the presence of liquid in the vaults. We accepted that the fault would have been repaired sooner if it were not for the restrictions in place due to the Covid-19 pandemic.

We recorded a CCS Category 3 (minor environmental impact) of the site's permit condition requiring Magnox to maintain in good repair the systems and equipment used to prevent avoidable generation of radioactive waste that requires disposal. We are monitoring the work to complete recovery of the effluent from the vaults and keep the asset inspection and maintenance work at the site (primarily carried out during an annual campaign in September/October each year) under review.

Peter Reynolds opened the floor to questions

3162 John White referred to the water leaks into the vaults – How do you seal completely?

Sohail Ashraf agreed to find out how the vault was sealed and come back to the LCLC group.

3163 Brian Main thanked Peter Reynolds for his presentation.

8. LCLC chairman's report

3164 Brian Main advised that the SSG Chairs met via zoom virtual meeting, but he did not attend. John White attended and his feedback notes were the following:

- Government enquiry to Magnox decommissioning contract by Professor Holliday:
 - Procurement team not to standard.
 - No self interest
 - The variations of sites were complicated to understand.

9. ANY OTHER BUSINESS

3165 Cllr Pam Grimes made a general comment that the terminology and acronyms used throughout this meeting is very hard for someone new to the meeting.

10. DATE AND TIME FOR NEXT MEETING

3166 Brian Main proposed Wednesday 2 March 2022

11. Close

3167 Chairman closed the meeting at 11.55 am.

DRAFT

Environment Agency Report

Bradwell Site Stakeholder Group

March 2022

This report covers our regulation of Magnox Ltd. at Bradwell Site, over the period September 2021 to February 2022.

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 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)).

Our existing HR policies and positions will not change initially as a result of Covid-19 restrictions being lifted, however they will remain under review. In brief, currently:

- we are fully operational, with the majority of our staff working from home in accordance with government guidelines
- our frontline staff have returned to near normal regulatory work including physical inspections.

We have maintained regulatory activities at Bradwell, including in-person site visits. We make use of remote working arrangements where practicable and effective to do so.

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 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 the Sizewell A's environmental management team, and participate in the routine tripartite (Magnox, EA and ONR) updates on Sizewell A and Bradwell to ensure we are aware of progress on actions and recommendations and any emerging issues at Bradwell site.

These discussions include updates on Covid related issues, such as number of Sizewell A staff available to carry out tasks at Bradwell site. We remain satisfied that environmental performance is not being adversely affected by current Covid-related impacts.

We also 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.) This follows an event in 2020, when liquid was found to be entering the vaults. Magnox have retrieved the effluent from the vaults and are making arrangements for its disposal. They are investigating solutions. They will review options and propose long term measures to manage the condition of the vaults, in a best available techniques (BAT) assessment report, once investigations are complete. We will engage with Magnox on possible solutions to arrive at one with minimal impact on the environment.

We carried out an inspection in November 2021 of general management and surveillance of Bradwell site and of waste management arrangements during the Examination, Maintenance, Inspection and Testing (EMIT) campaign carried out from September to November 2021.

We discussed management of the EMIT campaign with relevant Magnox staff. Topics covered included familiarisation training, working practises, communicating scheduled daily tasks to staff and contractors, implementing safe systems of work and monitoring progress against the project schedule. We reviewed provision of training and suggested additions, on managing waste, to the induction training course.

We confirmed that routines for the maintenance of the environmentally critical equipment at Bradwell site are programmed into the Sizewell A preventative maintenance system and reviewed a sample of these routines.

We discussed waste assay arrangements with Magnox staff. An ISO container has been set aside for this purpose to facilitate management of waste and provide better working conditions in poor weather. This is an example of good practise.

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.

Enforcement

We issued a warning letter in October 2021, concluding our enforcement action on an event, dating from May 2019, when waste containing free liquid was consigned from Bradwell to an off-site waste treatment facility. Rainwater had entered the waste package while it was stored outdoors at Bradwell in a container that was not fully weatherproof. The presence of free liquid contravened the waste acceptance criteria of the receiving site.

We set corrective actions, in addition to the measures already taken by Magnox after the error was discovered. These are that Magnox should review their existing processes or policies to identify improvements that would allow them to respond to changing circumstances during decommissioning, while at the same time maintaining environmental compliance. We also set a requirement that Magnox should review their arrangements for training and communicating with staff in order to embed a questioning culture and empower staff to confidently challenge poor working practices.

Because all accessible low level radioactive waste (LLW) has already been disposed of from Bradwell site and all intermediate level waste (ILW) is securely stored, we will follow up on progress with these actions as part of our routine engagement with Magnox at corporate level.

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 2020" (RIFE 26), 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 report for 2020 shows 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.

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 2020, the total dose to the representative person from all pathways and sources of radiation from Bradwell site was less than 5 microsieverts, unchanged from 2019. This is less than 0.5% of the UK National dose limit of 1000 microsieverts and less than 0.2% of the average annual radiation dose of 2700 microsieverts/year received in the UK from all sources of radiation.

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. Magnox must also carry out a programme of environmental monitoring. 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 reports 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 2021 calendar year on time, in February 2022.

Liquid radioactive effluent discharges and most gaseous emissions are based on standard reporting values because the dose impact of these emissions are expected to be very low. These values were derived from the average of discharge values measured, in the case of the reactor buildings from 2006 when defueling was completed until 2010. 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. Discharges are measured periodically (most recently in 2021) to confirm that the standard values remain valid.

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. Magnox takes a spot sample for information purposes from the Main Drains Pit for analysis at quarterly intervals. Magnox assess this data and adjust the standard reporting value should the measured activity concentration value exceed two times the standard value. 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 2021 were unexpectedly high or low.

Further information

The Environment Agency's Lead Regulator for Bradwell 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

NRG(S) Telephone +44 208 474 8298

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 publically 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>