Magnox

Magnox Limited

Dungeness A Site

Environmental Management Plan

ISSUE 18

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EXECTUIVE SUMMARY

In October 2005, Magnox Electric Ltd applied to the Health and Safety Executive (HSE) for consent to decommission Dungeness A Nuclear Power Station in accordance with the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended). An environmental statement accompanied the application.

After a period of public consultation, the HSE duly granted consent in July 2006. Conditions were attached to the consent, including a condition relating to the production and maintenance of an Environmental Management Plan covering the on-going mitigation measures to prevent, reduce and, if possible, offset any significant adverse environmental effects of the decommissioning work.

This document is the 18th issue of the Dungeness A Site Environmental Management Plan and provides an update on the activities undertaken so far, in addition to the details of the agreed mitigation measures. This document will be re-issued annually as agreed with the Health and Safety Executive.

As Site Director for Dungeness A, I look forward to a successful decommissioning project and on behalf of Magnox; I give my commitment to minimising any adverse effect on the environment as a consequence of our decommissioning operations.

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Ian Cuthbert

Site Director

Dungeness A

1st October 2023

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1. INTRODUCTION

Dungeness A Nuclear Power Station generated electricity until the 31st December 2006. Dungeness A Site (hereafter referred to as Dungeness A) then, in accordance with Government Policy, entered a period of decommissioning. During this time the fuel, plant and buildings associated with electricity generation will be systematically removed. Before removal they will be maintained in a safe condition. Prior to commencement of this work Magnox Electric Ltd, the Licensee of the Site at the time (the licence was transferred to Magnox South Ltd in October 2008 and then to Magnox Ltd in 2011), was legally required to seek consent from the Health and Safety Executive (HSE) to carry out the decommissioning project.

An application was therefore made to the HSE for consent to carry out the decommissioning project at Dungeness A in October 2005. In support of this application an Environmental Statement[1,2] was provided which assessed the impacts of the project on the environment. Following an extensive public consultation the HSE granted consent to carry out the decommissioning project at Dungeness A in July 2006, subject to certain conditions (listed in Appendix 1). Condition 2 requires the licensee to prepare an Environmental Management Plan (EMP) which shall:

- list the mitigation measures that are already identified in the Environmental Statement and evidence submitted (to the HSE) to verify information in the environmental statement;
- list the options to implement work activities where mitigation measures may be required but where selection of an option will only be possible in the future; and
- list the work activities where mitigation may be required but where assessments to identify mitigation measures will only be possible in the future.

It is a requirement of the conditions attached to the consent to describe the effectiveness of the mitigation measures over time. This EMP is therefore a living document that will be periodically reviewed and revised throughout the decommissioning project. The EMP will be reissued annually or at other intervals agreed with the HSE.

Further information on the HSE's decision to grant consent to decommission Dungeness A can be found in their decision report, which describes the content of the conditions attached to the Consent and the main reasons and considerations for the decision. Requests for copies of this document should be made directly to the HSE.

Any queries relating to decommissioning activities at Dungeness A or requests for copies of this EMP should be addressed to:

The Site Director

Dungeness A Site

Romney Marsh

Kent

TN29 9PP

1 European Council Directive 85/337/EEC (as amended) sets out a framework for the assessment of the effects of certain public and private projects on the environment. The Directive is implemented in Great Britain for decommissioning nuclear reactor projects by the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999

2 British Nuclear Group (2005) Dungeness A Nuclear Power Station Environmental Statement (in support of the application to decommission Dungeness A Nuclear Power Station as required by Statutory Instrument 1999 No. 2892: Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999)

In addition to the submission of this EMP to the Health and Safety Executive (HSE), Magnox will also provide copies to the:

- Dungeness Site Stakeholder Group; and
- The Nuclear Decommissioning Authority (NDA).

This EMP can be viewed at the following locations:

- **Cheriton Library**, 64 Cheriton High Street, Cheriton, Folkestone, Kent CT19 4HB;
- **Folkestone Central Library**, 2 Grace Hill, Folkestone, Kent, CT20 1HD;
- **Hythe Library**, 1 Stade Street, Hythe, Kent, CT21 6BQ;
- **Lydd Library**, The Old School, Skinner Road, Lydd, Romney Marsh, Kent, TN29 9HN;
- **Hastings Central Library**, Brassey Institute, 13 Claremont, Hastings, East Sussex, TN34 1HE;
- **Tenterden Library**, 2 Tenterden Gateway, Manor Row, Tenterden, Kent, TN30 6HP;
- **New Romney Library**, 82 High Street, New Romney, Kent, TN28 8AU;
- **Ashford Central Library**, Gateway Plus 1AS, Church Road, Ashford, Kent, TN23 1AS (3 copies, 2 marked up for mobile libraries);
- **Rye Library**, 30 High Street, Rye, East Sussex, TN31 7JF;
- **Folkestone and Hythe District Council**, Civic Centre, Castle Hill Avenue, Folkestone, Kent, CT20 2QY; and
- **Kent County Council**, County Hall, Maidstone, Kent, ME14 1XQ.
- Note: Dymchurch Library is now closed but it is served by a mobile library. Two extra copies are sent to Ashford Central Library for the mobile libraries that operate from here.
- The EMP is also available through the magnox pages of the .gov website

2. SCOPE OF THE ENVIRONMENTAL MANAGEMENT PLAN

This EMP details the mitigation measures to prevent, reduce and, where possible, offset any significant adverse effects on the environment throughout the decommissioning of Dungeness A. It also includes measures that, although not associated with significant adverse effects, are nevertheless proposed.

A revised decommissioning strategy was inserted into the Lifetime Plan baseline for Dungeness A to commence during the financial year 2016/17. This new strategy was approved by both the NDA (Nuclear Decommissioning Authority) and the Office for Nuclear Regulation (ONR). As a result the decommissioning programme is now divided into three phases as follows:

- Deferral Period Preparations
- Deferral Period
- Final Site clearance

These phases are explained in Box 1.

Note: The "Deferral Period" was previously known as the "Care & Maintenance" Period.

This EMP is similarly structured around these three phases. This is predominantly because mitigation measures may change in the future in light of experience and developing technologies. Where mitigation measures are still to be identified, developed in more detail, or require changes, these will be described in subsequent issues of the EMP together with the reasons for any changes made. Any changes will be subject to the Consent and associated Conditions issued by the HSE on 13/7/2006 (See Appendix 1).

Environmental impacts were grouped into topic areas in the Environmental Statement, as are the mitigation measures described in this EMP (see Box 2).

Box 1. Summary of the main decommissioning phases

- Deferral Period Preparations (DPP) is the first phase of decommissioning and is currently forecast to be complete by 2033. During this phase the focus is on hazard reduction such as asbestos thermal insulation removal (completed in 2021), passivation and storage of Intermediate Level Waste (ILW) and preparation of the site plant and systems for entry into the Deferral Period.
- In 2020, the Lifetime Plan Baseline was updated to include a revised strategy for removing the Boilers, Boiler Annexes, Boiler Drum Houses, Blower Halls and Central Control Block prior to entering the Deferral Period.
- Under the site's current Lifetime Plan, the Deferral Period is expected to be 60 years. It will be a quiescent period with minimal staffing and the Site maintained in a safe, secure and environmentally compliant state, with periodic inspections and walk downs.
- Final Site Clearance will be the final stage of decommissioning activity on Site. This will involve removing the remaining structures and the clearance of any residual radioactivity to the appropriate standards, and returning the site to shingle. It is anticipated that this phase will last approximately 10 years.
- However, under the NDA's revised strategy published in March 2021, the NDA estate is now moving towards a rolling programme of decommissioning across the Magnox fleet with a mix of site specific strategies. The strategy for Dungeness is yet to be confirmed but it is anticipated that the deferral period may be removed or significantly reduced and the final site clearance phase brought forward to follow on from Deferral Period Preparations.

Box 2. Environmental Assessment Topics

- Air Quality and Dust;
- Archaeology and Cultural Heritage;
- Ecology;
- Geology, Hydrogeology and Soils;
- Landscape and Visual;
- Noise and Vibration;
- Socio-Economic;
- Surface Waters; and
- Traffic and Transport.

In addition to the mitigation measures, a brief description of the Dungeness A site and its surroundings is presented in this EMP.

Decommissioning work at Dungeness A is carried out on a project basis. The mitigation measures identified in the Environmental Statement of 2005 are listed in Section 5 and unless otherwise stated, these measures have been successful in managing the potential environmental impacts so far. Additional mitigations have been added this year to offset biodiversity loss following construction activities which resulted in the reduction of vegetated shingle areas. Details of the mitigations are listed in Section 5.

3. STAKEHOLDER ENGAGEMENT

Magnox remains committed to engaging with stakeholders at all phases in the decommissioning process. Regular meetings have been held with the Dungeness Site Stakeholder Group. In addition a number of other organisations (see Box 3) will be kept informed of activities at the Site. The organisations listed in Box 3 were also involved in the public consultation process for the Environmental Statement.

As well as regular meetings with stakeholders, where appropriate, other interested parties will be kept informed of specific decommissioning activities. Some examples are shown in Box 4.

Box 3. Local Stakeholders

- Folkestone and Hythe District Council;
- Kent County Council;
- EDF, Dungeness B Power Station;
- Environment Agency;
- Natural England;
- Kent Wildlife Trust;
- Royal Society for the Protection of Birds (RSPB) and
- Site Stakeholder Group (SSG).

Box 4. Examples of Additional Stakeholder Activities

- Liaising with local wildlife groups, as well as Natural England and RSPB, regarding the work methodology for works undertaken on, or in close proximity to, sensitive vegetated shingle;
- Informing and liaising with the Crown Estate, Natural England, RSPB and Marine Management Organisation in relation to any offshore activities; and
- Informing local residents of any short-term activities that may cause a noise nuisance.

4. THE SITE AND SURROUNDING AREA

Site Description

Dungeness A Power Station was commissioned in 1966. Its twin reactors and associated turbo-generators had a generating capacity of 450 megawatts (electrical) (MW(e)). The Site ceased generating on 31st December, 2006 after producing 120 TWh of electricity during 41 years of operation. It then became known as Dungeness A Site.

During 2012 the site successfully completed the defuelling of both reactors and the ONR accepted the fuel free verification declaration following a detailed audit. This involved removing 55000 fuel elements (or 610 tonnes) which were dispatched in 332 fuel flasks following the cessation of generation on 31/12/2006.

Each reactor building contains one gas-cooled magnox reactor[3]. Each defueled reactor is situated within a large concrete bioshield, the purpose of which was primarily to protect workers from the effects of the direct radiation from the fuelled reactors. The reactor pressure vessel is of spherical shape and made from steel, contained within each pressure vessel are the graphite core and a range of monitoring and control equipment. Each reactor has four boilers which converted water to steam in order to drive turbines that were located inside the Turbine Hall. Cooling of the steam to return it to water was provided by seawater passed through condensing units located on the floor of the turbine hall beneath the turbines. The cooling water intake and outfall structures are located offshore and were connected to the turbine hall by means of large underground culverts which have since been blocked at each end.

Since 2006 a number of buildings and plant associated with operation of the site have been demolished including the cooling water pump house, the turbine hall and the old administration building. Other plant and buildings remain in place to support the site's continued operation including sewage plants, active effluent water treatment plants, stores, buildings and offices.

Decommissioning and waste management activities continue on the site. The Site's fuel storage ponds were drained of water in 2020 and bulk asbestos removal achieved in 2021.

Surrounding Landscape

Dungeness A site is located at an altitude of approximately 5.8m Above Ordnance Datum (AOD) on an extensive shingle foreland. Beyond the site, ground levels remain close to sea level for considerable distances inland. These low-lying areas include Denge Marsh, Walland Marsh and, further to the north, Romney Marsh. Vegetation on the shingle foreland is sparse, limited to low growing shingle communities, except in localised areas where scrub has developed.

Transport Infrastructure

The main route from the strategic road network, which is the most appropriate route for heavy goods vehicles, is from the M20 at Junction 10 or 10a, the A2070 to Brenzett, then the A259 through Old Romney and the B2075 to Lydd, followed by the Dungeness Road, which runs between the settlements of Lydd and Lydd-on-Sea. The site approach road is accessed from the Dungeness Road. There is no direct rail access to the site. However, there is a railhead immediately to the north of the junction of the site approach road with the Dungeness Road. The nearest rail stations for passenger services are Appledore and Rye.

Local Watercourses

The main surface water feature is the English Channel. There is also a series of land drains, including the Dengemarsh Sewer, which drain an area to the north and west. The Dengemarsh Sewer, which is classified as a 'main river' by the Environment Agency, is maintained by the Agency for flood defence purposes running southwards to the sea, passing some 1.9km to the west of the Dungeness A site.

There are a series of gravel pits to the north and north-west of the site, the closest being Long Pitt, located approximately 800m north of the site.

3 The term 'magnox' refers to the first generation of gas-cooled nuclear reactors used for electricity generation. It is derived from the cladding material (magnesium non-oxidising alloy) that surrounds each individual uranium metal fuel element.

Geology and Hydrogeology

The Dungeness A site is underlain by gravel deposits (the Denge Gravels), which constitute one of the largest shingle formations in Europe, with sand deposits (Marine Sands) lying beneath the shingle. The uniqueness of the gravel deposits is a factor in the Site of Special Scientific Interest (SSSI) designation for the area around the power station Site. Siltstones, fine-grained sandstones and mudstones lie at depth. There are two Minor Aquifers beneath Dungeness A, of which the uppermost is the most important. This upper aquifer comprises the Denge Gravels but also the underlying Marine Sands. This aquifer has been extensively developed for water supply, being abstracted by Affinity Water.

Sensitivity of the Receiving Environment

The nearest settlements are Dungeness village to the east of the Site, Lydd-on-Sea to the north and the larger town of Lydd, 6km to the north-west.

The Dungeness A Site lies within the Dungeness Special Landscape Area (SLA). The Kent Downs and High Weald Areas of Outstanding Natural Beauty (AONB) lie to the north and west.

The following Sites of nature conservation interest are located within 10km of Dungeness:

- Dungeness, Romney Marsh & Rye Bay Site of Special Scientific Interest (SSSI)[4];
- Dungeness to Pett Level Special Protection Area (SPA);
- Dungeness Special Area of Conservation (SAC);
- Dungeness proposed Ramsar Site (conservation of wetland);
- Dungeness National Nature Reserve (NNR);
- Kent Special Landscape Area (SLA); and
- Romney Marsh Local Landscape Area.

Dungeness, Romney Marsh & Rye Bay SSSI surrounds the site and within the site itself the SSSI is located to the north and north-east of the and includes the beach which is adjacent to the site and forms part of the site licence boundary. The SSSI is principally designated for its nature conservation value and geological importance as the largest shingle structure in the UK[5]. The site is particularly valued for its natural plant communities, and its invertebrate interest. Dungeness SAC is designated for its Annex I habitats, including annual vegetation of drift lines and perennial vegetation of stony banks, and for an Annex II species, great crested newt, which is known to occur in the gravel pits over 1km from the boundary of the licensed site. No part of the Dungeness A site is SAC.

The nearest Scheduled Monument is the Acoustic Listening Devices located near Lade. There are also no Listed Buildings on the Dungeness A Site. However, adjacent to the Site, the New and Old Lighthouse and Lighthousemens' Dwellings are Listed Grade II buildings. There are no parks or gardens of historic interest on or adjacent to the site. The nearest is at Port Lympne to the west of Hythe. There are no registered historic battlefields in Kent.

5. MITIGATION MEASURES

Additional mitigation measures have been included this year which is a change from the mitigations that were submitted in issue one of this document and the Environmental Statement and reported in this Environmental Management Plan. The mitigation measures added are listed in Section 5 (Red Hemp Nettle and Sussex Emerald Moth). The following tables list the mitigation measures for each phase of the decommissioning project at Dungeness A. Examples of how mitigations measures have been implemented during decommissioning activities are listed in Section 6.

4 As notified on 16th August 2006 under 28C of the Wildlife and Countryside Act 1981.

5 The 9000ha Dungeness, Romney Marsh & Rye Bay SSSI was announced by Natural England on 16th August 2006 and unites eight existing SSSI sites (Dungeness, Walland Marsh, Cheyne Court, Romney Warren and North Lade in Kent; and Camber Sands and Rye Salting, Rye Harbour and Pett Level in East Sussex) and also includes 2.300ha of newly notified land including an area of the Dungeness A Site. For consitency with the full Environmental Statement the original designations, i.e. the designation before the amalgamation, are referred to in the tables in this Environmental Management Plan.

DEFERRAL PERIOD PREPARATIONS

Mitigation measures already identified (Condition 3a)

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Air Quality and Dust			
Dust Emissions (from on-Site) • Increase in Site dust emissions due to construction, demolition and waste/materials handling operations etc. which could impact on residential and industrial receptors.	As appropriate: • Use of the Building Research Establishment, Guidance on the Control of Dust from Construction and Demolition Activities (2003) • On-Site roads to be regularly cleaned of mud/dust deposits, including the use of re-circulating water wheel washers and road cleaners as appropriate; and sheeting of vehicles carrying potentially dusty loads. • Minimisation of unnecessary material and waste handling as far as practicable. • Use of water sprays for external demolition activities as appropriate • Use of water sprays during outside in-fill operations. • Avoidance of vehicular use of un-surfaced (soft) ground where possible and limits on vehicle speeds on such surfaces where it cannot be avoided. Use of water sprays during particularly windy or dry conditions Use of water sprays to maintain damp surfaces during dry and windy weather (*eg* soil stockpiles, demolition rubble); or sheeting or	• Routine control will be enforced through existing site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • The effectiveness of dust mitigation will be monitored. There are a variety of means of measuring dust deposition (*eg* sticky pads); directional monitoring will be used if possible. It may be appropriate to initiate monitoring before works commence in order to determine the background contribution to which the Site may add.	• The implementation of these mitigation measures will offset impacts of dust deposition on sensitive habitats and species within and immediately adjacent to the Site. Sensitive habitats include Dungeness SSSI, NNR, SAC and SPA, and sensitive species include the Sussex Emerald Moth and its larval food plants, Early Spider Orchid, Red Hemp Nettle, Black Redstarts and lichens.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
	seeding of surfaces of stockpiles of soil or other dusty materials • Sheeting or seeding of surfaces and/or use of wind fences as appropriate. • Covering of containers and/or use of wind fences as appropriate		
• Dust emissions due to use of explosives	• Such activities will not be carried out under particularly dry or windy conditions, and local residents and Dungeness B will be informed in advance	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • The effectiveness of dust mitigation will be monitored. There are a variety of means of measuring dust deposition (*eg* sticky pads); directional monitoring will be used if possible. It may be appropriate to initiate monitoring before works commence in order to determine the background contribution to which the Site may add. Monitoring arrangements will be discussed in advance with the local authority.	• It should be noted that the decision as to whether explosives are used for demolition will be confirmed upon receipt of contractor method statements. Mitigation measures will therefore be employed on a case-by-case basis.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Dust (road side) Increase in dust at residential properties along traffic routes due to soiled vehicles or vehicles carrying dust load.	As appropriate: • Sheeting of lorries carrying dusty loads • Provision of wheel washing for, as a minimum, heavy goods vehicles on leaving the Site	• Routine control will be enforced through existing Site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • These mitigation measures will be considered as part of the development of the Transport Management Plan.	• These mitigation measures will offset possible though not significant impacts on habitats and species adjacent to roads.
Archaeology and Cultural Heritage			
No significant adverse environmental impacts identified arising from decommissioning activities.			
Ecology			
Dungeness SSSI & NNR HGVs straying onto verges along access road and other roads around Site.	• Appropriate signs will be put in place to advise drivers not to access verges.	• Routine control will be enforced through existing site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • Environmental Suitably Qualified Experienced Person (ESQEP) to ensure information regarding the ecological value of the site is included in site campaigns.	• Due to the presence of mostly soft shingle verges, HGV drivers would be reluctant by their nature to stray onto them. • Measures put in place to mitigate negative effects on Sussex Emerald Moth will also serve to minimise this effect.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Sussex Emerald Moth and its larval food plants Loss of and/or disturbance to habitat.	• Minimisation of habitat loss where practicable. • Implementation of an agreed methodology for working on sensitive shingle habitats. • An agreement with Natural England regarding the management of an area between the security fence and licensed Site boundary as a receptor area for larvae of this species found on site during this phase of decommissioning.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • Environmental SQEP to liaise with contract managers to ensure that contractors follow the agreed methodology for working on/adjacent to sensitive shingle areas. • Contractors to be advised to speak with their contract manager or Environmental SQEP for advice regarding working on/close to sensitive shingle areas.	• Magnox Ltd support further studies by local wildlife groups such as Butterfly Conservation, to establish which areas of the Site are more ecologically important for the Sussex Emerald Moth and their current distribution. • An agreement with Natural England regarding the management of the area between the security fence and licensed boundary to the north has been in place for some time. Additionally this area is now part of the designated SSSI.
Incidental mortality.	• Mitigation to minimise disturbance to shingle would also reduce the potential risk of incidental mortality.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	
Dust deposition.	• See dust suppression measures above under Air Quality and Dust.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	• The mitigation measures are proposed also to mitigate the effects of dust on people, and other flora and fauna.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Loss of vegetated shingle from construction areas	• All vegetation should be cut to a height of 100-150mm. Cuttings should be left on site for one week to allow all seed to drop and then removed. • Cut, pull or use herbicide 'spot' treatments to control the spread of undesirable vegetative species to below 5% of whole area. • Creation of bare ground using mechanical hand rotavator. Between 5 – 10% of the total area of vegetated shingle habitat to be returned to bare shingle. • Seeding of wild carrot in areas previously rotovated.	• Further detail on these mitigations with timescales are included in the site's Biodiversity Enhancement Management Plan (BEMP).	• The BEMP aims to offset (and marginally improve) biodiversity value on site.
Red Hemp-Nettle Loss of and/or disturbance to habitat/incidental mortality due to fence replacement.	• Minimisation of areas of ground disturbance, winter working and the use of temporary trackways. Natural England consents are in place for the management of Red Hemp Nettle.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • Environmental SQEP to liaise with contract managers to ensure that contractors follow the agreed methodology for working on/adjacent to sensitive shingle areas.	• Site procedures on gaining consent to carry out work on Dungeness SSSI or protected vegetated shingle to be followed.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Dust deposition.	• See dust suppression measures above under Air Quality and Dust.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	• The mitigation measures are proposed also to mitigate the effects of dust on people, and other flora and fauna
Loss of vegetated shingle from construction areas	• Cut all vegetation to a height of 20-30mm. • Cut all vegetation to a height of 100-150mm. Cuttings should be left on site for one week to allow all seed to drop and then removed. • Cut, pull or use herbicide 'spot' treatments to control the spread of undesirable vegetative species to below 5% of whole area. • Creation of bare ground using mechanical hand rotavator. Between 10-20% of the total area of vegetated shingle habitat to be returned to bare shingle.	• Further detail on these mitigation measures with timescales are included in the BEMP.	• The BEMP aims to offset (and marginally improve) biodiversity value on site.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Black Redstarts Loss of nest Sites/breeding habitat.	• Provision of additional, appropriately designed nest boxes prior to the commencement of Site works.	• Nest boxes should be installed prior to the start of works on-Site, at the earliest opportunity (*ie* more than one breeding season before, if possible), in order to allow time for the Black Redstarts to become familiar with them before their usual nest Sites are lost. • Advice should be sought from an experienced ecologist. • Ornithologist and/or RSPB to determine suitable nest box locations.	.
Loss of foraging habitat.	• Minimisation of habitat loss, where reasonably practicable. At any one time, parts of the Site will provide potentially suitable foraging habitat for Black Redstart. • See also mitigation measures for Sussex Emerald Moth.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	• Although the impact described is 'not significant' this mitigation is proposed as a matter of best practice.
Incidental mortality/noise (including explosions) and visual disturbance.	• Employee awareness programme and experienced individuals tasked with identifying active nest Sites.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • Environmental SQEP to ensure that periodical visual inspections are carried out for active nest sites.	• Although the impacts have been assessed as 'not significant', Black Redstarts receive some protection under the Wildlife and Countryside Act 1981, mitigation is therefore required. • Magnox Ecology Advisor is consulted prior to any major works being undertaken.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Lichens HGVs straying onto verges of the access road.	• Use of appropriate signs to inform drivers of the sensitivity of these habitats	• Routine control will be enforced through existing Site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans	• Due to the presence of mostly soft shingle verges, HGV drivers would be reluctant by their nature to stray onto them.
Reptiles Incidental mortality.	• One-way reptile-proof fencing to be used to prevent reptiles from moving into working areas. Reptile-proof fencing should be installed prior to works commencing, allowing a period of time for reptiles to move out of the working areas.	• This mitigation measure will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • Environmental SQEP to ensure that measures are put in place sufficiently in advance of works and that the advice of a suitably qualified and experienced person is first obtained. • Environmental SQEP to liaise with contract managers to ensure that contractors follow the agreed methodology for working on/adjacent to sensitive shingle areas.	• Although the impact with mitigation has been assessed as 'not significant', reptiles are protected under the Wildlife and Countryside Act 1981. Mitigation is therefore required. • A reptile-proof fence was installed prior to the first major demolition works in 2012.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Geology, Hydrogeology and Soils			
Inadvertent or uncontrolled disturbance or spreading of existing contaminated soils, including movement by windblown dust, entrainment in runoff, attachment to vehicles and/or inappropriate soil handling operations.	• Desk studies and Site investigation, if necessary, before works commence in order to determine the presence or absence of contamination, so that appropriate working practices can be adopted from the outset • Controlled access to or from known or potentially contaminated working areas as appropriate • Use of re-circulating wheel washers on HGVs leaving Site as appropriate • See below under 'Inadvertent contamination of soils and/or groundwater arising from temporary storage of contaminated soils, wastes or materials' • See also dust control mitigation measures	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	
Mobilisation of existing contamination by direct rainwater infiltration due to changes in ground coverage.	• Investigation of contaminated soils prior to removal of hard-standings or buildings/foundations (possibly by desk study alone if appropriate), with prior remediation if necessary	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	• Although the impact described is 'not significant' these mitigation measures are required because they constitute good practice.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Mobilisation of existing contamination by direct rainwater infiltration due to the creation of temporary open excavations.	• Desk studies and Site investigation, if necessary, before works commence in order to determine the presence or absence of contamination, so that appropriate working practices can be adopted from the outset. • Excavation dewatering, if necessary, with monitoring and appropriate management/disposal of any waters arising. • Tenting of exposed areas or excavations, if necessary.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans	• Although the impact described is 'not significant' these mitigation measures are required because they constitute good practice
Creation of new contaminant migration pathways (*eg* due to the creation of boreholes, piles or excavations connecting previously unconnected geological strata).	• Compliance with British Standard 5930 (Code of Practice for Site Investigations) and BS 10175 (Investigation of Potentially Contaminated Sites – Code of Practice). • Compliance with EA Technical Report P5-065/TR (Technical Aspects of Site Investigation). • Production of risk assessments, method statements and contingency plans.	• Routine control will be enforced through existing Site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Inadvertent contamination of soils and/or groundwater arising from temporary storage of contaminated soils, wastes or materials.	• Sampling and testing of soils, wastes and materials prior to storage as appropriate. • Segregation as appropriate. • Use of containment (*eg* membranes) to eliminate cross-contamination, as appropriate. • Management of rainwater run-off from storage areas for contaminated or potentially contaminated soil, wastes and materials.	• Routine control will be enforced through existing Site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	
Inadvertent contamination of soils and/or groundwater arising from inappropriate use of contaminated soils, wastes or materials as in-fill materials.	• Sampling and testing of potentially contaminated soils, wastes and materials prior to use as appropriate • Authorised disposal of unsuitable soils, wastes and materials.	• Routine control will be enforced through existing Site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	
Changes in soil and groundwater quality due to spills or leaks of non-radioactive substances.	• Bunding of chemical and fuel storage according to Statutory Regulations • Appropriate protocols for chemicals and fuel handling in line with Statutory Regulations, with trained staff only to operate facilities. • Emergency spill response planning according to contingency arrangements, including spill kits kept on Site and trained staff available.	• Routine control will be enforced through existing Site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning plans.	

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Inadvertent effects on groundwater flow and quality due to in-fill of deep basements and the breaching of basement structures to prevent 'ponding'.	• Breach of residual basement structures on one side only and/or above maximum water table only. • If considered necessary by the EA, use of in-fill that does not exceed average permeability of *in situ* gravels.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	• The current lifetime plan strategy for voids is to infill with suitable material as it becomes available through the deferral period and FSC. It is expected that small voids will be filled during the deferral period as spoil is generated, however there will be a shortfall of suitable material on the sites to infill large voids; for example the turbine hall basement.
Inadvertent effects of local dewatering on groundwater resources and nearby abstractions, watercourses and Sites of conservation interest.	If necessary: • Placement of physical barriers (*eg* sheet piles) and recharge barriers as appropriate (*ie* injection back into the ground of an equivalent volume of water to that extracted).	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	• The significance of operations and the need for mitigation measures to be discussed in advance with the EA, Water Companies and other parties.
Landscape and Visual			
Light spill.	Any new lighting to be installed on site should be directional lighting.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	The impact associated with any additional lighting on site has been assessed as 'not significant', however this mitigation measure is proposed as a measure of best practice, in order to contain the extent of illumination to those areas which are intended to be lit only.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Noise and Vibration			
Local residential properties, recreational areas & industrial receptors General changes to noise directly from the Site and associated changes in traffic.	• Use of noise barriers/screens around work areas. • Use of equipment fitted with effective silencers where practicable. • Appointment of a site contact to whom complaints/queries about construction/demolition activity can be directed - any complaints to be investigated and action taken where appropriate. • Local residents informed of exceptional activities. • No potentially significant external working outside of normal working hours (Monday to Friday 08.00 to 17.00) without prior agreement with the local authority. • All construction activity to be undertaken in accordance with good practice as described by British Standard 5228-2:2009 Noise and Vibration Control on Construction and Open Sites. This includes minimising unnecessary revving of engines, turning off machines when not required and routine maintenance of equipment.	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	
Noise & vibration caused by explosive demolition (if used).	• Use of good blasting practice and warning members of the public and the operators of Dungeness B in advance of demolition activities using explosives.	• As above.	• See also dust emissions due to use of explosives.

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Socio-economic			
Direct Employment Long-term loss of jobs.	• Magnox Ltd will attempt to re-deploy affected staff, provide opportunities for early retirement & support staff re-training/re-skilling. • Magnox Ltd will encourage its contractors to make use of local labour, equipment and services as far as practicable.	• Contractors will be provided with a list of local companies known to be capable of involvement as sub-contractors.	
Surface Waters			
Turbid Water Changes in sea water quality due to the potential release of turbid and/or contaminated water from decommissioning activities on the Site.	Where necessary: • Wetting down (*eg* excavation or construction/demolition areas) to prevent windblown spread of dust into locations where subsequent washing into surface water drains would be likely, and appropriate management of wastewater arising • On-Site roads to be kept free from mud/dust deposits, including the use of re-circulating water wheel washers and road cleaners as appropriate • Sheeting or seeding of any stockpiles of soil or potentially contaminating materials • Careful design and siting of spoil mounds as necessary to manage run-off, including use of low walls around such mounds if appropriate • See also measures under Geology, Hydrogeology and Soils	• These mitigation measures will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans	Wheel washing addresses dust, ecology, geology etc. and highways impacts

Environmental Impact	Mitigation Measure Proposed	Action	Comments
Changes in sea water quality due to minor spills and leaks of non-radioactive substances, if they occur.	• Careful siting of fuel/chemical handling facilities, correct use of drains and inspection regimes according to the EA's pollution prevention guidance for businesses; • Emergency/spill response planning in accordance with site contingency plans and arrangements, including spill kits kept on site and staff trained in their use.	• Routine control will be enforced through existing site procedures. Any additional requirements will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans.	
Traffic and Transport			
Impacts on safety *etc.* due to decommissioning traffic.	• A Travel Plan will be implemented with the objective of reducing the number of trips generated by the station throughout the entire decommissioning process.	• Details of the mitigation measures will be considered as part of the development of the Transport Management Plan – see Appendix 2.	
Impacts on safety *etc.* due to mud on roads	• Wheel washing of HGVs as necessary.	• This mitigation measure will be considered as part of the environmental, health and safety justification produced as part of individual decommissioning project plans. • This mitigation measure will be considered as part of the development of the Transport Management Plan.	Wheel washing addresses dust, ecology, geology etc. and surface waters impacts

Options to implement activities where mitigation may be required but specific options cannot yet be selected (Condition 3b)

Environmental Impact	Mitigation Measures Under Consideration
Historic Value Historical value of Dungeness A.	• A strategy to preserve the historical and industrial value of all Magnox reactor Sites, of which Dungeness A is one, is in progress. Magnox Ltd will provide supporting information to the NDA as required to assist in making any decisions. Potential options include the following: • Conducting a Royal Commission of the Historical Monuments of England (RCHME) level 1 survey • Undertaking a comprehensive cataloguing of existing photographs and supplementing these with new photographs where appropriate • Retaining operational records and other documents of interest • Displaying items of plant of interest, *eg* panels from a control room, in a visitors centre and/or museum

Activities where mitigation may be required but it is not yet possible to identify possible mitigation measures (Condition 3c)

Environmental Impact
All activities have been assessed for care and maintenance preparations.

DEFERRAL PERIOD

Environmental Impact	Mitigation Measures	Action
• During care and maintenance no significant works are planned with the possible exception of recladding the reactor buildings (should this be required). It is anticipated that the reactors would be reclad in a similar material to that used at the start of care and maintenance hence the visual impact will remain unchanged • No other significant adverse environmental impacts were identified during care and maintenance.	• Ecological surveys will be carried out prior to ILW removal if deemed necessary, mitigation measures will depend upon findings of the surveys. Field surveillance visits to demonstrate the prevention of biodiversity loss in compliance with the BEMP, will be carried out during the deferral period.	• Dependent upon the results of surveys

Options to implement activities where mitigation may be required but specific options cannot yet be selected (Condition 3b)

Environmental Impact
Currently no such options to implement such work activities have been identified

Activities where mitigation may be required but it is not yet possible to identify possible measures (Condition 3c)

Environmental Impact
All activities have been assessed for care and maintenance preparations.

FINAL SITE CLEARANCE

Mitigation measures already identified (Condition 3a)

Environmental Impact	Mitigation Measures	Action	Comments
Air Quality and Dust			
Mitigation measures will be the same as those identified in the Care and Maintenance Preparations phase			
Archaeology and Cultural Heritage			
No significant adverse environmental impacts identified arising from decommissioning activities.			
Ecology			
Dungeness SSSI & NNR and wildlife	Ecology surveys will be carried out prior to final site clearance and mitigation measures will depend upon the findings of the surveys		
Geology, Hydrogeology and Soils			
Mitigation measures will be the same as those identified in the Care and Maintenance Preparations phase			
Landscape and Visual			
Light spill	Any new lighting to be installed on site should be directional lighting.		The impact associated with any additional lighting on Site has been assessed as 'not significant', however this mitigation measure is required as a measure of best practice, in order to contain the extent of illumination to those areas which are intended to be lit only. The visual impact of the site should be improved with the demolition of buildings and reduced lighting.

Environmental Impact	Mitigation Measures	Action	Comments
Noise and vibration			
Mitigation measures will be the same as those identified in the Care and Maintenance Preparations phase			
Socio-economic			
Direct Employment – Long-term loss of jobs.	Magnox Ltd will attempt to re-deploy affected staff, provide opportunities for early retirement & support staff re-training/re-skilling.		
Surface Waters			
Mitigation measures will be the same as those identified in the Care and Maintenance Preparations phase			
Traffic and Transport			
Mitigation measures will be the same as those identified in the Care and Maintenance Preparations phase			

Options to implement activities where mitigation may be required but options cannot yet be selected (Condition 3b)

Environmental Impact	Mitigation Measures Under Consideration
No such activities have been identified.	

Activities where mitigation may be required but it is not yet possible to identify possible mitigation measures (Condition 3c)

Environmental Impact
Additional mitigation measures (or any changes required to those measures listed above) for activities during final site clearance will be based on the technologies available at that time, decommissioning experience and any future environmental assessment deemed necessary. Ecology and traffic surveys will be repeated prior to final site clearance; the former will include bat, protected species such as the Sussex Emerald Moth, and breeding bird surveys. This will be followed by a reconsideration of the appropriate mitigation measures.

6. IMPLEMENTATION OF MITIGATION MEASURES AND ASSESSMENT OF THEIR EFFECTIVENESS

It is a requirement of the conditions attached to the consent (See Appendix 1), to implement the mitigation measures and describe their effectiveness. This chapter will discuss the measures which have been implemented, how the site measures their effectiveness in reducing significant environmental impacts and describes their use in some relevant projects which have been carried out during 2022/2023.

Process for Implementation of Mitigation Measures

Dungeness A site procedures ensure that decommissioning activities are carried out in accordance with the mitigation measures set out in this EMP. All decommissioning projects and modifications to plant are assessed during the proposal stage in accordance with robust company management control procedures.

There are a number of tools used on Site to ensure that all environmental impacts are minimised. The site has an Integrated Management System, which will cover the requirements of ISO 9001 (Quality Assurance), ISO 14001 (Environmental Management Systems), ISO 45001 (Occupational Health and Safety Management System) and ISO 55001 (Asset Management).

For other companies working on site their contracts stipulate that all works shall be carried out in accordance with Dungeness A Environmental Management System (EMS).

It is stipulated in their contract that any contractor shall deliver the works in compliance with the Environmental Impact Assessment (Decommissioning Regulations) (EIADR) and in particular the Conditions detailed in Appendix 1.

The requirements above are reinforced at site meetings and training and checked through audits, inspections, visits etc.

An environmental risk assessment process is in place which was designed to identify at the planning stages, the environmental hazards and associated risks involved with project work on site. From the initial hazard identification, mitigations are proposed and a full environmental risk assessment is produced for the work, where appropriate. The mitigations are listed in the process and include mitigations related to our consent to decommission the site. (Section 7 provides examples where this process has been used).

Process for Determining Effectiveness of Mitigation Measures

The site aims to continually monitor the effectiveness of the specified mitigation measures over time, and where necessary review these, in order to ensure the success of reducing significant environmental impacts. Critical to environmental protection is the close interaction between contractors and the supervision provided by site staff, who ensure that mitigations and other environmental requirements are considered, applied and reviewed, where relevant, throughout the lifecycle of the project from conception to completion. It also allows enabling supervision and practical evaluation of the effectiveness of the mitigation measure. Evaluations can provide valuable feedback on any difficulties encountered, changes required or highlight further mitigation requirements.

The effectiveness of mitigation measures are discussed with project managers and engineers. They are also assessed during regular project safety reviews and during the close out of decommissioning proposal quality plans.

The site measures the effectiveness of mitigations in a variety of ways, outlined over:-

1) Environmental Performance Monitoring

Environmental performance monitoring (eg, noise and groundwater monitoring) using specialist equipment, allows the Site to understand baseline conditions and assess environmental impacts post-mitigation. Post-mitigation environmental monitoring will be used mostly to measure

effectiveness of mitigation measures for larger projects on site, eg movement of large quantities of spoil or demolition of buildings. The requirement of this method of measuring effectiveness is determined on an individual project basis as appropriate.

Effectiveness of radiological mitigations is monitored with the Site Environmental Monitoring Programme (SEMP).

2) Visual evidence

Site photographs, taken before the start of the project provide a good visual indication of the surrounding area and help to identify potential environmental receptors in the vicinity and hence highlight mitigation measures that need to be implemented.

Visual inspections and photographs during the project can also provide an indication on effectiveness of the mitigation measure. For example, the presence of mud on roads can be an indication of insufficient wheel washing of HGVs.

3) Review of Regulatory Action, Complaints and Internal Event Reporting

The Site operates a robust system of internal event reporting, where workers are encouraged to report conditions which may be unsafe or pose a threat to the environment. These are then investigated and additional controls put in place where required.

Learning from experience is also regularly reinforced by the internal review of complaints, event reports raised and any regulatory actions received. Learning is then shared and communicated with all other Magnox sites.

7. WORK UNDERTAKEN OVER THE LAST YEAR

Waste Operations

The Waste Operations programme have commenced the removal of ILW resin from the pathfinder containers located in the Wet Waste Transfer Facility. 5.74te has been retrieved so far with a further 1.1te to be retrieved for that project. A total of 15 x ILW packages (MOSAIKs) have also been transferred to the Bradwell ISF (Interim Storage Facility) by rail, making a total of 129 ILW packages (MOSAIKs) moved from Dungeness since ILW retrievals commenced.

The DCICs transported by rail to Bradwell site

In addition, numerous Low Level Waste (LLW) shipments have been made, including the processing and disposal of contaminated metallic waste (18te), contaminated combustible waste (51m^3) and Very Low Level Waste (VLLW - 10m^3). In excess of 12,000 tonnes of non-radioactive waste (mainly construction/demolition material) has also been processed and disposed of (as well as 36te of hazardous waste).

Decommissioning Programmes

Waste Projects

The Waste Projects Team has continued to develop and test plant to retrieve the remaining Intermediate Level Waste ready for storage and/or disposal. This work is now divided between seven projects which will continue to progress over the next year:

- **Borderline Wet Waste Project** – Retrieval equipment is being commissioned off-Site and the Contractor is expected to mobilise in 2024.
- **Sludge and Sand Project** – All of the sludge has now been successfully transferred from Sludge Tank 2 to Sludge Tank 1 . The project is is soon to commence retrievals of sand and gravel from storage locations to final disposal packages.

- **Cyclone Dust Project & Dessicant and Catalyst Project**– Preparation work in Lower Blowdown and Evacuation (BD&E) rooms commenced to facilitate the transferof cyclone dust and desicant into drums.
- **Yellow Box® Drying Stations Project** – Two new drying stations have now been installed and inactively commissioned. This allows the conditioning of the sand and gravel waste prior to dispatch from site.
- **Resin Residuals Project** – Removal of the last resin from the tank internals of Storage Tank 3 and Storage Tank 4 was completed and the tanks were jet washed and emptied, leaving the tanks in a suitable state for handover.
- **Wet Waste Transfer Facility Project** - Resin transfers from storage containers into disposal packages underway.
- **New Builds Project** - Detailed design of the Waste Transfer Area for solid ILW processing equipment is nearing completion with items of plant now in manufacture. The plant will continue to be finalised and manufactured throughout 2023/24. Three new facilities to house relocated ILW facilities, as a result of the boilers down project, have received planning permission and are progressing through construction with all building weather envelopes complete.

  An EIADR change assessment was completed for the construction of the waste buildings, laying of hardstanding over existing vegetated shingle areas and the exportation of shingle from site as waste. This change to the project was assessed as a Finding of No Significan Effect (FONSE).

Table 1 shows an extract from the environmental risk assessments created for the construction of three new waste projects buildings and the inactive commissioning of the wet waste transfer facility which identifies some of the hazards of the work and mitigations applied.

Table 1: Review of mitigations applied for Waste Project work and their effectiveness

Work description	Environmental Hazard	Environmental Mitigation	Effectiveness/comments
Construction of Building 132, Building 133 and Building 134 complete with concrete foundations.	Noise from construction activities	• No potentially significant external working to be carried out outside of normal working hours; • Plant and machinery with engines to be fitted with effective silencers, where practicable. • Local residents to be informed of duration of works in advance via the Site Stakeholder Group and Planning Application. • Plant and machinery with engines to be switched off when not in use.	During these works a complaint was made regarding noisy work undertaken before 08.00 am. The project team was reminded of their commitments under the EMP. The neighbour was also provided with the Project Manager's email address to make direct contact if needed. No other noise issues have been reported during the project to date. Two concrete pours were undertaken outside normal working hours in agreement with neighbours. In the event, the work was completed by 19.00 so impact to residents was minimised.
	Spills from plant and equipment	• Locate a storage area for mobile plant away from	Mittigations implemented. No issues reported.

Work description	Environmental Hazard	Environmental Mitigation	Effectiveness/comments
		drains and unmade ground • Perform pre-start checks on mobile plant and equipment, to identify wear or damage. • Ensure necessary COSHH risk assessments have been completed for all equipment containing hazardous substances, and that they are available to the equipment operators. • Where possible, deploy drain covers prior to refuelling or working with mobile plant, and ensure working parties are aware of drains in the area.	
	Dust impacts to two rare and protected species of flora and fauna (Red Hemp Nettle and Sussex Emerald Moth)	• Minimisation of unnecessary material and waste handling as far as practicable. • Avoidance of vehicular use of unsurfaced (soft) ground where possible and limits on vehicle speeds on such surfaces where it cannot be avoided. • Sheeting or seeding of surfaces and covering of containers as appropriate • Use of dust barriers in the work area to protect the Sussex Emerald Moth and red hemp nettle areas	The mitigations were implemented. The only issues reported were problems with installing the dust fence initially. This was due to wind loading issues. The fence was then redesigned/repositioned with no further problemsreported. The Red Hemp Nettle survey undertaken in July 2023 showed no detrimental effects from these works. In fact the survey this year showed an increase of Red Hemp Nettle plants when compared to last year's figures.
Wet Waste Transfer Facility Inactive commissioning activities and disposal/management of supernatant arisings	Liquid substances storage – potential spills to drainage system	No spare oil being stored in the facility. Contractors will come in with their own oil to service the compressor.	Walkdown of the area confirmed that there were no other liquid substances present other than general chemicals stored in a COSHH cabinet with appropriate data sheets.

Plant and Structures/Ponds

Work continues to prepare for the demolition of the boiler annexes, boiler cells, blower halls, central control block and other ancillary buildings that will facilitate the removal of the boilers. This work is to address degradation of the boiler annexes and the boilers. Work is proceeding on several fronts covering enabling works as well as the design phases to inform the demolition which is not expected to occur until 2025 at the earliest. Work is progressing well to characterise the buildings set for demolition to fully understand the wastes that will be produced ahead of waste generation. In the last year the following works have been completed:

- Construction of a new modular building that will house the site's laboratory;
- Demolition of seven small buildings and structures situated in the main demolition zone;
- Infilling of culverts, steam tunnels and a section of the site's cable tunnels with a bentenitious grout;
- Rationalisation of plant alarms;
- Fire system reroute and upgrade;
- PA system upgrade;
- Installation of new modular workshops;
- Upgrade of reactor void water pumping system.

Other major preparation works that are either underway or in advanced design phases include:

- Preparations for infilling the Turbine Hall Void
- Demolition of three remaining ancillary buildings;
- Diverting reactor void water to surface drains;
- Building a new site stores facility;
- Terminal isolations of site supplies;
- Commercial work to secure a contractor for the main demolition project.

Table 2 below shows the mitigations put in place to support this work. There have been no significant environmental events related to this work and the mitigations applied have been effective and proportionate to the hazards present.

Table 2: Review of mitigations applied for Plant and Structures and Ponds work and their effectiveness

Work description	Environmental Hazard	Environmental Mitigation	Effectiveness/comments
Construction of new site laboratory	Risk of spills to surface drains	• Project to ensure spill kits and drain covers are available at the work area and personnel are trained in their use. • All demolition vehicles to have plant nappies placed underneath when not in use • Where possible deploy drain covers prior to refueling or working with mobile plant, and ensure working parties are aware of drains in the area • Perform pre-start checks on mobile plant and equipment, to identify wear or damage	Mittigations implemented. No issues reported.
	Increased noise from	• No significantly noisy working outside normal working hours	Mittigations implemented. No issues reported.

Work description	Environmental Hazard	Environmental Mitigation	Effectiveness/comments
	construction activities	• Acoustic barriers to be constructed around generator	
	Release of dust to atmosphere	• If required, use water sprays to damp down areas where dust is being produced • Ensure any vehicles carrying dust producing materials are sheeted up prior to leaving site • Limit dust producing work if expecting high winds • Cover waste skips	Mittigations implemented. No issues reported.
Demolition of 7 buildings	Risk of spills to surface drains and groundwater	• Project to ensure spill kits and drain covers are available at the work area and personnel are trained in their use. • All demolition vehicles to have plant nappies placed underneath when not in use • Where possible deploy drain covers prior to refueling or working with mobile plant, and ensure working parties are aware of drains in the area • Locate a storage area for mobile plant away from drains and unmade ground • Perform pre-start checks on mobile plant and equipment, to identify wear or damage	Mittigations implemented. One spill of hydraulic oil experienced during the works. Spill contingencies enacted and mitigations were effective to minimise impact of the spill.
	Increased noise from demolition activities	• Use of equipment fitted with effective silencers where practicable • No working outside normal working hours • Minimise unnecessary revving of engines, turning off machines when not required	Mittigations implemented. No issues reported.
	Release of dust to atmosphere	• Use water sprays to damp down areas where dust is being produced • Ensure any vehicles carrying dust producing materials are sheeted up prior to leaving site • Limit dust producing work if expecting high winds • Cover waste skips	Mittigations implemented. No issues reported.
	Adverse impacts to protected species and designated land	• Suitably experienced person to carryout check for nesting birds prior to demolition of buildings • Brief working parties on the presence of any protected species, and contact an ESQEP if any are identified	Mittigations implemented. No issues reported.

Work description	Environmental Hazard	Environmental Mitigation	Effectiveness/comments
Discharge of accumulated groundwater and rainwater from culverts	Pollution of surface water (English Channel)	• Discharge to be controlled by operating instruction in line with surface water Environmental Risk Assessment for the works and monitoring required therein • Ensure spill kits and drain covers are available in the work area	Mittigations implemented. No issues reported.
	Oil spills - pollution of ground/surface waters	• Locate generators away from drains • Perform prestart checks on mobile plant and equipment to identify wear or damage • All plant items containing oils, chemicals to be bunded and spill kits available • Where possible deploy drain covers prior to refuelling or working with mobile plant	Mittigations implemented. No issues reported.
Infilling underground structures (culverts, steam tunnels and cable tunnels) with bentenitious grout	Spills - pollution of ground/surface waters	• Ensure spill kits and drain covers are available at the work area • Work which will generate cement washing must be designed to minimise its generation and maximise reuse of water as much as possible • Locate generators away from drains and unmade ground • Perform prestart checks on mobile plant and equipment to identify wear or damage • All plant items containing oils, chemicals to be bunded • Refuelling must only occur on hard ground, away from potential traffic impact hazards or drains. • Where possible deploy drain covers prior to refuelling or working with mobile plant, and ensure working parties are aware of drains in the area	Mitigations implemented. One spill of bentonite occurred when hose fitting failed. Small impact to pH of the water in the site's turbine hall drains but no impact to site discharges observed.

Asset Care

Some of the asset care work packs progressed over the last year include site installation of bird netting on some of the reactor roofs and an upgrade to the car park outside the main site administration building. The car park project included works to install a suitable soak-away drainage system with an oil interceptor and the area was to be tarmacked over. This work was assessed as a change to the project baseline as the environmental statement stipulates that during care and maintenance preparations (now referred to as the deferral period) areas used for parking will not be re-surfaced or have any alteration made to the existing drainage

arrangements. The conclusion reached from this assessment was that the environmental impact created from the upgrade work to the Channel View car park was considered to be low.

The table over shows some of the mitigations implemented to support the work packages that have been completed this year.

Table 3: Review of mitigations applied for Asset Care work and their effectiveness

Work description	Environmental Hazard	Environmental Mitigation	Effectiveness/comments
Instalation of bird netting	Noise from installation works	• No potentially significant noisy external working outside of normal working hours.	Mittigations implemented. No issues reported.
	Ecology – nesting birds	• Work on roofs should be minimised where possible during bird nesting season. • If a nest is found in the work area, contact a member of the environment team for advice.	Most of the work was undertaken before bird nesting season but any nests found were reported and advice provided from the environment team on a way forward
Car park upgrade works	Impacts to the neighbours from noise, and vibration	• Use of equipment fitted with effective silencers where practicable. • No potentially significant external working to be carried out outside of normal working hours • Minimise any unnecessary revving of engines. Machines to be turned off when not required.	A local neighbour raised a query in February 2023 regarding the noisy decommissioning activities being undertaken on this project over one weekend. The Site Director met with the neighbour and assured them that these external working activities would in future be confined to the normal working hours of Monday to Friday as per the site's consent to decommission.
	Ecology	• Working parties to be briefed on areas of environmental concern and protected species; • Working party to be briefed on the protection of the 1m wide verge that will be left along the eastern wall of the cark park and on the protection of the bund/strip of land close to the wall and that they are surrounded by a SSSI site.	Working party were briefed on the ecological importance of the area on multiple occasions
	Increased impacts from traffic and transport	• Sheeting of lorries with dusty loads; • Minimal number of vehicles and equipment to be utilised within project including waste vehicles; HGV's to use preferred routes as per Appendix A of DUN/SED/045; • Wheel washing of HGVs and cleaning of on site roads if necessary.	Mittigations implemented. No issues reported.

Socio-Economic

As of August 2023 there were 185 Magnox staff based at Dungeness A; there were also an additional 84 agency and contractor supplied workers employed at site.

The Magnox Socio-Economic Scheme funding remained unchanged for 2022/23 at £1,020,035 across the 12 Magnox sites. Of this, £171,750 had already been allocated for multi-year commitments including, for Dungeness, the on-going support of £30,000 towards the Romney Marsh Partnership Senior Officer. The NDA also continued to support the Romney Marsh Business Hub for £34,376 last year; the Hub is now nearing capacity which is good news for local businesses. Dungeness received £69,600 out of a socio-economic budget of £1,01,035.00 for the following projects:

- Turn the Tide Festival, Dymchurch, £1,000. This project created a “pollinator pot” to help inform everyone about the dramatic decline in pollinators across the country and what can be done to support pollinators like rewilding areas of gardens and fields. Each drop-in participant received three recyclable pots and lids, a wooden marker, information sheet and a paper bag. Available to plant were a variety of wildflower seeds chosen in consultation with local wildlife and wildflower experts. Everyone was encouraged to bury their pots in their gardens to create Pollinator Café’s to turn the tide on insect decline!
- Light Up New Romney, £600. This popular, free community event received £600 towards the cost of materials for the free lantern-making workshops open to the community to learn this new skill with experienced lantern makers and become part of the lantern parade.
- Marsh Community Theatre £2,000 towards replacement equipment for lighting and sound to continue to engage with adults and young people across the Marsh to deliver entertainment across the area.
- Folkestone and Hythe District Council (on behalf of the Romney Marsh Partnership Group (RMPG)) £30,000. This project (£90,000) is in its final year; the Senior Officer role continues to look for business opportunities for the Romney Marsh and works with the Nuclear Sector and Education including local schools, and further education providers looking at possible solutions through better connectivity and transport links to get people to work and to college. The Senior Officer also works with local businesses and partnerships to explore options and opportunities with the Business Manager at the Marsh Business Hub and also third sector organisations e.g. Kent Wildlife Trust to investigate possibilities.
- Folkestone and Hythe District Council – Rural England Prosperity Fund (REPF). Folkestone and Hythe District Council successfully applied for REPF support and were awarded £571,471 over a two-year period excluding revenue costs which meant that the council did not have enough capacity to maximise the impact of this funding. The council then applied to Magnox for the revenue funding to create a Rural Projects Officer role to create and administer a grant management system for the funding; they have been awarded £76,000 over two years (£36,000 year one and £40,000 year two). The aim of the REPF is to encourage business diversification and provide net zero and green energy grants for businesses, support the visitor and tourism economy including connectivity enhancements and investment in capacity building and infrastructure support to assist with connectivity and energy efficiency for local communities.

8. ENVIRONMENTAL IMPACTS

Air Quality and Dust

There has been some significant construction and demolition work undertaken over the last year where the management of dust has been a priority especially with regard to dust impacts on ecologically important receptors (see Section 7 for further details). These works were undertaken successfully with no detrimental effects from dust seen.

Equipment that contains fluorinated greenhouse gases

Work continues to ensure that equipment which contains fluorinated greenhouse gases is adequately maintained and robustly controlled. There are strict legal requirements with regard to leak testing, labelling of equipment, record keeping and qualifications of personnel who work on these systems and therefore an accurate inventory is critical to the management of these systems. During the last year, a number of ageing refrigeration units have been degassed and replaced where necessary There were no leaks from any systems containing F-Gas during the last year. Staff and contractors are also encouraged to switch off vehicles when not in use so that discharges of greenhouse gases to atmosphere are minimised where possible.

Archaeology and Cultural Heritage

There is no evidence of any surviving features of archaeological interest within the licensed power station site and therefore no mitigation is required in relation to this topic.

Ecology

Red Hemp Nettle:

The annual programme of ecological monitoring within the SSSI continued this year. The frequency and distribution of Red Hemp Nettle (*Galeopsis angustifolia)* plants within the survey area showed a significant increase when compared to the 2022 survey and produced the highest plant total since annual plant-count surveys began in 2016. Plant size this year was more typical of this impoverished colony and contrasted with the unusually large plants recorded in 2022. However no plants were recorded of the rare white flowering form of *Galeopsis angustifolia*.

Red Hemp Nettle in the sterile zone

The total number of *Galeopsis angustifolia* plants recorded was approximately 810, this representing a significant 37% increase in plant frequency since the 2022 survey, indicating an excellent level of success for this annual plant species within the no-spray zone of the sterile zone. A number of recommendations were made with regard to the ongoing management of this area including maintaining the integrity of the no-spray zone to protect the new *Galeopsis angustifolia* colonies recorded during the 2023 survey.

Sussex Emerald Moth:

A total of 10 Sussex Emerald Moth (*Thalera fimbrialis*) larvae was recorded during timed counts carried out in 2023 from the seven Magnox-owned compound sites. Whilst this was a small drop in numbers from the 13 recorded from these sites in 2022, this was to be expected as it was a generally poor year throughout the Dungeness metapopulation of the species. Recorded larval and adult Sussex Emerald numbers were down across the whole Dungeness SSSI in 2023 and the fall in numbers in Magnox sites represented one of the smallest reductions proportionately. There was also a change in the distributional bias within the Magnox compound with a drop in numbers within the fenced habitat creation plot and a majority of the larvae found in sites on the

eastern fringe of the compound allied to a resurgence in growth of the primary larval foodplant (Wild Carrot) in this area.

SEM Partnership Project:

Rabbit proof fence erected on the SSSI as part of the Partnership Project

In addition to the ongoing routine monitoring programme for the SEM, Magnox continue to work with Natural England, Butterfly Conservation, EDF and the Ministry of Defence to grow Wild Carrot and create suitable breeding habitat for this threatened species in trial areas. These efforts have been worthwhile with moth larvae recorded in most of the plots. This project was established in 2011 with the aim of increasing the SEM populations across the Dungeness peninsula, as despite the ongoing monitoring undertaken by Magnox and EDF, survey results had demonstrated a progressive decline in SEM larvae, a trend that is now being reversed. For the tenth successive year larvae were recorded within the fenced plot inside the Magnox compound during 2023. Dungeness A is fully committed to the SEM Partnership Project and, in conjunction with Natural England have:

1. Maintained the fenced SEM food plant protected area (around 400m^2) on the SSSI land on Dungeness Site;
2. Financed the preparation of the area by disturbance and seeding with wild carrot. (SEM food plant);
3. Financed the annual SEM survey of the whole of the SSSI including the new fenced area.

Introduction of a Biodiversity Enhancement Management Plan:

A biodiversity metric assessment was carried out in 2022 to assess the impact of planned construction on shingle-areas on site from three projects:

- Waste projects construction of 3 waste management facilities
- Plant and Structures construction of a replacement stores facility
- Asset Management modification of road way in north west corner of site

It was identified that to prevent biodiversity loss and to comply with planning permission requirements biodiversity compensation would be required. The biodiversity compensation management arrangements are detailed in the Biodiversity Enhancement and Management Plan (BEMP). The BEMP is a 30 year plan that aims to offset (and marginally improve) biodiversity value on site. Effectiveness of the management will be tracked and reviewed in line with the requirements detailed in the BEMP. As this work was considered to be a change to EMP mitigations under EIADR, the change was assessed and the findings concluded that the only impact identified was to biodiversity and ecology. The change was found to be a minor net improvement as long as the BEMP is complied with. The BEMP has been added to the mitigation measures detailed in Section 5 of this report**.**

Birds:

The site endeavours to avoid work during the bird nesting season as all wild birds and their nests and eggs are protected under the Wildlife and Countryside Act 1981 whilst they are actively nesting or roosting, however this is not always a viable option.

Netting to prevent bird access

Bird nesting issues continue to arise on site. In order to try to manage the issues caused, monthly bird management meetings are held. Some of the actions undertaken so far include:

- the identification of suitable site-wide bird mitigation measures;
- the implementation of a programme of drone flights to monitor bird populations;

- regular drain cleaning when safe to do so to remove any bird nesting material;
- reporting of any incidents where bird nesting issues prevent safety critical work from being undertaken team briefs to increase environmental awareness regarding bird issues on site.

The site was issued with a licence from Natural England in March 2023 for the control of Herring and Lesser Black Backed Gulls which granted permission to kill or take wild birds or their eggs, use a prohibited method or disturb wild birds or their nests when in use or being built for the preservation of public health or public safety. The Site did not use this licence to undertake any of the permitted activities this year primarily due to the success of the bird netting on the reactor roofs.

The site also holds a general licence to kill or take pigeons to preserve public health or public safety. This licence was rarely used during the last year, as there was extensive damage seen to buildings following severe weather the previous year which resulted in holes and loose cladding. These repairs were completed during the year but further work is now being undertaken on the R2 south face side which will potentially result in pigeons entering the building and therefore until this work is complete, it was decided that culling would be ineffective.

As detailed under Asset Care Work, bird netting was erected on some site roofs this year ahead of large scale demolition of these areas. The netting has been largely effective in preventing the birds from nesting but there have been some problems as the netting design did not cover all the roof areas leaving some roof ledges exposed. This resulted in birds nesting on the ledges around the netting. In these instances once the eggs were hatched, the young birds were able to get underneath the netting, continued to be fed by their parents and when the chicks grew larger were trapped in the netting. Some were successfully freed however a small number of birds were killed trapped on or under the netting. Other deterrents employed include metal spiders on the turnstile roofs which have been a successful mitigation measure as these areas were problematic in previous years. There are plans improve the netting on other buildings on site to prevent birds from nesting and delaying future project work.

Geology, Hydrogeology and Soils

In accordance with the Dungeness A Land Quality Strategy, a programme of Land Quality Survey monitoring and characterisation is undertaken. Collected samples are sent for analysis at Magnox approved, UKAS accredited testing laboratories. The groundwater monitoring programme is undertaken on a six monthly basis. The latest round was conducted in June 2022. The objective of the monitoring is to obtain groundwater levels, in-situ water quality parameters and samples for laboratory radiochemical analysis (gross beta, tritium and high resolution gamma spectrometry). The results of previous radiochemical analysis indicated that the activity (concentration) of all of the nuclides in all of the samples were less than the required action levels, so no specific actions were recommended in relation to land quality issues.

Infilling of the Turbine Hall Basement to support the boiler removal project is due to commence in the next year. Additional groundwater monitoring, as agreed with the Environment Agency, to support this work and ensure assertions in the risk assessment are bounding have been developed and implemented.

A proposal was submitted to leave the saltwater hydrants, freshwater hydrants, and towns water pipework unfilled and in situ instead of infilling the pipes using grout. These chambers are located across site, both within the supervised area and radiation controlled area. The proposal amends the requirement laid out in the Dungeness A Environmental Statement that states “pipes and tunnels deeper than 1 metre will be backfilled with grout”, in favour of leaving the pipes in situ. Overall, it was assessed that no additional environmental impacts would result from the proposal to leave pipework from the saltwater hydrants, freshwater hydrants and towns water pipes un-grouted and in situ for the end state. There are a few benefits to this change, namely the removal of a decommissioning activity saving time and construction tasks; cutting down on emissions due to not using grout in this task and not generating noise from the activity.

As such, it was deemed that no new mitigations were required to carry out this work, and therefore no new mitigations required in extension of the Environmental Management Plan.

Landscape and Visual

Following the damage to the Reactor 2 south face exterior cladding which occurred during Storm Eunice in February 2022, works were undertaken to make the area safe and to install a protective scaffold structure to prevent further damage to the building. Works are now

Reactor 2 south face following phase 1 repairs to make the buildings

progressing to remove all the remaining cladding from the south face to allow for additional steelwork to be installed which will provide added strength to the structure

This will followed by the fitting of a new cladding system which will involve the installation of over 1300 m2 of new cladding.

A number of new buildings to facilitate waste management activities and welfare facilities have been installed, however, these are in keeping with the site. Overall, as decommissioning progresses the eventual reduction of buildings will create a positive visual impact.

Noise and Vibration

All noise generating activities are restricted to normal working hours 08.00 - 17.00 Monday - Friday. Any potentially noisy activities are minimised where possible and all work is undertaken within the requirements of the Control of Noise at Work Regulations.Any work conducted near the site boundary is assessed for the potential to generate noise and subsequent nuisance to our neighbours. Two noise complaints were received in February 2023. (see further information in section 7).

Surface Water

Dungeness A sewage plant previously received and processed effluent from the Dungeness B Site for discharge to the English Channel. This cased in August 2023 as Dungeness B have now commissioned their own modular sewage plant.

Ground water accumulates in the reactor voids and is pumped via the surface drains system which is a permitted discharge route. This water was discharged to the surface drains from April to July 2023, after which debris was found in the samples due to the work being undertaken in the voids on the new automated pumping system. The reactor voids were then divered back to discharge via the Active Effluent Water Treatment Plant (AEWTP) until this work was complete. This work is now nearing completion and a programme of reassurance sampling will be undertaken before the water can be diverted back to being discharged via the surface water drains system.

The site management procedures prevent the risk of pollution to surface waters from uncontrolled discharges, through leaks and spills. The Site ensures that storage areas are well managed through routine inspections, maintenance of tanks etc. Contingency plans are also in place to deal with any emergency situations which include spillages of hazardous liquids. Spill kits also deployed around the site and contingency exercises will frequently involve the

deployment and use of these kits. Also the Site's internal reporting system would highlight any areas which have the potential to cause leaks or spills.

Traffic and Transport

There is a Transport Management Plan in place (see Appendix 2). There has been an increase in traffic movements from site activites over the past year due to the increase in construction and demolition works that have been undertaken. These projects have adhered to the transport management plan and where applicable, have implemented their own transport management plans. In addition, there are regular meetings on site to discuss and coordinate traffic management activites.

9. FUTURE WORK

Work to decommission Dungeness A Site will continue to progress. It is expected that there will be some strategy changes to the Magnox Lifetime Plans which could deviate from the site's consented EIADR baselines. Work is ongoing to underpin the implementation of these changes and determine the detail of the site specific configurations. When strategy changes are defined for Dungeness, and where these may deviate from the consented site EIADR baseline, the appropriate assessments will be made prior to any changes being implemented on the site in line with the requirements of Regulation 13 of the EIADR Regulations[1].

[1] 13. - (1) Where there is a change or extension of -

(a) any project in respect of which a consent has been granted pursuant to regulation 4(b)[1]; or

(b) any project which commenced prior to the coming into force of these Regulations,

which change or extension may have significant adverse effects on the environment, the licensee shall apply to the Executive for a determination as to whether the project shall be made subject to an environmental impact assessment and shall not commence or continue with the change or extension to the project or any other part of the project that the Executive may direct until such determination has been made

APPENDIX 1 - LETTER PROVIDING CONSENT TO DECOMMISSION AND ATTACHED CONDITIONS

ANNEX 7 Consent and conditions

Decommissioning Project Consent No.1 13th July 2006

NUCLEAR REACTORS (ENVIRONMENTAL IMPACT ASSESSMENT FOR DECOMMISSIONING) REGULATIONS 1999

CONSENT

granted under regulation 4(b)

in accordance with regulation 8(3)

with conditions attached under regulation 8(4)

DUNGENESS A POWER STATION

The Health and Safety Executive, for the purposes of regulation 4(b) in accordance with regulation 8(3), hereby grants consent for carrying out the project[9] applied for under regulation 4(a), in particular, to remove all buildings except the reactor buildings, alter the reactor buildings for a period of deferment, retrieve and package operational intermediate level waste, and store the intermediate level waste until it can be removed from Site, and clear the Site, subject to the conditions under regulation 8(4) attached.

Dated:

Signed

For and on behalf of the
Health and Safety
Executive

Dr S. L. Creswell

A person authorised to act in that behalf

[9] Project as defined in regulation 2

Conditions attached to Decommissioning Project Consent No.1

13th July 2006

NUCLEAR REACTORS (ENVIRONMENTAL IMPACT ASSESSMENT FOR DECOMMISSIONING) REGULATIONS 1999

CONDITIONS

attached under regulation 8(4)

to Decommissioning Project Consent No. 1 granted under regulation 4(b)

DUNGENESS A POWER STATION

Condition 1

The project shall commence before the expiration of five years from the date of this Consent.

Condition 2

(1) The licensee is required to prepare and implement an environmental management plan to cover mitigation measures to prevent, reduce and where possible offset any significant adverse effects on the environment.

(2) The project shall not be carried out except in accordance with the environmental management plan.

Condition 3

Within 90 days of the date of this Consent, with reference to the environmental statement provided under regulation 5(1) and evidence to verify information in the environmental statement, provided under regulation 10(9), the environmental management plan shall:

a. list the mitigation measures that are already identified in the environmental statement and evidence submitted to verify information in the environmental statement;
b. list the options to implement work activities where mitigation measures may be required but where selection of an option will only be possible in the future;
c. list the work activities where mitigation measures may be required but where assessments to identify mitigation measures will only be possible in the future.

Condition 4

Subsequent to condition 3, the environmental management plan shall:

a. with reference to condition 3b, identify the mitigation measures for options that have been selected, giving reasons for their selection;

b. with reference to condition 3c, identify the mitigation measures from assessments carried out, giving reasons for their selection;

c. describe the effectiveness of the mitigation measures over time;

d. describe significant changes to the mitigation measures in light of experience, giving reasons for such changes.

Condition 5

The licensee is required to:

a. provide the environmental management plan to the Health and Safety Executive within 90 days of the date of this Consent and every year thereafter, or within such longer time as the Executive may agree;

b. make the environmental management plan available to the public within 30 days of the plan being sent to the Health and Safety Executive, or within such longer time as the Executive may agree; the plan may replace earlier versions.

Condition 6

The licensee is required to provide notice to the Health and Safety Executive of any significant change to a mitigation measure to prevent, reduce and where possible offset any major adverse effects on the environment no less than 30 days before the change is made, or within such shorter time as the Executive may agree.

Dated:

Signed

For and on behalf of the

Health and Safety Executive

Dr S. L. Creswell

A person authorised to act in that behalf

APPENDIX 2 – PRINCIPLES FOR A TRANSPORT MANAGEMENT PLAN

Objective

All decommissioning operations involving transport will be managed so as to minimise the environmental effects of these operations, as far as is reasonably practicable. The principles for achieving this are defined below.

Transport Management Principles

1. Heavy Goods Vehicles (HGV's) will be required to follow preferred routes to and from the strategic road network. From the M20 at Junction 10, the A2070 to Brenzett, then the A259 through Old Romney and the B2075 towards Lydd, followed by the Dungeness Road, which runs between the settlements of Lydd and Lydd on Sea.
2. The numbers of individual transport movements will be minimised as far as is reasonably practicable.
3. Where appropriate, vehicles leaving site will be subject to inspection to ensure that earth and other material is not unduly dispersed. Wheel washing will be used where necessary.
4. On site roads will be swept as necessary to minimise the spread of material off-site and/or into drains or watercourses.
5. Where practicable, transport distances will be minimised by the use of local disposal sites, recycling facilities etc.
6. HGV transport movements should be undertaken within normal working hours (Monday to Friday 08.00 to 17.00) where possible.
7. Magnox Ltd and their contractors will be required to maintain their vehicles in a good condition.
8. Employees and contractors will be encouraged to share transport when travelling to and from site.
9. Employees and contractors are encouraged to minimise business travel where practicable by initially considering the need to attend off site meetings and to consider the use of other communication methods eg video conferencing facilities. If there is a pressing need to attend off site meetings, then public transport should be used in preference to private transport.
10. In the event of need for an abnormal load to be transported, a specific plan for this movement will be developed.