Executive Summary

In January 2002 Magnox Electric Ltd (now Magnox Ltd) applied for consent to decommission Hinkley Point A Nuclear Power Station under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended).

Consent was granted by the Health and Safety Executive (HSE) (now Office For Nuclear Regulation (ONR)) in July 2003 subject to 6 conditions. In compliance with condition 2, this Environmental Management Plan has been prepared to provide information relating to environmental risks and mitigations anticipated and arising during the project.

This document is the eighteenth issue of the Hinkley Point A Environmental Management Plan which has been updated and issued annually, in compliance with condition 5 of the consent.

This document provides detail of the mitigation measures available at Hinkley Point A to prevent, reduce, and where possible offset any significant adverse environmental effects of the decommissioning work, and provides an update on how these measures have and will be implemented during the decommissioning activities carried out on site.

Peter Montague  
Closure Director  
Hinkley Point A  
October 2019
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1. Introduction

Hinkley Point A Reactor Site (hereafter Hinkley A) ceased generation in 1999 and was formally shut down in May 2000 after generating electricity since 1965.

The site entered a phase of decommissioning in accordance with the consent issued by the Health and Safety Executive (HSE), now the Office for Nuclear Regulation (ONR) in 2003 under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended) (EIADR99).

The consent (Appendix A) details six conditions that apply to the decommissioning project, including a requirement for the preparation, implementation and review of an Environmental Management Plan (EMP) that shall describe preferential mitigation measures to prevent, reduce and where possible offset any significant adverse effects on the environment. In addition, the plan shall describe how such measures have been employed during the various phases of the decommissioning project including, where appropriate, the effectiveness of and changes to such mitigations in the light of experience and giving reasons for such changes.

This issue of the EMP is structured in a way to clearly demonstrate how Hinkley A meets the requirements of these consent conditions.

Other supporting information which may be of interest to the public but is not directly required by the consent conditions is also located in the Appendices (e.g. stakeholder management).

A detailed decision report describing the content of the conditions attached to the consent and the main reasons and considerations for the decision was prepared in 2003; copies of this document are available from:

Office for Nuclear Regulation
Building 4
Redgrave Court
Merton Road
Bootle
Merseyside
L20 7HS

Tel: 0151 951 4000
e-mail: EIA.Team@onr.gsi.gov.uk

Or via the internet from:
http://www.onr.org.uk/hinkley.pdf

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

Closure Director
Hinkley Point A Site
Nr Bridgwater
Somerset
TA5 1YA
2. Scope of the Environmental Management Plan

Geographical Scope
The site is situated adjacent to Bridgwater Bay within the Severn Estuary and is located between a currently generating nuclear site (Hinkley Point B) and a new build nuclear site (Hinkley Point C – see picture).

This EMP details the mitigation measures employed on site to prevent, reduce and, where possible, offset any significant adverse effects on the environment throughout the decommissioning of Hinkley A.

Duration
The decommissioning project at Hinkley Point A consists of a phased approach. These phases are summarised below:

- **Care & Maintenance Preparations (C&MP)**
  During this current phase of decommissioning, most of the radioactive and non-radioactive plant and buildings on the site will be dismantled. Intermediate level radioactive waste (ILW) will be retrieved from current storage locations as appropriate, processed and then placed into purpose-built storage. Upon completion of C&MP, the site will have been put into a passively safe state where the need for future human intervention to maintain acceptable conditions, prior to final site clearance, is minimized.

- **Care & Maintenance (C&M)**
  This is a mainly quiescent phase expected to last for some decades and will require the management, maintenance and monitoring of the Hinkley A site to ensure that it remains in a passively safe and secure state. The site will continue to be the subject of a Nuclear Site License during this phase.

- **Final Site Clearance**
  The final phase of decommissioning is expected to last approximately 10 years and will include the dismantling of the last remaining structures, including the reactor buildings, the clearance of any residual radioactivity to the applicable standards at the time, and the de-licensing of the site so that it can be made available for alternative land use.

This EMP is structured around these three phases. However, it is expected that mitigation measures may change in the future in light of experience and developing technologies. For the later phases of work 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 reasons for changes made.

The mitigation measures described in the Environmental Statement have been extracted and tabulated in Section 4.

Topics
The Environmental Statement that accompanied the application for consent in 2001 described potential beneficial and adverse environmental impacts of the Hinkley A decommissioning project.

These impacts were divided into 9 topic areas which have been used throughout this EMP and are listed below:

- Air Quality and Dust
- Archaeology and Cultural Heritage
- Ecology
- Landscape and Visual
- Noise and Vibration
- Socio-Economic
- Surface Water Quality and Draining
- Geology, Hydrogeology and Soils
- Traffic and Transport
3. The Site and Surrounding Area

Site Description

Hinkley A is located on the south west coast of England in the county of Somerset, approximately 13 km North West of the town of Bridgwater. The Nuclear Licensed Site occupies an area of approximately 26 hectares and consists of a number of buildings, hard standings, as well as a road network within a high metal fence. The remaining area consists of well-tended grassland.

![Fig. 2 View of Hinkley Point A from the Quantock Hills](image)

The two reactor buildings are the dominant features on the site, each 53 metres high. Each contains a reactor of the gas cooled, graphite moderated, Magnox type\(^1\). The reactor cores are each contained in a large steel pressure vessel surrounded by a concrete biological shield. Boilers converted water to steam in order to drive the turbines located inside the turbine hall which has recently been demolished. Cooling of the steam to return it to water was provided by seawater passed through condensing units. The cooling water intake and outfall structures are located offshore and were connected to the turbine hall by means of large underground tunnels but which are now blanked off.

Other buildings and plant on site include the pond buildings, national grid substation, workshops, stores and offices.

Transport Infrastructure

The main vehicular access to Hinkley A, from the M5 motorway to the east, is via the A38 which links with the motorway north and south of Bridgwater at junctions 23 and 24 respectively. At Bridgwater the A38 joins the A39 and the route continues west along the A39 to Cannington. From there the C182 leads north to a private site access road.

\(^1\) 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.

Sensitivity of Receiving Environment

Hinkley A is situated adjacent to the foreshore of Bridgwater Bay, a Site of Special Scientific Interest (SSSI) which is also designated a National Nature Reserve (NNR). The wider Severn Estuary is designated a Special Protection Area (SPA), a wetland of international importance under the Ramsar Convention and is a Special Area of Conservation (SAC).

A Nature Reserve in the Steart Peninsula was created by the Environment Agency and the Wildfowl and Wetlands Trust, approximately 10km from Hinkley A; the reserve fully opened in May 2015.

A County Wildlife Site (CWS) lies to the west and south of Hinkley A, within which lies Branland Copse north and south which are areas of broadleaved semi-natural woodland. The Quantock Hills lie 7 km south extending to the coastline at Quantock’s Head and have been designated as an Area of Outstanding Natural Beauty (AONB). The Exmoor and Quantock Oak woods are on the east side of the Quantock Hills and are designated as a Special Area of Conservation (SAC).

Within a 10 km radius of Hinkley A there are two additional SSSIs: Ge-mare Farm Fields which lies 7 km south west of the site and Berrow Dunes which lies near Burnham-on-Sea to the north east of the site.

There is one site of known archaeological interest close to the site boundary at Hinkley A, namely an early Bronze Age burial mound or tumulus dating from around 1500BC. This site is known as Pixies Mound (Wick Barrow) and is a Scheduled Monument.

![Fig. 3 Wick Barrow dating from 1500BC](image)
4. Mitigation Measures

4.1 Identified Impacts and Mitigation measures

In support of the application to decommission under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (EIADR99) and the Town and Country Planning (Environmental Impact Assessment) 1999 Regulations (TCP(EIA) 99), Environmental Statements were compiled in which potential impacts and key mitigation measures were identified for the three phases of decommissioning.

There have been no significant changes to the mitigation measures that were submitted in the Environmental Statement and reported in the previous issue of the Environmental Management Plan.

The mitigation measures identified in both Environmental Statements are presented in the tables in normal script, the mitigation measures identified in the ES under EIADR99 only are in italics and those mitigation measures identified in the ES under the TCP (EIA) 99 only are underlined.

The following tables list the mitigation measures identified for each phase of the decommissioning project separately (Tables 1 – 3).

Table 1: Care & Maintenance Preparations Phase
Mitigation measures already identified (Condition 3a)

<table>
<thead>
<tr>
<th>Topic: AIR QUALITY and DUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of impact</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
</tbody>
</table>
| Dust emissions during excavation, demolition and construction activities (including handling and storage of soil and material) | • Minimising unnecessary handling of materials and drop heights  
• Carrying out the activities during a period of poor dispersion conditions (i.e. very low wind speeds) and minimizing activities in dry/windy weather conditions.  
• Enclosing containers during loading and transport  
• Using water sprays to maintain damp surfaces during dry weather  
• Seeding surfaces of completed mounds  
• Construction of wind fences around dust sources |
| Dust emissions during movement of vehicles | • Sheetling of lorries containing materials and spoil export  
• Provision of wheel washing for HGVs on leaving the site where relevant |

<table>
<thead>
<tr>
<th>Topic: ARCHAELOGY and CULTURAL HERITAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of impact</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Impact on cultural heritage (decommissioning of buildings, structures and the technology housed within)</td>
</tr>
</tbody>
</table>
Table 1 Continued: Care & Maintenance Preparations Phase
Mitigation measures already identified (Condition 3a) – continued

<table>
<thead>
<tr>
<th>Nature of Impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
</table>
| Loss of habitat (grassland) as a result of off-site storage of materials and equipment, Loss of foraging habitat for badgers, bats, birds and amphibians | • Grassland will be reinstated after removal of spoil mound  
• Landscape planting will provide some replacement habitat (See Landscape and Visual)  
• Retained areas of valuable habitat will be protected with appropriate fencing |
| Disturbance to nesting birds as a result of clearance of vegetation (or demolition of buildings) | • All clearance of vegetation and demolition of buildings, likely to be of value to nesting birds, to be undertaken outside the bird breeding season |
| Disturbance to birds from traffic and site noise                                  | • If appropriate, fencing and other barriers will be erected to protect particular sensitive areas and close boarded fencing around the construction site will be erected to mitigate noise and human disturbance  
• Noisy operations may need be programmed sensively |
| Increased road mortality for badgers, nesting birds and great crested newts       | • Implement on site speed limits                                                          |
| Dust deposition on coastal grassland, species rich grassland and scrub along Branland Copse | See mitigation measures proposed under ‘Air Quality and Dust’ topic in this table         |
| Pollution/sedimentation of freshwater habitats for water voles and otters         | See mitigation measures proposed under ‘Surface Waters’ topic in this table                |
| Habitat creation                                                                  | • At final site clearance, a new pond will be created to provide additional breeding habitat for amphibians – see Table 3. |
Table 1 Continued: Care & Maintenance Preparations Phase
Mitigation measures already identified (Condition 3a) - continued

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
</table>
| Changes to groundwater quality through disturbance of contaminated soils from excavation of subsurface structures and/or surfaces | • A programme of sampling and testing of soils during excavation will be agreed with the EA and HSE  
• Contract documents will seek to ensure that groundwater ingress to excavation and demolition areas will be controlled to minimise the volume of water subsequently requiring management  
• Management of contaminated soils to avoid leaching into previously clean soils and groundwater  
• The containment and off-site disposal of contaminated soils  
• Groundwater infiltration and drainage from areas used for temporary storage of demolition waste materials or soils would be controlled to minimise the risk of leaching of contaminants and generation of contaminated or elevated pH water. Detailed proposals will be made for the collection and disposal of any potentially radiologically contaminated groundwater |
| Changes to groundwater quality through spills and leaks | • Utilisation of appropriate measures to prevent pollution  
• A spill response plan will be produced to deal with significant spillages to reduce the potential for environmental impact  
• Appropriate siting, bunding and drainage of fuel and oil tanks and concrete mixing facilities  
• Installation of adequately sized and designed oil separation units  
• Provision of sand, dispersants and oil booms |
| Changes to groundwater level | • Inert backfill will be placed and compacted within underground structures and artificial drainage points created to prevent build-up of groundwater levels |
### Table 1 Continued: Care & Maintenance Preparations Phase
Mitigation measures already identified (Condition 3a) - continued

#### Topic: LANDSCAPE and VISUAL

Visual impacts will occur as a result of the use of cranes, demolition of buildings and foundations, erection of the ILW store, site clearance activities, vehicle movement, material stores and security lighting. Cranes will be visible from locations to the south of the Quantock Hills Area of Outstanding Natural Beauty. The main adverse visual impacts will be from local viewpoints such as Stolford, Wick, Shurton, Burton and Knighton.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual impact from the site wide demolition activities and construction of Intermediate Storage Facility (ISF)</td>
<td>• Planting scheme will be implemented where reasonably practicable to do so including:</td>
</tr>
<tr>
<td></td>
<td>• Provision of a long-term visual softening in long views from the access road and mitigate the views of the ISF from the south and the south east by creating a wide hedgerow with trees.</td>
</tr>
<tr>
<td></td>
<td>• Visual extension of Brandland Copse North by creating a 4m hedgerow along the north part of the western boundary.</td>
</tr>
<tr>
<td></td>
<td>• Mitigation of the loss of grassland habitat resulting from the ISF development (i.e. soil stockpile area). This adverse impact will be mitigated by restoring the grassland habitat. The area will be seeded with low-density indigenous grass mix, sown directly onto soil. Fertilisers would not be used.</td>
</tr>
<tr>
<td></td>
<td>• Design, siting of buildings and choice of colour of cladding materials have been developed with the aim of reducing the visual impact.</td>
</tr>
</tbody>
</table>

#### Topic: NOISE and VIBRATION

C&MP impacts will depend on the demolition methods adopted and generally on their proximity to people and buildings. Impacts at all properties will be slight to negligible. The greatest impacts will be confined to the site and Hinkley B and Hinkley C and nearby wildlife. Any such disturbance is likely to relate to individual noisy events or to occur for relatively short periods of time.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise related to transport</td>
<td>• Maximum axle weights for transportation of plant materials and waste could be imposed by contract</td>
</tr>
</tbody>
</table>
### Topic: NOISE and VIBRATION - continued

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
</table>
| Noise from site activities (demolition, construction of ISF, etc.)             | • All construction activities to be undertaken in accordance with good practice as described by British Standard 5228-1:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites  
  • Main noise generating activities restricted to daytime hours (between 08:00 and 17:00), work outside these hours will be agreed with local authority  
  • Mitigation by distance and screening will be maximized where possible  
  • Use of concrete crushers rather than pneumatic hammers  
  • Use of equipment fitted with effective silencers/insulation  
  • Minimising unnecessary revving of engines, turning off machines when not required and routine maintenance of equipment  
  • Appointment of site supervisors to whom complaints/queries about construction activity can be directed – any complaints to be investigated and action taken where appropriate  
  • If piling is considered to be necessary, jacked or bored piling techniques to be used in preference to driven piling |

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### Topic: SOCIO-ECONOMIC

There will be a reduction in employment levels during the C&MP phase. When the station was operational ~ 340 people were employed. This figure will reduce to ~ 230 people and then to ~ 120 for most of the C&MP phase. This reduction in employees will be countered by the requirement for an additional ~ 100 contract personnel, a resource that will flex to meet the requirements of the decommissioning programme.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
</table>
| Reduction in number of site personnel                                         | • Phasing of employment reductions  
  • Maximising opportunities for employment continuity or redeployment within the Company for site personnel  
  • Where possible, maximise the take-up of a voluntary severance scheme |
| Change in employment level in local economy; change in level of local expenditure | • Use of locally based contractors  
  • Maximise the opportunities for locally-based businesses to secure involvement as contractors, sub-contractors and suppliers |
### Table 1 Continued: Care & Maintenance Preparations Phase

**Mitigation measures already identified (Condition 3a) – continued**

#### Topic: TRAFFIC and TRANSPORT

When entering the C&MP, the number of cars on site will reduce by around 240 movements per day. Lorry movements will broadly remain about the same as when the station was operational.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mud on public highways</td>
<td>• It is expected that normal good site practice with regards to wheel washing etc., if appropriate, will suffice.</td>
</tr>
</tbody>
</table>

#### Topic: SURFACE WATER QUALITY and DRAINAGE

Measures will be put in place to control surface water drainage. Fuels and chemicals on site will be used in accordance with current site practices to minimize the risk of spillages or leakages. The impacts of the C&MP phase on the surface water flow regime, surface water quality and soil erosion and sediment loading are negligible. Indeed, the removal of potential sources of pollution will yield slight benefits during the works phase and all subsequent phases.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
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</table>
| Surface Waters Changes to surface water quality through uncontrolled discharges arising from excavations into contaminated soils | • Contract documents will seek to ensure that surface water ingress to excavation and demolition areas will be controlled to minimize the volume of water subsequently requiring treatment  
• Any contaminated soil will be isolated and appropriately disposed of  
• Drainage from excavation areas will be collected and managed |

Changes to surface water quality through uncontrolled discharges of sediments and/or turbid water into surface drains and surface water courses

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<thead>
<tr>
<th>Nature of impact</th>
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</thead>
</table>
| Changes to surface water quality through uncontrolled discharges of contaminated water through spills and leaks of non-radioactive material (e.g. concrete, cement, fuels, oils or other chemicals) | • Minimise stockpiling of loose materials  
• Seeding of the soil stockpile to reduce wash-off of suspended solids  
• Erosion protection using geotextile materials considered when stockpiling materials over long periods  
• Minimising movement of soil during wet weather  
• Cleaning of roadways, including use or recirculating wheel washers and road sweepers  
• Silt traps, balancing ponds and approximately sized grills on drains |

Appropriate siting, bunding and drainage of fuel/oil tanks and concrete mixing facilities

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</table>
| Changes to surface water quality through uncontrolled discharges of contaminated water through spills and leaks of non-radioactive material (e.g. concrete, cement, fuels, oils or other chemicals) | • Appropriate siting, bunding and drainage of fuel/oil tanks and concrete mixing facilities  
• Handling protocols for washing out of concrete mixing plant and refueling  
• Installation of adequately sized and designed oil separation units  
• A Spill Response Plan will be produced to deal with spillage and reduce the potential for oils to enter surface waters  
• Provision of sand, dispersants and oil booms to control spillages |

#### Mud on public highways

- It is expected that normal good site practice with regards to wheel washing etc., if appropriate, will suffice.

### Topic: SURFACE WATER QUALITY and DRAINAGE

Measures will be put in place to control surface water drainage. Fuels and chemicals on site will be used in accordance with current site practices to minimize the risk of spillages or leakages. The impacts of the C&MP phase on the surface water flow regime, surface water quality and soil erosion and sediment loading are negligible. Indeed, the removal of potential sources of pollution will yield slight benefits during the works phase and all subsequent phases.

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• Seeding of the soil stockpile to reduce wash-off of suspended solids  
• Erosion protection using geotextile materials considered when stockpiling materials over long periods  
• Minimising movement of soil during wet weather  
• Cleaning of roadways, including use or recirculating wheel washers and road sweepers  
• Silt traps, balancing ponds and approximately sized grills on drains |

Appropriate siting, bunding and drainage of fuel/oil tanks and concrete mixing facilities

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</table>
| Changes to surface water quality through uncontrolled discharges of contaminated water through spills and leaks of non-radioactive material (e.g. concrete, cement, fuels, oils or other chemicals) | • Appropriate siting, bunding and drainage of fuel/oil tanks and concrete mixing facilities  
• Handling protocols for washing out of concrete mixing plant and refueling  
• Installation of adequately sized and designed oil separation units  
• A Spill Response Plan will be produced to deal with spillage and reduce the potential for oils to enter surface waters  
• Provision of sand, dispersants and oil booms to control spillages |
Table 2 Continued: Care & Maintenance Phase
Mitigation measures already identified (Condition 3a)

**Topic: ECOLOGY**

The decrease in noise levels will be a slight benefit, especially after Hinkley Point B has also ceased generation, although general levels of background noise are unlikely to change due to the continued construction and subsequent operation of Hinkley C. Habitat creation, as part of the restoration plan, could represent a considerable net benefit for nature conservation locally, in particular the potential to increase coastal grassland within the site boundary and outside the security fence. The site will be undisturbed and will become more attractive for wildlife, especially for birds.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbance to birds from traffic noise during removal of ILW</td>
<td>• Removal operations will be programmed sensitively</td>
</tr>
<tr>
<td>Increased road mortality for great crested newts during removal of ILW</td>
<td>• The presence or otherwise of great crested newts should be monitored as part of site management during the C&amp;M phase</td>
</tr>
<tr>
<td></td>
<td>• A detailed mitigation plan will be developed</td>
</tr>
</tbody>
</table>

**Topic: GEOLOGY, HYDROLOGY and SOILS**

No activities will take place that will affect geology, hydrology and soils.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes to groundwater quality through disturbance of contaminated soils from excavation of subsurface structures and/or services</td>
<td>• A programme of sampling and testing of soils during excavation will be agreed with the EA and the ONR</td>
</tr>
<tr>
<td></td>
<td>• Management of contaminated soils to avoid leaching into previously clean soils and groundwater</td>
</tr>
</tbody>
</table>

**Topic: LANDSCAPE and VISUAL**

The Site will remain visible. The architectural treatment and lack of lighting in particular will give rise to moderate visual benefits particularly at a local level, although the site will still be viewed in the wider context of Hinkley B and Hinkley C. New tree planting will enclose some views in the long term.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual impact from the constructed ISF</td>
<td>• The planting management regime (e.g. replacing of trees and scrubs) would be agreed with the local planning authority, as relevant and appropriate</td>
</tr>
</tbody>
</table>
### Table 2 Continued: Care & Maintenance Phase
Mitigation measures already identified (Condition 3a) – continued

#### Topic: SURFACE WATER QUALITY and DRAINAGE

No activities will take place during the C&M phase that will affect surface water and drainage.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidance of localized flooding</td>
<td>• Drainage facilities in place during and after C&amp;M period to avoid localised flooding. Small land drains may need to be installed</td>
</tr>
<tr>
<td></td>
<td>• Improvements to flood defences made as necessary to ensure continued protection of site until final clearance</td>
</tr>
</tbody>
</table>

### Table 3: Final Site Clearance Phase
Mitigation measures already identified (Condition 3a)

#### Topic: ALL TOPIC AREAS

This will take place ~100 years after station shut down. The works themselves are predicted to take ~10 years and the impacts will be similar to those that occurred during the initial C&M phase. Once the site is cleared, the removal of potential sources of contamination and lack of activity represents benefits. The most significant benefit will be in terms of views of the site, following the demolition of the reactor buildings and the ILW store.

<table>
<thead>
<tr>
<th>Nature of impact</th>
<th>Mitigation Measures Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is predicted that the impact may be as those identified in Table 1</td>
<td>Mitigation measures proposed for this section are identical to those specified in Table 1</td>
</tr>
</tbody>
</table>

### 4.2 Future mitigation measures (Condition 3b and 3c)

Work activities beyond final site clearance phase have not yet been identified. As a result a list of mitigation measures required during any future phases cannot yet be identified.

### 4.3 Activities where mitigation measures may be required but cannot yet be identified and assessed (Condition 3c)

Currently no such work activities have been identified.
5. Implementation of the Environmental Management Plan

It is a requirement of the conditions attached to the consent (Appendix A), to implement the mitigation measures and describe their effectiveness. This chapter lists the measures (identified in Table 1) which have been implemented, explains how the site measures their effectiveness in reducing environmental impacts and describes their use in some of the more recent and relevant projects.

**Process for Implementation of Mitigation Measures**

Hinkley A site procedures ensure that decommissioning activities are carried out in accordance with the mitigation measures set out in this plan. All decommissioning projects and modifications to plant are assessed during the proposal stage in accordance with robust company management control procedures. A template of questions (forming part of the Decommissioning Project Approval Form (DPAF)) is used to determine whether further environmental assessment and mitigation is required (Appendix C).

In addition, there are a number of other tools to ensure that all environmental impacts are minimised. The site has an Integrated Management System which covers the requirements of ISO 9001 (Quality Assurance), ISO 14001 (Environmental Management Systems) and OHSAS 18001 (Occupational Health and Safety Management System).

Hinkley A also undertakes Best Available Techniques (BAT) optioneering studies for those projects where it is deemed that there is potential for significant radioactive and non-radioactive discharges and disposals from the site, e.g. site waste management, decommissioning or restoration projects and where it is required to demonstrate that these impacts are minimised through evaluation by a clear, systematic and transparent process.

**Processes for Determining Effectiveness of Mitigation Measures**

The site continually monitors the effectiveness of mitigation measures over time, and where necessary reviews these in order to ensure the success of reducing significant environmental impacts. A key part of this process is the close interaction between the Project Teams and the Environment Team, ensuring that mitigation measures are considered, applied and, where relevant, reviewed throughout the lifespan of the project. The effectiveness of the mitigations is monitored in a variety of ways as described below.

1) Environmental Performance Monitoring

Environmental performance monitoring (e.g. dust, noise, groundwater monitoring) is performed using specialist equipment. This allows assessment of environmental impacts post-mitigation in addition to being of use for determining baseline conditions. The main use of post-mitigation environmental monitoring will be for larger projects, such as the demolition of buildings or movement of large quantities of spoil. The requirement for this method of measuring effectiveness is determined on an individual project basis as appropriate.

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 (e.g. surface drains) and hence highlight mitigation measures that need to be implemented. Visual inspections and photographs can also provide an indication on effectiveness of mitigation measures.

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

Regulatory actions, complaints and internal events including near misses are reported and investigated. Such investigations may provide recommendations for improvements where mitigation measures have not been effective or where further mitigations are required. Additionally, the site operates a robust system of internal event reporting called Operations Experience Feedback (OEF). With OEF, staff and contractors are encouraged to report conditions which are unsafe or pose a threat to the environment. These are then rectified and the root causes investigated where necessary.
**Examples of Work Completed Requiring Mitigation Measures**

Decommissioning and construction work undertaken during the period has resulted in only a few potential environmental impacts; therefore many of the mitigation measures described in the previous section have not been required.

During this period a significant number of large construction and demolition projects have been undertaken. Most significantly, Hinkley A has completed construction of the Interim Storage Facility (ISF), the main civil construction of the Modular Intermediate Level Waste Encapsulation Plant (MILWEP) a Pre-Conditioning Facility (PCF) Annex have also been completed.

A Modular Active Effluent Treatment Plant (MAETP) has been installed to replace the function of the Effluent Treatment Plant (ETP). The MAETP is designed to process low level Radioactive Aqueous Effluent arising from decommissioning activities and routine operations and is to be used once the current ETP has been taken out of service in preparation for the site entering the C&M phase.

To continue to take the site towards care and maintenance, the demolition of the sites turbine hall and associated buildings has been completed. The TH demolition was the largest single project carried out in the C&M preparation phase to date. The entire Project including enabling works cost £7M and generated over 12,000 tonnes of waste of which nearly 90% was sentenced for recycling. All demolition and associated activities were carried out safely, and controlled in such a way that the risk to the environment was minimised, with one minor deviation which occurred at the end of the project when water being used for dust suppression was allowed to pool and make its way to a road drain, and lead to an unauthorised discharge (see Section 5 – Surface Water).

Mitigations have been employed on site during routine works consistent with the assessment carried out for compliance with the decommissioning consent and other relevant aspects of compliance with the EIADR99 Regulations, non-radiological permits/consents, other relevant legislation and environmental issues, and signed onto as part of the Decommissioning Proposal Approval process (as shown in Appendix B).

**Air Quality and Dust**

Activities are subject to dust suppression to reduce the risk of dust emissions to the environment. Work would be halted whenever wind speeds increased to the point that the dust suppressor would not be able to manage dust migration. Dust monitoring stations are set up in multiple locations for monitoring and recording purposes.

Lorries carrying materials likely to cause dust migration are fitted with load screens. Notably, the location for the MAETP was specifically chosen to minimize the amount of excavation and civil work required by using as much of an existing concrete slab as possible.

**Ecology**

Due to the ecological importance of the area surrounding the site, Specialist Environmental Consultants have been employed to carry out habitat surveys and targeted protected species surveys of areas prior to construction/demolition. Natural England were also invited to the site and made aware of finding s and mitigations proposed by the Environmental Specialists, and were themselves satisfied with the findings and the mitigations in place.

The main impacts identified were with the potential to disturb over wintering birds and the possibility of birds nesting on the building roofs. As a mitigation measure, Bird Scaring Lasers were utilised to deter the gulls from nesting in the vicinity. Additionally, works which may have the potential to cause a disturbance to the birds were programmed to avoid the over wintering period.

**Geology, Hydrogeology and Soils**

Samples of the ground and soils were undertaken prior to any excavation. Zero ground contamination was found. This is following previous borehole to determine the extent of legacy oil ground contamination associated with Area of Potential Concern (APC); after which a contract was, awarded to carry out any necessary remediation. Additionally, the Turbine Hall basement contained soil which had been transferred back from C Site land and this material was previously tested and deemed acceptable for asbestos levels and an Impact to Human Health Assessment.

![Fig. 6 Dust Suppression in use.](image)

*Fig. 5. Turbine Hall Demotion – Before (l) & After (r)*
A specialist contractor was employed to produce a Materials Management Plant which was to cover the use of demolition arising’s from the Turbine Hall Demolition as in-fill. It was eventually decided, with further regulator consultations, that to ensure there was no risk of high alkaline leachate, all demolition arising’s would be removed from site. This resulted in different types of spoil arisings i.e. bricks, stone and concrete being stockpiled to prevent mixing of waste and after careful segregation, approximately 90% of this material was dispatched for recycling and reuse, which equated to approximately 9000 tonnes of material which was prevented from being disposed of as waste to landfill.

Appropriate bunding of any construction vehicles left overnight was used and spill kits were on hand to deal with any potential leakages. Additionally, part of the company procedure for identifying and implementing measures to prevent potentially contaminated soils leaching into ground or surface water is shown in Appendix D.

Landscape and Visual

The design, siting of buildings and choice of colour of cladding materials have been developed with the aim of reducing the visual impact from site wide C&M preparations.

Noise and Vibration

All construction activities on site are subject to management procedures which require implementation of relevant good practice standards and procedures. These include the use modern suppressed plant which is regularly maintained to minimise the noise and vibration output, and which when not in use were turned off to reduce further noise, vibration and fuel consumption. All noise generating activities are normally restricted to between the hours of 08:00 and 17:00.

Monitoring stations are set up in multiple locations to scrutinise work which is likely to cause noise and which are regularly assessed to ensure that limits were not breached.

Socio-Economic

Ultimately a trend of overall workforce reduction will continue until entry into the C&M phase, and the site aims to mitigate the impacts of reduction in site personnel through staff redeployment within the company and the voluntary severance scheme. However, due to the number of large-scale projects currently being undertaken at Hinkley A, an increase in the total workforce has been experienced.

These works have been completed by a largely local workforce, with the main ground works, cladding and mechanical and electrical subcontractors being based relatively close to the site – some of which have used their learning and have taken up opportunities on an the adjacent Hinkley C site.

Surface Waters

During the final stages of the turbine hall demolition a change to the method of dust suppression resulted in a breach of the non-radiological permit due to high pH liquor accumulating inside the demolition area, and overflowing into the storm drainage system and subsequently discharging into the Bristol Channel. The Environment Agency were informed and following their investigation it was decided that they would not pursue regulatory action. Although only 1m$^3$ of water was discharged, this was an unfortunate event and a breach of the site permit. An immediate and thorough internal investigation resulted; the findings of which were deemed sufficient to negate a reoccurrence of the incident.

There were no other changes to surface water quality as a result of all other C&M preparations. Road drains were protected where there was a potential for mud and debris to be washed down the drains and site management procedures ensure well managed oil and chemical storage areas and with routine inspection and maintenance of tanks and oil interceptors.

Fig 7. ISF and MILWEP showing the completed ISF and adjacent MILWEP structures, with considerate choice of colour of cladding materials

Fig. 8 Hydraulic attachment used to cut steel and break concrete whenever possible to reduce noise and vibration.
Traffic and Transport

All decommissioning operations involving transport will be managed so as to minimise the environmental effects of these operations, as far as is reasonably practicable. Fundamentally, the principles for achieving this are defined within the site’s travel plan (see Appendix E).

Specifically, works carried out during this period have been completed by a largely local workforce with, where it was reasonably practicable to do so, mini-buses were used to bring these operatives to site, thus minimising transport impacts. All concrete has been purchased and transported from the local batching plant located close to the site, and a road sweeper was regularly used on site to prevent the transfer of mud from the site to the public roads.

Traffic concerns are raised at the site stakeholder group meetings, and some complaints relating to speeding vehicles have been received through this forum. Coincident with EdF, the site management team has taken action to remind Hinkley Point A staff and contractors of the expectation that, where practical they should use the bypass which has been constructed to divert traffic away from the village of Cannington.

In addition, a reminder that adherence to speed limits is both an expectation from a stakeholder management perspective and legal obligation has been issued by the Hinkley A Transport Management Committee, who are continually looking to providing enhanced road safety controls and optimise vehicle movements both in and around its site.
6. Changes to the Environmental Management Plan

There are no significant changes to the mitigation measures that were submitted in the Environmental Statement and reported in previous issues of the Environmental Management Plan. Hinkley A will notify the ONR of any significant change to a mitigation measure no less than 30 days before the change is made, or within such shorter time as the ONR may agree.

7. Distribution of the Environmental Management Plan

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

The Closure Director
Hinkley Point A Site
Nr Bridgwater
Somerset
TA5 1YA

In addition to the submission of this EMP to the ONR, Magnox Ltd will make the document publicly available via the Magnox Website and will provide copies to the:

- Hinkley Point A Site Stakeholder Group
- Nether Stowey Library

This EMP may be viewed at the following locations:

- Burnham and Highbridge Council Hinkley Point A Site Stakeholder Group
- Nether Stowey Library
- www.magnoxsites.com/publications
## 8. Definitions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AONB</td>
<td>Area of Outstanding Natural Beauty</td>
<td>NAPL</td>
<td>Non Aqueous Phase Liquid</td>
</tr>
<tr>
<td>APC</td>
<td>Area of Potential Concern</td>
<td>NNR</td>
<td>National Nature Reserve</td>
</tr>
<tr>
<td>BAP</td>
<td>Biodiversity Action Plan</td>
<td>OHSAS 18001</td>
<td>Accreditation system for Occupational Health and Safety Management Systems</td>
</tr>
<tr>
<td>BAT</td>
<td>Best Available Technique</td>
<td>ONR</td>
<td>Office of Nuclear Regulation</td>
</tr>
<tr>
<td>DPAF</td>
<td>Decommissioning Project Approval Form</td>
<td>SAC</td>
<td>Special Area of Conservation</td>
</tr>
<tr>
<td>EA</td>
<td>Environment Agency</td>
<td>SLA</td>
<td>Special Landscape Areas</td>
</tr>
<tr>
<td>EIADR99</td>
<td>Nuclear Reactors (Environmental Impact Assessment for Decommissioning)</td>
<td>SPA</td>
<td>Special Protection Area</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
<td>SSG</td>
<td>Site Stakeholder Group</td>
</tr>
<tr>
<td>HSE</td>
<td>Health and Safety Executive</td>
<td>SSSI</td>
<td>Site of Special Scientific Interest</td>
</tr>
<tr>
<td>ILW</td>
<td>Intermediate Level Waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO 9001</td>
<td>Accreditation system for Quality Assurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO 14001</td>
<td>Accreditation system for Environmental Management Systems</td>
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</tbody>
</table>
Appendix A

Consent Conditions

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)

HINKLEY POINT A POWER STATION

Condition 1
The project\(^1\) shall commence before the expiration of 5 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 further information provided under regulation 10(9), the environmental management plan shall:

a. list the mitigation measures that are already identified;

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.

\(^1\) Project as defined in regulation 2
**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 changes 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: July 2003

For and behalf of the
Health and Safety Executive

Signed

M W Weightman

A person authorized to act in that behalf
# Appendix B

## Minimising Environmental Impacts — Decommissioning Proposal Approval Form

### PART 5 – ENVIRONMENTAL SAFETY ASSESSMENT

Both 5.1 and 5.2 are to be categorised individually before an overall environmental category is assigned in 5.3.

---

### 5.2 EIADR 99, ENVIRONMENTAL IMPACT AND OTHER REGULATORY COMPLIANCE

The following checklist must be completed by an Environmental SQEP (with LQ/planning consultation as required). The assessment is for compliance with the EIADR99 Regulations, Planning requirements, non-rad. permits/consents, other relevant legislation and environmental issues including management of land quality.

#### 5.2.1 Decommissioning Baseline

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>CONSIDER POTENTIAL FOR:</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Does this proposed modification represent a change from the Decommissioning Project baseline as described in the EIADR 99 Environmental Impact Assessment Baseline document (in particular, is it sufficient to trigger Regulation 13 determination)? If ‘YES’, (F-871 and F-872, as necessary) in accordance with S-159.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 5.2.2 Planning

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>CONSIDER POTENTIAL FOR:</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Does the proposal involve building or structures construction, external modification or demolition (planning permission)? Does the proposal involve on-site/inter-site disposal/transfer of waste (including stockpiling) in any form? If ‘YES’ confirm if permissions have been agreed, or identify how this will be addressed prior to implementation of proposal.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 5.2.3 Non-radioactive Discharges & Waste

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>CONSIDER POTENTIAL FOR:</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Could the proposal, if inadequately conceived or executed, lead to a breach of an existing Environmental Permit/consent, or other environmental licence/regulatory requirement (e.g. controlled activities Regs, pollution control permit, wildlife management license, PCB registration, marine consent, waste management exemption)?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 5.2.4 Non-radioactive Discharges & Waste

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>CONSIDER POTENTIAL FOR:</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is a change to an existing Environmental/PPC Permit, Licence or Consent or new Environmental Permit or registered waste management licence or exemption required for this proposal?</td>
<td></td>
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</tbody>
</table>

#### 5.2.5 Land Quality

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>CONSIDER POTENTIAL FOR:</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Will the proposed work involve ‘breaking ground’ or otherwise have the potential to affect the sub-surface or controlled waters? If ‘YES’, complete form F-158 in accordance with S-154, and ensure that any required mitigation measures are included in this DPAF.</td>
<td></td>
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</tbody>
</table>

#### 5.2.6 Other Environmental Impacts

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>CONSIDER POTENTIAL FOR:</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Could the proposal, if inadequately conceived or executed, lead to an unacceptable environmental impact? (Consider relevant legislation and formal guidance). If so, appropriate controls/ mitigation must be specified.</td>
<td></td>
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</tr>
</tbody>
</table>

#### 5.2.7 If all answers are ‘NO’ then the proposal is Category E3. If ‘YES’ is answered to any questions above, then assess the environmental impacts and provide further information below.

#### 5.2.8 CONTROL MEASURES AND COMMENTS

Describe the control measures that will be used to ensure that environmental risks are adequately managed. Refer to environmental assessments and BAT studies where appropriate.

---

### 5.2.9 Potential Environmental Category with respect to EIADR 99 Compliance and all other environmental aspects:

<table>
<thead>
<tr>
<th></th>
<th>E1</th>
<th>E2</th>
<th>E3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature</td>
<td></td>
<td></td>
<td></td>
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<td>Date</td>
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</table>

Environment SQEP
## PART 5 – ENVIRONMENTAL SAFETY ASSESSMENT

Both 5.1 and 5.2 are to be categorised individually before an overall environmental category is assigned below.

### 5.3 OVERALL ENVIRONMENTAL ASSESSMENT

To be completed by the NRE, with signatures from Environmental SQEP/PRSLA and EHSS&Q Manager as appropriate.

### 5.3.1 ENVIRONMENTAL JUSTIFICATION / MITIGATION

Refer to control measures under 5.1 and 5.2, make a summary statement. Also consider if there is any conflict between mitigations that need to be addressed or if additional mitigations are required overall.

### 5.3.2 OVERALL ENVIRONMENTAL CATEGORY

The environmental category is determined by reviewing the adequacy of the environmental hazard identification and assessment carried out and consider whether any other relevant aspects of the category definitions given in MCP-099 Appendix 1 are relevant. Select the relevant box below.

Environmental control and mitigation measures required have been identified above and will be incorporated in the design or working methods. Any further Environmental Justifications (e.g. BAT / BPM) should be attached.

**RECOMMENDED ENVIRONMENTAL CATEGORY:**

<table>
<thead>
<tr>
<th></th>
<th>E1</th>
<th>E2</th>
<th>E3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Environment SQEP/PRSLA</td>
<td>Signature:</td>
<td>Date:</td>
</tr>
</tbody>
</table>

For category E1 modifications, two additional signatures are required:

1) Confirm awareness of the modification proposal.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EHSS&amp;Q Manager</strong></td>
<td></td>
<td></td>
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</tbody>
</table>

2) Confirm that the modification proposal has been reviewed by Head of Profession – Environment and that comments / recommendations have been addressed.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NRE</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Stakeholder Engagement

Whilst decommissioning represents a new phase in the lifecycle of the site, Magnox Ltd remains committed to engaging with stakeholders at all phases in the process.

The Site Stakeholder Group (SSG) is an open public meeting. It meets three times a year and is chaired by an independent chairman. Both the Hinkley A, B and C sites are represented and an update is provided on site works. The chair regularly meets with the Hinkley A Site Closure Director and is also in regular contact with the Nuclear Decommissioning Authority (NDA).

The role of the Nuclear Decommissioning Authority (NDA)

The Energy Act (2004, as Amended) requires that the NDA must prepare a strategy for carrying out its functions and from time to time to review that strategy. This strategy must set out the steps that the NDA proposes to take for:

- giving appropriate publicity to its responsibilities and strategy;
- explaining them both to persons having a particular interest in matters relating to the carrying out by the NDA of its functions and to the general public;
- ensuring that the NDA is kept informed at all times of the opinions about such matters of persons having such a particular interest;
- facilitating the communication by such persons of their opinions to the NDA.

The NDA is also required to give encouragement and other support to activities that benefit the social or economic life of communities living near those sites for which it has responsibilities, including Hinkley A.
## Appendix D

### Format of Land Quality Assessment Form

#### QUESTIONS TO BE ADDRESSED WHEN APPROVING PROPOSALS FOR WORK ON SITE

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes/No*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Does the proposed work have any potential for disturbance / mobilisation of existing contaminated ground and/or groundwater?</strong></td>
<td></td>
</tr>
<tr>
<td>1a. Will the proposed work involve ‘breaking ground’ or otherwise have the potential to affect the sub-surface?</td>
<td></td>
</tr>
<tr>
<td>Such work may involve excavations, advancing of boreholes or piles, changes in ground cover, changes to surface water drainage, groundwater abstraction, ground de-watering.</td>
<td></td>
</tr>
<tr>
<td>If the answer to 1a is Yes:</td>
<td></td>
</tr>
<tr>
<td>1b. Is there any existing known or suspected contamination of land (ground and/or groundwater) that could be affected significantly by the proposed work?</td>
<td></td>
</tr>
<tr>
<td>The answer to this question shall be based on the site’s Land Quality Map and related Land Quality Register, noting that indirect effects such as modification of groundwater pathways can mean that work in one area may affect contamination present in another area. If in doubt, consult the Land Quality Technical Lead for the site.</td>
<td></td>
</tr>
<tr>
<td>If the answer to 1b is Yes:</td>
<td></td>
</tr>
<tr>
<td>Give details of the mitigation measures specified to eliminate / mitigate any potential impacts.</td>
<td></td>
</tr>
<tr>
<td>Specified mitigation measures:</td>
<td></td>
</tr>
<tr>
<td>Was specialist advice sought in answering Question 1?</td>
<td></td>
</tr>
<tr>
<td>Give details of who was consulted. Give name and role, e.g. Land Quality Technical Lead or Environmental SQEP:</td>
<td></td>
</tr>
<tr>
<td><strong>2. Does the proposed work have any potential to result in exposure of those undertaking the work to contaminants at levels that should be taken into account in the Method Statements and Risk assessments for the work?</strong></td>
<td></td>
</tr>
<tr>
<td>This question should be answered with reference to the site’s Land Quality Map and related Land Quality Register. If yes, detail the measures to be put in place to provide adequate protection of the workers.</td>
<td></td>
</tr>
<tr>
<td>Specified mitigation measures:</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Was specialist advice sought in answering Question 2?</th>
<th>Yes/ No*</th>
</tr>
</thead>
</table>

Give details of who was consulted. Give name and role, e.g. COSHH Assessor / Accredited Health Physicist:

Assessment prepared by (give name & role and date):

Assessment approved by (give name & role and date):

**Completed form to be filed as appropriate** - e.g. with relevant Decommissioning Proposal Approval Form (DPAF; F-142).

**Unexpected contamination:** Any unexpected contamination identified during the works shall be reported to the Nominated Responsible Engineer, to the site’s Site Land Quality Interface person and to the Land Quality Technical Lead for the site, who will provide initial advice on what action to take and whether to amend the **Land Quality Map** and **Land Quality Register**.

* Delete as applicable
Appendix E

Principles for a Travel 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

- The numbers of individual transport movements will be minimised as far as is reasonably practicable.
- Employees and contractors will be encouraged to use video and teleconferencing facilities as much as possible rather than travelling to other sites for meetings.
- Employees and contractors will be encouraged to share transport (or use public transport) when travelling to and from the Hinkley Point A Site.
- Employees and contractors will be given awareness training on the principles of eco driving to minimise the environmental effects of vehicle emissions.
- Magnox Ltd and its contractors will be required to maintain their vehicles in a good standard of condition.
- When appropriate, vehicles leaving the site will be subject to wheel wash and inspection to ensure that earth and other material is not unduly dispersed.
- On site roads will be swept as necessary to minimise the spread of material off site and/or into drains or watercourses.
- Signage will be provided at site exits to reinforce the contract requirements on vehicle drivers.
- Where practicable, transport distances will be minimised by the use of local disposal sites, recycling companies, etc.
- Most HGV transport movements will be undertaken during normal working hours.
- HGVs will be required to exit the site through the Hinkley Point A main gate and, where appropriate, to follow preferred routes to and from the strategic road network.
- In the event of the need for an abnormal load to be transported, a specific plan for this movement will be developed.