



SUNNICA ENERGY FARM

EN010106

Volume 6

Environmental Statement

6.2 Appendix 16E: Framework Decommissioning Environmental
Management Plan

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and
Procedure) Regulations 2009



Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

Sunnica Energy Farm

**Environmental Statement
Appendix 16E: Framework Decommissioning Environmental
Management Plan**

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1 Introduction

- 1.1.1 This document provides a framework for the Decommissioning Environmental Management Plan (DEMP) for Sunnica Energy Farm (hereafter referred to as 'the Scheme'). A DEMP will be produced for the Scheme following the appointment of a contractor and prior to the start of decommissioning. The DEMP will be prepared in accordance with this Framework DEMP, as a Requirement of the Development Consent Order (DCO).
- 1.1.2 As the Scheme is split across three main areas (i.e. Sunnica East Sites A and B and Sunnica West Site A) (see section 1.4 below) and as decommissioning may be carried out with respect to different parts of the Scheme at different times, there may be more than one DEMP prepared for the Scheme; for example, a DEMP for each of the Sites. This will be determined by the appointed contractor once the detailed decommissioning programme is known.
- 1.1.3 This document does not address construction or operational activities, which are subject to separate environmental management plans and procedures. A Framework Construction Environmental Management Plan (CEMP) has been submitted as part of the DCO Application in **Appendix 16C** of this Environmental Statement (ES) [EN010106/APP/6.2]. A Framework Operation Environmental Management Plan (OEMP) has been submitted as part of the DCO Application in **Appendix 16F** of the ES [EN010106/APP/6.2].
- 1.1.4 An Environmental Impact Assessment (EIA) has been undertaken for the Scheme and an ES has been prepared, in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) (Ref. 1). In accordance with the requirements of the EIA Regulations, the ES contains the assessment of potential impacts on the environment that may be caused during the decommissioning of the Scheme and describes proposed mitigation measures.
- 1.1.5 This Framework DEMP demonstrates how the mitigation measures included within the ES will be implemented. It also sets out the monitoring and auditing activities designed to ensure that such mitigation measures are carried out, and that they are effective.
- 1.1.6 This document provides the likely structure of the DEMP(s) and some outline information relevant to the DEMP(s).
- 1.1.7 The DEMP(s) will be produced in line with this Framework DEMP once the Development Consent Order (DCO) is granted and submitted to the appropriate local planning authorities for approval.
- 1.1.8 The key elements of this Framework DEMP include:
- a. An overview of the Scheme
 - b. Prior assessment of environmental impacts (through the EIA);

- c. Reduction of potential adverse impacts;
 - d. Monitoring of effectiveness of mitigation measures;
 - e. Corrective action procedure; and
 - f. Links to other complementary plans and procedures.
- 1.1.9 In summary, this Framework DEMP will identify how commitments made in the ES will be translated into actions on site during decommissioning and includes a process from implementing the actions through to the allocation of key roles and responsibilities.
- 1.1.10 The contractor will be responsible for working in accordance with the environmental controls documented in the DEMP(s) which will be prepared in accordance with this Framework DEMP, as a requirement of the DCO. The overall responsibility for implementation of the DEMP(s) will lie with the contractor as a contractual responsibility to the Applicant, as the Applicant is ultimately responsible for compliance with the Requirements of the DCO.
- 1.1.11 This Framework DEMP has been designed with the objective of compliance with the relevant environmental legislation, and the mitigation measures set out within the ES.
- 1.1.12 Any additional licences, permits or approvals that are required will be listed in the DEMP(s), including any environmental information submitted in respect of them.

1.2 The Applicant

- 1.2.1 Sunnica Ltd (hereafter referred to as 'the Applicant') has submitted the DCO Application for the construction, operation, and decommissioning of the Scheme. The DCO Application is submitted to the Planning Inspectorate, with the decision of whether to grant a DCO being made by the Secretary of State pursuant to the Planning Act 2008 (Ref. 2).

1.3 The Order limits

- 1.3.1 The Order limits comprise the Sites (Sunnica East Site A, Sunnica East Site B and Sunnica West Site A). The Order limits include the associated electrical infrastructure for connection to the national transmission system, comprising Grid Connection Route A and Grid Connection Route B. Grid Connection Route A will run from Sunnica East Site A to Sunnica East Site B, and from there to Sunnica West Site A. Grid Connection Route B will run from Sunnica West Site A to Burwell National Grid Substation. Each is located within the following administrative areas:
- a. Sunnica East Site A: both East Cambridgeshire District Council (ECDC) and West Suffolk Council (WSC);
 - b. Sunnica East Site B: WSC;
 - c. Sunnica West Site A: ECDC;
 - d. Grid Connection Route A: WSC and ECDC;
 - e. Grid Connection Route B: ECDC; and

- f. Burwell National Grid Substation: ECDC.
- 1.3.2 The maximum area of land potentially required for the construction, operation (including maintenance), and decommissioning of the Scheme, which includes land required for permanent and temporary purposes, is shown on the Works Plan [EN010106/APP/6.2].
- 1.3.3 The DEMP(s) will include (as relevant depending on the part of the Scheme covered by the DEMP) plans showing the land within each administrative area, plans illustrating the Scheme, the Works Areas and Schedule 1 of the DCO.
- 1.4 The Scheme**
- 1.4.1 The Sunnica East Site A, Sunnica East Site B and Sunnica West Site A will consist of the same principal infrastructure. The principal infrastructure and the cable route are presented in **Chapter 3: Scheme Description** of the Environmental Statement [REP2-022].

2 Decommissioning Environmental Management

2.1 Decommissioning Activities

- 2.1.1 All equipment located on the Sites will be removed and recycled or disposed of in accordance with good practice at the time. The 400kV cables along the cable route will remain in situ following decommissioning, unless legislation at the time requires otherwise.
- 2.1.2 The effects of decommissioning are similar to, or often of a lesser magnitude than construction effects. These are considered in the relevant sections of the ES. However, there can be a high degree of uncertainty regarding decommissioning as engineering approaches and technologies are likely to change over the operational life of the Scheme.

2.2 Decommissioning Programme

- 2.2.1 The Scheme will be decommissioned after 40 years of operation, with decommissioning assumed to be not earlier than 2065, although some parts of the Scheme may be decommissioned earlier. A worst case of a 24 month period for decommissioning has been assumed for the purposes of the ES.
- 2.2.2 More details on the decommissioning phasing will be provided within the DEMP(s), prior to decommissioning commencing.

2.3 Working Hours

- 2.3.1 Core decommissioning working hours on Site will run from 07:00 to 19:00 Monday to Saturday, with working days as one 12-hour shift, with employees travelling to and from Site outside of these times. Where on-site works are to be conducted outside the core working hours, they will comply with the restrictions stated in the relevant DEMP, and any other restrictions agreed with the relevant planning authorities pursuant where relevant to the section 61 (or any other replacement) process.

2.4 Control of Noise

2.4.1 Applications for Section 61 consents, variations and dispensations under the Control of Pollution Act 1974 (COPA), or equivalent process at the time if this process has been superseded, will be submitted to the relevant local planning authority for decommissioning activities.

2.5 Control of Light

2.5.1 Temporary site lighting during decommissioning may be required in areas where natural lighting is unable to reach (sheltered/confined areas) and during core working hours within winter months. Artificial lighting will be provided to maintain sufficient security and health and safety for the Site, whilst adopting mitigation principles to avoid excessive glare, and minimise light spill to nearby receptors (including ecology and residents), outside of the Order limits as far as reasonably practicable.

2.5.2 All temporary lighting will be deployed in accordance with the following commitments to prevent or reduce the impact on human and ecological receptors:

- a. The use of lighting will be minimised to that required for safe site operations;
- b. Lighting will utilise directional fittings to minimise outward light spill and glare (e.g. via the use of light hoods/cowls which direct light below the horizontal plane, preferably at an angle greater than 20° from horizontal); and
- c. Lighting will be directed towards the middle of the Site rather than towards the boundaries.

2.6 Traffic Management

2.6.1 During decommissioning, the contractor will ensure that the impacts from decommissioning traffic on the local community (including local residents and businesses and users of the surrounding transport network) are minimised, where reasonably practicable, by implementing the measures set out in **Chapter 13: Transport and Access** of this Environmental Statement [APP-045] and **Appendices 13B [APP-117] and 13C [EN010106/APP/6.2]**. These are included within **Table 3-8**.

2.6.2 The final Decommissioning Traffic Management Plan (DTMP) will be developed by contractor prior to decommissioning in consultation with the appropriate local planning authorities. This will include a Decommissioning Worker Travel Plan (DWTP) to utilise sustainable modes of transport for journeys to and from the site where possible. Both the DTMP and DWTP will use, as their starting point, the measures detailed in **Appendix 13C: Framework Construction Traffic Management Plan (CTMP) and Travel Plan** of this Environmental Statement [EN010106/APP/6.2] updated to reflect the circumstances prevailing during the period in which decommissioning is to be carried out.

2.7 Parking Provisions

- 2.7.1 It is anticipated there will be two central car parking areas within the Order limits and off the main access routes during decommissioning. Workers will utilise these two car parks and will be transported to the various locations within the Order limits via minibus. The approach to be used during decommissioning will be similar to that adopted during construction, of which further details are provided in **Appendix 13C: Framework CTMP and Travel Plan** of this Environmental Statement [EN010106/APP/6.2].
- 2.7.2 A self-contained wheel wash facility will be installed for use by vehicles prior to exiting the Site onto the public highway. For loads unable to use the fixed wheel wash facility, localised wheel washing will be set up to ensure no detrimental effect to the highway.
- 2.7.3 Both the DTMP and the DWTP will use, as their starting point, the measures detailed in **Appendix 13C: Framework CTMP and Travel Plan** of this Environmental Statement [EN010106/APP/6.2] updated to reflect the circumstances prevailing during the period in which decommissioning is to be carried out.

2.8 Recycling and Disposing of Waste

- 2.8.1 In order to control the waste generated on-site and removal of materials, the contractor will separate the main waste streams on-site, prior to transport to an approved, licensed third party waste facility for recycling or disposal.
- 2.8.2 Prior to the decommissioning works commencing, a Decommissioning Resource Management Plan (DRMP) will be prepared by the contractor, which will specify the waste streams to be estimated and monitored and goals set with regards to the waste produced.
- 2.8.3 All waste to be removed from the Order limits will be undertaken by fully licensed waste carriers and taken to licensed waste facilities for recycling or disposal.

2.9 Security

- 2.9.1 Site security during decommissioning will be managed by the contractor. The site security fencing will remain in place throughout the duration of the decommissioning period and will be the last feature to be removed from the Scheme. Any storage of materials would be kept secure to prevent theft or vandalism. A safe system for accessing the materials storage areas would be implemented by the contractor.

2.10 Best Practice Measures

- 2.10.1 The Considerate Constructors Scheme (CCS) will be adopted to assist in reducing pollution and nuisance from the decommissioning of the Scheme, by employing best practice measures which go beyond statutory compliance, where relevant to decommissioning.

2.11 Retention of OLEMP Measures

- 2.11.1 As part of the detailed DEMP, the undertaker must include a schedule setting out details of the landscape and ecological mitigation and enhancement measures that have been put in place as a result of the detailed LEMPs ('Measures') which relate to the land that is the subject of the detailed DEMP including an assessment of the landscape function and ecological interest of those measures.
- 2.11.2 The detailed DEMP must include:
- a. a commitment that all landscape and ecological mitigation and enhancement Measures mentioned in the schedule will not be removed by the undertaker at the time of decommissioning the phase of the scheme that is the subject of the detailed DEMP;
 - b. the identification in the schedule referred to above of (a) the Measures that would serve a continuing landscape function after decommissioning is complete and which may benefit from long term retention; and (b) the Measures that would not serve a continuing landscape function after decommissioning is complete and which therefore would not need to be retained in the long term;
 - c. the identification in the schedule referred to above of (a) the ecological Measures which would serve a continuing ecological interest of at least a county scale (with reference to CIEEM guidelines) and which may benefit from long term retention; and (b) the Measures that would not serve a continuing ecological interest of at least a county scale (with reference to CIEEM guidelines) after decommissioning is complete and which therefore would not need to be retained in the long term; and
 - d. in the case of Measures identified in the schedule as benefiting from long term retention, the Applicant's proposals for means by which such long term retention might be secured for a period of 25 years after decommissioning is complete and, where relevant, the process for which any alterations or removal of the Measures identified in the schedule for long term retention could be undertaken.
- 2.11.3 The detailed DEMP will not identify for retention any grassland planting within the areas identified for solar development.
- 2.11.4 The detailed DEMP will also be able to include the following statement:
- a. *'It shall not be a breach of this DEMP for the owners (and their lessees, occupiers and tenants) and successors in title of the land that is the subject of this DEMP to fell, lop, or remove any:*
 - i. *grassland; or*
 - ii. *the Measures identified as not needing to be retained in the long term on the land that is the subject of this DEMP.*

3 Management and Mitigation Plan

3.1 Purpose

3.1.1 This section sets out the mitigation and management measures to be included as a minimum in the DEMP(s). It also sets out monitoring requirements and the responsible party identified for each mitigation measures or monitoring requirement. This section will be updated and further developed as part of the preparation of the DEMP(s).

Table 3-1 Climate Change

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
Greenhouse Gas (GHG) emissions from decommissioning traffic and equipment. Use of natural resources. Increased greenhouse gas emissions.	Appropriate standard and best practice control measures will be included in the DEMP(s), which will include: <ul style="list-style-type: none"> Increasing recyclability by segregating decommissioning waste to be reused and recycled where reasonably practicable; Disposing of wastes locally where reasonably practicable to reduce emissions associated with transportation; Conducting regular planned maintenance of the decommissioning plant and machinery to optimise efficiency; Reusing suitable infrastructure already available in the Order limits where possible to minimise the use of natural resources and unnecessary materials (e.g. reusing excavated soil for fill requirements); Liaising with decommissioning personnel for potential to implement low carbon transport options; Implementing a Travel Plan to reduce the volume of decommissioning staff and employee trips to the Scheme; and Switching vehicles and plant off when not in use and ensuring decommissioning vehicles conform to emissions standards in place at the time. 	To be confirmed by the contractor in the DEMP(s)	The overall responsibility will be with the contractor. Specific responsibilities will be confirmed in the DEMP(s)

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>The following measures are required to ensure safety of staff from increased flood risk on-site due to climate change:</p> <ul style="list-style-type: none"> • Storing topsoil and other materials outside of the 1 in 100-year floodplain extent (Flood Zone 3); • Appointing at least one designated Flood Warden who is familiar with the risks and remains vigilant to news reports, Environment Agency flood warnings and water levels of the local waterways; and • Health and safety plans will be required to account for potential climate change impacts on workers, such as flooding and heatwaves. 		

Table 3-2 Cultural Heritage

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
Decommissioning will not have any impact beyond the already-disturbed footprint of the Scheme; therefore, it is not anticipated that decommissioning activities will have a direct physical impact upon archaeological remains.	No previously undisturbed land will be disturbed within the Sites to deliver the decommissioning activities.	N/A	N/A
Ensuring Archaeological	Updated HEMP Method Statements will be provided as part of the DEMP, such method statements to be consistent with the principles of the OHEMP.	To be set out in the HEMP	Contractor

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
Protection Areas remain protected during decommissioning works		method statements.	
B50 Bomber memorial	The B50 Bomber memorial will be removed from the Permissive Path adjacent to E05, unless the landowner agrees the dedication of the path.	N/A	Contractor

Table 3-3 Biodiversity

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>Potential for obtrusive glare and light spill to impact on ecology.</p> <p>Potential for spillages to enter watercourses and impact ecology.</p> <p>Clearance or damage of habitat to facilitate decommissioning – resulting in temporary reduction in</p>	<p>Ecological Clerk of Works</p> <ul style="list-style-type: none"> A team of licensed Ecological Clerk of Works (ECoW) will be employed/contracted to advise on relevant environmental commitments, the findings of the updated surveys, protected species licencing requirements and with reference to the relevant project programmes. Prior to the start of decommissioning in each relevant part of the Order limits, site walkover surveys will be undertaken by an ecologist to confirm the baseline and presence of protected/notable species, including Stone Curlew. This will inform the correct implementation of impact avoidance measures (e.g. protected species stand-offs). The scope of the required walkovers will be defined on a case by case basis, in consultation with ECDC and WSC or other relevant statutory consultees as necessary, based on the specific risks. Relevant site staff will receive toolbox talks on the ecological risks present, legal requirements and working arrangements necessary to comply with legislation. Toolbox talks will be repeated as necessary over the duration of the relevant works. A display board will be installed on-site and a website will be set up. These will include contact details for the Site Manager or alternative public interface with whom nuisance 	<p>A site walkover will be undertaken in advance of mobilisation/any potential advance works to re-confirm the ecological baseline conditions and to identify any new ecological risks.</p> <p>Updated species surveys, including bats, great crested newt, breeding birds, otter, water vole</p>	<p>The overall responsibility will be with the contractor. Specific responsibilities will be confirmed in the DEMP(s).</p>

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>habitat extent and potential direct and indirect effects on associated species.</p> <p>Dust deposition on sensitive ecological receptors.</p> <p>Potential loss of an area of grassland within the Order limits which will be utilised as the decommissioning laydown area.</p>	<p>or complaints can be lodged. A log book of complaints will be prepared and managed by the Site Manager.</p> <p>Working Methods to avoid and minimise impacts on protected/ notable species and existing habitats</p> <p>The following precautionary working methods will be employed to minimise potential adverse effects on protected/notable species prior to, and during, decommissioning:</p> <ul style="list-style-type: none"> • Measures to prevent and minimise dust creation and air pollution will be adopted throughout decommissioning. Please refer to Table 3-9 for the measures employed to minimise effects on air quality; • Measures to prevent pollution incidents will be adopted throughout decommissioning. Please refer to Table 3-4 for the measures employed to avoid pollution events with respect to water quality; • Measures to minimise effects on ecology from noise and vibration will be adopted throughout decommissioning. Please refer to Table 3-6 for the measures employed to minimise noise and vibration; • Pre-commencement surveys for habitats and protected/notable species will be undertaken in advance of the works commencing; • The presence of nesting Stone Curlew will be confirmed through the pre-commencement site surveys; • Reasonable avoidance measures to avoid impact on protected species such as badgers and bats will be employed, including buffers of 30m around any identified badger setts and 15m buffer around trees with bat roost potential; • Decommissioning activities will avoid areas of high-quality habitat, such as mature trees and woodland/wetland habitats associated with Local Wildlife Sites (LWS) surrounding the Order limits; • Retained trees adjacent to decommissioning working areas will be protected by clearly defined root protection zones to prevent damage/compaction of roots by plant and other machinery; 	<p>and badger, will be completed as appropriate to re-confirm the status of protected species identified, to inform mitigation requirements and support protected species licence applications, if required by Natural England, the Council(s) and ECoW.</p> <p>Such surveys will be undertaken sufficiently far in advance of decommissioning works to account for seasonality constraints and to allow time for the implementation of any necessary mitigation, prior to decommissioning.</p>	

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> • Where reasonably practicable, vegetation clearance works will be undertaken outside the bird breeding season, which is generally between March and August inclusive. Where this is not reasonably practicable, an ecologist will inspect all areas of vegetation prior to clearance, and clearance will only be undertaken subject to the instruction and requirements of the ecologist to protect any birds and their nests; • Reasonable avoidance measures will be used during clearance of any habitat suitable for reptiles, to minimise the risk of direct impacts including phased clearance of vegetation to gradually reduce suitability for reptiles, thereby encouraging animals to move away from affected areas into adjacent suitable habitat; • Cleared ground will be maintained in a disturbed state in the run-up to decommissioning commencing to minimise the risk of ground nesting birds attempting to nest on cleared ground; • Precautionary measures will be implemented to prevent trapping wildlife in excavations in order to ensure compliance with animal welfare legislation. All excavations deeper than 1m will be covered or fenced overnight, or where this is not practicable, a means of escape will be fitted (e.g. battened soil slope or scaffold plank) to provide an escape route should any animals stray into the site and fall into an excavation; • No works will be undertaken within 10m of watercourses; • A Biosecurity Management Plan will be prepared. This will set out procedures to ensure any imported materials are free from invasive non-native species (e.g. Schedule 9 species), and to prevent any spread of invasive non-native species within the Order limits from the decommissioning works; • Implementation of measures to avoid animals being injured or killed within construction working areas, through excluding them from such areas and preventing them falling into and becoming trapped in excavations; • The crossing of watercourses will be avoided where the presence of Otter and Water Vole have been determined through the pre-commencement surveys for decommissioning; • Avoidance of decommissioning traffic through designated sites; and 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> Where invasive non-native species have been identified, e.g. Lee Brook, no in-channel works will be undertaken to avoid the spread of invasive non-native species. <p>Lighting</p> <p>Controls on lighting/illumination to minimise visual intrusion and potential adverse effects on sensitive ecology, such as bats, will be considered as far as reasonably practicable and will be designed to be aligned with Bat Conservation Trust guidance as far as is reasonably practicable. Details of bat flight lines and suitable habitat is provided within Chapter 8: Ecology and Nature Conservation of this Environmental Statement [APP-040]; these areas will be identified prior to decommissioning of the Scheme and will need to be confirmed during pre-commencement surveys prior to decommissioning. Controls on lighting and illumination will be implemented in these specific locations. Temporary decommissioning site lighting will be designed as far as reasonably practicable so as to minimise artificial light spill from the Site.</p>		

Table 3-4 Flood Risk, Drainage and Water Resources

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
Leakage or accidental spillage of materials and potential pollutants used on-site, migrating to nearby surface watercourses or infiltrating to groundwater.	<p>General</p> <p>The contractor will comply with:</p> <ul style="list-style-type: none"> Guidance for Pollution Prevention (GPP) 2 Above ground oil storage tanks (Ref. 3); GPP 4 Treatment and disposal of wastewater where there is no connection to the public foul sewer (Ref. 4); GPP 5 Works and maintenance in or near water (Ref. 5); GPP 8 Safe storage and disposal of used oils (Ref. 6); and GPP 21 Pollution incident response planning (Ref. 7). 	Water quality monitoring of potentially impacted watercourses will be undertaken to ensure that pollution events can be detected against	The overall responsibility will be with the contractor. Specific responsibilities will be confirmed in the DEMP(s).

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>Any flooding during decommissioning could flood equipment and materials, causing release of pollutants to nearby surface watercourses or infiltrating to groundwater.</p> <p>Impacts on workers during decommissioning from extreme weather.</p>	<p>Requirements set out in the above guidance (and any other relevant guidance available at the time of decommissioning) will be listed in or appended to the DEMP(s).</p> <p>A Water Management Plan (WMP) will be prepared to document the mitigation measures to be implemented to protect the water environment from adverse effects during decommissioning.</p> <p>Local watercourses are shown in Figure 9-1 of this Environmental Statement [AS-011].</p> <p>Management of Decommissioning Site Runoff</p> <p>Mitigation measures for managing site runoff during decommissioning are described in detail below and will be adhered to during the decommissioning phase of the Scheme.</p> <p>The measures outlined below will be required for the management of fine particulates in surface water runoff as a result of the decommissioning activities:</p> <ul style="list-style-type: none"> • All reasonably practicable measures will be taken to prevent the deposition of fine sediment or other material in, and the pollution by sediment of, any existing watercourse, arising from decommissioning activities. The measures will accord with the principles set out in industry guidelines including the CIRIA report 'C532: Control of water pollution from construction sites' and CIRIA report C648 Control of water pollution from linear construction sites'. Measures may include use and maintenance of temporary lagoons, tanks, bunds and fabric silt fences or silt screens as well as consideration of the type of plant used; • A temporary drainage system will be developed to prevent runoff contaminated with fine particulates from entering surface water drains without treatment. This will include ensuring that all land drains and watercourses within the Sites are adequately protected using drain covers, sand bags, earth bunds, geotextile silt fences, straw bales, or proprietary treatment (e.g. lamella clarifiers); • The relevant sections of BS 6031: Code of Practice for Earthworks will be followed for the general control of site drainage; • Where practical (and where needed), earthworks will be undertaken during the drier months of the year. When undertaking earth moving works periods of very wet weather will be avoided, where practical, to minimise the risk of generating runoff contaminated with fine particulates. However, it is likely that some working during wet weather periods will be 	<p>baseline conditions and can be dealt with effectively.</p> <p>To be confirmed in DEMP(s).</p>	

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>unavoidable, in which case other mitigation measures (see below) will be implemented to control fine sediment laden runoff. Water may also be required to dampen earthworks during dry weather to reduce dust impacts, and any runoff generated will need to be appropriately managed by the contractor in accordance with the pollution prevention principles described in this chapter;</p> <ul style="list-style-type: none"> • To protect watercourses from fine sediment runoff, topsoil/subsoil will be stored a minimum of 20m from watercourses on flat lying land. Where this is not practicable, and it is to be stockpiled for longer than a two-week period, the material will either be covered with geotextile mats, seeded to promote vegetation growth, or runoff prevented from draining to a watercourse without prior treatment; • Appropriately sized runoff storage areas for the settlement of excessive fine particulates in runoff will be provided. Site runoff will be treated on site and discharged under a water discharge activity permit from the Environment Agency to Controlled Waters (potentially also including infiltration to ground); • Equipment and plant are to be washed out and cleaned in designated areas within the site compound where runoff can be isolated for treatment before disposal as outlined above; • Mud deposits will be controlled at entry and exit points to the Sites using wheel washing facilities and / or road sweepers operating during earthworks activities or other times as required; • Debris and other material will be prevented from entering surface water drainage, through maintenance of a clean and tidy site, provision of clearly labelled waste receptacles, grid covers and the presence of site security fencing; and • The WMP will include details of water quality monitoring. This will be based on a combination of visual observations and reviews of the Environment Agency's automatic water quality monitoring network. <p>Management of Spillage Risk</p> <p>The measures outlined below will be implemented to manage the risk of accidental spillages on site and potential conveyance to nearby waterbodies via surface runoff or land drains.</p>		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>The following mitigation measures relating to the control of spillages and leaks will be included in the DEMP and adopted during the decommissioning works:</p> <ul style="list-style-type: none"> • Fuel will be stored and used in accordance with the prevailing regulations; currently the Control of Substances Hazardous to Health Regulations 2002, and the Control of Pollution (Oil Storage) (England) Regulations 2001; • Fuel and other potentially polluting chemicals will either be in self bunded leak proof containers or stored in a secure impermeable and bunded area (minimum capacity of 110% of the capacity of the containers); • Any plant, machinery or vehicles will be regularly inspected and maintained to ensure they are in good working order and clean for use in a sensitive environment. This maintenance is to take place off site if possible or only at designated areas within the site compound. Only equipment and vehicles free of all oil/fuel leaks will be permitted on site. Drip trays will be placed below static mechanical plant; • It is considered unlikely that the Scheme will require a high number of trips requiring the transportation of hazardous loads; however, all vehicles carrying hazardous loads for Scheme construction will be required to follow the regulations set out in the Health and Safety Executive's (HSE) Carriage of Dangerous Goods (Ref. 11); • Drivers must ensure that hazardous loads are always accompanied by a transport document which sets out detailed information on the load being carried, including full classification of any substances carried and how to package them; the transport document must include: <ul style="list-style-type: none"> – Information for each dangerous substance, material or article being carried; – Emergency instructions in writing; and – Means of identification, including a photograph of each member of the vehicle crew. • All drivers of vehicles carrying hazardous loads must be appropriately trained, so that they: <ul style="list-style-type: none"> – Are aware of the hazards in the carriage of hazardous loads; – Can take steps to reduce the likelihood of an incident taking place; 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> – Can take all necessary measures for their own safety and that of the public and the environment to limit the effects of any incident that does occur; and – Have individual practical experience of the actions they will need to take. • All washing down of vehicles and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses; • All refuelling, oiling and greasing will take place above drip trays or on an impermeable surface which provides protection to underground strata and watercourses, and away from drains as far as reasonably practicable. Vehicles will not be left unattended during refuelling; • As far as reasonably practicable, only biodegradable hydraulic oils will be used in equipment working in or over watercourses; • All fixed plant used on the site will be self-bunded; • Mobile plant is to be in good working order, kept clean and fitted with plant 'nappies' at all times; • The WMP will include details for pollution prevention and will be prepared and included alongside the DEMP(s). Spill kits and oil absorbent material will be carried by mobile plant and located at high risk locations across the Sites and regularly topped up. All workers will receive spill response training and tool box talks; • The site will be secured to prevent any vandalism that could lead to a pollution incident; • Decommissioning waste / debris are to be prevented from entering any surface water drainage or water body; • Surface water drains on public roads trafficked by plant or within the compound will be identified and, where there is a risk that fine particulates or spillages could enter them, the drains will be protected (e.g. using covers or sand bags) or the road regularly cleaned by road sweeper; and • Water quality monitoring of potentially impacted watercourses will be undertaken to ensure that pollution events can be detected against baseline conditions and can be dealt with effectively. 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>In addition, any site welfare facilities will be appropriately managed, and all foul waste disposed of by an appropriate contractor to a suitably licenced facility.</p> <p>Management of Flood Risk</p> <p>Decommissioning works undertaken adjacent to, beneath and within watercourses will comply with Environment Agency and Defra guidance documents.</p> <p>The DEMP(s) will incorporate measures aimed at preventing an increase in flood risk during the decommissioning works. Examples of measures that will be implemented within the Scheme area include:</p> <ul style="list-style-type: none"> • Topsoil and other materials will be stored outside of the 1 in 100-year floodplain extent. If areas located within Flood Zone 2 are to be utilised for the storage of materials, this will be done in accordance with the applicable flood risk activity regulations, if required; • Connectivity will be maintained between the floodplain and the adjacent watercourses, with no changes in ground levels within the floodplain; • During the decommissioning phase, the contractor will monitor weather forecasts on a monthly, weekly and daily basis, and plan works accordingly; and • The laydown area site office and supervisor will be notified of any potential flood occurring by use of the Floodline Warnings Direct or equivalent service. <p>As part of the DEMP the appointed contractor will be required to produce an Emergency Response Plan which will provide details of the response to an impending flood and include:</p> <ul style="list-style-type: none"> • A 24 hour availability and ability to mobilise staff in the event of a flood warning; • The removal of all plant, machinery and material capable of being mobilised in a flood for the duration of any holiday close down period where there is a forecast risk that the site may be flooded; • Details of the evacuation and site closedown procedures; • Arrangements for removing any potentially hazardous material and anything capable of becoming entrained in floodwaters, from the temporary works areas; • The contractor will sign up to Environment Agency flood warning alerts and describe in the Emergency Response Plan the actions it will take in the event of a flood event occurring. 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>These actions will be hierarchal meaning that as the risk increases the contractor will implement more stringent protection measures;</p> <ul style="list-style-type: none"> • If water is encountered during below ground works (e.g. removal of foundations), suitable dewatering methods will be used. Any groundwater dewatering required in excess of the exemption thresholds will be undertaken in line with the requirements of the Environment Agency (under the Water Resources Act 1991 as amended) and the Environmental Permitting Regulations (2016); and • Safe egress and exits are to be maintained at all times when working in excavations. When working in excavations a banksman is to be present at all times. <p>Increased flood risk due to climate change</p> <ul style="list-style-type: none"> • Appointing at least one designated Flood Warden who is familiar with the risks and remains vigilant to news reports, Environment Agency flood warnings and water levels of the local waterways; and • Health and safety plans developed for decommissioning activities will be required to account for potential climate change impacts on workers, such as flooding and heatwaves. 		

Table 3-5 Landscape and Visual Amenity

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>Potential loss of vegetation to make way for decommissioning activities</p> <p>Visibility of decommissioning activities</p>	<p>The OLEMP (Appendix 10I of this Environmental Statement [EN010106/APP/6.2]) sets out the measures proposed to mitigate the potential impacts and effects on landscape (and biodiversity) features, and to enhance the landscape and biodiversity value of the Order limits (i.e. the green infrastructure). A LEMP will be prepared in accordance with the OLEMP following detailed design.</p> <p>The DEMP(s) should be required to take into account measures contained within the detailed LEMP. A pre-commencement survey of vegetation prior to</p>	<p>A pre-decommissioning arboricultural survey in line with BS5837:2012 (Ref. 8) will be undertaken prior to decommissioning,</p>	<p>The overall responsibility will be with the contractor. Specific responsibilities will be confirmed in the DEMP(s).</p>

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>decommissioning will need to be undertaken to establish the extent to which any vegetation removal will be needed.</p> <p>Measures proposed to mitigate potential effects on landscape during decommissioning include:</p> <ul style="list-style-type: none"> • To protect and retain existing trees and vegetation via decommissioning exclusion zones and tree protective fencing (see below Tree Works); • Lighting at the minimal levels of lux and luminance as necessary during the temporary lighting (see below); • Landscape and biodiversity management and enhancement measures including replacement tree planting (where relevant); • Landscape, arborists and ECoW to ensure that the landscape and ecology requirements of the DEMP(s) are adhered too and that the works are monitored; and • The perimeter security fence around the Scheme will remain in place until the end of the decommissioning phase to retain site security. <p>Tree Works</p> <ul style="list-style-type: none"> • A pre-decommissioning tree survey will be required prior to decommissioning to establish the baseline prior to starting works. This survey will inform the tree protection zones to be applied during decommissioning. The findings of this will be included within an Arboriculture Report, which will be accompanied by an Arboriculture Method Statement which will set out mitigation and protection measures to be undertaken. • Where works in close proximity to retained trees cannot be practically avoided, these works will be undertaken in accordance with current best practice, defined in British Standard (BS) 5837: 2012 Trees in relation to design, demolition and construction – Recommendations and National Joint Utilities Group (NJUG) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Ref. 8). 	<p>to identify where trees are likely to be affected by the decommissioning works.</p>	

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> All necessary protective fencing will be installed prior to the commencement of any site decommissioning works. <p>Lighting</p> <p>Temporary site lighting during decommissioning required to enable safe working during hours of darkness will be designed as far as reasonably practical so as not to cause a nuisance outside of the Sites. Standard best practice measures will be employed to minimise light spill, including glare.</p>		

Table 3-6 Noise and Vibration

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>Vibration due to decommissioning activities potentially causing annoyance at Noise Sensitive Receptors (NSR) and damage to building structures.</p> <p>Decommissioning traffic, plant and machinery noise at nearby NSR.</p>	<p>Best Practicable Means (BPM) will be applied, as far as reasonably practicable, during decommissioning works to minimise noise and vibration at NSRs, including, neighbouring residential properties and other sensitive receptors arising from decommissioning activities; including, as appropriate:</p> <ul style="list-style-type: none"> Ensuring that all appropriate processes, procedures and measures are in place to minimise noise before works begin and throughout the decommissioning programme; All contractors to be made familiar with current legislation and the guidance in BS 5228 (Parts 1 and 2) which should form a prerequisite of their appointment; Ensuring that, where reasonably practicable, noise and vibration is controlled at source (e.g. the selection of inherently quiet plant and low vibration equipment), review of the decommissioning programme and methodology to consider quieter methods, consideration of the location of equipment on-site and control of working hours; Use of modern plant, complying with applicable UK noise emission requirements; 	<p>Section 61 consents – or equivalent if superseded - will be obtained by the appointed contractor.</p> <p>Noise monitoring will be undertaken throughout decommissioning. Requirements including monitoring locations and noise monitoring methods and frequency to be employed will be determined by the contractor and</p>	<p>The overall responsibility will be with the contractor. Specific responsibilities will be confirmed in the DEMP(s).</p>

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> • Hydraulic techniques for breaking to be used in preference to percussive techniques, where reasonably practicable; • Drop heights of materials will be minimised; • Unnecessary revving of engines will be avoided, and equipment will be switched off when not in use; • Plant and vehicles will be sequentially started up rather than all together; • Use of screening locally around significant noise producing plant and activities. Screening would be designed to minimise landscape and visual impacts; • Regular and effective maintenance by trained personnel will be undertaken to keep plant and equipment working to manufacturer's specifications; • All decommissioning plant and equipment to be properly maintained, silenced where appropriate, operated to prevent excessive noise and switched off when not in use; • Loading and unloading of vehicles, dismantling of site equipment or moving equipment or materials around the Sites to be conducted in such a manner as to minimise noise generation, as far as reasonably practicable; • All vehicles used on-site shall incorporate reversing warning devices as opposed to the typical tonal reversing alarms to minimise noise disturbance where reasonably practicable; • Appropriate routing of decommissioning traffic on public roads and along access tracks pursuant to the DTMP; • Section 61 (or any relevant replacement statutory scheme) Consents would be obtained which would include agreed construction noise limits for nearby noise sensitive receptors; • Provision of information to ECDC and WSC and local residents to advise of potential noisy works that are due to take place; • Monitoring of noise complaints and reporting to the Applicant for immediate investigation and action. A display board will be installed on-site and a website will 	<p>agreed pursuant to the section 61 (or any replacement statutory scheme) process.</p> <p>The DEMP will also set out a scheme for the provision of monthly reporting information to local residents to advise of potential noisy works that are due to take place. The DEMP will also set out a scheme for the monitoring of noise complaints and reporting for immediate investigation and action.</p> <p>Further details are to be confirmed in the DEMP(s).</p>	

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>be set up. These will include contact details for the Site Manager or alternative public interface with whom nuisance or complaints can be lodged. A log book of complaints will be prepared and managed by the Site Manager; and</p> <ul style="list-style-type: none"> • Consideration will also be given to traffic routing, timing and access points to the Sites to minimise noise impacts at existing receptors following appointment of a principal contractor, and as decommissioning working methods are developed. Contractors will issue a project route map and delivery/removal schedule to control decommissioning traffic. Management of HGVs within the site and being let onto the highway network will be managed through a DTMP. • Engagement will be undertaken with equestrian groups on scheduling of decommissioning activities with potential for generating high levels of noise in the vicinity of public rights of ways or other highways frequently used by horse riders. 		

Table 3-7 Socio-Economics and Land Use

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>Impacts on soil</p> <p>Disruption to users of Public Rights of Way</p> <p>Disruption to local residents, businesses and community facilities</p>	<p>Agricultural soils will be managed, preserved, retained and reinstated in accordance with Department for Environment, Food and Rural Affairs (Defra) guidance. Key mitigation measures from this guidance will be included in the DEMP(s).</p> <p>The DEMP will include a Soil Management Plan (SMP) providing guidance on handling of soil material, specific to the soil resource present. This will serve to conserve soil volume and functional capacity for beneficial reuse, from the small areas where soil will be stripped. Conserving soil volume and functional capacity will prevent any loss of ALC grade on land with reinstated soils, when compared to the current baseline. A suitably qualified soil scientist should be appointed to ensure decommissioning work complies with the SMP guidance.</p>	<p>Record rainfall, assessment of soil consistence and the suspension of soil disturbance while plastic.</p> <p>Monitor temporary diversions of PRowS during the decommissioning</p>	<p>To be included in the DEMP(s).</p>

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>As for the solar PV deployment, removal of the solar panels and associated infrastructure will involve trafficking of vehicles over the grassed soil surface. Such work would only take place when the topsoil is below (drier than) the plastic limit.</p> <p>Following removal of hard standing such as switchgear housings and access tracks, the newly exposed subsoil would be loosened then lightly consolidated by a toothed excavator bucket to a depth of 30cm prior to the replacement of topsoil. A grass cover would then be established and the land maintained under grass (grazed or mowed) for three years prior to any return to arable production. An aftercare period will not be necessary for the majority of the Scheme where soil has remained in situ, as the extended period of time under grass would leave the soil profile in better structural condition than that found under the current arable production.</p> <p>On completion of decommissioning works the site is to be inspected by a soil scientist to check for the presence of subsoil compaction, with particular focus on areas such as haul routes over in situ soil and the locations of livestock troughs and handling pens. The landowners would be encouraged to inspect the site themselves prior to the soil scientist visit to identify any areas where they have heightened concern.</p> <p>Where problematic compaction is found the area would be subsoiled prior to any reestablishment of arable production.</p> <p>Temporary closures of Public Rights of Way will be supported by appropriate and clearly signed existing alternative routes and where possible will be planned and programmed to minimise disruption to users. Further details will be included in the DEMP(s).</p> <p>Measures to mitigate the effects of decommissioning noise are outlined in Table 3-6 of this document.</p> <p>Measures to mitigate the effects of visual impacts from decommissioning are outlined in Table 3-5 of this document.</p> <p>Measures to mitigate the effects of decommissioning traffic are outlined in Table 3-8 of this document.</p>	<p>phase to ensure they are suitable and well maintained for use.</p>	

Table 3-8 Transport and Access

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>The effect of the decommissioning phase on transport and access is anticipated to be the same or less than construction effects.</p> <p>Increased traffic flows, including HGVs on the roads leading to the Sites.</p> <p>Severance and intimidation associated with increased decommissioning traffic and abnormal loads.</p>	<p>A DTMP will be produced prior to decommissioning. This will be similar in structure and will contain similar measures to those set out in the CTMP produced prior to decommissioning to manage traffic. Appendix 13C: Framework CTMP and Travel Plan of this Environmental Statement [EN010106/APP/6.2] details the mitigation measures required to reduce the impacts of increased traffic flows including HGVs on the roads and severance and intimidation associated with increased traffic and abnormal loads, which should be taken forward into the DTMP as a starting point and updated to reflect the circumstances prevailing during the period in which decommissioning is to be carried out.</p>	<p>The appointed contractor will undertake such monitoring as is necessary.</p> <p>Further details to be confirmed in the DEMP(s) and the DTMP.</p>	<p>Travel Plan Co-ordinator to oversee management, monitoring and implementation of the individual measures within the DTMP.</p> <p>Other responsibilities are to be confirmed in the DEMP(s).</p>

Table 3-9 Air Quality

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>The effect of the decommissioning phase on air quality is anticipated to be the same or less than construction effects.</p> <p>Increased nitrogen dioxide (NO₂) and particulate matter (PM₁₀) from on-site and off-site decommissioning vehicle/plant emissions.</p> <p>Increased particulates and deposited dust from Site activities, materials transportation, storage and handling, including use of haul roads.</p>	<p>Appropriate standard and best practice control measures will be included in the DEMP(s), which may include, but not be limited to:</p> <p>Communication</p> <ul style="list-style-type: none"> Develop and implement a stakeholder communications plan that includes community engagement before work commences on-site; Display the name and contact details of person(s) accountable for air quality and dust issues on site. This may be the environment manager/engineer or the site manager. Display the head or regional office contact information for the contractor; and Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The level of detail will depend on the risk and should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the site. The DMP may include monitoring of dust deposition, dust flux, real-time PM10 continuous monitoring and/or visual inspections <p>Site Management</p> <ul style="list-style-type: none"> Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken; Make the complaints log available to the local authority when asked; Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the logbook; and Hold regular liaison meetings with any other high-risk construction sites within 500m of the site (if applicable), to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/ deliveries which might be using the same strategic road network routes. 	<p>Measures in the DEMP(s) will include the implementation of:</p> <ul style="list-style-type: none"> Inspection procedures at the Order limits to periodically visually assess any dust and air pollution which may be generated. Additional monitoring measures will be provided in the DEMP(s) 	<p>To be included in the DEMP(s).</p>

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>Monitoring</p> <ul style="list-style-type: none"> • Undertake daily inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local planning authority when asked. This should include regular dust soiling checks of surfaces, within publicly available land, within 100m of Order limits, with cleaning to be provided if necessary; • Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked; • Increase the frequency of site inspections by the person accountable for air quality and dust issues on-site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions; and • Agree dust deposition, dust flux, or real-time PM10 continuous monitoring locations with the Local Authority. Where possible commence baseline monitoring at least three months before work commences on-site or, if it a large site, before work on a phase commences. <p>Dust management</p> <p>The contractor will need flexibility to determine which measures are most effective in a given situation, but the measures are listed in Institute of Air Quality Management guidance on assessment of dust from demolition and construction (Table 3-9) and include:</p> <ul style="list-style-type: none"> • Implement wetting of dust generating activities, which are usually incorporated into a Dust Management Plan (where necessary) produced by the contractor; • Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust and record inspection results; • Increase the frequency of inspections when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions; • Locate dust causing activities away from receptors, as far as is possible; 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> • Use intelligent screening where possible – e.g. locating site offices between potentially dusty activities and the receptors; • Erect solid screens or barriers around the site boundary if necessary; • Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period where operations are within 100m of receptors; • Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site; • Depending on the duration that stockpiles will be present and their size, cover, seed, fence or water to prevent wind whipping; • Sheet vehicles carrying dusty substrates; • Ensure all vehicles switch off engines when stationary, i.e. no idling vehicles; • Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas; • Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction; • Avoid scabbling (roughening of concrete surfaces) where possible; • Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable; • Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible; • Use enclosed chutes, conveyors and covered skips, where practicable; • Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate; 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> • Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods; • Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible; • Erect solid screens or barriers around dusty activities that are at least as high as any stockpiles on-site where stockpiles are within 100 m of receptors; • Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period where operations are within 100 m of receptors; • Avoid site runoff of water or mud; • Keep site fencing and barriers clean using wet methods; • Remove materials that have a potential to produce dust from the site as soon as possible, unless being re-used on-site. If they are being re-used on-site cover as described below; • Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place; • For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust; and • Cover, seed or fence stockpiles to prevent wind whipping. <p>Operating vehicle/machinery and sustainable travel</p> <ul style="list-style-type: none"> • Require all vehicles to switch off engines when stationary i.e. no idling vehicles; • Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable; • Staff vehicles will be discouraged from using Turnpike Road during construction to minimise air quality impacts on the Red Lodge Heath SSSI; 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> • Ensure all non-road mobile machinery are regularly maintained and checked to minimise emissions; • Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate); • Produce a Decommissioning Logistics Plan to manage the sustainable delivery of goods and materials; and • Implement a Travel Plan that supports and encourages sustainable travel (as described above in Table 3-8). <p>Operations</p> <ul style="list-style-type: none"> • Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems; • Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate; and • Ensure equipment is readily available on-site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods. <p>Waste</p> <ul style="list-style-type: none"> • No bonfires and burning of waste materials will be carried out. <p>In addition, activity specific mitigation measures include:</p> <p>Earth Works</p> <ul style="list-style-type: none"> • Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable; 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> • Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable; and • Only remove the cover in small areas during work and not all at once. <p>Track-out</p> <ul style="list-style-type: none"> • Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use; • Avoid dry sweeping of large areas; • Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport; • Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable; • Record all inspections of haul routes and any subsequent action in a site logbook; • Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned; • Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable); • Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits; and • Access gates to be located at least 10m from receptors where possible. 		

Table 3-10 Ground Conditions

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>Potential for risks to human health associated with waste generation, land contamination, airborne contamination and groundwater contamination.</p> <p>The discovery of ground contamination during groundworks.</p> <p>Levelling of the site including the possible introduction of new fill materials.</p>	<p>Best practice avoidance and mitigation measures proposed include:</p> <ul style="list-style-type: none"> • Appropriate use of Personal Protective Equipment (PPE) and implementation and adherence to Health & Safety Protocols, Plans and Procedures; • A Pollution Response Plan will be drafted prior to the commencement of the works. The plan will outline key pollution mitigation measures including a Control of Substances Hazardous to Health (COSHH) / fuel inventory and key contacts to be notified in the event of a significant pollution incident, which may subsequently lead to the contamination of controlled waters. Tanks and dispensing pumps will be locked when not in use to prevent unauthorised access; • Oils and hydrocarbons will be stored in designated locations with specific measures to prevent leakage and release of their contents, include the siting of storage areas away from surface water drains, on an impermeable base with an impermeable bund that has no outflow and is of adequate capacity to contain 110% of the contents. Valves and trigger guns will be protected from vandalism and kept locked up when not in use. All chemicals will be stored in accordance with their COSHH guidelines, whilst spill kits will be provided in areas of fuel/oil storage; • All plant and machinery will be kept away from surface water bodies wherever possible. Vehicles should be well maintained to prevent accidental pollution from leaks. Static machinery and plant should include drip trays beneath oil tanks/engines/gearboxes/hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator. Refuelling and delivery areas will be located away from surface water drains; • An emergency spillage action plan will be produced, which all site staff will have read and understood, and provisions made to contain any leak/spill. Information regarding spill prevention and disposal of COSHH items will be provided as part of the standard site induction presentations and during regular toolbox talks and as the works progress; 	<p>To be included in the DEMP(s).</p>	<p>To be included in the DEMP(s).</p>

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none"> • Workers will remain vigilant of ground conditions at all times and will report to the Principal contractor any suspect areas of potential contamination; • Should any potentially contaminated ground, including isolated ‘hotspots’ of contamination and/or potential deposits of asbestos containing materials (ACM), be encountered, the contractor will be required to investigate the areas and assess the need for containment or disposal of the material. Advice should be sought from an environmental specialist should materials suspected of being contaminated be found. The contractor will also be required to assess whether any additional health and safety measures are required; • To further minimise the risks of contaminants being transferred and contaminating other soils or water, decommissioning workers will be briefed as to the possibility of the presence of such materials; • In the event that contamination is identified, appropriate remediation measures will be taken to protect decommissioning workers, future site users, water resources, structures and services; • The contractor will be required to place arisings and temporary stockpiles away from watercourses and drainage systems, whilst surface water will be directed away from stockpiles to prevent erosion; • Stockpiles and material handling areas will be kept as clean as practicable to avoid nuisance from dust. Dusty materials will be dampened down using water sprays in dry weather or covered; • The length of time materials are stockpiled on-site before being removed for re-use, recycling or disposal is to be kept to a minimum and stockpiles are to be covered with tarpaulins prior to disposal; • Dust generating equipment e.g. mobile crushing and screening equipment will be located to minimise potential nuisance impacts to receptors, as far as practicable; • The risk to surface water and groundwater from run-off from any contaminated stockpiles during decommissioning works will be reduced by 		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>implementing suitable measures to minimise rainwater infiltration and/or capture runoff and leachates, through use of bunding and/or temporary drainage systems. These mitigation measures will be designed in line with current good practice, follow appropriate guidelines and all relevant licences/permits;</p> <ul style="list-style-type: none"> • The contractor will ensure that all material is suitable for its proposed use and will not result in an increase in contamination-related risks on identified receptors, including any landscaped areas and underlying groundwater; • Any waters removed from excavations by dewatering will be discharged appropriately, subject to the relevant permits being obtained from the Environment Agency; • The contractor will implement a dust suppression/management system in order to control the potential risk from airborne contamination migrating off-site to adjacent sites; • Complaints about dust will be investigated at the earliest opportunity and appropriate action taken to control the source or remedy the impact as appropriate; • Access roads will be regularly cleaned and damped down with water; • All vehicles entering and leaving the site during the works will pass through a wheel washing facility. Vehicles used to transport materials and aggregates will be enclosed or covered in a tarpaulin. Vehicle movements will be kept to a minimum and vehicle speeds within the site will be limited; and • A competent/licensed contractor will survey (pre site preparation survey as defined by the Health and Safety Executive) and remove asbestos containing materials and other materials and structures contaminated with asbestos fibres. 		

Table 3-11 Waste

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>The creation of waste during decommissioning.</p> <p>Disposal of large volumes of waste (potential waste streams are listed in Chapter 16: Other Environmental Topics of this Environmental Statement [REP2-024]).</p> <p>Potential to impact on sensitive receptors (humans, wildlife and controlled waters) if not stored and managed appropriately.</p>	<p>The contractor will consider the objectives of sustainable resource and waste management and seek to use material resources efficiently, reduce waste at source, reduce waste that requires final disposal to landfill and apply the principles of the waste hierarchy. This will include, where reasonably practical, working towards a cut and fill balance for any excavations; and segregation of materials on-site for appropriate re-use, recycling and recovery, with landfill as a last resort. This will be achieved by a combination of measures listed below.</p> <p>The Waste Hierarchy</p> <p>The volumes of estimated waste streams generated through decommissioning are included in Chapter 16: Other Environmental Topics of this Environmental Statement [REP2-024]. The 'Waste Hierarchy' provides an outline approach of how waste management should be managed. The Waste (England and Wales) Regulations 2011 (Ref. 12) place a duty on all persons who produce, keep or manage waste to apply the 'Waste Hierarchy' in order to minimise waste production at every stage of the development. The 'Waste Hierarchy' promotes selection of the Best Practicable Environmental Option (BPEO) and preferred option for management of waste.</p> <p>The core waste management principles of prevention, reuse, recycle, recover and disposal as defined in the 'Waste Hierarchy' will be embedded within the Decommissioning Resource Management Plan (DRMP) and the DEMP(s), produced by the contractor prior to decommissioning.</p> <p>The separation of waste will be carried out at the source in order to maximise opportunities for reuse and recycling. Segregation of waste will require training, monitoring and enforcement.</p> <p>All areas used for temporary storage of waste on site will comply with Defra and EA guidelines and will be clearly signed. Waste storage facilities will be provided at source using the best environmental options available. Any hazardous or special waste will be stored in separate, secure containers and clearly identified as such.</p>	<p>The types, quantities and final destination of waste generated during the decommissioning phase will be identified, measured and recorded through the DRMP.</p> <p>A register of all waste loads leaving site will be maintained to provide a suitable audit trail for compliance purposes and to facilitate monitoring and reporting of waste types, quantities and management methods.</p>	<p>To be confirmed in the DEMP(s).</p>

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>Waste disposal</p> <p>Disposal activities will also be carried out in accordance with the Pollution Prevention Guidelines (PPGs) (or any relevant successive guidance in place) in order to ensure compliance with current waste legislation.</p> <p>All waste transported off site will be delivered to the appropriately licenced receivers of such materials. Waste transportation will take place at regular intervals to avoid the accrual of waste.</p> <p>Only registered waste carriers will be authorised to transport waste and a Waste Transfer Note (WTN) will be completed for each load of waste, which must contain a record of their waste carrier registration number. Copies of each WTN will be filed as an appendix to the DRMP and held for at least two years. The appropriate European Waste Catalogue (EWC) code will be noted on the WTN, in addition to how it is contained. All sites receiving waste must have an appropriate permit, licence or registration exemption, the details of which should also be recorded.</p> <p>Hazardous Waste</p> <p>If required, the EA will be advised in advance of any hazardous waste movements and Waste Consignment Notes (WCNs) will be purchased in advance for this type of waste transportation. These consignment notes will be held for at least three years.</p> <p>Burning of waste or unwanted materials will not be permitted on-site. All hazardous materials including chemicals, cleaning agents and solvent containing products to be properly sealed in sealed containers at the end of each day prior to storage in appropriately protected and bunded storage areas.</p> <p>All fuel and oil will be stored within an area of the decommissioning compound and contained by a small bund constructed from material sourced on site and lined with an impermeable membrane in order to prevent any contamination of the surrounding soils, vegetation and water table, in accordance with Defra and Environmental Agency Oil Storage Regulations for Businesses 2016 (Ref. 9). Any contaminated run-off within the bund will be disposed of at an appropriate waste management facility.</p>		

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
	<p>Any used (contaminated) spill kits, absorbent granules, sheets or fibres must be disposed of in accordance with the COSHH regulations and in accordance with the spill management plan.</p> <p>Waste from Welfare and Domestic Facilities</p> <p>Temporary welfare facilities will be provided during the decommissioning phase, with permanent welfare facilities provided in the site office, storage and welfare building. These facilities will include toilets, washing and drinking water. This will include a connection to the public mains water supply, and a cess tank that will be periodically emptied and taken off site by a licensed operator. All on site welfare facilities will be clearly signposted and maintained.</p> <p>Where excess surface water occurs from the area of the buildings, this will be collected and treated in a Sustainable Urban Drainage System (SUDS), prior to discharge.</p> <p>Effluent and waste from onsite decommissioning personnel will be treated at a package sewage treatment plant or a septic tank and discharged into a properly designed and sized drainage field, in accordance with PPG4 (Table 3-4), subject to obtaining the required consents.</p> <p>Where a septic tank is used, this will be emptied on a regular basis and taken away by a registered waste disposal contractor.</p> <p>Collection facilities for other domestic refuse will be provided to segregate waste. These facilities will be clearly marked, positioned in appropriate locations and protected from the weather and animals.</p>		

Table 3-12 Human Health

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
Human Health risks are covered in the following tables: Table 3-9 Air Quality, Table 3-4 Flood Risk, Drainage and Water Resources, Table 3-6 Noise and Vibration, Table 3-7 Socio-Economics and Land Use, Table 3-8 Transport and Access, Table 3-10 Ground Conditions and Table 3-11 Waste			

Table 3-13 Major Accidents and Disasters

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
<p>To minimise risks to health and safety all works will be undertaken in accordance with relevant Health and Safety legislation and guidance. Details of fire, police, emergency services and hospitals will be publicised and included in the site induction.</p> <p>The risk assessments relevant for safety during construction will be required and produced by the contractor prior to decommissioning, which will be implemented to minimise the risk of accidents and disasters on site.</p> <p>The perimeter security fence around the Scheme will be left in place until the end of the decommissioning phase to secure the site.</p> <p>Mitigation for further risks of major accidents and disasters are covered in the following tables: Table 3-4 Flood Risk, Drainage and Water Resources, Table 3-8 Transport and Access and Table 3-10 Ground Conditions.</p>			

Table 3-14 Telecommunications, Television Reception and Utilities

Potential Impact	Mitigation / Enhancement Measure	Monitoring Requirements	Responsibility
Risk of utilities to be affected through damage caused as a result of excavation and engineering operations	<p>Precautionary measures have been included as part of the embedded mitigation for the Scheme. These include:</p> <ul style="list-style-type: none"> The use of ground penetrating radar before excavation to identify any unknown utilities; and Consultation and agreement of methods prior to works commencing. 	To be confirmed in the DEMP(s)	The overall responsibility will be with the contractor.

4 Complementary Plans and Procedures

- 4.1.1 A suite of complementary environmental plans and procedures for the decommissioning phase will be developed alongside the DEMP, including a DRMP, a DTMP and a Decommissioning Worker Travel Plan (DWTP), as discussed in the tables above. These plans and procedures will build on the principles and procedures set out in this Framework DEMP and described in the ES. These supporting and supplementary plans and procedures will be clearly outlined in the DEMP(s) and cross referenced.

5 Implementation and Operation

- 5.1.1 The DEMP(s) will set out all roles, responsibilities and actions required in respect of implementation of the measures described in this Framework DEMP, including:
- An organogram showing team roles, names, and responsibilities;
 - Training requirements for relevant personnel on environmental topics;
 - Information on-site briefings and toolbox talks that will be used to equip relevant staff with the necessary level of knowledge to follow environmental control procedures;
 - Measures to advise employees of changing circumstances as work progresses;
 - Communication methods;
 - Document control; and
 - Environmental emergency procedures.

6 Checking and Corrective Action

6.1 Monitoring

- 6.1.1 To meet the requirement of the DEMP(s), environmental monitoring of the Scheme and its impacts will be undertaken throughout the decommissioning phase.
- 6.1.2 As part of the monitoring process the contractor will allocate a designated Environmental Site Officer(s), who will be present on Site throughout the decommissioning phase and when new activities are commencing. The Environmental Site Officer will observe site activities and report any deviations from the DEMP(s), along with the action taken and general conditions at the time. The Applicant will be informed of any deviations from the DEMP(s) as soon as possible following identification of such issues. The Environmental Site Officer will also act as day-to-day contact with relevant local authorities and other regulatory agencies such as the Environment Agency.
- 6.1.3 During decommissioning, the Environmental Site Officer will conduct walkover surveys to ensure all requirements of the DEMP(s) are being met. Action from these surveys will be documented on an Environmental Action Schedule,

discussed with the Site Manager for programming requirements and issued weekly for actioning.

- 6.1.4 The Environmental Manager / Project Manager will arrange regular formal inspections to ensure the requirements of the DEMP(s) are being met. After completion of the works, the Environmental Site Officer will conduct a final review.

6.2 Records

- 6.2.1 The Environmental Manager/ Project Manager will retain records of environmental monitoring and implementation of the DEMP(s). This will allow provision of evidence that the DEMP(s) is being implemented effectively. These records will include:
- a. Environmental Action Schedule;
 - b. Licences and approvals;
 - c. Results of inspections by Environmental Manager/ Project Manager;
 - d. Other environmental surveys and investigations; and
 - e. Environmental equipment test records.
- 6.2.2 The DEMP(s) will be updated as necessary, with a full review as required (at least quarterly) throughout the decommissioning period.
- 6.2.3 A brief report will be produced and submitted to the relevant local authorities on a quarterly basis and following completion of decommissioning. This will summarise the monitoring process, observed deviations from the DEMP(s) and the corrective actions taken.

6.3 Management Review

- 6.3.1 The DEMP(s) will be signed off on completion of the decommissioning works by an appropriately qualified person(s).

7 References

- Ref. 1 The Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2017).
- Ref. 2 HMSO (2008) The Planning Act 2008
- Ref. 3 Northern Ireland Environment Agency (NIEA) (2018), Above ground oil Storage tanks: GPP 2.
- Ref. 4 NIEA (2017), Treatment and disposal of wastewater where there is no connection to the public foul sewer, GPP 4.
- Ref. 5 NIEA (2018); Works maintenance in or near water, GPP 5
- Ref. 6 NIEA (2017); Safe storage and disposal of used oils, GPP 8
- Ref. 7 NIEA (2017); Pollution incident response planning GPP 21
- Ref. 8 British Standards Institute (2012) BS 5837:2012 – Trees in relation to design, demolition and construction. Recommendations, Noise, BSi, London.
- Ref. 9 Department for Food and Rural Affairs (Defra) & Environment Agency (2015) Oil Storage Regulations for Businesses.
- Ref. 10 Environmental Agency Pollution Prevention Guidelines 4
- Ref. 11 Health and Safety Executive (HSE) (2009) Carriage of Dangerous Goods (CDG) and Use of Transportable Pressure Equipment Regulations
- Ref. 12 HMSO (2011) The Waste (England and Wales) Regulations