# **drax** REGISTER OF ENVIRONMENTAL ACTIONS AND COMMITMENTS

### Drax Bioenergy with Carbon Capture and Storage

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - 5(2)(q)

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## 1. REGISTER OF ENVIRONMENTAL ACTIONS AND COMMITMENTS

- 1.1.1. The Register of Environmental Actions and Commitments (REAC) contained in **Table 1.1 below** identifies the environmental actions and commitments that have been identified during the environmental impact assessment (EIA) and reported within the **ES Chapters** (APP-041 APP-054) in order to mitigate the potential environmental effects of the Proposed Scheme.
- 1.1.2. The REAC contains measures that will be implemented during design, construction, operation and decommissioning of the Proposed Scheme. It will enable the Applicant to communicate environmental actions and commitments to its own organisation and to designers, contractors, operators and users of the Proposed Scheme.
- 1.1.3. Where measures are refined and / or updated as the Proposed Scheme progresses, it shall be ensured that the implementation of such measures does not lead to materially new or materially different effects to those reported in the ES.
- 1.1.4. Where measures will be included in the Construction Environmental Management Plan (CEMP) for the Proposed Scheme this is detailed within the Achievement Criteria and Reporting Requirements column in **Table 1.1** below. It is proposed that approval and implementation of the CEMP will be secured via a requirement in Schedule 2 of the DCO. The CEMP for the Proposed Scheme will include the following plans:
  - a. Materials Management Plan (as an appendix to the CEMP)
  - **b.** Stakeholder Communication Plan
  - c. Invasive Species Strategy
  - d. Soils Handling Management Plan
  - e. Surface Water Management Plan
  - f. Site Waste Management Plan the SWMP will be produced and updated throughout the construction of the Proposed Scheme and will be part of the CEMP. It is usual that the SWMP will be in electronic format.
- 1.1.5. Plans that will be produced for the Proposed Scheme but that will not be included in the CEMP include the following, and their approval and implementation is proposed to be secured by a requirement in Schedule 2 of the draft DCO:
  - a. Lighting Strategy developed from the Draft Lighting Strategy (APP-184)
  - b. Construction Traffic Management Plan (CTMP) developed in accordance with the Outline CTMP (OD-009)
  - c. Construction Worker Travel Plan (CWTP) developed in accordance with Framework CWTP (APP-120)

- **d.** Landscape and Biodiversity Strategy (LBS) which will be developed from the **Outline LBS** (APP-180)
- 1.1.6. Given that it is not currently possible to predict the activities that will be involved in the decommissioning of the Proposed Scheme, specific detail for the DEMP has not been included in this REAC. Those measures that are detailed below that apply to preconstruction and construction stages of the Proposed Scheme will however be considered in the production of the DEMP and the DEMP will be approved by the LPA prior to commencing decommissioning.
- 1.1.7. The Applicant recognises that some effects (including those as a result of noise, fugitive emissions, secondary containment and waste) arising from the Proposed Scheme may be difficult to delineate from permitted activities carried out at Drax Power Station Site in the normal course of events. In the event of an issue or complaint arising, the Applicant would facilitate discussions between the LPA and the EA to determine the appropriate next steps.

#### Table 1.1 Register of Environmental Actions and Commitments

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
Desigr	ו					
D1	<ul> <li>Design principles, described within Section 4 of the Design Framework (APP-195) for soft and hard landscaping within the Drax Power Station Site, that will be followed in the detailed design, are set out below:</li> <li>The inclusion, where reasonably practicable, of landscape elements which reinforce the original intents of the Weddle Strategy for the Drax Power Station Site, notably: <ul> <li>To create an attractive and positive working environment for site users within the confines of the Power Station; and</li> <li>To provide a landscape structure capable of incorporating continuing development of ancillary industry.</li> <li>Planting measures which seek to enhance any new or modified public realm:</li> <li>clear definition of pedestrian/vehicular circulation; sub-division of larger spaces (such as new parking area provision);</li> <li>introducing a "human scale" as a benefit of planting measures; reducing the sense of imposition from adjacent large-scale infrastructure; and</li> <li>Landscape measures where practicable to screen and soften the effects of installed artificial light sources.</li> <li>Improving the biodiversity value of amenity planted areas within the Power Station Site:</li> <li>Increasing species-rich grassland areas, with reduced amenity grassed areas (subject to function);</li> <li>Incorporating species-rich amenity hedges where introduced; and</li> <li>Reducing the use of ornamental shrub species in favour of species selection for biodiversity and habitat creation, while maintaining an amenity function.</li> <li>Enhancement opportunities resulting from any necessary replacement of aged, over-mature amenity planting, where its appearance and function is now heavily compromised.</li> </ul> </li> </ul>	6.1.9 - para 9.10.6 6.9 - para 4.2.21	Detailed Design	DCO Requirement	Detailed Design. This will be recorded on as built drawings. Landscape mitigation and planting will occur in line with the LBS which will be approved by the LPA following consultation with NYCC.	Main Designer
D2	The current firewater system in place on site will be extended to contain and mitigate fires on the BECCS plant to minimise the risk of spread to the other Control of Major Accident Hazards (COMAH) installations. An additional dedicated firewater tank will be installed for the process area.	6.3.17.2 - Table 1.1	Detailed Design	DCO Requirement	Detailed Design This will be recorded on as built drawings.	Designer
D3	During the preliminary design, and to avoid and mitigate adverse impacts from material resources consumption, and the generation and disposal of waste, a proportion of	6.1.13 - para 13.9.4	Detailed Design	DCO Requirement	SWMP Detailed Design	Designer Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	aggregate imported to site for temporary piling platforms will be retained for reuse as structural fill on the Proposed Scheme (55,600 tonnes).				This will be recorded on as built drawings.	
D4	<ul> <li>A Draft Lighting Strategy (APP-184) has been produced which outlines the mitigation measures for the project. The following specific design requirements will be followed in the lighting design for the Proposed Scheme:</li> <li>BS EN 12464-2:2014 provides recommendations and lighting levels for the majority of areas that make up the Proposed Scheme. It is likely that some areas of the site where specific tasks require alternative levels, will require illuminating appropriately but may not be covered by the standard and should be discussed as part of the detailed design phase to determine appropriate levels of illumination and suitable mitigation measures, particularly if levels are required to be high.</li> <li>The extent of lit sections will be constrained to the minimum required for safety;</li> <li>Selected lighting levels will be reduced to the minimum required for safety;</li> <li>LED luminaires will be specified so that light distribution is easily controllable to reduce spill light and other obtrusive parameters;</li> <li>Luminaires will be specified so that no light is emitted directly upward above the horizontal where practicable;</li> <li>Luminaires will be installed at 0° to the horizontal and to reduce source intensity over greater distances where practicable;</li> <li>Luminaires with maximum colour temperatures of 3,000 Kelvin (K) will ideally be used, to minimise the blue-light component and the Proposed Scheme's impact on fauna populations;</li> <li>Other colour temperatures up to 5,000 K where higher colour rendering is required for specific visual tasks, can be utilised but will be kept to a minimum where practicable;</li> <li>A more limited range of spectral power distribution will be used, with predominance in the longer wavelength end of the spectrum, to aid environmental mitigation;</li> <li>A system of control and operation will be considered that allows:</li> <li>Dimming of lighting to a lower level during periods of low use or switch-off when areas are not in use;</li> <li>The us</li></ul>		Design Operation	DCO Requirement	Lighting Strategy approved by the LPA. This will be recorded on as built drawings Landscape mitigation and planting will occur in line with the LBS which will be approved by the LPA following consultation with NYCC.	Designer The Applicant

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	<ul> <li>Shield and baffles will be used where levels of obtrusive light cannot be limited through good design and where issues may arise post-installation;</li> <li>The choice of luminaire with the right distribution at the right height will be made to minimising light spill and obtrusive light effects whilst providing the right lighting performance on the task area. It should be noted that a lower mounting height is perhaps not better. A lower mounting height can create a higher level of light spill and require more columns.</li> <li>Light spill onto confirmed, suspected or introduced bat roosts, boxes and the like is prohibited and will be avoided primarily through good design and secondarily by physical shields where necessary;</li> <li>Light spill onto trees and hedgerows will be minimised through good design, with physical shields installed where necessary;</li> <li>A 'buffer zone' of very low illuminance (if any) will be created adjacent to established or proposed key habitats, such as adjacent to treelines. In accordance with ILP GN08 (Institution of Lighting Professionals, 2018) a wider system of zoning may be employed to mitigate against artificial lighting;</li> <li>Landscaping measures in the form of shrubs and tree planting to further act as secondary mitigation to screen and soften the effects of installed artificial light sources will be considered;</li> <li>To minimise effects on foraging and commuting bats, otters (and other nocturnal species) as a result of light spill, the lighting design will incorporate measures to reduce the effects of lighting on fauna and flora. This will be reviewed by a suitably qualified ecologist to ensure that effects on sensitive habitats are avoided. The Lighting Strategy will be informed by Lux modelling of any proposed lighting. This will support achieving a maximum increase of 1 lux onto habitats beyond the northern boundary of the Power Station Site (habitats in and adjacent to the Habitat Provision Area) arising from Proposed Schem</li></ul>					
D5	In order to reduce the potential effects for flooding from sea level rise of the Carbon Capture Plants and supporting infrastructure is creation of additional floodplain capacity (a minimum floodplain area of 1,889 m <sup>2</sup> will be created) through the lowering of ground currently outside the floodplain on land controlled by the Applicant.	6.1.12 - para 12.10.35 6.1.14 - para 14.10.4	Detailed Design	DCO Requirement	Detailed Design This will be recorded on as built drawings.	Main Designer
D6	When the new distribution voltage infrastructure equipment has been defined as part of detailed design, an electric and magnetic fields assessment will be carried out.	5.1 - Table 7.2	Detailed Design	DCO Requirement	Electric and magnetic fields assessment completed.	The Applicant

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
D7	<ul> <li>Surface water runoff from new impermeable areas will be limited to the pre- development greenfield runoff rate or 1.4l/s/ha, whichever is the least. New outfalls will be:</li> <li>Set back from the existing bank and not protrude into the watercourse.</li> <li>Erosion protection will be provided in the existing bed and banks if required.</li> <li>A marker post will be provided at the top of the bank at all new outfalls.</li> <li>The invert levels of any new outfalls are designed in relation to existing watercourses (or receiving watercourse) and that outfalls will not be below existing water levels.</li> <li>Any variation to the above will be discussed with the IDB.</li> </ul>	Requested by the IDB during Pre- Examination	Detailed Design	DCO Requirement	Detailed Design.	Designer / Main Contractor
D8	Should detailed design require foundations to be constructed within the 7m buffer from IDB watercourses/culverts, they will be designed in such a manner so that they would not extend into the culvert / channel (i.e. impact flow conveyance) or prevent maintenance to the culvert / channel from being undertaken.	Requested by the IDB during Pre- Examination	Detailed design	DCO Requirement	Detailed Design	Designer / The Applicant
D9	It may be mutually beneficial (for the Applicant and the IDB) for the Habitat Provision Areas to be located within 7m of the watercourse. This will be discussed with the IDB during detailed design.	Requested by the IDB during Pre- Examination	Detailed Design	DCO Requirement	Detailed Design	Designer / The Applicant
D10	New culverts or crossings will be no smaller than those immediately upstream or downstream so as not to change flood risk. The access crossing culverts will be of box shape or bridge type structure, connecting top of bank to minimise impact on watercourses. If a pipe culvert is unavoidable, it will be sized to be no smaller than a downstream culvert. Following construction, temporary culverts or crossings will be reinstated. Should surface water drainage need to cross the culverted section of Carr Dyke, suitable measures will be in place to enable maintenance to the culvert, and to ensure that the surface water drainage does not go through the culvert.	Requested by the IDB during Pre- Examination	Detailed Design / Construction	DCO Requirement	Detailed Design	Designer / Main Contractor
Gener	al				-	
G1	<ul> <li>A CEMP will be approved by the Local Planning Authority (LPA) (Selby District Council (SDC)), prior to construction works commencing on site.</li> <li>The measures contained in the CEMP will be reviewed and updated by the Main Contractor in consultation with the LPA on a regular basis. The measures contained in the CEMP will be used to manage and mitigate the potential environmental impacts</li> </ul>	6.1.2 - para 2.3.33 6.1.17 - para 17.11.2 (f)	Pre-construction Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation			
	that could result from the construction and decommissioning of the Proposed Scheme respectively.								
	As a minimum the Applicant will review and update the measures as follows:								
	~ Every six months;								
	~ To incorporate changes to legislation, policy or other requirements;								
	~ To incorporate the outcomes of environmental audits and inspections;								
	<ul> <li>Following the outcome of environmental incident investigation on site; and</li> </ul>								
	<ul> <li>In response to near miss and good practice reporting.</li> </ul>								
G2	Arisings will be suitably stockpiled to maximise reuse. The East Construction Laydown Area has been identified for storage of topsoil from the area and for laydown of plant	6.1.6 - para 6.10.3	Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor			
	and materials. The redundant limestone and gypsum storage buildings will be used for covered laydown and fabrication of materials. Stockpiles will be designed to minimise	6.3.6.2 - para 1.3.1							
	<ul> <li>quality degradation, damage and loss of resource.</li> <li>The CEMP will include the following measures to minimise quality degradation,</li> <li>damage and loss of stockpiled resources:</li> </ul>	6.1.12 - para 12.10.24 6.1.13 - para 13.10.3	-	-	-				
	<ul> <li>Stockpiles will be located a minimum of 10m from surface water features, a minimum of 10m of water bodies and drainage lines and as far as possible from sensitive properties, taking account of the prevailing wind direction (where practicable);</li> </ul>								
	<ul> <li>Topsoil and other construction materials (including hazardous materials and plant and equipment) will not be stored in the northern and southern parts of East Construction Laydown Area, which is shown to be at risk of flooding in the breach scenario;</li> </ul>								
	<ul> <li>The methods for prevention of erosion and leachate generation, such as using jute matting to mitigate the release of sediment load;</li> </ul>								
	<ul> <li>Appropriate signage will be used to identify contents of stockpiles;</li> </ul>								
	<ul> <li>To reduce area of surfaces exposed to wind pick-up, stockpile surface areas will be minimised (subject to health and safety and visual constraints regarding slope gradients and visual intrusion);</li> </ul>								
	<ul> <li>Appropriate stockpile segregation, locations and containment measures, e.g. covering stockpiles with tarpaulins, to minimise the exposure of surface water and groundwater from contaminated run-off and local neighbours from windblown dusts, vapours and asbestos fibres;</li> </ul>								
	<ul> <li>To prevent wind whipping, stockpiles will be covered, seeded or fenced (where practicable);</li> </ul>								

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	<ul> <li>To stabilise surfaces earthworks and exposed areas / soil stockpiles will be revegetated as soon as practicable. Otherwise, hessian, mulches or tackifiers will be used where re-vegetation is not possible;</li> </ul>					
	<ul> <li>To provide a physical barrier between the Site and the surroundings windbreak netting / screening will be positioned around material stockpiles and vehicle loading / unloading areas, as well as exposed excavation and material handling operations (where practicable);</li> </ul>					
	<ul> <li>During dry or windy weather, material stockpiles and exposed surfaces will be dampened down using a water spray to minimise the potential for wind pick-up;</li> </ul>					
	<ul> <li>Sand and other aggregates will be stored in bunded areas that are not allowed to dry out, unless this is required for a particular process, in which case other appropriate additional control measures will be put in place; and</li> </ul>					
	<ul> <li>Bulk cement and other fine powder materials will be delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.</li> </ul>					
G3	A Materials Management Plan (MMP) will be produced, if necessary, following the Contaminated Land: Applications in Real Environments (CL:AIRE) 'Definition of Waste: Development Industry Code of Practice' (CL:AIRE, 2011) and / or exemptions / environmental permits, to ensure that soil re-use and imported materials are suitable for their intended use and will not significantly affect human health or the environment. It will also drive performance in the highest tiers of Waste Hierarchy as required by the Site environmental permit, thereby maximising reuse, recycling and recovery. This includes testing site arisings to determine suitability of reuse.	6.1.11 - para 11.10.12 6.1.13 - para 13.10.9 6.1.15 - para 15.10.2	Pre-construction Construction	DCO Requirement.	The MMP will be approved by a Qualified Person with a declaration sent to the EA.	Main Contractor
	The MMP requires answers to a series of questions including:					
	<ul> <li>The parties involved;</li> <li>Suitably for use criteria;</li> </ul>					
	$\sim$ Suitably for use criteria; $\sim$ Certainty of use;					
	~ Quantity of use;					
	<ul> <li>Contingency arrangement; and</li> </ul>					
	~ Tracking and document control and a verification plan.					
G4	A Piling Risk Assessment will be produced to outline measures to protect the underlying aquifers during construction and mitigate risk of creating preferential pathways for potential contamination. Additionally, risk assessments will be	6.1.11 - para 11.10.10 6.1.12 - para	Pre-construction Construction	DCO Requirement	Piling Risk Assessment will be approved by the EA.	Main Contractor
	undertaken for any construction proposals entailing significant groundworks (especially those which are proposed to include excavations).	12.10.28			The CEMP will be approved by the LPA.	
					Completed risk assessments.	

Ref D	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation		
G5		6.1.8 - para 8.10.4 - 8.10.7	Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor		
	an Environment Permit (VP3530LS) and a significant proportion of these requirements are regulated in accordance with the Environmental Permit):	6.1.9 - para 9.10.13			Environmental inspection and audit			
	<ul> <li>b. Construction working hours will be as follows:</li> <li>During the construction phase, standard working hours will be Mondays to</li> </ul>	6.1.11 - para 11.10.3			results.			
	<ul><li>Friday 07:00 to 19:00;</li><li>On Saturdays, working hours will be 07:00 and 13:00;</li></ul>	6.1.12 - para 12.10.17 -						
	<ul> <li>Start-up and shutdown activities will take place on the Drax Power Station Site during a one hour window either side of standard working hours; and</li> </ul>	12.10.25 6.1.6 - para						
	<ul> <li>c. Delivery or removal of materials, plant and machinery must not take place on Sundays, bank holidays nor otherwise outside the hours of:</li> </ul>	6.10.3 6.1.5 - para						
	<ul> <li>08:00 to 18:00 hours on Monday to Friday; and</li> <li>08:00 to 13:00 hours on a Saturday.</li> </ul>	5.9.17						
	d. Restrictions on working hours above do not apply to construction work or the delivery or removal of materials, plant and machinery, where these:	6.3.5.1 - para 3.2.1						
	<ul> <li>Are carried out within existing buildings or buildings constructed as part of the authorised development;</li> </ul>	6.3.5.2 - para 3.5.1 - 3.5.4						
	<ul> <li>Are carried out with the prior approval of the relevant planning authority; or</li> <li>Are associated with an emergency.</li> </ul>	6.3.6.2 - para 1.3.1						
	e. A stakeholder communications plan that includes community engagement before work commences on site will be developed and implemented and which will include	6.6 - para 1.4.4, 3.2.2						
	a commitment to keep the IDB informed of the timing, duration and progress of temporary works within 7m of an IDB watercourse;	Following consideratio						
	<ul> <li>f. Working hours outside of these periods, including bank holidays, will be agreed in advance with Selby District Council (SDC) and North Yorkshire County Council (NYCC).</li> </ul>	n of Relevant Representati on and for						
	<b>g.</b> Regular site inspections will be undertaken to monitor compliance. Inspections will be recorded, and the inspection log made available to the local authority, as required;	consistency with Drax Re- Power, where						
	<ul> <li>h. Upon completion, laydown areas and site compounds will be returned to their original use;</li> </ul>	this was agreed.						
	<ul> <li>Construction compounds and working areas will be kept in a tidy condition (e.g., free of litter and debris);</li> </ul>	Requested by the IDB						
	j. Surrounding roads (New Road) and pavements will be maintained free of	during Pre- Examination						
	prevent "track out" from vehicles. Wheel wash facilities will be appropriately contained to ensure that silt laden water will not reach surface water features.	Requested by the EA						

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Ac an Re
	Rumble grids will be used to dislodge accumulated dust and mud prior to leaving the Site where reasonably practicable;	during Pre- Examination			
	<ul> <li>k. Appropriate management plan (e.g., COSHH plans) for polluting substances that are being brought on Site and used as part of the construction process. The CEMP will also describe the procedures in the event of an environmental emergency such as a fuel or chemical spillage;</li> </ul>				
	I. Appropriate management of sediments in surface water runoff generated in construction area and laydowns;				
	m. Procedures will be put in place in the case of accidental leakage and / or spillage incidents of oils / hazardous substances including the provision of appropriate spill containment and clean up materials;				
	<ul> <li>n. Hydrocarbon interceptors will be incorporated into the Site drainage system at high risk areas, such as parking, unloading and refuelling areas, to remove hydrocarbons and oils from surface water prior to discharge;</li> </ul>				
	<ul> <li>All fuel, oil and chemicals will be stored in a designated secure area, with secondary containment provided;</li> </ul>				
	p. All refuelling will be supervised and carried out in a designated area with appropriate cut-off drainage and located away from watercourses;				
	q. Construction method statements and work instructions will be produced that include instructions on dealing with adverse weather conditions, including snow and ice, and environmental incidents and complaints;				
	<ul> <li>r. Vegetation will only be removed when necessary and gradients kept as shallow as possible to prevent large amounts of earth being washed away during periods of heavy rainfall;</li> </ul>				
	<b>s.</b> Areas of ground that have been exposed will be reseeded or surfaced as soon as practicable;				
	t. Surface water run-off and excavation dewatering will be captured and settled out prior to disposal. Any contaminants will be removed prior to disposal;				
	u. Construction compounds and laydown areas will be surrounded by hoardings to reduce impacts on sensitive receptors due to the construction activities. The hoardings will create an orderly appearance to the edge of the Site and will be a minimum of 2.4 m high, maintained in good condition. and will be maintained in good condition for the duration of the relevant construction/decommissioning activity. Solid hoardings will be provided on the eastern, northern, and southern boundaries of the East Construction Laydown Area. They will also be provided around the western, northern, and eastern boundaries of the Woodyard, Drax Power Station Site and Construction Laydown Area;				
	v. If the Carbon Dioxide Delivery Terminal Compound is constructed as part of the Proposed Scheme, it will be fenced by using minimum 2.4 m high hoarding, if				

chievement Criteria nd Reporting equirements	Responsible Organisation

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
Ge	<ul> <li>screening of this is not achieved by the proposed hoarding around the Woodyard, Drax Power Station Site and Construction Laydown Area; and</li> <li>w. Trees and their roots that are within or enter the construction areas will be protected in accordance with BS5837:2012 Trees in relation to design, demolition and construction, and the National Joint Utilities Group (NJUG) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees. Fencing will be erected prior to construction activities and will remain in place for the entire construction period.</li> <li>x. Working areas for demolition and construction activities will be offset from existing and retained landscape features and associated habitats (where they fall within or adjacent to the Order Limits) to minimise the risk of accidental damage. This will include offsets to hedgerows, woodland and existing ditches (where these are not Internal Drainage Board (IDB) drains) and buildings to allow maintenance access.</li> <li>y. Selby IDB require a 7 m offset from the landward toe of the ditch for maintenance of all IDB drains. All woody planting in proximity to IDB drains such as hedgerows and trees will be planted outside of this 7 m offset where this is in proximity to an IDB drain. Planting near drains will be undertaken by workers on foot or by small agricultural machinery with the planting undertaken by hand.</li> </ul>	6 1 12 - para	Operation	Environmental		
G6	<ul> <li>The current environmental management system (EMS), which is certified to ISO14001, will be updated to incorporate any new procedures and update current procedures in order to control environmental impacts as a result of the operation of the Proposed Scheme. Drax Power Station Site will update (prior to construction / operation, as appropriate) operational control procedures, Environment Management System and Drax Management Instructions to incorporate the additional risks and requirements of the Proposed Scheme including, but not limited to:</li> <li>Ensuring safe operation of the site and the ability to safely shut down and evacuate the site, if required.</li> <li>Monitoring of the climate risks and impacts to ensure that the Proposed Development can continue to be resilient to climate change.</li> <li>Operational maintenance / improvements to address climate vulnerability as required.</li> </ul>	6.1.12 - para 12.10.33 6.3.12.3 - para 6.4.3 6.3.14.1 - Table 1.1	Operation	Environmental Permit	Environmental Permit variation approved by the Environment Agency. Records of updates to operational control procedures, Environment Management System and Drax Management Instructions.	The Applicant
G7	<ul> <li>A Draft Lighting Strategy has been produced which outlines the mitigation measures for the Proposed Scheme; for construction these measures will be included in the CEMP and will include the following:</li> <li>The correct levels of lighting will be provided to ensure the safety of workers and other users of the site;</li> <li>Construction lighting will be designed such that, where practicable, all luminaires are installed internal to the Site (such as on the inside of hoarding where used) and are directed towards the working area;</li> </ul>	6.1.2 - para 2.3.12 6.7 - para 5.2.7 6.1.9 - para 9.10.7 - 9.10.9	Construction	DCO Requirement	The construction lighting measures will be included in the CEMP which will be approved by the LPA.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Ac an Re
	<ul> <li>Cranes, where required, may be lit for safety and lighting may be provided within buildings during internal fit-out activities.</li> <li>The lighting will be operational only during construction works, except where lighting is required for out-of-hours security or safety reasons; and</li> <li>Construction lighting will adhere to industry best practice, including guidance from industry bodies (such as the Construction Industry Research and Information Association (CIRIA)). CIRIA guidance, for example, notes that lighting on construction sites is typically required for security and safety, while at the same time being required to minimise impact on surrounding receptors.</li> </ul>				
G8	<ul> <li>A Landscape and Biodiversity Strategy will be developed at the detailed design stage for the Proposed Scheme that will include the measures contained within the <b>Outline Landscape and Biodiversity Strategy</b> (document reference 6.6). It will outline the key principles required to avoid, mitigate and compensate for effects on biodiversity and landscape. The strategy will be developed at each stage of the Proposed Scheme. During pre-construction, construction and operation. Where planting and the creation of new habitats is undertaken the following principles will apply:</li> <li>Measures for the retention of existing vegetation are detailed within the <b>Outline Landscape and Biodiversity Plan</b> (APP-180) and illustrated on <b>Figure 3</b> (Vegetation Retention) (APP-183). Areas of existing amenity planting will be retained wherever practicable. Where the loss of such planting is unavoidable, the detailed design will seek to reinstate those landscape elements that are temporarily lost, or to incorporate new amenity planting measures in-keeping with the original aspirations as set out within the Weddle Strategy for Drax Power Station, where reasonably practicable.</li> <li>Consultation will take place pre-construction with NYCC and SDC to agree the indicative planting palette including seed mixes and sourcing of material;</li> <li>The planting palette for each area within the Order Limits and the Off-site Habitat Provision Area will be drawn from the species outlined in <b>Tables 3.1 to 3.3</b>. of the <b>OLBS</b>, and be informed by updated ecological walkovers, Weddle's Landscape Management Report 1987 / Revised 1990, and consultation with NYCC, SDC and Yorkshire Wildlife Trust.</li> <li>All seed mixes and planting stock will be ordered as early as possible prior to planting, to ensure that the supply does not risk substitution;</li> <li>All seed mixes and shrubs will be sourced from a specialist producer of British native plants;</li> <li>Native trees and shrubs will be sourced from a supplier which follows the Forestry</li></ul>	6.1.9 - para 9.10.12 and 9.10.19 6.1.8 - para 8.10.16 - 8.10.19 6.6 6.6.1	Detailed Design Pre-construction Construction Operation	DCO Requirement	Def Lar pla will line whi dev acc OL by cor NY

chievement Criteria nd Reporting equirements	Responsible Organisation
etailed Design andscape mitigation, anting and design ill be carried out in he with the LBS, hich will be eveloped in ccordance with the LBS, to be approved the LPA following onsultation with YCC.	Designer Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	<ul> <li>Terms of supply will include a condition that no part of the order shall be substituted with alternative species or of unapproved origin and that any change must be mutually agreed.</li> <li>All new habitat creation and enhancement works will be subject to a long term (30 year) management, maintenance and monitoring plan, detailed in the LBS, to ensure the full and successful establishment of the planting. The LBS will prescribe the maintenance regimes for all different landscape / habitats considering the aims, objectives and functions of each area of planting / habitat. The LBS will also set out proposals for monitoring the condition of landscape and habitat creation areas, to assess how these develop post-construction.</li> <li>The LBS (in line with the <b>OLBS</b>) will prescribe the maintenance regimes for all different landscape planting and habitats considering the aims, objectives and functions of each area of planting the aims, objectives and functions of each area of planting the aims, objectives and functions of each area of planting / habitat. The LBS will also set out proposals for monitoring the condition of landscape and habitat creation areas, to assess how these develop post-construction.</li> <li>The LBS (in line with the <b>OLBS</b>) will prescribe the maintenance regimes for all different landscape planting and habitats considering the aims, objectives and functions of each area of planting / habitat. The LBS will also set out proposals for monitoring the condition of landscape and habitat creation areas, to assess how these develop post-construction.</li> <li>If areas of planting are seen to be failing, soil samples will be taken to identify potential soil issues affecting plant health and soil remediation considered and / or alternative more suitable plants chosen to maintain proposed features. An approved contractor will undertake a number of operations including weed control, checking plants, pruning and replacement planting as well as watering.</li> </ul>					
G19	A Decommissioning Environmental Management Plan will be implemented for the decommissioning phase of the Proposed Scheme. It will be produced in line with the relevant legislation in force at the time of cessation of operations and agreed with the Environment Agency as part of the Environmental Permit and site surrender process. Given that it is not currently possible to predict the activities that will be involved in this process, the principle of the measures that are detailed in this <b>REAC</b> that apply to preconstruction and construction stages of the Proposed Scheme will be considered in the production of the DEMP. The DEMP will be approved by the LPA prior to commencing decommissioning.	6.1.2 - para 2.5.6	Decommissioning	DCO Requirement	The DEMP will be approved by the LPA.	Main Contractor
Chapt	er 5 (Transport)				L	
T1	An Outline Construction Traffic Management Plan (OD-009) has been produced to support the DCO Application. It will be updated by the Main Contractor and form part of the CEMP. The following measures will be implemented for the Proposed Scheme: ~ Construction workers will park within the existing 500 carparking spaces available within the Drax Power Station Site. However, provision for 300 overflow car parking spaces will be provided within the East Construction Laydown Area. The combined capacity of 800 carparking spaces across the two areas will not be required throughout the entire construction programme, but is included to ensure	6.1.5 - para 5.10.3 6.1.6 - para 6.10.5 6.3.5.1 6.2.5.5 6.2.5.6	Pre-construction Construction	DCO Requirement	The CTMP will be approved by the LPA.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Ach and Rec
	<ul> <li>operational resilience throughout the construction phase as the existing operational units will still require maintenance and outages;</li> <li>Construction traffic (HGVs) will access the site via J36 of the M62, then the A614, A645 and New Road. Access routes for AILS and HGVs are shown in Figure 5.5 and Figure 5.6 (APP-066 and APP-067) respectively;</li> <li>Appropriate signage to ensure sufficient guidance for construction traffic will be provided, and to ensure that the traffic does not deviate from a specified route;</li> <li>The CTMP will be updated once the final route and logistics are confirmed following consultation for the transportation of AILs;</li> <li>In order to facilitate the delivery of AILs, it will be the responsibility of the haulage company to contact and inform the following key stakeholders:</li> <li>Emergency services;</li> <li>Highway Authorities;</li> <li>Local residents;</li> <li>Local services, including bus services, refuse collections and regular goods deliveries; and</li> <li>Local councils.</li> </ul>				
Τ2	<ul> <li>A Construction Worker Travel Plan (CWTP) will be produced for the Proposed Scheme which will include measures to minimise the traffic impacts associated with construction workers travelling to and from Drax Power Station. The following measures will be implemented for the Proposed Scheme:</li> <li>A member of staff working for Drax will be appointed to the role of Travel Plan Coordinator (TPC) as part of their overall responsibilities. This will be a senior person within the organisation to demonstrate senior management buy in and leadership. They will be responsible for the delivery of the Action Plan (see Table 6.1, in Appendix 5.2 Outline Construction Worker Travel Plan (APP-120)) along with senior management;</li> <li>The TPC will be responsible for establishing and coordinating a Travel Plan Steering Group (TPSG) with appropriate terms of reference. The TPSG will be focused on progressing implementation and delivery of the Travel Plan objectives and measures, as well as approval of monitoring and targets. A meeting frequency of every three months is suggested. The TPC will be responsible for producing a report and presentation reviewing the past 12 months, key achievements and way forward, to be shared with all parties;</li> <li>Construction worker travel surveys will be used to gather information to assess which of the proposed measures are most effective. The TPC will work with senior management in order to ensure that as much information can be collated early on in the recruitment process; the overall aim here is to have a positive influence on construction worker travel pattern;</li> </ul>	6.1.5 - para 5.10.3 6.1.6 - para 6.10.6 6.3.5.2	Pre-construction Construction	DCO Requirement	The app TPC resp mor proc repo with

chievement Criteria nd Reporting equirements	Responsible Organisation
he CWTP will be oproved by the LPA. PC and TPSG are sponsible for onitoring and oducing an annual port to be shared th all parties.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Ach and Req
	<ul> <li>A dedicated Travel Plan page will be added to the Drax BECCS project website and provide up to date travel plan information, links to transport resources and public transport information and relevant travel policies. The website will serve as a central point for the most up to date travel regulations and advice;</li> </ul>				
	<ul> <li>Key information and travel options available will be explained to construction workers during their induction, and any contractual requirements will also be communicated at this stage;</li> </ul>				
	<ul> <li>Sustained and targeted marketing of car sharing and group travel will be delivered before and during the construction phase in order to ensure that construction workers have a good understanding of the CWTP including the objectives, sustainable travel measures, and there role and responsibilities in minimising the effects of the construction phase;</li> </ul>				
	In order to achieve the vehicle occupancy targets for daily car journeys in the construction phase, the construction site will have a capped number of parking spaces, at no more than 450 spaces. A car parking management scheme will be implemented which provides favourable parking locations for those that travel to the Site with two or more passengers; this will discourage single vehicle occupancy where possible. In addition, a car parking management strategy will be developed by the TPC, and agreed by senior management and the local planning authority prior to the construction period;				
	<ul> <li>A construction worker registration process will be integrated into the induction process to ensure that all construction workers are registered on a car sharing database and encouraged to assess car sharing to site with other construction workers, either by private car or contractor minibuses;</li> </ul>				
	<ul> <li>In conjunction with the preferential parking offering, those who car share will also benefit from financial savings which will be actively promoted to construction workers;</li> </ul>				
	<ul> <li>Shower and changing facilities will be provided for construction workers, including lockers for personal storage equipment and heated drying areas for clothing;</li> </ul>				
	<ul> <li>Convenient, sheltered, well-lit and secure parking provision will be made available for cycle and motorcycles. Additional cycle or motorcycle parking provision will be provided as needed by construction workers and identified through monitoring of this CWTP. To assist cyclists with bike repairs, a dedicated bike maintenance facility will be provided close to the parking shelters;</li> </ul>				
	<ul> <li>Senior management working at, or visiting, the Site who are not part of the construction workforce, should demonstrate a high level of commitment to the CWTP, and follow the same rules and policies to lead by example and encourage wider engagement in the programme; and</li> </ul>				
	<ul> <li>National Highways have requested the monitoring of construction traffic. The TPC and senior management will agree the arrangements for the monitoring of</li> </ul>				

Achievement Criteria and Reporting Requirements	Responsible Organisation

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	construction traffic with National Highways and review the data at the proposed TPSG to understand and agree if additional measures are required to support the management of the construction phase traffic impacts.					
Т3	A Decommissioning Traffic Management Plan (DTMP) will be provided prior to decommissioning to reflect the changes in transport patterns and travel demand at the time of decommissioning.	6.1.5 - para 5.1.7 6.3.5.2 - para 3.6.3	Decommissioning	DCO Requirement	The DTMP will be approved by the LPA.	Main Contractor
Chapt	er 6 (Air Quality)	1	I		L	l
AQ1	<ul> <li>The following mitigation measures will be implemented for the Proposed Scheme:</li> <li>The name and contact details of person(s) accountable for air quality and dust issues will be displayed on the construction site boundary e.g. perimeter fence / hoarding at appropriate intervals. This may be the environment manager / engineer or the site manager. The head or regional office contact information will also be displayed;</li> <li>All dust and air quality complaints will be recorded, and causes identified. Appropriate remedial action will be taken in a timely manner with a record kept of actions taken, including of any additional measures put in place to avoid reoccurrence. The complaints log should be made available to the local authority on request. Any exceptional incidents that cause dust and / or air emissions, either on- or offsite will be recorded, and then the action taken to resolve the situation recorded in the logbook;</li> <li>When there is a risk of dust from construction activities, daily on-site and off-site inspections will be undertaken, where receptors (including roads) are nearby to monitor dust. The inspection results should be recorded and made available to the local authority when asked.</li> <li>Where deemed applicable, dust deposition, dust flux, or real-time PM10 continuous monitoring locations will be agreed with the Local Authority. Where possible baseline monitoring will start at least three months before work commences;</li> <li>The frequency of site inspections will be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions;</li> <li>The Site layout will be planned so that machinery and dust causing activities are located away from receptors, as far as is practicable;</li> <li>Where practicable, solid screens or barriers will be erected around dusty activities or the construction site boundary that are at least as high as any stockpiles on site, if practicable;</li> </ul>	6.1.6 - para 6.10.3 6.3.6.2 - para 1.1.3 6.1.8 - para 8.10.9 - 8.10.12, para 8.10.34 6.1.12 - para 12.10.26	Pre-construction Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	~ All vehicle operators will switch off engines when stationary - no idling vehicles;					
	<ul> <li>All construction plant and equipment will be maintained in good working order and not left running when not in use;</li> </ul>					
	<ul> <li>The use of diesel- or petrol-powered generators will be avoided and mains electricity or battery powered equipment used where practicable;</li> </ul>					
	<ul> <li>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.</li> </ul>					
	<ul> <li>An adequate water supply on the Site for effective dust / particulate matter suppression / mitigation will be made available, using non-potable water where possible and appropriate;</li> </ul>					
	<ul> <li>Drop heights from loading or handling equipment will be minimised and fine water sprays used on such equipment as appropriate;</li> </ul>					
	<ul> <li>Vehicles entering and leaving the Site will be covered to prevent escape of materials during transport;</li> </ul>					
	<ul> <li>Enclosed chutes and conveyors and covered skips will be used;</li> </ul>					
	<ul> <li>It will be ensured that 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;</li> </ul>					
	<ul> <li>Bonfires or burning of waste materials will be prohibited;</li> </ul>					
	<ul> <li>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 in frequent use;</li> </ul>					
	<ul> <li>Avoid dry sweeping of large areas; and</li> </ul>					
	<ul> <li>Access gates will be located at least 10 m from sensitive receptors.</li> </ul>					
AQ2	Operational changes to the Main Stack emissions parameters will include:	6.1.6 - para	Operation	Environmental	Environmental Permit	The Applicant
	$\sim$ Reducing SO <sub>2</sub> emissions by 40%, applied to the BECCS Biomass Units; and	6.10.8		Permit	variation approved by the Environment	
	<ul> <li>Increasing exit temperature of flue gases from the BECCS Units from 80°C to 103°C.</li> </ul>	6.1.8 - para 8.10.11			Agency.	
Chapte	er 7 (Noise and Vibration)	·	·		·	

Ref D	Mitigation measure				Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
NV1	Once details of the new equipment Proposed Scheme commences, a LPA to demonstrate via noise mo operation predicted at 1m from the the following values in the following	a noise mitigation delling that the e façade of noi	on scheme will rating noise lev	be submitted to the vels for normal mode of	6.1.7 - para 7.5.51 to 7.5.53 and Tables 7.14, 7.25 and 7.26	Pre-Operation	DCO Requirement	Noise Mitigation Scheme including noise modelling outputs to be submitted to the LPA.	The Applicant
	Receptor	Easting	Northing	Rating Level, L <sub>Ar,Tr</sub> dB				Reporting of the noise levels at each of the sensitive receptors.	
	R1, Wren Hall	467273.9	427168.2	30					
	R2, Long Drax	468163.8	428107.5	25					
	R3, Old Lodge	467515.8	428113.3	24					
	R4, Drax Abbey Farm	467042.9	428281.2	26					
	R5, Foreman's Cottage	466842.8	428479.7	26					
	R6, 2 Forest Grove Barlow	465213.8	428417.7	34					
	R7, Brigg Lane	465054.1	426248.0	33					
	R8, Station Cottage	466671.9	426399.0	23					
	R9, Briden Bungalow	467759.4	426857.7	27					
	R10, Weston House	466922.8	426331.1	24					
	R11, Rose Cottage	468427.5	426135.4	24					
	R12, Brigg Farm Court	465207.2	426066.8	24					
	R13, Camela House	464868.2	426604.7	36					
	R14, Low Farm	464211.5	427351.1	35					
	The noise mitigation scheme will exceeded during operation near t rating levels at the receptor. Nois m from the following equipment: Plant	he equipment t	o ensure comp	liance with the noise mode shall be set at 5					
	Flue Gas Booster Fans	5 m from equipment	69						
	Carbon Dioxide Compressor Buildings	5 m from building	53						
	Pumps	1 m from each pump	80						
	Combined Power Turbine Buildings	5 m from building	63						
V2	Best Practicable Means will be us during construction. The following Scheme:		-	-	6.1.7 - para 7.5.25	Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contracto

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
NV3	<ul> <li>The appropriate selection of plant, construction methods and programming: Only plant conforming with, or that is better than, relevant national or international standards and directives will be used;</li> <li>Construction plant will be maintained in good condition with regards to reducing noise output; and</li> <li>Design and use of Site hoardings and screens, where necessary, to provide acoustic screening at the earliest opportunity. Gates to the Site will not be located opposite buildings containing noise sensitive receptors.</li> <li>The following noise monitoring will be carried out for the Proposed Scheme:</li> </ul>	6.1.7 - para	Construction	Noise levels	Construction noise	Main Contractor
	<ul> <li>Noise monitoring during the construction phase, which will be included within the CEMP, at locations representative of sensitive receptors R1, R4 and R13, shown in Figure 7.1 (Baseline Noise Survey and Sensitive Receptor Locations) (APP-089), to demonstrate that the noise levels do not exceed the SOAEL for construction; and</li> <li>Noise monitoring during commissioning within short distance to the main operational post combustion technology, namely, compressors, pumps, pumps and flue gas blowers, to verify the mitigated predicted noise levels shown in Appendix 7.2 (Operational Noise Assessment Assumptions) (APP-131).</li> </ul>	7.14.1 6.2.7.1 6.3.7.2	Operation	secured through DCO Requirement	monitoring records demonstrating the noise levels do not exceed the SOAEL for construction. The CEMP will be approved by the LPA. Noise monitoring during commissioning verifying that noise levels are in accordance with the noise levels shown in <b>NV1.</b>	The Applicant
Chapt	er 8 (Ecology)	1	L	L	l	L
E1	Where existing mature vegetation will be avoided and retained, this is identified on the Landscape Mitigation Plan contained within the Outline Landscape and Biodiversity Strategy (OLBS) (APP-180).	6.1.9 - para 9.10.13 (a) 6.6.1	Pre-construction Construction Decommissioning	DCO Requirement S106 Agreement (outside of Order limits)	Landscape mitigation and planting will occur in line with the LBS to be approved by the LPA following consultation with NYCC.	Main Contractor
E2	<ul> <li>Bats</li> <li>Compensatory habitat will be provided for bats (refer to Outline Landscape and Biodiversity Strategy (APP-180)) and will include:</li> <li>Additional trees and hedgerows within the East Construction Laydown Area;</li> <li>Provision of scrub, waterbodies and other suitable habitats for foraging and commuting bats within the Habitat Provision Area;</li> </ul>	6.1.8 - para 8.10.20 - 8.10.21 6.6 - Section 3 6.6.1	Construction Operation	DCO Requirement (in Order limits) S106 Agreement (outside of Order limits)	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the	Main Contractor The Applicant

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	<ul> <li>Reinstatement and strengthening of potential bat commuting routes through the local landscape including within the Habitat Provision Area and border habitats within the East Construction Laydown Area;</li> <li>Provision of new woodland, scrub, grassland and hedgerows within the Habitat Provision Area; and</li> <li>A five-metre offset along the eastern hedgerow and southern woodland parcel within the East Construction Laydown Area will protect commuting and foraging habitats within this area.</li> </ul>				OLBS, to be approved by the LPA following consultation with NYCC. Section 106 will require approval of details of Off-site Provision area and any reporting requirements.	
E3	<b>Badgers</b> A pre-construction badger survey will be carried out at least seven months in advance of site clearance in areas of potential badger habitat commencing to ensure any new information is obtained. A further survey will be completed within one month prior to site clearance commencing. These surveys will reconfirm levels of badger activity in advance of site clearance commencing. This will allow identification of any additional mitigation required, in the unlikely event that levels of activity have increased or locations have changed in the three months prior to site work commencing.	6.1.8 - para 8.10.23	Pre-construction Construction	DCO Requirement S106 Agreement (outside of Order limits)	Pre-construction badger surveys and site clearance will be carried out under a Precautionary Method of Works (PMoW), secured via a CEMP. The CEMP will be approved by the LPA.	Main Contractor
E4	<ul> <li>Otters:</li> <li>The following specific mitigation measures for otters will be implemented for the Proposed Scheme:</li> <li>Pre-construction surveys to reconfirm the status of otter habitat usage of the Site and surrounding watercourses up to 250 m from the Proposed Scheme;</li> <li>Avoidance of any obstructions to established otter paths and access to open water;</li> <li>The marking of, and adherence to, 30 m exclusion zones around any holts and shelters identified as a result of updated survey prior to site clearance and construction activities occurring. If otters are known or suspected to be breeding, the exclusion zone will be extended to a 200 m radius. However, it could be reduced to 100 m depending on the nature of the works, topography and natural screening. This will require judgement from a suitably qualified ecologist; and</li> <li>If breeding was confirmed and exclusion zones of the size set out above were not possible, works will be undertaken in accordance with a European Protected Species (EPS) Mitigation licence to derogate the legislation protecting otter (except during periods of active breeding). Works that could lead to significance disturbance will not be able to commence prior to a licence being in place. As part</li> </ul>	6.1.8 - para 8.10.24 - 8.10.29	Construction	DCO Requirement S106 Agreement (outside of Order limits)	The CEMP will be approved by the LPA. EPS licence (if required)	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	of the licence, appropriate compensation will be provided to ensure that alternative habitat is provided in advance of the impact occurring. This would ensure no net loss in available habitat that may be considered to provide functional linkage for the SAC.					
E5	<ul> <li>Breeding and Wintering Birds</li> <li>If carried out during the breeding season, vegetation and site clearance could cause the destruction or damage of active nests and any eggs or live young present. The following measures will therefore be implemented:</li> <li>Vegetation and site clearance will take place between September and February inclusive, i.e. outside the main bird breeding season, wherever practicable. If it is necessary to remove habitats suitable for breeding birds during the nesting season, these will be subject to a pre-clearance check by a suitably qualified ecologist.</li> <li>In the event that any active nests are found, clearance works will be halted within a minimum distance of 5 m from the nest. This buffer distance will be varied on the advice of a suitably qualified ecologist and will be dependent on the nature of affected habitats and the species of bird involved. Clearance works will not recommence until any young had fledged and left the nest, with a re-inspection by a suitably qualified ecologist to confirm the absence of active nests.</li> </ul>	6.1.8 - para 8.10.30 - 8.10.35 6.6 - Section 3	Pre-construction Construction	DCO Requirement S106 Agreement (outside of Order limits)	Vegetation and site clearance will be carried out under a Precautionary Method of Works (PMoW), secured via a CEMP. The CEMP will be approved by the LPA. Landscape mitigation and planting will occur in line with the LBS.	Main Contractor
E6	<ul> <li>Breeding and Wintering Birds</li> <li>The proposals for reinstatement, enhancement and compensatory habitat as set out in the Outline Landscape and Biodiversity Strategy will provide replacement habitat for breeding and wintering birds. This will include: <ul> <li>New woodland planting, hedgerows within the farmland area to the north of the East Construction Laydown Area;</li> <li>New and enhanced hedgerows within the Habitat Provision Area and border habitats of the East Construction Laydown Area;</li> <li>Provision of scrub within the farmland area to the north of the East Construction Laydown Area;</li> <li>Enhancement of field margins around the East Construction Laydown Area;</li> <li>Provision of new and enhanced woodland, scrub and species-rich grasslands within the Off-site Habitat Provision Area in Arthur's Wood and Fallow Field.</li> </ul> </li> </ul>	6.1.8 - para 8.10.32 6.6 - Section 3	Construction Operation	DCO Requirement (in Order limits) S106 Agreement (outside of Order limits)	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC. Section 106 will require approval of details of Off-site Provision area and any reporting requirements.	Main Contractor The Applicant

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
E7	Reptiles and Amphibians         Vegetation clearance in areas that may support reptiles and amphibians will be carried out under a PMoW. The areas to be cleared are shown in Figure 3 of the Outline Landscape and Biodiversity Strategy (APP-180).	6.1.8 - para 8.10.36 and para 8.10.39 6.6 - Section 3 6.6.3	Construction Operation	DCO Requirement S106 Agreement (outside of Order limits)	Vegetation and site clearance will be carried out under a Precautionary Method of Works (PMoW), secured via a CEMP. The CEMP will be approved by the LPA. Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC.	Main Contractor
E8	Reptiles         The proposals for reinstatement, enhancement and provision of compensatory habitat as set out in the Outline Landscape and Biodiversity Strategy, will provide replacement habitat for local reptile populations, which will include:         ~ Enhancement of field margins around the East Construction Laydown Area;         ~ Creation of a waterbody, species rich grassland and scrub within the Habitat Provision Area; and         ~ Provision of new and enhanced woodland, scrub and species-rich grasslands within the Off-Site Habitat Provision Area.	6.1.8 - para 8.10.37 6.6 - Section 3.3 6.6.1	Construction Operation	DCO Requirement S106 Agreement (outside of Order limits)	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC. Section 106 will require approval of details of Off-site Provision area and any reporting requirements.	Main Contractor
E9	Great Crested Newts	6.1.8 - para 8.10.39	Pre-construction	District Level Licence	The District Level Licence already exists. Use of the Licence will be secured through an	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	A District Level Licence will be secured to implement strategic mitigation for great crested newts within Selby. This will address the effects of the Proposed Scheme on great crested newt habitats.				application to Natural England.	
E10	<ul> <li>Terrestrial Invertebrates</li> <li>As terrestrial invertebrate habitat in the Woodyard will be lost permanently during the operational phase, the following methods will be used implemented to mitigate impacts on terrestrial invertebrates as set out in the Outline Landscape and Biodiversity Strategy (APP-180).</li> <li>Habitat creation in the Off-Site Habitat Provision Area will include suitable habitat features for a range of terrestrial invertebrate species, including those recorded during the terrestrial invertebrate surveys of the Woodyard; and</li> <li>Habitat compensation for terrestrial invertebrates using habitat features from the existing Woodyard will be used to create new habitat within the Order Limits in the Habitat Provision Area and the Off-Site Habitat Provision Area.</li> </ul>	6.1.8 - para 8.10.40 6.6 - Section 3 6.6.1	Construction Operation	DCO Requirement (in Order limits) S106 Agreement (outside of Order limits)	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC. Section 106 will require approval of details of Off-site Provision area and any reporting requirements.	Main Contractor The Applicant
E11	Vascular Plants Mitigation for the green-winged orchids will include the translocation of individual orchids to a receptor site (provisionally located within Fallow Field in the Off-site Habitat Provision Area). The receptor site will be prepared with translocated soils from the Woodyard. Individual orchids will be carefully removed from the existing site and replanted at the receptor site. The details of the orchid translocation will be included in the LBS	6.1.8 - para 8.10.42 and 8.10.43 6.6 - para 3.3.33 - 3.3.36	Pre-construction	DCO Requirement to secure methodology through LBS (in Order limits) S106 Agreement to secure land delivery (outside of Order limits)	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC. Section 106 will require approval of details of Off-site Provision area and any reporting requirements.	The Applicant

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
E12	An invasive species strategy will be produced and included within the CEMP which will address the risk of spreading invasive non-native species. This will apply to areas where invasive species are recorded.	6.1.8 - para 8.10.45 - 8.10.47 6.6 - para 3.3.38	Pre-construction Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor
E13	A suitably qualified ecologist will complete a pre-construction / site clearance walkover at least three months ahead of commencement (for relevant work numbers) where there could be an impact on the biodiversity interest of the Site. The aim of this advanced site visit will be to re-assess the ecological baseline conditions and to determine if any additional ecological mitigation is required beyond that specified in the <b>OLBS</b> and the ES. The scope of the walkover will be defined in consultation and with the agreement of the Applicant, North Yorkshire County Council and SDC. The results of the pre-construction walkover will inform the detailed delivery of construction phase ecological mitigation and will consider the following elements: ~ Badger activity including new setts; ~ Invasive non-native species; ~ Trees with features suitable to support protected and notable species; ~ Changes in habitat composition and condition.		Pre-construction	DCO Requirement S106 Agreement (outside of Order limits)	The CEMP, which will be informed by the ecology walkover, will be approved by the LPA.	The Applicant Main Contractor
E14	<ul> <li>The following monitoring surveys will be required to assess the efficacy of mitigation:</li> <li>A walkover survey of landscape and habitat creation areas including reinstated, created, and enhanced habitats will be completed in years 1, 3, 5, and 10 following completion of the construction phase. This will assess the success of habitat mitigation measures;</li> <li>Walkover surveys of reinstated, created and enhanced habitats on and off-site to assess suitability for foraging and commuting bats will be completed. In addition bat activity transect surveys will be completed to assess any evident changes in bat populations. Surveys will be completed between May and September in years 3 and 10 following completion of the construction phase;</li> <li>Targeted otter surveys of watercourses and waterbodies within the Order Limits will be completed in years 1 and 3 following completion of construction. The proposed surveys will ascertain if otters are still inhabiting the features where they have been previously recorded.</li> <li>Walkover surveys of reinstated, created and enhanced habitats within on and off-site areas to assess suitability of these for breeding and wintering birds will be completed. Targeted breeding bird surveys of landscape and habitat creation</li> </ul>	6.1.8 - para 8.14.2 - 8.14.9 6.6 - Section 5	Operation	DCO Requirement S106 Agreement (outside of Order limits)	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC. Section 106 will require approval of details of Off-site Provision area and any reporting requirements.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	<ul> <li>areas will also be completed. These surveys will be completed between April and July in years 3 and 10 following completion of construction;</li> <li>Targeted wintering bird surveys of habitats in the Habitat Provision Area and East Construction Laydown Area will be completed between September and March of years 3 and 10 following completion of construction. These will confirm the distribution and abundance of wintering bird species and identify whether any changes could be linked to changes arising from the Proposed Scheme;</li> <li>Walkover surveys of reinstated, created and enhanced habitats including areas of plug planted and seeded areas to assess suitability and success, will be carried out in years 3 and 10 following completion of construction within the Habitat Provision Area and Off-Site Habitat Provision Areas. Targeted terrestrial invertebrate surveys will be undertaken in years 3 and 10 to ascertain the level of colonisation of each area by terrestrial invertebrates following completion of construction. In particular, surveys will seek to re-establish the presence of the Red Data Book species identified during surveys carried out to date for the Proposed Scheme.</li> <li>Targeted surveys to assess the presence of green-winged orchid will be completed within the receptor site within the Off-site Habitat Provision Area. Surveys will be undertaken in years 3 and 10 following completion of construction</li> </ul>					
E15	In order to achieve 10% net gain for biodiversity, there will be enhancements to river habitat in the local area. Enhancements are not possible within the Order Limits, so opportunities to achieve the biodiversity net gain target are being sought elsewhere in consultation with the Environment Agency, Yorkshire Wildlife Trust and Selby Area IDB.	6.1.12 - 12.10.36 6.6 - para 1.4.7	Detailed design	S106 Agreement (outside of Order limits)	Demonstration of 10% net gain for biodiversity being achieved for Drax BECCS. Section 106 will require approval of details of Off-site Provision area and any reporting requirements.	The Applicant
Chapte	er 9 (Landscape and Visual Impact)	1	1			L
LVIA1	Landscape mitigation planting, for the purpose of visual screening is proposed along the eastern boundary of the East Construction Laydown Area. The existing hedgerow will remain in place and be enhanced along its length, to include the thickening and gapping up of the hedge and the planting of frequent broadleaved tree species. The intention is to provide additional filtering of views towards the East Construction Laydown for footpath users east of the Drax Power Station Site and for occupiers of nearby residential properties during construction. Measures to achieve this mitigation are provided within the <b>Outline Landscape and Biodiversity Plan</b> (APP-180)	6.1.9 - para 9.10.12 6.6	Detailed Design	DCO Requirement	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements by the LPA following consultation with NYCC.	Responsible Organisation
LVIA2	<ul> <li>The Construction Environmental Management Plan (CEMP) will include the following measures:</li> <li>Fencing will be erected prior to construction activities and will remain in place for the entire construction period;</li> <li>No works (including temporary) will be carried out within the canopy of the spread of existing retained trees; and</li> <li>Where existing vegetation is removed by the construction of the Proposed Scheme, appropriate planting in the form of hedgerows, arable field margins and tree planting will be planted in line with the landscape mitigation design (refer to Landscape Mitigation Plan) in order that the vegetative framework of the landscape is replaced / restored.</li> </ul>	6.1.9 - 9.10.17 6.6 6.6.1 6.6.2 6.6.3	Construction	DCO Requirement	The CEMP will be approved by the LPA. Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC.	Main Contractor The Applicant
LVIA3	The construction programme would be no longer that is reasonably necessary to construct the Proposed Scheme, and as such, would limit the duration of any landscape and visual impacts. Areas required to be cleared to enable the Proposed Scheme to be built will be cleared as close as possible to works commencing and topsoiling, seeding and planting will be undertaken during the next available season after works are complete.	6.1.9 - para 9.10.14	Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor
LVIA4	<ul> <li>To protect soil for landscape planting:</li> <li>Uncontaminated topsoil for re-use will be stored in un-compacted mounds no more than 2 m high and stored separately from subsoil material;</li> <li>Stripped topsoil will be used in areas of similar proposed vegetation type to utilise the existing natural seed bank; and</li> <li>Where necessary subsoil in planting areas will be replaced following construction and appropriately treated, this may include being ripped to reduce compaction (depending on underlying soil type and conditions), before topsoiling and planting. A minimal topsoil depth of 300 mm will be achieved across all planting areas unless otherwise agreed with the landscape architect. Topsoil depth will be reduced to a minimum depth of 100 mm in areas of amenity grassland. Topsoil will not be used for species rich grassland areas.</li> </ul>	6.1.9 - para 9.10.16	Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
LVIA5	The <b>LBS</b> will set out the landscape mitigation replacement planting beyond the 5-year establishment period (years to 6 to 30). From year 6, monitoring surveys will be undertaken to review the success of the landscape mitigation and identify any areas where mitigation commitments have not been met. The reviews should identify any management works required to ensure the longer-term success of the landscape elements and identify measures or develop proposals to rectify any areas where a commitment is not being met, such as through any replacement planting.	6.1.9 - para 9.14.2 and 9.14.5 6.6	Operation	DCO Requirement	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC.	The Applicant
LVIA6	Maintenance inspections will be undertaken (by an appointed landscape architect) on a regular basis during the maintenance period following the completion of the Proposed Scheme, to review the effectiveness of the proposed Landscape Elements in meeting their Environmental Functions as set out within the <b>Outline Landscape</b> <b>and Biodiversity Strategy</b> . Inspection visits will review planting maintenance and establishment as set out within the <b>Landscape Management Plan.</b> During each inspection, records will be made of the standard of work undertaken, general plant health and obvious signs of disease or plant stress. At the autumn inspection the number of plant failures will be recorded, and the extent of replacement planting will be carried out in the following planting season.	6.1.9 - para 9.14.3 to 9.14.4 6.6 6.6.1	Operation	DCO Requirement	Landscape mitigation, planting and design will be carried out in line with the LBS, which will be developed in accordance with the OLBS, to be approved by the LPA following consultation with NYCC.	The Applicant
LVIA7	Landscape mitigation planting in relation to the East Construction Laydown Area will be implemented prior to the commencement of the construction phase.	6.6	Pre-construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor
Chapte	er 10 (Heritage)	<u> </u>		1	I	
H1	Avoidance through design of known below ground HAs and areas of high potential will be used in the first instance. Any planting in the Habitat Provision Area will avoid the boundary of the Drax Augustinian Priory (NHLE1016857).	6.1.10 - para 10.10.2 6.2.10.1 6.6 6.6.1	Detailed Design	DCO Requirement	Detailed Design This will be recorded on as built drawings. Planting completed in line with the <b>OLBS.</b>	Main Designer The Applicant
H2	An Archaeological Clerk of Works (ACoW), who will be responsible for the design and implementation of the archaeological works, will oversee all heritage aspects for the	6.1.10 - para 10.10.5	Pre-construction Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor The Applicant

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	Proposed Scheme. Roles and responsibilities for the ACoW will be included in the CEMP.					
H3	An archaeological Watching Brief to an approved archaeological Written Scheme of Investigation (WSI) will be agreed with the Local Planning Authority for any major ground disturbance to ensure that archaeological remains are not removed without record. This will need to be programmed with adequate time for the recording of archaeological remains.	6.1.10 - para 10.10.4 and 10.10.5	Pre-construction Construction	DCO Requirement	WSI approved by the LPA in consultation with the local authority.	Main Contractor The Applicant
	Any archaeological work will be undertaken in consultation with the relevant Archaeological Advisor, and in accordance with an archaeological WSI approved by the relevant planning authority outlining the scope and method of investigation, along with the post-excavation reporting and dissemination strategy.					
	The level of archaeological attendance will depend on the nature of the works taking place.					
H4	Following consultation on the Watching Brief, it is recognised additional targeted site- based archaeological investigations may be required, the scope and form of which is to be agreed with LPA archaeological officers. Dependant on the results of this investigation, further mitigation may be required.	6.1.10 - para 10.10.7	Pre-construction Construction	DCO Requirement	WSI approved by the LPA in consultation with the local authority	Main Contractor The Applicant
H5	If impacts do occur on currently unknown but nationally important Below-Ground HAs (related to Drax Augustinian Priory (1016857)) within the Habitat Provision Area, preservation in-situ will be explored, where practicable.	6.1.10 - para 10.10.9	Pre-construction Construction	DCO Requirement	WSI approved by the LPA in consultation with the local authority.	Main Contractor The Applicant
H6	The WSI will set out how public benefits will be achieved by means of engagement, participation and / or dissemination, as appropriate, to the scale and circumstances of the work.	6.1.10 - para 10.10.11	Pre-construction Construction	DCO Requirement	WSI approved by the LPA in consultation with the local authority.	Main Contractor The Applicant
Chapte	er 11 (Ground Conditions)	I				I
GC1	The CEMP will include the following measures which will be implemented to mitigate risks to human health (site visitors / workers, construction / demolition workers and, third party neighbours), Controlled Waters and GWDTE and agricultural soils:	6.1.11 - para 11.10.3	Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor
	<ul> <li>This will include the use of hoardings around excavations, construction compounds and laydown and demolition areas.</li> </ul>					
	<ul> <li>A protocol for managing unexpected ground contamination that may be encountered during construction will be implemented. This will include additional investigations, sampling, risk assessment and remediation to ensure the protection of sensitive receptors; and</li> </ul>					

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	<ul> <li>Construction workers will be required to wear PPE such as gloves and face masks (where appropriate) to prevent dermal contact and inhalation or ingestion.</li> <li>Appropriate site hygiene facilities will be put in place and the presence of contaminants, and the associated risks will be explained to ground workers before they begin work.</li> </ul>					
GC2	<ul> <li>A Soil Handling Management Plan, which will be included in the CEMP, will be produced prior to any enabling or construction works commencing. This will include best practice measures to reduce impacts to soil during handling and will be informed by site-specific soil and climatological data. Appropriate measures in the SHMP will include:</li> <li>Site specific soil management considerations which will be informed by the detailed ALC Survey (refer to Appendix 11.2, (APP-158)) and available Post-1988 ALC survey information;</li> <li>The SHMP will demonstrate the sustainable, beneficial soil re-use of potential surplus soil resources;</li> <li>The SHMP will include the principles outlined within the DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites;</li> <li>The SHMP will include the type and volume of each soil type to be handled and stockpiled and the location of soil storage and restoration. These activities will be determined by the nutrient status of the soils and the ALC grade.</li> <li>For areas of temporary development, the SHMP will outline actions for appropriate methods for the stripping, handling and storage of the soils.</li> <li>The methods which will be used to restore affected areas to agricultural use after works will be outlined using the ALC survey as a baseline and will aim to return the soil to the same quality as far as practicable to minimise potential loss.</li> <li>Land to be restored for agricultural use after construction will require an agreed aftercare plan with the landowner / farmer and aim to return the land to the same agricultural capability as before construction.</li> <li>The SHMP will be prepared in consultation with Natural England.</li> </ul>	6.1.11 - para 11.10.3	Pre-construction Construction	DCO Requirement	The CEMP will be approved by the LPA. The SHMP, which will form part of the CEMP, will be approved by the LPA following consultation with Natural England.	Main Contractor
GC3	A ground investigation will be undertaken prior to the construction phase. This is likely to be led by geotechnical requirements but will include geo-environmental sampling of soil, groundwater, and surface water. The scope of the geo-environmental investigation will be underpinned by the Conceptual Site Model presented in the <b>Preliminary Risk Assessment (Appendix 11.1)</b> (APP-156). The analytical data will be screened for risks to human health and controlled waters and the results used to refine the contaminant linkages identified. The soils will also be analysed for the purposes of waste classification and to determine suitability for re-use.	6.1.11 - para 11.10.4 - 11.10.11 6.3.11.1 (Part 1) - Section 7	Pre-construction	DCO Requirement	Ground Investigation specification. Ground Investigation completed in accordance with specification. Generic Quantitative Risk Assessment	The Applicant's Ground Investigation Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	The ground investigation will also confirm preliminary hydrogeological conditions and will obtain information associated with ground aggressivity, including sulphates, sulphides (especially in pyritic ground), water-soluble magnesium and acids (indicators are pH, chloride and nitrate ions). The results will be used to determine an appropriate concrete specification for the design stage.				Remediation Strategy Verification Report	
	The results of the ground investigation will be interpreted and assessed within a Generic Quantitative Risk Assessment (GQRA) which will be provided for regulatory approval. If the ground investigation identifies contaminant linkages a Remediation Strategy will be produced which will specify protective measures during construction which will be agreed with the regulators prior to implementation. Any remediation undertaken will be validated and a Verification Report produced to provide confidence that it has been undertaken with the agreed strategy. The ground investigation will be undertaken in accordance with the following:					
	<ul> <li>BS 10175:2011+A2:2017: Investigation of Potentially Contaminated Sites. Code of Practice. British Standards Institute (British Standard, 2017); and</li> </ul>					
	<ul> <li>Land Contamination Risk Management, Environment Agency (Environment Agency, 2020)</li> </ul>					
	<ul> <li>The results of the ground investigation will be interpreted and assessed within a Generic Quantitative Risk Assessment (GQRA) which will be provided for regulatory approval.</li> </ul>					
	If the ground investigation identifies contaminant linkages a Remediation Strategy will be produced which will specify protective measures during construction which will be agreed with the regulators prior to implementation. The Remediation Strategy will include measures to remove or decommission any below ground services, tanks, structures and / or pipework encountered during construction to ensure that contaminants do not enter the ground and no preferential pathways remain.					
	<ul> <li>Any remediation undertaken will be validated and reported on within a Verification Report to provide confidence that it has been undertaken with the agreed strategy.</li> </ul>					
	<ul> <li>An Earthworks Specification will be produced that will include protocols for testing and limiting values to ensure that imported materials are suitable for their intended use in terms of their chemical and geotechnical quality.</li> </ul>					
Chapt	er 12 (Water Environment)					
WE1	The Proposed Scheme will include a system of containments to mitigate the potential risk of pollution. These will be designed in accordance with the COSHH / COMAH /	6.1.12 - para 12.10.3 -	Detailed Design	DCO Requirement	This will be recorded on as built drawings	Designer
	HSE guidance / GPP requirements at the detailed design stage. Where the water meets discharge criteria the surface water will be discharged in line with the Drax Power Station discharge consent. If the surface water does not meet consent conditions it will either be transferred to the Carbon Capture Waste Water Treatment	12.10.5 6.3.12.3 - para 6.4.3		Environmental Permit	Approval of SWDS by North Yorkshire County Council	

Drax Bioenergy with Carbon Capture and Storage

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	Plant for treatment or, if contaminant levels are such that they cannot be treated on site, to a storage tank prior to removal and treatment off site under a waste transfer licence to a suitable licensed wastewater treatment facility.	6.1.8 - para 8.10.3			(NYCC) in consultation with LLFA, EA and IDBs.	
	The following areas will include containment measures to collect potentially contaminated surface water runoff:				Approval under Environmental Permit	
	<ul> <li>Solvent Storage and Make-up System;</li> <li>Chemicals for Carbon Capture Waste Water Treatment Plant;</li> </ul>				Regulations (EPR) by the EA as part of permit variation.	
	<ul> <li>Chemicals for Quench Column; and</li> <li>Chemicals for Absorber Column.</li> </ul>					
	These areas will be kerbed or bunded to collect surface water runoff. These will be designed in accordance with the COSHH / COMAH / HSE guidance / GPPs requirements at the detailed design stage. Consideration will be given to any additional requirements to prevent damage to the sensitive infrastructure from the debris during flood events. Discharge valves will be kept closed and water collected would be tested to identify if contaminants are present. Where the water meets discharge criteria the surface water will be discharged in line with the Drax Power Station discharge consent. If the surface water does not meet consent conditions it will either be transferred to the Carbon Capture Waste Water Treatment Plant for treatment or, if contaminant levels are such that they cannot be treated on site, to a storage tank prior to removal and treatment off site under a waste transfer licence to a suitable licensed wastewater treatment facility. The environmental controls to operate these areas will be included in the Drax Power Station environmental management system (EMS) certified in accordance with the ISO 14001.					
WE2	Oil Storage for the Flue Gas Booster Fans, CO <sub>2</sub> compressor and air compressor unit will be designed in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001. All potentially oil contaminated storm water in these areas will be collected into the oil water drain pit and transferred to the existing oily wastewater system.	6.1.12 - para 12.10.6	Detailed Design	DCO Requirement Environmental Permit	This will be recorded on as built drawings Approval of SWDS by NYCC, in consultation with LLFA, EA and IDBs. Approval under EPR	Designer
					by the EA as part of permit variation.	
WE3	Rich Solvent / Lean Solvent Heat Exchangers will be individually bunded. The bunds will be designed in accordance with the COSHH / COMAH / HSE guidance / GPP requirements at the detailed design stage.	6.1.12 - para 12.10.7	Detailed Design	DCO Requirement Environmental Permit	Detailed Design This will be recorded on as built drawings. Approval of SWDS by NYCC, in consultation	Designer

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements with LLFA, EA and IDBs. Approval under EPR by the EA as part of permit variation.	Responsible Organisation
WE4	Tanker / chemical unloading bays dependant on risk / impact will either be designed as fully bunded areas or with suitable protection measures to prevent any spillages to Drax Power Station on-site surface water drainage systems. The bunds, if required, will be designed in accordance with the COSHH / COMAH / HSE guidance / GPPs requirements at detailed design stage.	6.1.12 - para 12.10.8	Detailed Design	DCO Requirement Environmental Permit	This will be recorded on as built drawings Approval of SWDS by NYCC, in consultation with LLFA, EA and IDBs. Approval under EPR by the EA as part of permit variation.	Designer
WE5	<ul> <li>Control measures in accordance with the ISO 14001 certified EMS for the Proposed Scheme will be implemented in order to control surface water runoff that could become contaminated by chemicals and oil. These will include, but not be limited to, the following:</li> <li>Daily checks will be carried out to inspect for chemical and oil leakage;</li> <li>Drip trays, or similar, will be installed under pumps to capture any potential leaks;</li> <li>Contaminant trays and / or shrouds will be installed for Plate Heat Exchanger (PHE); and</li> <li>Leakage detection systems will be considered for high risk areas during detailed design.</li> <li>The surface water drainage network for the Proposed Scheme will include oil separators, as required, during detailed design.</li> </ul>	6.1.12 - para 12.10.9 - 12.10.11	Detailed Design Operation	DCO Requirement Environmental Permit	Approval of SWDS by NYCC in consultation with LLFA and IDBs. Environmental Permit variation approved by the Environment Agency. Records of updates to operational control procedures, Environment Management System and Drax Management Instructions.	The Applicant
WE6	As set out in the Existing Drainage Systems and Proposed Surface Water Drainage Strategy (APP-162), the Proposed Scheme will include a new arrangement whereby surface water will be directed to a new sump and pump arrangement which will direct the waters to the Northern Cooling Water Reservoir. The collected runoff will then be utilised as cooling water. Current operations at Drax Power Station use water abstracted from the River Ouse for cooling and surface water is discharged to Carr Dyke and the River Ouse. As set out in the Existing Drainage Systems and Proposed Surface Water Drainage Strategy, the following hierarchy will be followed:	6.1.12 - para 12.10.13 6.3.12.3 - para 6.1.3	Detailed Design	DCO Requirement Environmental Permit	Approval of SWDS by NYCC, in consultation with LLFA, EA and IDBs. Approval under EPR by the EA as part of permit variation.	Designer

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
	<ul> <li>Reducing and eliminating additional runoff;</li> <li>Reuse of runoff and harvesting;</li> <li>Discharge into the ground (infiltration);</li> <li>Discharge to a surface water body;</li> </ul>					
	<ul> <li>Discharge to a public / third-party surface water sewer (e.g. highway drain, or another drainage system); and</li> <li>Discharge to a combined sewer.</li> </ul>					
WE7	The sensitive equipment (equipment which is required to maintain the operation of the Proposed Scheme and could be adversely impacted by flood waters) within the floodplain will be set a minimum of 800 mm above the design event (FT2) flood levels. For elements located outside of the design and sensitivity floodplains a minimum freeboard of 300mm will be incorporated. Raising the sensitive infrastructure will provide 380mm for the sensitivity scenarios and 250 mm freeboard allowance between the level of the sensitive equipment and the modelled breach flood levels. The increase in flood risk will be mitigated by creating additional floodplain (a minimum floodplain area of 1,889m <sup>2</sup> will be created) through the lowering of ground outside the floodplain on land controlled by the Applicant.	6.1.12 - para 12.10.15 6.3.12.1 - para 5.4.2 and 5.4.9 6.1.14 - para 14.10.4	Detailed Design	DCO Requirement to comply with Flood Risk Assessment.	This will be recorded on as built drawings.	Designer
WE8	<ul> <li>To mitigate increased sediment load and reduce impacts as a result of the release of hydrocarbons, oil and hazardous materials, during construction, the following measures will be implemented through a Surface Water Management Plan:</li> <li>No activities will take place in Carr Dyke or within 7 m of its open channel or piped section without prior consent from the Selby Area IDB. As this will be secured pursuant to the DCO, no separate Land Drainage consent will be required. This rule also relates to any other ordinary watercourse within the Order Limits;</li> <li>Construction activities including vegetation clearance, earth moving, storage of materials and equipment and plant movement in the vicinity of any surface water features or drainage lines will be protected from material falling into it, or runoff entering it. The use of one or more of silt fences, cut-off drains, berms and other relevant control measures will be indicated in such circumstances, depending on the topography. Nothing other than clean water should be allowed to enter drainage lines;</li> <li>Land clearance in the vicinity of surface water features is unavoidable, the features will be protected with, but not limited to, silt traps, silt fences and filter bunds;</li> </ul>	6.1.12 - para 12.10.24 and 12.10.25 6.1.8 - para 8.10.13	Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Ac and Re
	<ul> <li>Temporary cut-off drains will be used uphill and downhill of the working areas (including construction areas and laydown areas) to prevent clean runoff entering and dirty water leaving the working area without appropriate treatment;</li> </ul>				
	<ul> <li>Cut off ditches, silt fencing or similar measures, will be provided along the perimeter of the Site to capture any runoff from the Site. They will be provided inside of the hoarding so pollution can be captured before it reaches the hoarding;</li> </ul>				
	<ul> <li>Surface water run-off and excavation dewatering will be captured and settled out prior to water being discharged through the Purge to the River Ouse or to the IDB drains. Runoff from potentially highly contaminated areas will be treated appropriately prior to discharge;</li> </ul>				
	<ul> <li>All the existing drains and sewers within the Drax Power Station Site will be identified and labelled, and measures such as using straw bales, silt fencing or silt traps will be implemented to prevent polluting substances and increased sediment load from entering them.</li> </ul>				
	~ Appropriate interceptors will be incorporated in the on-site drainage systems;				
	<ul> <li>Spill containment equipment will be stored on the Site;</li> </ul>				
	<ul> <li>Hazardous substances, oil and fuel will be managed in accordance with the requirements of the Environmental Permit but as a minimum they will not be located within 10 m of water bodies or drainage lines and will be stored in bunded areas holding at least 110% of the container or one quarter of the combined capacity of all containers where there are more than one. Storage and bunded areas will be constructed with impervious floors;</li> </ul>				
	<ul> <li>Refuelling of machinery will be undertaken in bunded areas, which will not be located within 10 m of water bodies or drainage lines;</li> </ul>				
	<ul> <li>All refuelling will be supervised and carried out in a designated area with appropriate cut-off drainage and located away from watercourses and drainage lines;</li> </ul>				
	<ul> <li>In accordance with the Environmental Permit, drip trays will be used for diesel pumps and standing plant will be regularly maintained to prevent leaks;</li> </ul>				
	<ul> <li>Any dewatering will be undertaken and managed in such a way as to prevent an increase in sediment / silt loads in the receiving watercourse / water environment;</li> </ul>				
	<ul> <li>Construction materials, such as cement, will be mixed in designated areas located away from water bodies and drainage lines; and</li> </ul>				
	~ Concrete wash out will only take place at designated concrete washout areas.				
WE9	If temporary pumping of water from excavations is required, appropriate consents / permits will be obtained from the Selby Area IDB and / or the Environment Agency as appropriate. If required, the groundwater pumping rate and volume will be confirmed	6.1.12 - para 12.10.27	Construction	Appropriate consents	App will
	appropriate. If required, the groundwater pumping rate and volume will be confirmed as part of the CEMP and in compliance with the Guidance for Pollution Prevention.	Requested by the IDB		obtained from the Selby Area	the and

chievement Criteria nd Reporting equirements	Responsible Organisation
opropriate consents ill be obtained from e Selby Area IDB nd / or EA.	Main Contractor in conjunction with the Applicant

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
		during discussions at Pre- Examination		IDB and / or EA.		
WE10	<ul> <li>The following measures will be implemented to mitigate flood risk:</li> <li>No works will be carried out within the Order Limits when there is a risk of breach of the existing flood defences;</li> <li>A Method Statement will be produced as part of the CEMP detailing the procedures for securing the Site and plant equipment for a flood event (breach of the defences), in particular with reference to safe working practises, harmful substances and fuels; and</li> <li>The Main Contractor will sign up to the Environment Agency flood warning service to receive up to date flood information and warnings.</li> </ul>	6.1.12 - para 12.10.29 - 12.10.32	Construction	DCO Requirement	Method Statement for procedures to be followed for a flood event included in the CEMP that will be approved by the LPA.	Main Contractor
WE11	The existing discharge (W1) included within the Environmental Permit held by Drax Power Station requires water to be monitored prior to discharge to the River Ouse. The existing monitoring regime will be retained or enhanced as required to ensure permit compliance to account for the existence of the Proposed Scheme. Monitoring will also be carried out prior to discharging water captured on the Drax Power Station Site to River Ouse. These monitoring requirements will be incorporated into the Drax Power Station EMS.	6.1.12 - para 12.14.2 and 12.14.3	Operation	Environmental Permit	Environmental Permit variation approved by the Environment Agency. Records of updates to operational control procedures, Environment Management System and Drax Management Instructions.	The Applicant
WE12	<ul> <li>Should any works be required to be undertaken in the vicinity (7m) of the IDB watercourses (open channels) these will be planned and discussed with the IDB in advance to minimise impacts and disruption. A Method Statement will be produced in consultation with the IDB which will include the following:</li> <li>A drawing to show the location of the watercourse;</li> <li>Measures to protect the watercourse if works are to be undertaken within 7m of the watercourse; and</li> <li>The operational and emergency access requirements including protocols for site induction arrangements, contact details and out of working hours access arrangements, for any periods when the land is fenced.</li> </ul>	Requested by the IDB during Pre- Examination	Construction	DCO Requirement	The CEMP will include a requirement for the Method Statement to be produced in consultation with the IDB. The CEMP will be approved by the LPA. Site Environmental Inspection Reports	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation
WE13	Dewatering / temporary drainage measures will be halted during a significant flood event should the IDB request it and the Main Contractor will monitor weather conditions / river levels to help restrict these works during adverse weather conditions when the IDB are unlikely to be able to pump waters to the River Ouse which may cause flooding.	Requested by the IDB during Pre- Examination	Construction	DCO Requirement	This commitment will be included in the CEMP which will be approved by the LPA.	Main Contractor
WE14	<ul> <li>Prior to any works being undertaken a watercourse pollution prevention plan will be prepared and shared with the Environment Agency. This will enable the contractor and other bodies (e.g. the Environment Agency) to rapidly manage and mitigate a pollution event should one occur during construction or operation of the Proposed Scheme, this will detail:</li> <li>The locations, names and references of all watercourses shown in Figure 1, Appendix A of this REAC;</li> <li>Normal flow directions;</li> <li>Key culverts / barriers to flow;</li> <li>Inspection locations;</li> <li>Access points;</li> <li>Locations of pollution prevention measures (e.g. spill kits, silt curtains, silt traps, booms and stop boards) both embedded and reactive; and</li> <li>Outfalls / connections to other watercourses (including the River Ouse).</li> </ul>	Requested by the EA during Pre- Examination	Construction and Operation	DCO Requirement	This commitment will be included in the CEMP which will be approved by the LPA. A watercourse pollution prevention plan. Records of updates to operational control procedures, Environment Management System and Drax Management Instructions.	Main Contractor and the Applicant
WE15	Should any ponds or water features be required to be infilled during the construction phase this will be undertaken in such a manner to prevent an increase in silt / sediment loads in the receiving watercourse and with appropriate mitigation in place to prevent the creation of contaminant pathways to the receiving groundwater body and / or increase in groundwater flood risk to the new infrastructure.	Requested by the EA during Pre- Examination	Construction	DCO Requirement	The CEMP will be approved by the LPA.	Main Contractor
Chapte	er 13 (Materials and Waste)	I	1			
MW1	All suitable earthworks arisings generated (cut) will be reused during construction and are anticipated to comprise approximately 365,850 tonnes of resource, subject to testing.	6.1.13 - para 13.10.2	Construction	DCO Requirement	The CEMP will be approved by the LPA. The MMP will be approved by a Qualified Person with a declaration sent to the EA (which will facilitate the reuse of arisings ).	Main Designer Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements SWMP (recording reuse of materials on site).	Responsible Organisation
MW2	Where on site re-use of earthworks (or other forms of recovery) cannot be achieved, the arisings will be sent for off-site reuse or to licensed recycling facilities. The materials will be suitably stockpiled temporarily until such a time that it can be usefully deployed. The storage location for these arisings will be determined by the contractor and specified in the CEMP, and in accordance with the Materials Management Plan (MMP). The Materials Management Plan will be developed in accordance with relevant guidance including 'The Definition of Waste: Development Industry Code of Practice' (CL:AIRE), an environmental permit or a relevant exemption.	6.1.13 - para 13.10.3	Pre-construction / Construction / Decommissioning	DCO Requirement	The MMP will be approved by a Qualified Person with a declaration sent to the EA. The CEMP will be approved by the LPA.	Main Contractor
MW3	<ul> <li>The SWMP will be produced to manage and monitor site waste effectively with the overall objective to reduce waste and potential harm to the environment during construction and will include the following measures:</li> <li>Monitoring and management of scheme performance objectives and targets, including the current target to divert 95% of waste from landfill;</li> <li>The types and volumes of waste reused, recycled and landfilled will be recorded;</li> <li>Where the arisings and waste have been reused, recycled and landfilled, both on and off site will be identified;</li> <li>Waste recovery and disposal facilities that will be used are identified and the details of their permits / licences / exemptions, both on and off site;</li> <li>Waste recovery and disposal contractors that will be used and details of waste carriers' licences are collated;</li> <li>Any waste exemptions that are in place in order to enable waste to be reused; and</li> <li>Waste transfer documentation that captures all waste movements and is accompanied by information required by law.</li> </ul>	6.1.13 - para 13.10.8 6.1.15 - para 15.10.2	Construction / Decommissioning	DCO Requirement	SWMP produced and maintained. The CEMP will be approved by the LPA.	Main Contractor
Chapte	r 14 (Climate Resilience)		1	1		
CC1	<ul> <li>The following mitigation will be implemented to reduce the potential effects for extreme temperature events:</li> <li>The buildings will be designed to accommodate temperatures up to 35 degrees with no risk to health and safety of occupants and components for worst-case scenario temperatures.</li> </ul>	6.1.14 - para 14.10.5	Detailed Design	DCO Requirement	Detailed design. This will be recorded on as built drawings.	Designer

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Acl and Red
	<ul> <li>The design shall be in accordance with the UK Building Regulations and BE EN codes. Where no BS EN code exists the Eurocodes and ISO standards will be adopted;</li> <li>The FEED contractor will consider using heat resistant materials for replacement / refurbishment of pavements.</li> <li>Proactive maintenance to address any defects to be carried out on the Proposed Scheme assets.</li> </ul>				
CC2	To reduce the potential effects of wind loading on the Main Stack, the structures will be designed in accordance with UK Building Regulations and BS EN design codes. For structural system design purposes, wind loads will be considered according to the provisions of BS EN 1991-1-4 + NA with the following parameters for the Site: ~ vb,0 = 22.7 m/s (fundamental basic wind velocity) ~ Calt = 1.01 (altitude factor) ~ Cseason <= 1.0 (seasonal factor) ~ Cdir <= 1.0 (directional factor) ~ Terrain category: "country terrain" Any changes to UK Regulations and BSI updates to codes will be incorporated into	6.1.14 - para 14.10.6	Detailed Design	DCO Requirement	Det This on a
	subsequent design phases. Existing structures which are altered / re-purposed as part of the project will be subject to reappraisal to modern wind codes. Any required strengthening to meet the new design life for the project will be carried out as required.				
Chapte	er 15 (Climate - Greenhouse Gases)	1	I	_	
GHG1	The detailed design will reflect the carbon hierarchy and include feasible measures to reduce embodied carbon as part of the design, as outlined in PAS 2080, where reasonably practicable. This will include potential for re-using or refurbishing existing assets; and use of low carbon solutions (technologies, materials and products) to minimise resource consumption.	6.1.15 - para 15.10.1	Detailed Design	DCO Requirement	Det This on a Rec den carl bee follo
GHG2	<ul> <li>The following measures will be included in the CEMP:</li> <li>Use of efficient construction processes such as design for manufacture and assembly aligning with the carbon hierarchy outlined in PAS 2080. This will include re-using site arisings; using low carbon solutions (technologies, materials and</li> </ul>	6.1.15 - para 15.10.2	Construction	DCO Requirement	The app whi met

#### Drax Bioenergy with Carbon Capture and Storage

Register of Environmental Actions and Commitments

chievement Criteria nd Reporting equirements	Responsible Organisation
etailed design. nis will be recorded n as built drawings.	Designer
etailed design. his will be recorded h as built drawings ecords emonstrating that the arbon hierarchy has een considered and llowed.	Designer The Applicant
ne CEMP will be oproved by the LPA hich will consider the ethods undertaken.	Main Contractor

Ref ID	Mitigation measure	Source Ref	Project Stage	Mechanism for Securing Measure	Achievement Criteria and Reporting Requirements	Responsible Organisation	
	products) to minimise resource consumption; and using construction techniques that reduce resource consumption.						
Chapte	Chapter 16 (Population, Health and Socio-economics)						
PH1	The Applicant will prepare a local employment scheme, setting out measures to promote opportunities for local suppliers and contractors with the aim of providing opportunities to local people and businesses to benefit from the Proposed Scheme during the construction phase.	6.1.16 - para 16.10.2	Construction	S106 Agreement	Local Employment Scheme	The Applicant Main Contractor	
PH2	The Applicant will prepare a local employment scheme, setting out opportunities for local people to access training opportunities through working in partnership with key local stakeholders.	6.1.16 - para 16.10.2	Construction / Operation	S106 Agreement	Local Employment Scheme	The Applicant Main Contractor	

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2		•	Construction /	S106	Loca
	local people to access training opportunities through working in partnership with key	16.10.2	Operation	Agreement	Sche
	local stakeholders.				
				1	1

## **APPENDICES**

## APPENDIX A - CEMP WATERCOURSE POLLUTION PREVENTION PLAN

