

APPENDIX 20A: COMMITMENTS REGISTER



South Humber Bank Energy Centre Project

Planning Inspectorate Reference: EN010107

South Marsh Road, Stallingborough, DN41 8BZ

The South Humber Bank Energy Centre Order

Document Ref. 6.4: Environmental Statement – Volume III Appendix 20A: Commitments Register

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended)

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)



Applicant: EP Waste Management Ltd

Date: April 2020



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1.0 COMMITMENTS REGISTER

- 1.1.1 This Commitments Register summarises the committed impact avoidance, mitigation and enhancement measures within the chapters of the Environmental Statement (ES), and associated appendices, that are to be adopted in relation to the Proposed Development and its potential identified impacts.
- 1.1.2 The table below contains the actions and commitments relating to the construction and operation of the Proposed Development. Where relevant, cross-references are provided to the method of securing these commitments. This Commitments Register should be read in conjunction with the full text in the relevant chapters in Volume II of the ES (Document Ref. 6.2), cross references to which are provided in the table.



REF	ES REFERENCE	MEASURE	REASON	SECURED BY
1	ES Vol I Chapter 4 para 4.2.9	The Proposed Development buildings will have appropriately coloured external cladding. See also Ref. 60 below.	To minimise the impact of the Proposed Development on landscape and visual amenity.	DCO Schedule 2 (Document Ref. 2.1) Detailed design (appearance) requirement
2	ES Vol I Chapter 4 para 4.2.11	The entry and exit doors to the fuel reception hall will be equipped with automated vertical folding or roller doors, which will be kept closed except for times of vehicle access and egress.	To enable a negative pressure to be maintained and to minimise the release of dust and odours.	DCO Schedule 2 (Document Ref. 2.1): Detailed design (position and scale) requirement Environmental Permit
3	ES Vol I Chapter 4 paras 4.2.25 and 4.2.70	The Proposed Development will be configured to enable heat (steam or hot water) to be exported to nearby consumers via an extraction from the steam turbine.	To ensure the Proposed Development is CHP ready.	DCO Schedule 2 (Document Ref. 2.1): Combined heat and power requirement
4	ES Vol I Chapter 4 paras 4.2.28 and 4.2.31	The Proposed Development will include a combination of primary combustion control measures and Flue Gas Treatment (FGT) will be used to control emissions to the limits set in the Environmental Permit and to meet national and international standards. A bag filter will be used to remove particulates, and this will be regularly	To minimise adverse air quality impacts and through the control of air emissions.	Environmental Permit



		cleaned by pulsing compressed air through the bag filter.		
5	ES Vol I Chapter 4 para 4.2.33	FGT residues will be stored in sealed silos adjacent to the FGT plant until they are transported by road in a sealed tanker to an appropriate treatment facility.	To ensure safe storage of hazardous substances.	Hazardous Waste (England and Wales) Regulations 2005
6	ES Vol I Chapter 4 para 4.2.37	Any excess liquid process effluent will be collected on Site, analysed and transported off Site for treatment, or discharged to foul sewer (if a connection is available).	To prevent pollution.	DCO Schedule 2 (Document Ref. 2.1): Foul water drainage requirement
7	ES Vol I Chapter 4 para 4.2.39, Chapter 7 para 7.5.5 and Chapter 10 paras 10.5.14 and 10.6.57	The top of the stacks will be at 102 m Above Ordnance Datum (AOD) and flue gases will be emitted at approximately 120°C.	To minimise adverse air quality impacts and through the dispersal of air emissions.	DCO Schedule 2 (Document Ref. 2.1): Approved details and amendments to them requirement
8	ES Vol I Chapter 4 para 4.2.41	The stacks will be fitted with aviation warning lights as required by the Civil Aviation Authority.	For aviation safety.	DCO Schedule 2 (Document Ref. 2.1): Air safety requirement
9	ES Vol I Chapter 4 para 4.2.51	A fire water system will be installed, including fire water pumps, a fire water storage tank, hydrants and mains, and a sprinkler system.	For fire extinguishing in the event of a fire.	Environmental Permit
10	ES Vol I Chapter 4 para 4.2.54	The Proposed Development is designed to minimise conflict between HGVs and smaller vehicles, to reduce queue length and prevent delays to employees and	For safety and to avoid impacts on the public highway.	DCO Schedule2 (Document Ref. 2.1): Detailed design (position and scale).



		visitors accessing the Site.		Delivery and servicing plan, Visibility splays, New highway access, and Parking requirements
11	ES Vol I Chapter 4 para 4.2.58	Up to 57 car parking spaces, including approximately five electric vehicle charging bays, and a bicycle shelter will be provided.	To ensure access to safe parking and sustainable modes of transport.	DCO Schedule 2 (Document Ref. 2.1): Parking requirement
12	ES Vol I Chapter 4 para 4.2.59	Pedestrian and cycle routes and crossings will be clearly marked within the Site and segregated from HGVs where possible.	To ensure pedestrian and cyclist safety.	DCO Schedule 2 (Document Ref. 2.1): Detailed design (position and scale) and Means of enclosure and hard landscaping requirements
13	ES Vol I Chapter 4 para 4.2.62, Chapter 10 para 10.5.5 and Chapter 11 para 11.7.2	A visual screen (a close boarded fence approximately 2.5 m in height) will be provided along part of the southern boundary of the Site (see Figure 4.2 in ES Volume II (Document Ref. 6.3)). Its design will consider materials and colours that reflect the local landscape character.	To prevent visual disturbance of water birds in the field to the south of the Site during construction and operation.	DCO Schedule 2 (Document Ref. 2.1): Means of enclosure and hard landscaping requirement
14	ES Vol I Chapter 4 para 4.2.63 and 4.2.64, Chapter 10 para 10.5.15, Chapter 12	Surface water runoff will be drained and attenuated within the Site and discharged at 'greenfield' runoff rate via a new discharge point to one of the two existing	To prevent flooding and pollution and to avoid effects on ditch habitats and the	DCO Schedule 2 (Document Ref. 2.1): Surface water drainage



	paras 12.5.11 and 12.5.21 and Chapter 14 paras 14.7.11 and 14.7.23 to 14.7.32	land drains within the Site. Oil-water separators will be provided where necessary. Maintenance of the drainage system will be incorporated into general site management.	protected species they support (water voles).	requirement Environmental Permit
15	ES Vol I Chapter 4 para 4.2.65, Chapter 10 para 10.5.16 and Chapter 14 para 14.7.12	Domestic foul water will be discharged to foul sewer, tankered away to an appropriate disposal facility offsite or treated on Site using a package treatment plant which discharges to a surface water drainage ditch on Site.	To prevent pollution and effects on ditch habitats during operation.	DCO Schedule 2 (Document Ref. 2.1): Foul water drainage requirement
16	ES Vol I Chapter 4 para 4.2.73	Existing woodland in the north-west of the Site will be retained and managed to provide ongoing landscape screening of South Humber Bank Power Station (SHBPS) and the Proposed Development.	To minimise the impact of the Proposed Development on landscape and visual amenity.	DCO Schedule 2 (Document Ref. 2.1): Retained trees requirement
17	ES Vol I Chapter 4 para 4.2.76, Chapter 10 para 10.5.13 and Chapter 11 para 11.5.3.	External operational lighting will be designed to provide safe working conditions in all areas of the Site whilst reducing light pollution and the visual impact on the local environment (for example by directing lighting away from adjacent habitats). Refer to the Indicative Lighting Strategy (Document Ref. 5.12).	For health and safety of staff, and to minimise light pollution and visual impacts.	DCO Schedule 2 (Document Ref. 2.1): Lighting scheme requirement
18	ES Vol I Chapter 4 Table 4.1	Maximum design parameters have been defined for building height and footprint, stack height and diameter, and the bunker base maximum depth. (See also Ref. 7	To control the maximum size of the Proposed Development and	DCO Schedule 2 (Document Ref. 2.1): Approved details and amendments to



		above).	minimise adverse air quality impacts through the dispersal of air emissions.	them requirement
19	ES Vol I Chapter 4 para 4.3.6	Limits of deviation are defined for each part of the Proposed Development, as shown on the Works Plan (Document Ref. 4.3).	To control the layout of the Proposed Development.	DCO Article 4 (Document Ref. 2.1) and associated Works Plans (Document Ref. 4.3)
20	ES Vol I Chapter 4 para 4.5.2	The flue gas cleaning system and emissions monitoring will be in operation before any solid fuel is added during start-up of the Proposed Development.	To minimise adverse air quality impacts and through the control of air emissions.	Environmental Permit
21	ES Vol I Chapter 4 paras 4.5.13 to 4.5.21	Measures to prevent the risks of fire, flooding, spillages or other potentially major incidents will be embedded in the design of the Proposed Development. A Health and Safety Plan, Site Emergency Plan and Flood Emergency Response Plan will be prepared.	To prevent fire, flooding, spillage or other major incidents or emergencies, to ensure a healthy and safe working environment for staff, and to define emergency response procedures.	DCO Schedule 2 (Document Ref. 2.1): Flood risk mitigation requirement Environmental Permit
22	ES Vol I Chapter 4 para 4.5.23	All liquid chemicals stored on site will be kept in bunded controlled areas with a volume of 110% of stored capacity. Diesel will be held in a bunded storage tank.	To prevent pollution.	DCO Schedule 2 (Document Ref. 2.1): Detailed design (position and scale) requirement



				Environmental Permit
23	ES Vol I Chapter 4 para 4.5.24 and Chapter 7 para 7.5.4	The Proposed Development will comply with the Industrial Emissions Directive.	To minimise impacts of emissions to air, soil, surface and groundwater and ensure legal compliance.	Environmental Permit
24	ES Vol I Chapter 4 para 4.5.25	The Site will be operated in line with appropriate standards and the operator will implement and maintain an Environmental Management System (EMS) which will be certified to International Standards Organisation (ISO) 14001.	To minimise and monitor environmental impacts.	Environmental Permit Health and safety legislation
25	ES Vol I Chapter 4 para 4.5.28	Odour levels around the plant will be regularly monitored to assess the effectiveness of the installed odour control measures.	To monitor odour impacts.	Environmental Permit
26	ES Vol I Chapter 4 para 4.9.4	Prohibited materials such as asbestos, polychlorinated biphenyls (PCBs), ozone depleting substances and carcinogenic materials will not be allowed within the design of the Proposed Development.	To minimise risks to human health and ensure legal compliance	Building Regulations 2010 and rules in specific legislation such as Control of Asbestos Regulations 2012 The Applicant will also prohibit use of deleterious materials in the EPC contract,



				as standard
27	ES Vol I Chapter 4 para 4.9.6 and Chapter 14 para 14.7.34	A Decommissioning Plan (including Decommissioning Environmental Management Plan) will be produced.	To identify required measures to manage environmental risks during decommissioning.	DCO Schedule 2 (Document Ref. 2.1): Decommissioning requirement
28	ES Vol I Chapter 5 para 5.3.5	Spoil generated during construction may need to be stored temporarily within the Site, and if necessary suitable measures will be put in place to prevent sediment being washed off Site.	To prevent pollution.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
29	ES Vol I Chapter 5 paras 5.3.6 and 5.3.31- 5.3.32 and Chapter 12 para 12.5.5	A Materials Management Plan (MMP) will be prepared to detail procedures and measures to be taken to manage excavated materials.	To minimise impacts on soil resources and encourage reuse of materials where possible.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
30	ES Vol I Chapter 5 para 5.3.6 and 5.3.28-5.3.30 ES Vol III Appendix 5A	A Construction Environmental Management Plan (CEMP) will be prepared which will identify how commitments made in the ES will be translated into actions on Site, including details such as the allocation of key roles and responsibilities.	To control and minimise impacts on the environment during construction.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
31	ES Vol I Chapter 5 para 5.3.8	The temporary construction laydown area will have a suitable surface to allow uncontaminated rain water to percolate to ground, with bunded areas for storage of any hazardous or polluting materials or	To prevent pollution and to ensure safe working environment.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan



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		chemicals.		requirement
32	ES Vol I Chapter 5	A Piling Risk Assessment will be	To minimise effects	DCO Schedule 2
	paras 5.3.9 - 5.3.10,	undertaken in accordance with	on controlled waters	(Document Ref. 2.1):
	Chapter 12 para	Environment Agency guidance to mitigate	and wintering birds.	Construction
	12.5.13 and Chapter 14	the risks of causing new pollutant linkages		environmental
	para 14.7.12	and/ or worsening existing ones with		management plan
		respect to risks to controlled waters, and		and Piling
		to minimise disturbance to wintering birds,		requirements
		during the construction of the Proposed		
		Development.		
33	ES Vol I Chapter 5 para	HGV access for the construction of the	To avoid traffic	DCO Schedule 2
	5.3.23	Proposed Development will be via the	impacts on	(Document Ref. 2.1):
		A180, the A1173, Kiln Lane, Hobson Way	residential areas.	Construction traffic
		and South Marsh Road.		management and
				travel planning
				requirement
34	ES Vol I Chapter 5 para	Third party access will be maintained	To avoid disruption to	DCO Article 13 and
	5.3.24	along South Marsh Road throughout the	third party access.	Schedule 2
		construction period.		(Document Ref. 2.1):
				New highway access
_				requirement
35	ES Vol I Chapter 5 para	Construction working hours will generally	To control adverse	DCO Schedule 2
	5.3.25 and Chapter 8	be 07:00 and 19:00 Monday to Saturday.	environmental effects	(Document Ref. 2.1):
	para 8.5.1	Where any on Site works are to be	(e.g. noise and	Construction
		conducted outside the core hours, they	traffic).	environmental
		will comply with any restrictions agreed		management plan
		with the planning authorities, including in		and Construction
		relation to control of noise and traffic.		traffic management
				and travel planning
				requirements



36	ES Vol I Chapter 5 para 5.3.26, Chapter 10 para 10.5.11 and Chapter 11 para 11.5.3	Construction temporary lighting will be arranged so that light spill is minimised outside of the construction site.	To minimise visual impacts and disturbance to ecological receptors.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
37	ES Vol I Chapter 7 paras 7.5.1 and 7.5.2	Emissions of dust and particulates from the construction phase of the Proposed Development will be controlled in accordance with good working practices regularly employed in the construction industry, through incorporation of appropriate mitigation and control measures according to the risks of dust emissions posed by the activities undertaken. Such measures include appropriate storage of materials, use of water suppression, covering of vehicles leaving the Site, use of a wheel wash system at Site exits, restricting use of unmade roads where possible, minimising storage of spoil, and prohibiting open fires on Site.	To minimise adverse impacts during construction from dust and particulates.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
38	ES Vol I Chapter 7 para 7.5.3	Good practice measures will be employed for the siting and operation of non-road mobile machinery to control associated emissions, including where possible minimising vehicle and plant idling and locating static plant away from sensitive	To minimise adverse impacts from emissions during construction.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement



		boundaries or receptors.		
39	ES Vol I Chapter 8 paras 8.5.2 and 8.7.7	The construction contractor will follow Best Practicable Means to reduce the noise and vibration impacts to surrounding sensitive receptors. Examples of Best Practicable Means are provided at Chapter 8 para 8.5.2, including plant to comply with EU noise emission limits, maintenance of plant, selection of quieter plant, shutting down plant when not in use, handling materials with care, design of the Proposed Development to provide acoustic attenuation, positioning of plant away from sensitive receptors, and adherence to codes of practice given in British Standard 5228.	To minimise adverse impacts from noise and vibration during construction and operation.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
40	ES Vol I Chapter 8 para 8.7.3 to 8.7.6 and Chapter 10 para 10.7.3	Mitigation is required to avoid significant adverse effects on waterbirds using the field to the south of the Site during piling. Mitigation has not been fixed, but may comprise seasonal constraints and/ or use of alternative piling methods, e.g. Continuous Flight Auger (CFA) piling. CFA piling is virtually vibration free and one of the quietest forms of piling.	To minimise adverse effects on waterbirds using fields that are functionally linked to the Humber Estuary Special Protection Area/ Ramsar site.	DCO Schedule 2 (Document Ref. 2.1): Piling requirement
41	ES Vol I Chapter 9 para 9.5.1	A Construction Worker Travel Plan (CWTP) will be used to identify measures and establish procedures to encourage	To minimise adverse impacts from traffic during construction.	DCO Schedule 2 (Document Ref. 2.1): Construction traffic



		workers to ensure that vehicle occupancy rates used in the Transport Assessment as a basis for analysis are achieved (a Framework CWTP is provided in Annex 27 of the TA in Appendix 9A ES Report Volume III). Measures could include managing the number of parking spaces, encouraging contractors to use staff minibuses and car share schemes, and providing secure parking for bicycles.		management and travel planning requirement
42	ES Vol I Chapter 9 para 9.5.1	A Construction Traffic Management Plan (CTMP) will be used to identify measures to control the routing and impact that construction HGVs will have on the local road network during construction (a Framework CTMP is provided in Annex 28 of the TA in Appendix 9A ES Report Volume III). Measures could include communicating HGS routing plan to drivers during induction, local signage, limiting delivery hours to 07:00 – 19:00, managing abnormal load deliveries, and providing a contact name and number for members of the public regarding any issues.	To minimise adverse impacts from traffic during construction.	DCO Schedule 2 (Document Ref. 2.1): Construction traffic management and travel planning requirement
43	ES Vol I Chapter 9 para 9.5.2	During operation, an Operational Travel Plan will be implemented, aimed at identifying measures and establishing procedures to encourage operational staff to adopt modes of transport which reduce	To minimise adverse impacts from traffic during operation.	DCO Schedule 2 (Document Ref. 2.1): Operational travel plan requirement



44	ES Vol I Chapter 9 para 9.5.3	reliance on single occupancy private car use. A Delivery and Servicing Plan will be prepared to demonstrate how deliveries and servicing will be managed, including a routing plan for operational HGVs.	To minimise adverse impacts from traffic during operation.	DCO Schedule 2 (Document Ref. 2.1): Delivery and servicing plan requirement
45	ES Vol I Chapter 10 para 10.5.4	A sum of money will be commuted to NELC to contribute to the South Humber Gateway strategic mitigation scheme in accordance with NELC Local Plan Policy 9. The sum is calculated as Site Area x £11,580.	To mitigation for the loss of habitat in the Main Development Area that is functionally linked to the Humber Estuary Special Protection Area/ Ramsar site, to ensure compliance with the Habitats Regulations.	Development Consent Obligation (Document Ref. 5.13)
46	ES Vol I para 10.5.6	The Proposed Development design will accommodate a minimum 5 m undeveloped buffer zone along the banks of all perimeter ditches, to avoid damage and disturbance to the main water vole habitats (i.e. the ditches) (with the exception of the new site access which will cross the northern perimeter ditch). The buffer zone will be fenced from the Proposed Development to prevent accidental damage during construction.	To avoid damage and disturbance to the main water vole habitats (i.e. the ditches) during construction and operation.	DCO Schedule 2 (Document Ref. 2.1): Biodiversity protection requirement
47	ES Vol I Chapter 10	The construction phase will comply with	To prevent pollution	DCO Schedule 2



48	paras 10.5.7 ES Vol I Chapter 10	industry good practice and environmental protection legislation in relation to prevention of surface and ground water pollution, fugitive dust management and noise prevention or amelioration. In support of this, the construction contractor will prepare and implement a CEMP detailing all requirements for environmental protection and legal compliance. The CEMP will include details of impact avoidance and mitigation measures for water vole, grass snake and breeding birds, which are set out in paragraphs 10.7.7 to 10.7.13. All clearance of suitable vegetation will be	and minimise dust and noise effects on ecology, and to ensure compliance with industry good practice and environmental protection legislation. To ensure legislative	(Document Ref. 2.1): Construction environmental management plan requirement
48	para 10.5.8, and paras 10.7.8 to 10.7.9	undertaken outside the bird breeding season (which is typically March-August inclusive), where possible. In situations where this is not possible, an ecologist would survey the working area for nests before works commence and implement any appropriate mitigation required to ensure that they are not disturbed or destroyed before any works can commence in that area.	compliance in relation to nesting birds.	(Document Ref. 2.1): Biodiversity protection requirement
49	ES Vol I Chapter 10 para 10.5.9	Precautionary measures will be implemented to prevent trapping wildlife in construction excavations. Any excavations deeper than 1 m would be covered overnight, or where this is not	To ensure compliance with animal welfare legislation and to allow animals (e.g.	DCO Schedule 2 (Document Ref. 2.1): Biodiversity protection and Construction



50	ES Vol I Chapter 10 para 10.5.10	practicable, a means of escape would be fitted (e.g. battered soil slope or scaffold plank situated at or below a 45° angle). An ecological watching brief will be carried out during ground clearance of the Main Development Area at the start of the construction phase, including removal of the artificial hibernaculum and the two hay piles.	otter) to vacate excavations should they fall in. To prevent harm to reptiles and amphibians that may be present, during construction.	environmental management plan requirements DCO Schedule 2 (Document Ref. 2.1): Biodiversity protection requirement
51	ES Vol I Chapter 10 para 10.5.12	If construction is delayed to one of the later construction programme scenarios (see Chapter 5: Construction Programme and Management in ES Volume I (Document Ref. 6.2)), an updated ecological walkover survey will be undertaken.	To confirm there are no changes to the baseline ecological conditions, particularly with regard to mobile species such as	Wildlife and Countryside Act 1981 DCO Schedule 2 (Document Ref. 2.1): Biodiversity protection requirement
52	ES Vol I Chapter 10 paras 10.5.17 and 10.5.18	Further ecological surveys will be undertaken in advance of decommissioning works, to inform the specification of relevant impact avoidance and mitigation measures, such as relevant stand-off distances along ditches and supervision of relevant works by an Ecological Clerk of Works.	To avoid impacts on ecology during decommissioning.	DCO Schedule 2 (Document Ref. 2.1): Decommissioning requirement
53	ES Vol I Chapter 10 paras 10.7.4 to 10.7.7	Works to install the culvert on Ditch 3 will be undertaken under the supervision of an ecologist holding a Class Licence for water vole. A separate water vole	To mitigate potential impacts on water vole, water shrew and grass snake	Wildlife and Countryside Act 1981



	mitigation atratagy document will be	during construction of	DCO Schedule 2
		_	
		the new site access.	(Document Ref. 2.1):
	•		Biodiversity
	•		protection
	U		requirement
<u> </u>			DCO Schedule 2
		impacts on ecology.	(Document Ref. 2.1):
10.7.11	1		Biodiversity
			mitigation and
	· · · · · · · · · · · · · · · · · · ·		enhancement
	habitat, the location and construction		requirement
	specifications for log pile refuges and bird		
	nest boxes, appropriate management and		
	monitoring of habitats, and timetables and		
	responsibilities. See the Biodiversity		
	Strategy (Document Ref. 5.11).		
ES Vol I Chapter 10	An area of species-rich grassland,	To offset some of the	DCO Schedule 2
paras 10.7.12 – 10.7.14	including areas of rough grassland, will be	losses of semi-	(Document Ref. 2.1):
	created to the west of the SHBPS.	improved grassland	Biodiversity
	Creation and management of the habitat	within the footprint of	mitigation and
	will be set out in the Biodiversity Mitigation	the Main	enhancement
	,	Development Area.	requirement
		·	·
	, ,		
ES Vol I Chapter 10		To provide ecological	DCO Schedule 2
			(Document Ref. 2.1):
		enhancement.	Biodiversity
			mitigation and
	grassland providing connectivity to nearby		enhancement
	•	paras 10.7.10 to 10.7.11 Enhancement Plan will be agreed, including details on grassland mitigation, new pond creation, species-rich hedgerow creation, enhancement of existing ditch habitat, the location and construction specifications for log pile refuges and bird nest boxes, appropriate management and monitoring of habitats, and timetables and responsibilities. See the Biodiversity Strategy (Document Ref. 5.11). ES Vol I Chapter 10 paras 10.7.12 – 10.7.14 An area of species-rich grassland, including areas of rough grassland, will be created to the west of the SHBPS. Creation and management of the habitat will be set out in the Biodiversity Mitigation and Enhancement Plan (see the Biodiversity Strategy (Document Ref. 5.11)). The initial post-completion and establishment period will be created in habitat west of the existing SHBPS, with surrounding tall marginal vegetation and areas of uncut semi-improved neutral	prepared as part of the Class Licence process. This method will also avoid potential impacts on water shrew and grass snake. ES Vol I Chapter 10 paras 10.7.10 to 10.7.11 A Biodiversity Mitigation and Enhancement Plan will be agreed, including details on grassland mitigation, new pond creation, species-rich hedgerow creation, enhancement of existing ditch habitat, the location and construction specifications for log pile refuges and bird nest boxes, appropriate management and monitoring of habitats, and timetables and responsibilities. See the Biodiversity Strategy (Document Ref. 5.11). ES Vol I Chapter 10 paras 10.7.12 – 10.7.14 Including areas of rough grassland, including areas of rough grassland, including areas of rough grassland, will be created to the west of the SHBPS. Creation and management of the habitat will be set out in the Biodiversity Mitigation and Enhancement Plan (see the Biodiversity Strategy (Document Ref. 5.11)). The initial post-completion and establishment period will be created in habitat west of the existing SHBPS, with surrounding tall marginal vegetation and areas of uncut semi-improved neutral the new site access. To minimise adverse impacts on ecology. To minimise adverse impacts on ecology. To minimise adverse impacts on ecology. To minimise adverse impacts on ecology.



		woodland and hedgerow. The pond will be designed with a non-uniform margin and varying depths. The margins of the pond will be planted with a small amount of native aquatic and marginal plant species to assist with the establishment of vegetation, but will be primarily allowed to establish naturally. An appropriate management plan for the new pond will be developed and implemented post-completion as described in the Biodiversity Strategy ((Document Ref. 5.11) of the pond. The initial post-completion and establishment period will		requirement
57	ES Vol I Chapter 10 para 10.7.19	be for five years. A species-rich native hedgerow will be created along the boundary of grassland to be botanically enhanced at the west of the SHBPS.	To provide ecological enhancement.	DCO Schedule 2 (Document Ref. 2.1): Biodiversity mitigation and enhancement requirement
58	ES Vol I Chapter 10 paras 10.7.20 to 10.7.23	Existing ditches at the boundaries of the Site will be managed to provide enhanced habitat for water vole and a section of ditch to the south-east of SHBPS will be widened to extend the area of open water and provide potential for a diverse assemblage of aquatic vegetation to establish. Log piles refuges and bird nest boxes will also be installed. See the	To provide ecological enhancement.	DCO Schedule 2 (Document Ref. 2.1): Biodiversity mitigation and enhancement requirement



		Biodiversity Strategy ((Document Ref. 5.11).		
59	ES Vol I Chapter 11 para 11.5.1	Any future landscape proposals will seek to retain existing boundary features such as drainage channels and associated habitat, including fragmented hedgerow where possible.	To minimise adverse effects on visual amenity.	DCO Schedule 2 (Document Ref. 2.1): Means of enclosure and hard landscaping and Soft landscaping requirements
60	ES Vol I Chapter 11 paras 11.5.2 and 11.5.4	Supplementary planning guidance within the Countryside Design Summary (Estell Warren Landscape Architects for NELC, 1999) regarding industry and infrastructure developments within the Humber Estuary will inform development of the detailed design including how the built form relates to landscape character, how colour may be used to either integrate the Proposed Development with the landscape, reflect the character of the surrounding landscape or to relate to what the buildings will be seen against.	To minimise adverse effects on landscape and visual amenity.	DCO Schedule 2 (Document Ref. 2.1): Detailed design (appearance) requirement
61	ES Vol I Chapter 11 para 11.5.3	Suitable materials will be used, where possible, in the construction of structures to reduce reflection and glare and to assist with breaking up the massing of the buildings and structures. Visual clutter will be minimised where possible through careful design.	To minimise adverse impacts on landscape.	DCO Schedule 2 (Document Ref. 2.1): Detailed design (appearance) requirement
62	ES Vol I Chapter 11	The existing plantation to the north-west	To minimise adverse	DCO Schedule 2



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	para 11.7.1	of the SHBPS will be retained and will	impacts on	(Document Ref. 2.1):
		benefit from future maintenance and	landscape.	Retained trees
		management to retain its existing		
		screening and ecological function. The		
		existing plantations to the west and southwest will also be retained and managed.		
		See the Indicative Landscape Strategy		
		(Document Ref. 5.10).		
63	ES Vol I Chapter 12	This CEMP will include a range of	To minimise potential	DCO Schedule 2
03	paras 12.5.3 and 12.5.5	measures associated with mitigating	impacts associated	(Document Ref. 2.1):
	paras 12.0.0 and 12.0.0	potential impacts associated with land	with land	Construction
		contamination. Such measures accord	contamination and	environmental
		with legal compliance and best practice	follow legal	management plan
		guidance when working with or around	compliance and best	requirement
		contaminated materials. A Materials	practice guidance.	'
		Management Plan will be prepared as		
		part of the CEMP.		
64	ES Vol I Chapter 12	The potential impacts on soil resources	To ensure storage or	DCO Schedule 2
	para 12.5.8	will be managed by minimising trafficking	re-use of soil	(Document Ref. 2.1):
		over topsoil materials and undertaking soil	resources.	Construction
		stripping during appropriate weather		environmental
		conditions, such that the soils are not wet.		management plan
		Once stripped, the soils will be stored in		requirement
		soil bunds to an agreed height so that the		
		materials own weight does not damage		
		the structure of the soil. The topsoil will		
		be reused in areas of landscaping within		
		the Site or off-Site if it cannot be re-used		
0.5	F0. Val. I. Ob and an 40	on Site.	To avaid insurants or	DOO Calaaduda C
65	ES Vol I Chapter 12	Potential impacts to construction,	To avoid impacts on	DCO Schedule 2



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	paras 12.5.9, 12.5.18	maintenance and demolition workers will	construction,	(Document Ref. 2.1):
	and 12.5.25	be managed by adherence to the working	maintenance and	Construction
		practices in accordance with Construction	demolition workers.	environmental
		Industry Research and Information		management plan
		Association (CIRIA) C741 Environmental		requirement
		Good Practice on Site 4th Edition (CIRIA,		
		2015), including measures to minimise		Health and safety
		dust generation, provision of personal		legislation
		protective equipment (PPE), provision of		
		adequate hygiene facilities and clean		
		welfare facilities, monitoring of confined		
		spaces for potential ground gas		
		accumulations, and preparation and		
		adoption of a Site and task specific health		
		and safety plan.		
66	ES Vol I Chapter 12	Surface water runoff during construction	To prevent pollution.	DCO Schedule 2
	para 12.5.11 and	will be controlled using appropriate		(Document Ref. 2.1):
	Chapter 14 paras	drainage measures. These may include		Construction
	14.7.13 to 14.7.15	installation of measures to reduce		environmental
		sediment load, regular cleaning of Site		management plan
		access points to prevent build-up of dust		requirement
		and mud and separate drainage for all		
		potentially polluted waters which are to be		
		tankered away from Site. If monitoring		
		demonstrates unsatisfactory levels of		
		solids or other pollutants, additional		
		measures would be implemented.		
67	ES Vol I Chapter 12	If dewatering of the Site is required during	To prevent pollution.	DCO Schedule 2
"	paras 12.5.12 and	construction or decommissioning a permit	10 provont pollution.	(Document Ref. 2.1):
	12.5.27 and Chapter 14	from the Environment Agency to		Construction
	12.3.21 and Onapier 14	Hom the Environment Agency to	1	Constituction



		T	T	
	para 14.7.12	discharge to surface water or a consent to		environmental
		discharge to foul sewer will be obtained,		management plan
		and arrangements made to store any		requirement
		waters collected during dewatering to		
		determine whether contamination is		Environmental
		present before deciding on where to		Permitting
		discharge the waters.		Regulations
68	ES Vol I Chapter 12	The prevention of pollution of surface	To prevent pollution.	DCO Schedule 2
	para 12.5.14	water and/ or groundwater will comply		(Document Ref. 2.1):
		with the requirements set out by the		Construction
		Environment Agency within guidelines		environmental
		published at		management plan
		www.gov.uk/guidance/pollution-		requirement
		prevention-for-businesses.		
69	ES Vol I Chapter 12	During decommissioning potential impacts	To minimise the	DCO Schedule 2
	para 12.5.25	on soil resources will be managed by	impacts on soil	(Document Ref. 2.1):
		minimising trafficking over topsoil.	resources.	Decommissioning
				requirement
70	ES Vol I Chapter 14	Best practice measures to protect surface	To prevent pollution	DCO Schedule 2
	para 14.7.3	water from a range of potentially		(Document Ref. 2.1):
		dangerous activities will be implemented		Construction
		through a CEMP including compliance		environmental
		with Environmental Agency Pollution		management plan
		Prevention Guidance Notes, awareness of		requirement
		potential impacts to water resources, and		
		procedures to be followed the event of an		
		accidental pollution event occurring.		
71	ES Vol I Chapter 14	Pollution plans to deal with accidental	To minimise long-	Environmental
	para 14.7.5	pollution will be drawn up and agreed with	term effects of any	Permit
		the Environment Agency and NEL IDB	accidental pollution	



70	EC Val I Chapter 4.4	prior to construction and any necessary equipment (e.g. spillage kits) will be held on the Site and relevant Site personnel will be trained in their use. The Environment Agency and NELC will be informed immediately in the unlikely event of a suspected pollution incident.	incident during construction.	En viron montol
72	ES Vol I Chapter 14 para 14.7.6	Measures set out in Environment Agency, Defra and Government guidance (see ES Volume I, Chapter 14, paragraph 14.2.46) will be followed in the storage of materials within the Main Development Area of the Site. Examples of such measures include placing arisings and temporary stockpiles away from drainage systems, appropriate storage of fuel and chemicals, keeping plant and machinery away from surface water bodies wherever possible and protecting exposed ground and stockpiles as appropriate and practicable to prevent windblown migration of potential contaminants.	To prevent pollution.	Environmental Permit
73	ES Vol I Chapter 14 para 14.7.8	The CEMP will incorporate measures aimed at preventing an increase in flood risk during the construction works. Examples of measures that will be implemented in the Main Development Area include storing topsoil and other materials where possible outside tidal Flood Zone 3 and maintaining connectivity	To minimise risk of flooding.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement



74	ES Vol I Chapter 14 paras 14.7.9 to 14.7.10	between the floodplain and the River Humber, with no increases in ground level within the floodplain as far as practicable. The construction contractor will be required to produce a Flood Emergency Response Plan which will provide details of the response to an impending flood, using the Environment Agency Flood Warning Service.	To minimise the effects of flooding.	DCO Schedule 2 (Document Ref. 2.1): Flood warning and evacuation plan requirement
75	ES Vol I Chapter 14 para 14.7.16	A septic tank is likely to be used for treatment of domestic wastewater during construction. This will be emptied and tankered off Site to a waste water treatment plant.	To prevent pollution	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
76	ES Vol I Chapter 14 para 14.7.17	The Environmental Permit will include conditions relating to handling, storage and use of diesel and other chemicals, including emergency procedures in line with the use of Best Available Techniques (BAT).	To prevent pollution during operation and maintenance.	Environmental Permit
77	ES Vol I Chapter 14 para 14.7.18	A number of the impact avoidance measures employed during the construction phase will remain for the operational and maintenance phases (where relevant), and will be implemented through the Site operator's Environmental Management System (EMS). For example: • plans to deal with accidental pollution;	To prevent pollution	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement Environmental Permit

78	ES Vol I Chapter 14 para 14.7.19	 containment measures; and oil interceptors. The operator of the Proposed Development will be required to subscribe to the Environment Agency's Flood Warning and Alert Service in the area. 	To reduce the effects of flooding.	DCO Schedule 2 (Document Ref. 2.1): Flood warning and evacuation plan requirement
79	ES Vol I Chapter 14 paras 14.7.20 to 14.7.22	Flood resilience measures will be incorporated into the Proposed Development design to minimise the amount of damage and reduce the recovery time in the unlikely case of the Site becoming inundated. These may include: • raised levels for critical equipment and a place of safe refuge for people; • boundary walls and fencing could be designed with high water resistance materials and/ or effective seals to minimise water penetration for low depth, short duration floods; and • tanks could be bunded to a level higher than the 0.5% AEP plus climate change event breach flood level.	To reduce the effects of flooding.	DCO Schedule 2 (Document Ref. 2.1): Flood risk mitigation requirement
80	ES Vol I Chapter 15 para 15.5.1	A dedicated entrance to the Proposed Development will be provided in order to avoid impacts on the operation of the	To minimise operational effects on SHBPS.	DCO Schedule 2 (Document Ref. 2.1): New highway access



		SHBPS.		requirement
81	ES Vol I Chapter 15 para 15.5.2	The Applicant will host a careers fair and a "meet the buyer" event will be held.	To promote employment opportunities for local residents and supply chain opportunities for local businesses.	EPC contract requirement
82	ES Vol I Chapter 16 para 16.5.1	Waste arisings will be prevented and designed out where practicable through working with suppliers to minimise wastage in materials and packaging.	To reduce the impacts of materials and packaging.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
83	ES Vol I Chapter 16 para 16.5.2	Contractors will be required to adopt good practice in construction waste management which will reduce the quantity of waste generated. Measures will be to minimise the quantities of waste requiring disposal (see Chapter 16: Waste Management, paragraph 16.5.2), including agreements with material suppliers to reduce or take back packaging, a 'just-in-time' material delivery system, attention to material quantity requirements to avoid over-ordering, re-use and recycling of materials.	To reduce the impact of waste from the development.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
84	ES Vol I Chapter 16 para 16.5.3	Waste management measures will be implemented to minimise the likelihood of any localised impacts of waste on the	To reduce the impact of waste from the development.	DCO Schedule 2 (Document Ref. 2.1): Construction



		surrounding environment, such as damping down of surfaces during spells of dry weather, off Site prefabrication, where practical, appropriate storage of all hazardous materials, and waste transport using licensed carriers.		environmental management plan requirement
85	ES Vol I Chapter 16 para 16.5.4	The CEMP will set out how waste will be managed during construction, and opportunities to re-use and recycle waste will be explored in accordance with the waste hierarchy.	To reduce the impact of waste from the development.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
86	ES Vol I Chapter 16 para 16.5.6	The Environmental Management System that will be developed and maintained for the operational Proposed Development as required by the Environmental Permit will include procedures for the management of waste in accordance with relevant legislation.	To reduce the impact of waste from the development.	Environmental Permit
87	ES Vol I Chapter 16 paras 16.7.2 to 16.7.3	The construction contractor will seek to minimise the quantities of surplus excavated materials where practicable and to identify beneficial uses for surplus excavated material both within the Site and on other sites. Landfill disposal will be used only as the final option, in accordance with the waste hierarchy.	To reduce the impact of waste from the development.	DCO Schedule 2 (Document Ref. 2.1): Construction environmental management plan requirement
88	ES Vol I Chapter 16 para 16.7.4	The operator will explore opportunities for the beneficial re-use of bottom ash as a secondary aggregate to avoid landfill if	To reduce the impact of waste from the development.	The Applicant will review commercially available options at



		possible, in accordance with the waste hierarchy.		the time of coming into operation.
89	ES Vol I Chapter 18 paras 18.5.6 to 18.5.7	During the detailed design of works to connect into the existing 400 kV substation or 132 kV connection, potential electromagnetic interference effects will be identified and mitigated through the application of electromagnetic compatibility industry accepted practice. Health risks due electromagnetic fields (EMF) from relevant sources including the substation and electrical connections will be reduced using the 'as low as reasonably practicable' (ALARP) principle. Measures to protect workers will include engineering and administrative controls, personal protection programmes and medical surveillance in accordance with relevant legislation and guidance.	To reduce potential EMF effects associated with the Proposed Development and comply with legislation.	Control of Electromagnetic Fields at Work Regulations 2016