

H2Teesside Project

Environmental Statement

Volume III – Appendices

Appendix 23D: Stage 4 - Assessment of Cumulative and Combined Effects

Document Reference: 6.4.40

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

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



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23D.0 STAGE 4 - ASSESSMENT OF CUMULATIVE AND COMBINED EFFECTS

Table 23D-1: Other Developments Scoped In or Out of the Cumulative Assessment for Surface Water, Flood Risk and Water Resources

DEVELOPMENT	SCOPED IN / OUT OF CUMULATIVE ASSESSMENT	REASON FOR SCOPING IN / OUT
<p>ID 2: (Planning Ref. EN010082) - The Tees Combined Cycle Power Plant. A gas fired combined cycle gas turbine (CCGT) power station with a maximum generating capacity of up to c. 1,700 MWe. The project will utilise existing Gas and National Grid connections.</p>	<p>Scoped In</p>	<p>The other development is positioned within the boundary of the Proposed Development, with potential for further construction from five years of its commercial operation to be completed in 2030. The cumulative development sits southwest to the Proposed Development next to several ordinary watercourses (The Mill Race, Kinkerdale Beck, Kettle Beck, and Castle Gill).</p>
<p>ID 3: Net Zero Teesside (Planning Ref. EN010103) - Full chain carbon capture, utilisation and storage (CCUS) project.</p>	<p>Scoped In</p>	<p>The other development comprises a four-year construction period and therefore harbours potential to overlap with the Proposed Development. The other development overlaps with the Proposed Development Site and has the potential to impact upon the River Tees, Tees coastal water body, the Fleet, and Dabholm Gut.</p>
<p>ID 5: Net Zero Teesside Offshore Elements (Planning Ref. EN010103) - to be consented by Marine Licence including CO₂ Export Pipeline below MHWST and geological store and associated facilities.</p>	<p>Scoped In</p>	<p>The pipeline of the other development extends north-east across the Tees Coastal waterbody.</p>
<p>ID 8: (Planning Ref. EN010150) - 'Waste-to-sustainable aviation fuel' facility with on-site generating station capacity of up to 150 MW. Application received July 2023, with anticipated construction period of 4 years.</p>	<p>Scoped In</p>	<p>The other development boundary extends across the left River Tees riverbank from Port Clarence, extends up past Dorman Pool and Saltholme West Pool and encompasses the area around Seal Sands. Both the other development and the Proposed Development would interact with Holme Fleet and River Tees.</p>

DEVELOPMENT	SCOPED IN / OUT OF CUMULATIVE ASSESSMENT	REASON FOR SCOPING IN / OUT
ID 19: (Planning Ref. R/2017/0876/FFM) - Construction and operation of a mineral processing and refining facility including ancillary development, car parking and landscaping. Mineral processing is expected to provide enough resource for around 30 years.	Scoped In	The other development overlaps with, and shares many of the same receptors as the Proposed Development, potentially impacting on several ordinary watercourses including The Mill Race, Kinkerdale Beck, Kettle Beck, and Castle Gill.
ID 20: (Planning Ref. R/2016/0484/FFM) - Proposed anaerobic biogas production facility and combined heat and power plant.	Scoped In	A major other development within the Zone of Influence (ZOI) and it has potential for cumulative impacts via surface water drainage.
ID 22: (Planning Ref. R/2019/0767/OOM) - Director of Regeneration & Neighbourhoods Hartlepool, outline application for the construction of an energy recovery facility (ERF) and associated development, Grangetown Prairie Land east of John Boyle Road and west of Tees Dock Road, Grangetown.	Scoped In	A major other development which shares many of the same receptors as the Proposed Development including the River Tees.
ID 30: (Planning Ref. R/2019/0031/FFM) - Tourian Renewables Ltd, construction and operation of a plastic conversion facility including office and contemporary construction compounds, workshops, weighbridges and associated infrastructure, former Croda Site Wilton International, Redcar.	Scoped In	A major other development within the ZOI sharing many of the same receptors as the Proposed Development including Mains Dike and Castle Gill.
ID 33: (Planning Ref. R/2017/0906/OOM) - Sirius Minerals Plc, outline planning application for an overhead conveyor and associated storage facilities in connection with the York potash project, land between Wilton International and Bran Sands, Redcar.	Scoped In	The other development overlaps with the Main Site and both the other development and the Proposed Development are likely to overlap during the construction phase, where impacts to the River Tees and Tees coastal waterbody may occur.

DEVELOPMENT	SCOPED IN / OUT OF CUMULATIVE ASSESSMENT	REASON FOR SCOPING IN / OUT
<p>ID 35 (Planning Ref. York Potash Ltd: Full planning application) - The winning and working of polyhalite by underground methods including the construction of a minehead at doves nest farm involving access, maintenance and ventilation shafts, the landforming of associated spoil, construction of buildings, access roads, car parking and helicopter landing site, attenuation ponds, landscaping, restoration and aftercare and associated works. In addition, the construction of an underground tunnel between doves nest farm and land at Wilton that links to the mine below, comprising 1 shaft at Doves Nest Farm, 3 intermediate access shaft sites, each with associated landforming of associated spoil, construction of buildings, access roads and car parking, landscaping, restoration and aftercare, the construction of a tunnel portal at Wilton comprising buildings, landforming of spoil and associated works).</p>	<p>Scoped In</p>	<p>A major other development with potential impacts upon Ash Gill, Mains Dike and Roger Dike, Mains Dike and West Dike where both the other development and the Proposed Development overlap.</p>
<p>ID 42 (Planning Ref. R/2020/0357/OOM) - South Tees Development Corporation (STDC): Outline planning application for demolition of existing structures on site and the development of up to 418,000 m² (gross) of general industry (use class B2) and storage or distribution facilities (use class B8) with office accommodation (use class B1), HGV and car parking and associated infrastructure works all matters reserved other than access.</p>	<p>Scoped In</p>	<p>First wave of occupation is stated on the LPA planning portal to have occurred in 2023. The other development overlaps and sits on the border of the Proposed Development boundary and crosses Knitting Wife Beck and is positioned on the right bank of the River Tees.</p>
<p>ID: 48 (Planning Ref. R/2006/0433/OO) - P D Teesport: Outline application for development of a container terminal</p>	<p>Scoped In</p>	<p>The other development overlaps with the Main Site and both the other development and the Proposed Development are likely to overlap during the construction phase, where impacts to the River Tees and Tees coastal waterbody may occur.</p>

DEVELOPMENT	SCOPED IN / OUT OF CUMULATIVE ASSESSMENT	REASON FOR SCOPING IN / OUT
ID 51 (Planning Ref. R/2020/0819/ESM) - STDC: Outline planning application for development of up to 139,353 m ² (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourse including realignment and associated infrastructure works. All matters reserved.	Scoped In	Construction anticipated to take 11 years to complete with an indicative end date of 2032. This other development crosses Cross Beck, Knitting Wife Beck. Both the other development and the Proposed Development's construction periods overlap.
ID 52 (Planning Ref. R/2020/0820/ESM) - STDC: Outline planning application for development of up to 92,903 m ² (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	Scoped In	Construction to commence in 2028 with an indicative completion date of 2031. The other development crosses Knitting Wife Beck and also has the potential to impact on the River Tees downstream.
ID 53 (Planning Ref. R/2020/0821/ESM) - STDC: Outline planning application for development of up to 464,515 m ² (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	Scoped In	12-year construction period, with an indicative completion date of 2033. The other development overlaps with the Main Site and both the other development and the Proposed Development are likely to overlap during the construction phase, where impacts to the River Tees and Tees coastal waterbody may occur.
ID 54 (Planning Ref. R/2020/0822/ESM) - STDC: Outline planning application for the development of up to 185,806 m ² (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourses including realignment and associated infrastructure works. All matters reserved.	Scoped In	11-year construction phase with indicative completion date of 2033. The other development sits to the east of the Main Site and crosses both the Proposed Development.
ID 55 (Planning Ref. R/2020/0823/ESM) - STDC: Outline planning application for the development of up to 15,794 m ² (gross) of office accommodation (Use Class E) and car parking and associated infrastructure works. All matters reserved.	Scoped In	5-year construction period and an indicative completion date of 2031. The other development sits to the east of the Main Site and crosses the Proposed Development and The Fleet

DEVELOPMENT	SCOPED IN / OUT OF CUMULATIVE ASSESSMENT	REASON FOR SCOPING IN / OUT
		(River Tees (S Bank) watercourse). Construction period of both schemes expected to overlap.
ID 65 (Planning Ref. MWP8 South Tees Eco-Park) - Tees Valley Joint Minerals and Waste Development Plan Documents, A site of approximately 27 hectares is allocated for the development of the South Tees Eco-Park.	Scoped In	Scoped in due to its proximity to the River Tees.
ID 131 (Planning ref. 22/2386/SOR) - Scoping opinion for Green Hydrogen Production Facility and Wind Turbine	Scoped In	Scoped in due to the other developments proximity to the River Tees.
ID 135 (Planning Ref. 23/0090/EIS) - Carbon capture facility for existing Energy from Waste site.	Scoped In	The other development overlaps with the Proposed Development and adjacent to the River Tees.
ID 166 (Planning Ref. 13/2892/EIS) - Development of materials recycling facility and production of energy from waste, including demolition of the existing offices and erection of new buildings, tanks and silos with access taken from the existing access at New Road, Billingham. The main building will be portal frame, profiled steel clad with stacks at a maximum height of 80m and 28m. (Residual wastes will be processed through an advance thermal treatment process, gasification, to produce renewable heat and power) - related to consented planning boundary of 13-1584-RNW.	Scoped In	The other development is located at southwest of the Proposed Development boundary. Billingham Beck is situated near to the scheme.
ID 167 (Planning Ref. 22/1145/SCO) - Screening opinion for proposed hydrogen production plant, battery storage and hydrogen re-fuelling point.	Scoped In	Status of the other development is unknown but scoped in as a precautionary measure. The other development has potential to impact on Billingham Beck.

DEVELOPMENT	SCOPED IN / OUT OF CUMULATIVE ASSESSMENT	REASON FOR SCOPING IN / OUT
ID 168 (Planning Ref. none) - Stockton-on-Tees Local Plan, Main growth location for hazardous installations including liquid and gas processing, bio-fuels and bio-refineries, chemical processing, resource recovery, and waste treatment, energy generation, carbon capture and storage and other activities.	Scoped In	Holme Fleet and the River Tees both have the potential to be impacted by the other development.
ID 172 (Planning Ref. R/2020/0685/ESM) - STDC: Outline planning application for demolition of existing redundant quay structures, capital dredging and development of new quay and associated works (PHASE 2).	Scoped In	Scoped in as the other development has several construction phases. The scheme is situated to the north of Normanby Beck. The main receptor from this other development is the River Tees, and the Tees Coastal water body.
ID 173 (Planning Ref. R/2022/0773/ESM)- Construction of a Lithium Hydroxide Monohydrate manufacturing plant and ancillary development.	Scoped In	The other development will overlap with the Proposed Development and impacts to Castle Gill, Kinkerdale Beck and Kettle Beck may occur.
ID 174 (Planning Ref. R/2014/0626/FFM)- Mineral (Polyhalite) granulation and storage facility involving the construction of buildings, conveyor systems, substations, water treatment plant, internal access roads, car parking, attenuation ponds, landscaping, restoration and aftercare, and construction of a tunnel portal including the landforming of spoil and associated works.	Scoped In	Both the other development and the Proposed Development's boundaries overlap, and this other development would be located near to Ash Gill, The Mill Race and hydrologically connected to Dabholm Beck and The Fleet.
ID 178 (Planning Ref. R/2023/0291/ESM)- Outline application (all matters reserved) for the development of a 3-line low-carbon lithium refinery and associated dock-side reception, handling, storage, and manufacturing facilities for the production of high-quality, battery-grade lithium hydroxide monohydrate, to include the construction of up to three production lines with the production capacity of up to 75,000 tonnes per annum. The proposed development will include an office and warehouse buildings, together with associated site infrastructure and utility supplies.	Scoped In	The other development will overlap with the Proposed Development and has potential to overlap with Knitting Wife Beck, Dabholm Gut and the River Tees.

DEVELOPMENT	SCOPED IN / OUT OF CUMULATIVE ASSESSMENT	REASON FOR SCOPING IN / OUT
ID 205 (Planning Ref. H/2023/0128)- Scoping opinion in respect of Greatham Northeast Flood Alleviation Scheme. Construction anticipated to begin in 2024 and likely to overlap with the Proposed Development, therefore scoped in .	Scoped In	The other development is located to the north-western fringe of the Proposed Development and has potential to impact Greatham Creek, Seaton on Tees Channel and other unnamed water bodies and watercourses.
ID 212 (Planning Ref. 22/1525/EIS)- Erection of an energy recovery facility and associated infrastructure for fuel receipt and storage, power generation, power export, process emissions control, maintenance, offices and car parking together with associated operations.	Scoped In	The other development is situated partially within the boundary of the Proposed Development.
ID 219 (Planning Ref. 23/1019/EIS)- Development of Greenergy Renewable Fuels and Circular Products Facility comprising a Sustainable Aviation Fuel Plant and Tyre Plant and associated infrastructure. A temporary construction compound, proposed services corridor, pipe bridge, ancillary buildings, and car parking.	Scoped In	Application currently pending, but anticipated to take three years for construction and therefore scoped in. The other development is situated within the boundary of the Proposed Development and lies within proximity to an unnamed watercourse.
ID 222 (Planning Ref. R/2023/0179/SCP) - Scoping Opinion for HyGreen Hydrogen Project.	Scoped In	The other development is situated adjacent to the Proposed Development with pipeline networks crossing many of the same watercourses.

Table 23D-2: Surface Water, Flood Risk and Water Resources Cumulative Effects Assessment During Construction

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
<p>ID 2: (Planning Ref. EN010082) - The Tees Combined Cycle Power Plant. A gas fired combined cycle gas turbine (CCGT) power station with a maximum generating capacity of up to 1,700 MWe (Tbc). The project will utilise existing Gas and National Grid connections.</p>	<p>Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.</p>	<p>Best practice construction measures are assumed to be adopted as set out within the Final Construction Environmental Management Plan(s) (CEMP) based upon the Framework CEMP, with appropriate adherence to planning and permit conditions</p>	<p>No change - same as residual effect (i.e. Not Significant).</p>
<p>ID 3: Net Zero Teesside (Planning Ref. EN010103)- A full chain carbon capture, utilisation and storage ('CCUS') project, comprising a CO₂ gathering network, including CO₂ pipeline connections from industrial facilities on Teesside to transport the captured CO₂ (including the connections under the tidal River Tees); a combined cycle gas turbine ('CCGT') electricity generating station with an abated capacity circa 850 gigawatts output (gross), cooling water, gas and electricity grid connections and CO₂ capture; a CO₂ gathering-booster station to receive</p>	<p>The NZT development is situated adjacent to the Proposed Development with pipeline networks crossing many of the same watercourses. There will be potential for pollution of surface or groundwater bodies from construction runoff, accidental spillage and soil disturbance; increased flood risk from increased impervious area in the catchment; potential hydromorphological impacts to surface watercourses from watercourse crossings (including some of the same watercourses as for the Proposed</p>	<p>Best practice construction measures are adopted as set out within the Final CEMP(s) (based on the Framework CEMP) for the Proposed Development and the Other Development, with appropriate adherence to planning and permit conditions. Appropriate design of structures and mitigation for crossings is included, and measures to manage flood risk during construction.</p>	<p>No change - same as residual effect (i.e. Not Significant).</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
<p>the captured CO₂ from the gathering network and CCGT generating station; and the onshore section of a CO₂ transport pipeline for the onward transport of the captured CO₂ to a suitable offshore geological storage site in the North Sea.</p>	<p>Development). Trenchless crossing beneath the River Tees may have impacts on the water quality of the water body and construction of a new outfall for process water discharge to Tees Bay could impact surface water quality during construction and cause localised hydromorphological impacts.</p>		
<p>ID 5: Net Zero Teesside Offshore Elements (Planning Ref. EN010103)- to be consented by Marine Licence including CO₂ Export Pipeline below MHWS and geological store and associated facilities.</p>	<p>Potential pollution of marine waters (Tees Bay and / or River Tees) or disruption to seabed sediments during construction could lead to changes in turbidity, water quality, the release of existing chemical contaminants or bacteria from sediments. There is also a risk of pollution events from marine vessels (fuel, hydraulic leaks) and drilling fluid leaks from HDD activities.</p>	<p>Any vessels used for the proposed Project will need to be in compliance with the International Maritime Organisation (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL) regulations and will have suitable waste disposal facilities on board. Vessels will follow the Work Boat Code. Best practice measures for dealing with spills and site runoff will be implemented as outlined in the Framework CEMP to ensure no adverse water quality effects. The Proposed Development would not cause any disturbance to the seabed which could release contaminants or bacteria.</p>	<p>No change- same as residual effect (Not Significant).</p>
<p>ID 8: (Planning Ref. EN010150) - 'Waste-to-sustainable aviation fuel' facility with on-site generating station capacity of up to 150 MW.</p>	<p>Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential</p>	<p>Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures notably, the adoption of mitigation measures set</p>	<p>No change- same as residual effect (Not Significant).</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
	impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	
ID 19 (Planning Ref: R/2017/0876/FFM) - Construction and operation of a mineral processing and refining facility including ancillary development, car parking and landscaping.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment. Threats mainly exists from hydrocarbon and chemical spills where the site sits within the sub-catchment of the River Tees (S Bank).	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant).
ID 20: (Planning Ref. R/2016/0484/FFM) - Proposed anaerobic biogas production facility and combined heat and power plant.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures notably, the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution	No change- same as residual effect (Not Significant).

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
	flood risk from increased impervious area in the catchment.	prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	
ID 22: (Planning Ref. R/2019/0767/OOM) - Director of Regeneration & Neighbourhoods Hartlepool, outline application for the construction of an energy recovery facility (ERF) and associated development, Grangetown Prairie Land east of John Boyle Road and west of Tees Dock Road, Grangetown.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures notably, the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant).
ID 30: (Planning Ref. R/2019/0031/FFM) - Tourian Renewables Ltd, construction and operation of a plastic conversion facility including office and contemporary construction compounds, workshops, weighbridges and associated infrastructure, former Croda Site Wilton International, Redcar.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute	No change- same as residual effect (Not Significant).

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
		documents. These will also be applied by the Other Development.	
ID 33: (Planning Ref. R/2017/0906/OOM) - Sirius Minerals Plc, outline planning application for an overhead conveyor and associated storage facilities in connection with the York potash project, land between Wilton International and Bran Sands, Redcar.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant).
ID 35 (Planning Ref. York Potash Ltd: Full planning application: The winning and working of polyhalite by underground methods including the construction of a minehead at Doves Nest Farm involving access, maintenance and ventilation shafts, the landforming of associated spoil, construction of buildings, access roads, car parking and helicopter landing site, attenuation ponds, landscaping, restoration and aftercare and associated works. In addition, the	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
<p>construction of an underground tunnel between Doves Nest Farm and land at Wilton that links to the mine below, comprising 1 shaft at Doves Nest Farm, 3 intermediate access shaft sites, each with associated landforming of associated spoil, construction of buildings, access roads and car parking, landscaping, restoration and aftercare, the construction of a tunnel portal at Wilton comprising buildings, landforming of spoil and associated works)</p>			
<p>ID 42 (Planning Ref. R/2020/0357/OOM) - South Tees Development Corporation (STDC): Outline planning application for demolition of existing structures on site and the development of up to 418,000 sqm (gross) of general industry (use class B2) and storage or distribution facilities (use class B8) with office accommodation (use class B1), HGV and car parking and associated infrastructure works all matters reserved other than access.</p>	<p>Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.</p>	<p>Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.</p>	<p>No change- same as residual effect (Not Significant)</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
ID: 48 (Planning Ref. R/2006/0433/OO) - P D Teesport: Outline application for development of a container terminal	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 51 (Planning Ref. R/2020/0819/ESM) - South Tees Development Corporation (STDC): Outline planning application for development of up to 139,353 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourse including realignment and associated infrastructure works. All matters reserved.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 52 (Planning Ref. R/2020/0820/ESM) - South Tees	Potential pollution of surface or groundwater bodies from spillages or	Mitigation of adverse impacts on the water environment during the construction phase will be	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
<p>Development Corporation (STDC): Outline planning application for development of up to 92,903sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.</p>	<p>mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.</p>	<p>achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.</p>	
<p>ID 53 (Planning Ref. R/2020/0821 /ESM)- South Tees Development Corporation (STDC): Outline planning application for development of up to 464,515sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.</p>	<p>Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.</p>	<p>Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.</p>	<p>No change- same as residual effect (Not Significant)</p>
<p>ID 54 (Planning Ref. R/2020/0822/ESM)- South Tees Development Corporation (STDC): Outline planning application for the development of up to 185,806 sqm</p>	<p>Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources</p>	<p>Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended</p>	<p>No change- same as residual effect (Not Significant)</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
(gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourses including realignment and associated infrastructure works. All matters reserved.	and local water supplies. Increased flood risk from increased impervious area in the catchment.	to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	
ID 55 (Planning Ref. R/2020/0823/ESM)- South Tees Development Corporation (STDC): Outline planning application for the development of up to 15,794sqm (gross) of office accommodation (Use Class E) and car parking and associated infrastructure works. All matters reserved.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 65 (Planning Ref. MWP8 South Tees Eco-Park)- Tees Valley Joint Minerals and Waste Development Plan Documents, A site of approximately 27 hectares is allocated for the development of the South Tees Eco-Park.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
	flood risk from increased impervious area in the catchment.	prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	
ID 131 (Planning ref. 22/2386/SOR) - Scoping opinion for Green Hydrogen Production Facility and Wind Turbine	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 135 (Planning Ref. 23/0090/EIS)- Carbon capture facility for existing Energy from Waste site	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
		documents. These will also be applied by the Other Development.	
ID 166 (Planning Ref. 13/2892/EIS)- Development of materials recycling facility and production of energy from waste, including demolition of the existing offices and erection of new buildings, tanks and silos with access taken from the existing access at New Road, Billingham. The main building will be portal frame, profiled steel clad with stacks at a maximum height of 80m and 28m. (Residual wastes will be processed through an advance thermal treatment process, gasification, to produce renewable heat and power) - related to consented planning boundary of 13-1584-RNW	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 167 (Planning Ref. 22/1145/SCO)- Screening opinion for proposed hydrogen production plant, battery storage and hydrogen re-fuelling point.	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
	watercourse crossings and road outfalls, if required.	CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	
ID 168 (Planning Ref. none)- Stockton-on-Tees Local Plan, Main growth location for hazardous installations including liquid and gas processing, bio-fuels and bio-refineries, chemical processing, resource recovery, and waste treatment, energy generation, carbon capture and storage and other activities, Seal Sands.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s). It is also assumed that standard mitigation measures such as pollution prevention, good practice guidance and relevant CIRIA guidance and British Standards Institute documents will be applied by any Other Development brought forward pursuant to this allocation.	No change- same as residual effect (Not Significant)
ID 172 (Planning Ref. R/2020/0685/ESM) - South Tees Development Corporation (STDC): Outline planning application for demolition of existing redundant quay structures, capital dredging and development of new quay and associated works (PHASE 2)	Potential pollution of estuarine (River Tees), marine waters (Tees Bay) or disruption to seabed sediments during construction could lead to changes in turbidity, water quality, the release of existing chemical contaminants or bacteria from sediments. There is also a risk of pollution events from marine vessels (fuel, hydraulic leaks) and drilling fluid leaks from HDD activities.	Any vessels used for the proposed Project will need to be in compliance with the IMO MARPOL regulations and will have suitable waste disposal facilities on board. Vessels will follow the Work Boat Code. Best practice measures for dealing with spills and site runoff will be implemented as outlined in the Framework CEMP (EN070009/APP/5.12) to ensure no adverse water quality effects. The Proposed Development would not cause any disturbance to the seabed which could release contaminants or bacteria.	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
ID 173 (Planning Ref. R/2022/0773/ESM)- Construction of a Lithium Hydroxide Monohydrate manufacturing plant and ancillary development	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 174 (Planning Ref. R/2014/0626/FFM)- Mineral (Polyhalite) granulation and storage facility involving the construction of buildings, conveyor systems, substations, water treatment plant, internal access roads, car parking, attenuation ponds, landscaping, restoration and aftercare, and construction of a tunnel portal including the landforming of spoil and associated works	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 178 (Planning Ref. R/2023/0291/ESM)- Outline application (all matters reserved) for	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures,	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
<p>the development of a 3 line low-carbon lithium refinery and associated dock-side reception, handling, storage, and manufacturing facilities for the production of high-quality, battery-grade lithium hydroxide monohydrate, to include the construction of up to three production lines with the production capacity of up to 75,000 tonnes per annum. The proposed development will include an office and warehouse buildings, together with associated site infrastructure and utility supplies</p>	<p>sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.</p>	<p>notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.</p>	
<p>ID 205 (Planning Ref. H/2023/0128)- Scoping opinion in respect of Greatham Northeast Flood Alleviation Scheme</p>	<p>Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.</p>	<p>Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.</p>	<p>No change- same as residual effect (Not Significant)</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
ID 212 (Planning Ref. 22/1525/EIS)- Erection of an energy recovery facility and associated infrastructure for fuel receipt and storage, power generation, power export, process emissions control, maintenance, offices and car parking together with associated operations.	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) and WMP (appended to the Final CEMP(s)). Standard mitigation measures will include those relating to pollution prevention and management of flood risk as outlined in good practice guidance and relevant CIRIA guidelines and British Standards Institute documents. These will also be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 219 (Planning Ref. 23/1019/EIS)- Development of Greenenergy Renewable Fuels and Circular Products Facility comprising a Sustainable Aviation Fuel Plant and Tyre Plant and associated infrastructure. A temporary construction compound, proposed services corridor, pipe bridge, ancillary buildings and car parking	Potential pollution of surface or groundwater bodies from spillages or mobilisation of contaminants from sediments or the ground. Potential impacts on groundwater resources and local water supplies. Increased flood risk from increased impervious area in the catchment.	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s). It is also assumed that standard mitigation measures such as pollution prevention, good practice guidance and relevant CIRIA guidance and British Standards Institute documents will be applied by the Other Development.	No change- same as residual effect (Not Significant)
ID 222 (Planning Ref. R/2023/0179/SCP) - Scoping Opinion for HyGreen Hydrogen Project	The other development is situated adjacent to the Proposed Development with pipeline networks crossing many of the same watercourses. There will be potential	Mitigation of adverse impacts on the water environment during the construction phase will be achieved principally through embedded measures, notably the adoption of mitigation measures set out within the Final CEMP(s) (based on the	No change - same as residual effect (i.e. Not Significant).

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
	<p>for pollution of surface or groundwater bodies from construction runoff, accidental spillage and soil disturbance; increased flood risk from increased impervious area in the catchment; potential hydromorphological impacts to surface watercourses from watercourse crossings (including some of the same watercourses as for the Proposed Development).</p>	<p>Framework CEMP), with similar measures assumed for Hygreen where there is interaction between the two projects. Appropriate design of structures and mitigation for crossings is included, and measures to manage flood risk during construction.</p>	

Table 23D-3: Surface Water, Flood Risk and Water Resources Cumulative Effects Assessment During Operation

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
<p>ID 2: (Planning Ref. EN010082) - The Tees Combined Cycle Power Plant. A gas fired combined cycle gas turbine (CCGT) power station with a maximum generating capacity of up to 1,700 MWe (Tbc). The project will utilise existing Gas and National Grid connections.</p>	<p>Potential pollution of surface water bodies (The Mill Race, Kinkerdale Beck, Kettle Beck, and Castle Gill) or groundwater bodies from diffuse urban runoff from the development, increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required. Utilisation of existing gas and grid connections may create increased risk to groundwater and surface water runoff through maintenance on older systems. Cooling requirements require the initial abstraction and return of water to the River Tees.</p>	<p>An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. Furthermore, abstraction licences and environmental permits to discharge are expected to be obtained by the applicant. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off and will also be subject to the necessary consents governing their abstraction and discharge arrangements.</p>	<p>No change- same as residual effect (Not Significant)</p>
<p>ID 3: Net Zero Teesside (Planning Ref. EN010103)- A full chain carbon capture, utilisation and storage ('CCUS') project, comprising a CO₂ gathering network, including CO₂ pipeline connections from industrial facilities on Teesside to transport the captured CO₂</p>	<p>Surface water runoff and process wastewater from NZT would discharge via a new outfall to Tees Bay. There could be cumulative impacts with wastewater from the Proposed Development under Case 2B. Modelling has been undertaken and shows this to not be significant.</p>	<p>An Indicative Surface Water Drainage Plan and Flood Risk Assessment are included in the DCO submission for both the Proposed Development and Other Development. They incorporate SuDS to control runoff rate and provide treatment of pollutants and thereby prevent cumulative impacts.</p>	<p>No change- same as residual effect (Not Significant)</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
<p>(including the connections under the tidal River Tees); a combined cycle gas turbine ('CCGT') electricity generating station with an abated capacity circa 850 gigawatts output (gross), cooling water, gas and electricity grid connections and CO₂ capture; a CO₂ gathering-booster station to receive the captured CO₂ from the gathering network and CCGT generating station; and the onshore section of a CO₂ transport pipeline for the onward transport of the captured CO₂ to a suitable offshore geological storage site in the North Sea.</p>	<p>Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings.</p>	<p>Process water to be treated prior to discharge (including using a reverse osmosis plant). Under Case 2B for the Proposed Development, process wastewater would be discharged to Tees Bay via a proposed new outfall to be built for the NZT development's wastewater and surface water runoff. Hydrodynamic dispersion modelling has been undertaken of the cumulative impact of the combined discharge from assumptions for NZT and the Proposed Development, as described in Appendix 9B: Water Quality Modelling Report (ES Volume III, EN070009/APP/6.4). Near and far field modelling indicated that the cumulative impact of discharges from the Proposed Development Site and NZT site is larger for all polluting substances and temperature at all stages of the tidal cycle than for the Proposed Development alone, as would be expected, with mixing zones more likely to reach the water surface. However, the thermal mixing zones remain extremely small, and pollutants are diluted to below the EQS value within a very short distance of the discharge point. Concentrations of DIN are slightly elevated above background concentrations over a wider area than the Proposed Development alone, but the overall increase in average and maximum pollutant</p>	

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
		<p>concentrations do not exceed EQS values, taking into account the complex tidal currents in this region which can result in pollutants accumulating in shallow water. The near field and far field modelling results show that the development proposals for both the Proposed Development Site and NZT site include sufficient treatment of process effluent to ensure that there is No significant impact on water quality in Tees Bay due to the cumulative impact of discharges from both sites.</p>	
<p>ID 5: Net Zero Teesside Offshore Elements (Planning Ref. EN010103)- to be consented by Marine Licence including CO₂ Export Pipeline below MHWS and geological store and associated facilities.</p>	<p>Potential pollution of marine waters (Tees Coastal, River Tees) from the development through changes in turbidity, chemical or bacterial contaminant release from sediments (from operational and maintenance activities such as seabed scour, cable movement, cable / pipeline maintenance.). Risk of pollution events from the use of marine vessels.</p>	<p>Any vessels used for the proposed Project will need to be in compliance with the IMO MARPOL regulations and will have suitable waste disposal facilities on board. Vessels will follow the Work Boat Code. Best practice measures for dealing with spills will be implemented. A Surface Water Drainage Strategy will provide attenuation and treatment for discharges from the Proposed Development. The Proposed Development would not cause any disturbance to the seabed which could release contaminants or bacteria. As such, there would not be expected for there to be any cumulative effects between the two developments.</p>	<p>No change- same as residual effect (Not Significant)</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
<p>ID 8: (Planning Ref. EN010150) - 'Waste-to-sustainable aviation fuel' facility with on-site generating station capacity of up to 150 MW</p>	<p>Potential pollution of surface or groundwater bodies from diffuse urban runoff or process water discharge, or spillages (aviation fuel) from the development and soil disturbance; increased flood risk from increased impervious area in the catchment.</p>	<p>An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. Development may coincide with the Proposed Development assessed herein. The Scoping Report for the Other Development indicates that process water would discharge to the River Tees following treatment at Bran Sands WwTW. An FRA and drainage strategy would be produced, and so there is not considered to be any significant cumulative effects between the two developments.</p>	<p>No change- same as residual effect (Not Significant)</p>
<p>ID 19 (Planning Ref: R/2017/0876/FFM) - Construction and operation of a mineral processing and refining facility including ancillary development, car parking and landscaping.</p>	<p>Potential pollution of surface or groundwater bodies from diffuse urban runoff or spillages from the development and; increased flood risk from increased impervious area in the catchment. Threats mainly exists from hydrocarbon and chemical spills where the site sits within the sub-catchment of the River Tees (S Bank). Spills from refuelling is a high-risk event which can occur at regular points during the operational phase of</p>	<p>An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. Alongside this, it is assumed that oil / silt interceptors will be embedded in the design of the scheme, in line with the Environment Agency's Pollution Prevention Guidelines. Potentially hazardous</p>	<p>No change- same as residual effect (Not Significant)</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
	<p>the development where refuelling practices take place. These pose a significant risk to the water environment due to their toxicity, persistence, large dispersion area and difficulty in clean up.</p>	<p>chemicals will also be stored with a secondary bunded container, of sufficient capacity, to contain any accidental spills.</p> <p>The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.</p>	
<p>ID 20: (Planning Ref. R/2016/0484/FFM) - Proposed anaerobic biogas production facility and combined heat and power plant.</p>	<p>Potential pollution of surface or groundwater bodies from diffuse urban runoff via drainage or spillages from the development and; increased flood risk from increased impervious area in the catchment.</p>	<p>An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include a FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.</p>	<p>No change- same as residual effect (Not Significant)</p>
<p>ID 22: (Planning Ref. R/2019/0767/OOM) - Director of Regeneration & Neighbourhoods Hartlepool, outline application for the construction of an energy</p>	<p>Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from</p>	<p>An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and</p>	<p>No change- same as residual effect (Not Significant)</p>

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
recovery facility (ERF) and associated development, Grangetown Prairie Land east of John Boyle Road and west of Tees Dock Road, Grangetown.	increased impervious area in the catchment.	provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 30: (Planning Ref. R/2019/0031/FFM) - Tourian Renewables Ltd, construction and operation of a plastic conversion facility including office and contemporary construction compounds, workshops, weighbridges and associated infrastructure, former Croda Site Wilton International, Redcar.	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 33: (Planning Ref. R/2017/0906/OOM) - Sirius Minerals Plc, outline planning application for an overhead conveyor and associated storage facilities in connection with the	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
York potash project, land between Wilton International and Bran Sands, Redcar.		design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 35 (Planning Ref. York Potash Ltd: Full planning application: The winning and working of polyhalite by underground methods including the construction of a minehead at Doves Nest Farm involving access, maintenance and ventilation shafts, the landforming of associated spoil, construction of buildings, access roads, car parking and helicopter landing site, attenuation ponds, landscaping, restoration and aftercare and associated works. In addition, the construction of an underground tunnel between Doves Nest Farm and land at Wilton that links to the mine below, comprising 1 shaft at Doves Nest Farm, 3 intermediate access shaft sites, each with	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
associated landforming of associated spoil, construction of buildings, access roads and car parking, landscaping, restoration and aftercare, the construction of a tunnel portal at Wilton comprising buildings, landforming of spoil and associated works)			
ID 42 (Planning Ref. R/2020/0357/OOM) - South Tees Development Corporation (STDC): Outline planning application for demolition of existing structures on site and the development of up to 418,000 sqm (gross) of general industry (use class B2) and storage or distribution facilities (use class B8) with office accommodation (use class B1), HGV and car parking and associated infrastructure works all matters reserved other than access	Potential pollution of surface or groundwater bodies from diffuse urban and road runoff and spillages from the development; increased flood risk from increased impervious area in the catchment.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include a FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID: 48 (Planning Ref. R/2006/0433/OO) - P D Teesport: Outline application for development of a container terminal	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
	catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 51 (Planning Ref. R/2020/0819/ESM) - South Tees Development Corporation (STDC): Outline planning application for development of up to 139,353 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourse including realignment and associated infrastructure works. All matters reserved.	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 52 (Planning Ref. R/2020/0820/ESM) - South Tees Development Corporation (STDC): Outline planning application for development of up to 92,903sqm	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
(gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 53 (Planning Ref. R/2020/0821/ESM)- South Tees Development Corporation (STDC): Outline planning application for development of up to 464,515sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 54 (Planning Ref. R/2020/0822/ESM)- South Tees Development Corporation (STDC): Outline planning application for the development of up to 185,806 sqm (gross) of general industry (Use	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourses including realignment and associated infrastructure works. All matters reserved.	watercourses from watercourse crossings and road outfalls, if required.	design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 55 (Planning Ref. R/2020/0823/ESM)- South Tees Development Corporation (STDC): Outline planning application for the development of up to 15,794sqm (gross) of office accommodation (Use Class E) and car parking and associated infrastructure works. All matters reserved.	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 65 (Planning Ref. MWP8 South Tees Eco-Park)- Tees Valley Joint Minerals and Waste Development Plan Documents, A site of approximately 27 hectares is	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
allocated for the development of the South Tees Eco-Park.	watercourses from watercourse crossings and road outfalls, if required.	design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 131 (Planning ref. 22/2386/SOR) - Scoping opinion for Green Hydrogen Production Facility and Wind Turbine	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 135 (Planning Ref. 23/0090/EIS)- Carbon capture facility for existing Energy from Waste site	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
	watercourse crossings and road outfalls, if required.	Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 166 (Planning Ref. 13/2892/EIS)- Development of materials recycling facility and production of energy from waste, including demolition of the existing offices and erection of new buildings, tanks and silos with access taken from the existing access at New Road, Billingham. The main building will be portal frame, profiled steel clad with stacks at a maximum height of 80m and 28m. (Residual wastes will be processed through an advance thermal treatment process, gasification, to produce renewable heat and power) - related to consented planning boundary of 13-1584-RNW	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 167 (Planning Ref. 22/1145/SCO)- Screening opinion for proposed hydrogen production	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4)	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
plant, battery storage and hydrogen re-fuelling point.	flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 168 (Planning Ref. none)- Stockton-on-Tees Local Plan, Main growth location for hazardous installations including liquid and gas processing, bio-fuels and bio-refineries, chemical processing, resource recovery, and waste treatment, energy generation, carbon capture and storage and other activities, Seal Sands.	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 172 (Planning Ref. R/2020/0685/ESM) - South Tees Development Corporation (STDC): Outline planning application for	Potential pollution of estuarine (River Tees), marine waters (Tees Bay) from the development through changes in turbidity, chemical or bacterial	Any vessels used for the Proposed Development will need to be in compliance with the IMO MARPOL regulations and will have suitable waste disposal facilities on board. Vessels will follow the	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
demolition of existing redundant quay structures, capital dredging and development of new quay and associated works (PHASE 2)	contaminant release from sediments (from operational and maintenance activities such as seabed scour, cable movement, cable/pipeline maintenance.). Risk of pollution events from the use of marine vessels.	Work Boat Code. Best practice measures for dealing with spills will be implemented.	
ID 173 (Planning Ref. R/2022/0773/ESM)- Construction of a Lithium Hydroxide Monohydrate manufacturing plant and ancillary development	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 174 (Planning Ref. R/2014/0626/FFM)- Mineral (Polyhalite) granulation and storage facility involving the construction of buildings, conveyor systems, substations, water treatment plant, internal access roads, car parking, attenuation ponds, landscaping,	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
restoration and aftercare, and construction of a tunnel portal including the landforming of spoil and associated works		Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 178 (Planning Ref. R/2023/0291/ESM)- Outline application (all matters reserved) for the development of a 3 line low-carbon lithium refinery and associated dock-side reception, handling, storage, and manufacturing facilities for the production of high-quality, battery-grade lithium hydroxide monohydrate, to include the construction of up to three production lines with the production capacity of up to 75,000 tonnes per annum. The proposed development will include an office and warehouse buildings, together with associated site infrastructure and utility supplies	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 205 (Planning Ref. H/2023/0128)- Scoping opinion in	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased	Information scarce on LPA website, although it is expected that a Drainage Strategy and Flood Risk Assessment will be submitted with the ES for the	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
respect of Greatham North East Flood Alleviation Scheme	flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	development, incorporating SuDS to control runoff rate and provide treatment of pollutants.	
ID 212 (Planning Ref. 22/1525/EIS)- Erection of an energy recovery facility and associated infrastructure for fuel receipt and storage, power generation, power export, process emissions control, maintenance, offices and car parking together with associated operations.	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	No change- same as residual effect (Not Significant)
ID 219 (Planning Ref. 23/1019/EIS)- Development of Greenergy Renewable Fuels and Circular Products Facility comprising a Sustainable Aviation Fuel Plant and Tyre Plant and associated infrastructure. A temporary construction compound, proposed	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	An Indicative Surface Water Drainage Plan (EN070009/APP/2.12) and Flood Risk Assessment (Appendix 9A, ES Volume III, EN070009/APP/6.4) are included in the DCO submission. They incorporate SuDS to control runoff rate and provide treatment of pollutants. Appropriate design of structures is to be included. The Other Development is assumed to implement a Surface Water Drainage Strategy including SuDS measures	No change- same as residual effect (Not Significant)

DEVELOPMENT	POTENTIAL CUMULATIVE IMPACT	MITIGATION	POTENTIAL CUMULATIVE EFFECT (TAKING MITIGATION INTO ACCOUNT)
services corridor, pipe bridge, ancillary buildings and car parking		to attenuate and treat run off. It is assumed to include an FRA and have appropriate standard measures for installation of watercourse crossings or outfalls.	
ID 222 (Planning Ref. R/2023/0179/SCP) - Scoping Opinion for HyGreen Hydrogen Project	Potential pollution of surface or groundwater bodies from diffuse urban runoff from the development and soil disturbance; increased flood risk from increased impervious area in the catchment. Potential hydromorphological impacts to surface watercourses from watercourse crossings and road outfalls, if required.	A Detailed Drainage Strategy is to be developed post consent for both developments outlining appropriate treatment of surface water runoff prior to discharge. It is understood that Process water will be sent to Bran Sands WwTW for HyGreen and from there will discharge to River Tees (as opposed to the Proposed Development where the preference is to discharge to Tees Bay, but brine may be sent to Bran Sands under Case 1B). No intrusive pipeline crossings are required for HyGreen. A Flood Risk Assessment and WFD assessment will be included in the ES for both developments.	No change- same as residual effect (Not Significant)

Table 23D-4: Geology, Hydrogeology and Contaminated Land Cumulative Effects Assessment During Construction

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
2 – Tees CCPP	Scoped in – Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Tees CCPP site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.
3 - NZT	Scoped in – Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the NZT site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
5 - NZT offshore elements	Scoped in – Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> Not applicable for this type of development.</p> <p><u>Soils</u> Not applicable for this type of development.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.
6 - Dogger Bank Teesside A / Sofia Offshore Wind Farm	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the other development.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.
8 – Lighthouse Green Fuels Project	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the Lighthouse Green Fuels development.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No	No significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
		<p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Lighthouse Green Fuels site.</p>	<p>additional mitigation measures proposed for cumulative effects.</p>	
19 – Mineral Processing and Refining Facility	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Mineral Processing and Refining Facility site.</p>	<p>Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.</p>	<p>No significant residual effects are anticipated.</p>
20 - Anaerobic Biogas Production Facility and Combined	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with Anaerobic Biogas Production Facility and Combined Heat and Power Plant development.</p>	<p>Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No</p>	<p>No significant residual effects are anticipated.</p>

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
Heat and Power Plant		<p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Anaerobic Biogas Production Facility and Combined Heat and Power Plant site.</p>	additional mitigation measures proposed for cumulative effects.	
22 – Energy Recovery Facility	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Energy Recovery Facility site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.
30 – Plastic Conversion Facility	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No	No significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
		<p>each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Plastic Conversion Facility site.</p>	<p>additional mitigation measures proposed for cumulative effects.</p>	
33 – York Potash Overhead Conveyor	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the York Potash site.</p>	<p>Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.</p>	<p>No significant residual effects are anticipated.</p>
35 – York Potash		<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p>	<p>Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.</p>	<p>No significant residual effects are anticipated.</p>

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
		<p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the surface development of the York Potash site.</p>		
42 – South Tees Development Corporation	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the South Tees Development Corporation site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.
48 – Container Terminal	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
		<p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Container Terminal site.</p>		
51 - South Tees Development Corporation	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the South Tees Development Corporation site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.
52 - South Tees Development Corporation	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
		as there is no BMV land within the South Tees Development Corporation site.		
53 - South Tees Development Corporation	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the South Tees Development Corporation site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No significant residual effects are anticipated.
54 – South Tees Development Corporation	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
		as there is no BMV land within the South Tees Development Corporation site.		
55 - South Tees Development Corporation	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the South Tees Development Corporation site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.
65 – South Tees Eco-Park	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the South Tees Eco-Park site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
131 – Green Hydrogen Production Facility and Wind Turbine	Scoped in - Potential for cumulative construction impacts	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Green Hydrogen Production Facility and Wind Turbine site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.
135 – Carbon Capture Facility	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Carbon Capture Facility site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
166 – Materials Recycling Facility	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Materials Recycling Facility.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.
167 – Hydrogen Production Plant, Battery Storage and Hydrogen Refuelling Point	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the Hydrogen Production Plant, Battery Storage and Hydrogen Refuelling Point site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
168 – Stockton-on-Tees Local Plan, Policy SD4 Economic Growth Strategy - Local Plan Allocation	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap within the area of the Local Plan Allocation for hazardous installations.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the area of the Local Plan Allocation for hazardous installations.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.
172 – South Tees Development Corporation Quay Development	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap within the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the area of the other development.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
173 - Lithium Hydroxide Monohydrate Manufacturing Plant	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap within the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the other development.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.
174 - Mineral (Polyhalite) Granulation and Storage Facility	Scoped in - Potential for cumulative construction impacts	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap within the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the area of the Mineral (Polyhalite) Granulation and Storage Facility site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects	No Significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
178 – Low Carbon Lithium Refinery	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap with the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the area of the Low Carbon Lithium Refinery site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.
205 - Greatham North East Flood Alleviation Scheme		<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap within the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> Cumulative effect for agricultural soils, due to both developments affecting Best and Most Versatile land, this is assessed as Slight Adverse (Not Significant).</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). The removal of soil should be minimised as far as reasonably possible and stockpiled to be re-used for landscaping areas.	Slight Adverse (Not Significant)

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
212 – Energy Recovery Facility	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap within the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils as there is no BMV land within the area of the G Energy Recovery Facility site.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.
219 - Greenergy Renewable Fuels and Circular Products Facility	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap within the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect on the agricultural soils</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). No additional mitigation measures proposed for cumulative effects.	No Significant residual effects are anticipated.

ID	SCOPE OF CUMULATIVE ASSESSMENT	ASSESSMENT OF CUMULATIVE EFFECT WITH THE PROPOSED DEVELOPMENT	PROPOSED MITIGATION APPLICABLE TO THE PROPOSED DEVELOPMENT	RESIDUAL CUMULATIVE EFFECT
		as there is no BMV land within the area of the Greenergy Renewable Fuels and Circular Products Facility site.		
222 – HyGreen	Scoped in - Potential for cumulative construction impacts.	<p><u>Geology</u> There is not considered to be a cumulative effect on geology. There are no designated geological sites that overlap within the other development.</p> <p><u>Groundwater (superficial and bedrock aquifers)</u> There is not considered to be a cumulative effect on groundwater as each development will adhere to legislation and best practice during construction.</p> <p><u>Soils</u> There is not considered to be a cumulative effect for agricultural soils as there is no BMV land which overlaps within the area of the HyGreen development.</p>	Mitigation as presented in Chapter 10: Geology, Hydrogeology and Contaminated Land (ES Volume I, EN070009/APP/6.2). The removal of soil should be minimised as far as reasonably possible and stockpiled to be re-used for landscaping areas.	No Significant residual effects are anticipated.

Table 23D-5: Noise Cumulative Effects Assessment During Construction

DEVELOPMENT	HIGHEST PREDICTED FREE-FIELD NOISE LEVEL FOR DAYTIME CONSTRUCTION ACTIVITY dB L _{Aeq,12h}						
	H1	H2	H3	H4	H5	H6	H7
3 - Net Zero Teesside	N/A	N/A	N/A	78	58	47	69
33 - York Potash Overhead Conveyor	N/A	N/A	N/A	N/A	45	45	45
48 - Northern Gateway Container Terminal	N/A	49	N/A	N/A	N/A	46	41
53 - STDC Foundry	N/A	N/A	N/A	N/A	41	38	48
54 - STDC Long Acres	N/A	N/A	N/A	N/A	48	47	48
55 - STDC Steel House	N/A	N/A	N/A	N/A	42	54	54
174 - York Potash	N/A	N/A	N/A	N/A	42	57	57
178 - Green Lithium*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
212 - Energy Recovery Facility Seal Sands**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
219 - Greenergy Renewable Fuels and Circular Products Facility	41	39	N/A	N/A	N/A	N/A	N/A
222 - HyGreen	N/A	N/A	N/A	47	50	48	
Cumulative construction noise level of all developments without the Proposed Development	41	49	N/A	78	59	60	70
The Proposed Development	78	42	60	82	47	52	70
Cumulative construction noise level of all developments including the Proposed Development ¹	78	50	60	83	59	61	73
Classification of the Proposed Development Effect alone	Major Adverse	Negligible Adverse	Negligible Adverse	Moderate Adverse	Negligible Adverse	Negligible Adverse	Minor Adverse

¹ 78 dB + 41 dB is equal to 78 dB. The decibel scale is logarithmic with a 10 dB increase being equivalent to 10 times more sound pressure, so 78 dB is over 1000 times higher than 41 dB.

DEVELOPMENT	HIGHEST PREDICTED FREE-FIELD NOISE LEVEL FOR DAYTIME CONSTRUCTION ACTIVITY dB L _{Aeq,12h}						
	H1	H2	H3	H4	H5	H6	H7
Classification of Cumulative Effect	Major Adverse	Negligible Adverse	Negligible Adverse	Moderate Adverse	Negligible Adverse	Moderate Adverse	Minor Adverse

*All construction noise levels for this development are listed as being below the 65 dB threshold however no specific figures are mentioned

**Predicted construction noise levels are not given but it is stated that "Given the large separation distance between the application site and noise-sensitive premises it is not considered likely that any significant impacts would occur during the construction phase of the development."

Table 23D-6: Assessment of Night-time Operational Noise Cumulative Effects

DEVELOPMENT	OPERATIONAL SPECIFIC SOUND LEVEL DB L _{Aeq,T} dB	
	H5	H6
3 - Net Zero Teesside	45	45
33 - York Potash Overhead Conveyor	40	40
48 - Northern Gateway Container Terminal	28	28
53 - STDC Foundry	37	47
54 - STDC Long Acres	42	44
55 - STDC Steel House	21	40
174 - York Potash	21	39
178 - Green Lithium*	N/A	N/A
212 - Energy Recovery Facility Seal Sands	22	N/A
219 - Greenergy Renewable Fuels and Circular Products Facility	25	N/A
222 - HyGreen	40	37
Existing night-time <i>Ambient Sound Level</i>	44	45
Cumulative operational sound level of other major developments, summed with existing ambient sound level	50	52
The Proposed Development	40	36
Cumulative operational sound level of other major developments, summed with existing ambient sound level	50	52

*Operational noise levels were not specified for this development, however it is stated that "All plant will be specified such that rating levels at the nearest residential receptors fall below the specified background sound levels."

Table 23D-7: Ecology and Nature Conservation Assessment of Cumulative Effects

DEVELOPMENT	APPLICATION REFERENCE	DEVELOPMENT NAME AND DETAILS	REPORTED EFFECTS OF OTHER DEVELOPMENT	MITIGATION PROPOSED TO ADDRESS EFFECTS OF OTHER DEVELOPMENT	POTENTIAL FOR CUMULATIVE EFFECTS WITH PROPOSED DEVELOPMENT AND POTENTIAL ADDITIONAL MITIGATION	LIKELIHOOD AND SIGNIFICANCE OF CUMULATIVE EFFECTS AND PHASES AFFECTED
2	EN010082	The Tees Combined Cycle Power Plant. A gas fired combined cycle gas turbine (CCGT) power station with a maximum generating capacity of up to 1,700 MWe (Tbc). The project will utilise existing Gas and National Grid connections.	Chapter 12: Ecology and Nature Conservation (ES Volume I, EN070009/APP/6.2) of the ES reported negligible ecological value for habitats and species of flora and fauna. No Significant effects were predicted. There were No Significant effects predicted on off-site habitats due to changes in air quality, nitrogen deposition and acid deposition. The HRA screening report concluded No Significant effects on European designated sites.	No specific mitigation was required, as all the reported effects of this project were Not Significant. The ecology chapter states that the Framework CEMP (EN070009/APP/5.12) has been prepared and will be developed to include standard mitigation and good practice in relation to advice on construction with regards to nesting birds and mammals.	No potential cumulative effects have been identified. No additional mitigation required.	As mitigation is proposed to avoid significant adverse effects on the majority of species and habitats assessed for the Proposed Development, and the effects of the other development are not significant, it is considered unlikely that cumulative effects could be significant. No Significant cumulative effects identified during construction or operation.
3	EN10103	Net Zero Teesside. A full chain carbon capture, utilisation and storage ('CCUS') project, comprising a CO ₂ gathering network, including CO ₂ pipeline connections from industrial facilities on Teesside to transport the captured CO ₂ (including the connections under the tidal River Tees); a combined cycle gas turbine ('CCGT') electricity generating station with an abated capacity circa 850 gigawatts output (gross), cooling water, gas and electricity grid connections and CO ₂ capture; a CO ₂ gathering-booster station to receive the captured CO ₂ from the gathering network and CCGT generating station; and the onshore section of a CO ₂ transport pipeline for the onward transport of the captured CO ₂ to a suitable offshore geological storage site in the North Sea.	The ecology and nature conservation chapter of the ES identified no pathways for construction impacts on designated sites within the ZOI of the development. The construction phase will result in the following impacts on habitats: • Permanent losses of semi-improved grassland; • Temporary losses of semi-improved grassland and scrub for temporary construction compounds and/or construction corridors; • Disturbance of open mosaic habitats for construction of the Natural Gas Connection. Construction activities will result in the following impacts on species: • Permanent and temporary losses of part of the habitat resource for a terrestrial invertebrate assemblage; • Localised temporary disturbances affecting part of the habitat resource for terrestrial invertebrate assemblages; • Potential for interaction with invasive-non-native species. No Significant effects on ecology receptors were identified during operation, however both projects have the potential for air quality effects.	Compensation for loss of grassland habitat is proposed and detailed within an Indicative Landscape and Biodiversity Strategy. All temporary losses of grassland for temporary construction compound will be reinstated in accordance with the relevant landowner. Creation of flower rich grassland within the PCC site and restoration of temporary construction compounds after construction will be suitable for re-colonisation by invertebrates.	The Proposed Development will also result in losses of semi-improved grassland, scrub and open mosaic habitat during the construction phase and there is potential overlap of construction periods. There will also be permanent and temporary losses of habitat which are a resource for the terrestrial invertebrate assemblage. Habitat creation and restoration is proposed to offset these losses, and the re-establishment of vegetation consistent with open mosaic habitat is likely to be well advanced within two – three growing seasons.	Although mitigation is proposed, based upon a precautionary approach, there is potential for cumulative losses of grassland and open mosaic habitats during the construction phase in the interim period between newly created and restored habitats reaching their target condition. It is considered unlikely that the temporary loss of these habitats would have a significant effect on the invertebrate assemblage due to the abundance of comparable habitats in the South Tees Area. The air quality modelling has confirmed that there will be No Significant cumulative effects from the Proposed Development in combination with other plans and projects (refer to Appendix 8A and 8B (ES Volume III, EN070009/APP/6.4) and the Report to Inform Habitats Regulations Assessment (EN070009/APP/5.10)).

DEVELOPMENT	APPLICATION REFERENCE	DEVELOPMENT NAME AND DETAILS	REPORTED EFFECTS OF OTHER DEVELOPMENT	MITIGATION PROPOSED TO ADDRESS EFFECTS OF OTHER DEVELOPMENT	POTENTIAL FOR CUMULATIVE EFFECTS WITH PROPOSED DEVELOPMENT AND POTENTIAL ADDITIONAL MITIGATION	LIKELIHOOD AND SIGNIFICANCE OF CUMULATIVE EFFECTS AND PHASES AFFECTED
5	NZT Offshore Elements	Net Zero Teesside offshore elements to be consented by Marine Licence including CO ₂ Export Pipeline below MHWS and geological store and associated facilities.	No Significant effects upon terrestrial ecology are reported within the ES. The potential for in combination effects upon ornithology and marine ecology are discussed in ES Chapter 13: Ornithology and ES Chapter 14: Marine Ecology (ES Volume I, EN070009/APP/6.2) respectively.	No mitigation required.	No potential cumulative effects have been identified. No additional mitigation required.	No Significant effects are identified during construction or operation.
6	EN010051	Forewind Ltd. (formerly Dogger Bank Teesside B) – Project previously known as Dogger Bank Teesside A&B. Dogger Bank Teesside A & B is the second stage of Forewind’s offshore wind energy development of the Dogger Bank Zone (Zone 3, Round 3). Dogger Bank Teesside A & B will comprise up to two wind farms, each with an installed capacity of up to 1.2GW, which are expected to connect to the National Grid at the existing National Grid substation at Lackenby, near Eston. It follows that Dogger Bank Teesside A & B could have a total installed capacity of up to 2.4GW Dogger Bank Teesside A & B is located within The Dogger Bank Zone which comprises an area of 8660 square kilometres (km ²) located in the North Sea between 125 kilometres (km) and 290km off the UK North East coast.	No Significant effects upon terrestrial ecology are reported within the Environmental Report. The potential for in combination effects upon ornithology and marine ecology are discussed in ES Chapter 13: Ornithology and ES Chapter 14: Marine Ecology (ES Volume I, EN070009/APP/6.2) respectively.	No mitigation required.	No potential cumulative effects have been identified. No additional mitigation required.	No Significant effects are identified during construction or operation.
8	EN010150	‘Waste-to-sustainable aviation fuel’ facility with on-site generating station capacity of up to 150 MW	The scoping report identifies the potential for effects upon the Teesmouth and Cleveland Coast SPA and Ramsar. There is also potential for effects upon Habitats of Principal Importance (Open Mosaic Habitat). Baseline surveys for protected and notable species are being completed.	Not available.	Potential for cumulative effects upon designated sites and Open Mosaic Habitat.	There is insufficient information in the Scoping Report for the other development to allow for cumulative assessment to be undertaken.
19	R/2017/0876/FFM	Construction and operation of a mineral processing and refining facility including ancillary	The ecology chapter of the ES identified that the development would result in the loss of open mosaic habitat which supports notable invertebrates. In the	Existing areas of habitat adjacent to the site will be retained. An additional Ecological Enhancement Area is to be established including	There is no overlap between the project areas, however there is potential for cumulative effects upon Open Mosaic Habitat during construction. Mitigation is proposed to prevent adverse	As mitigation is proposed to avoid significant adverse effects on the majority of species and habitats assessed for the Proposed Development, and the effects of the other development are not significant, it is

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		development, car parking and landscaping.	absence of mitigation, the development had the potential to affect water vole.	existing and new habitat to be enhanced / created / maintained around the site. A 5m buffer to watercourses to prevent adverse effects upon water vole.	effects from the other development and No Significant residual effects remain. Habitat creation and restoration are proposed for the Proposed Development to offset losses of Open Mosaic Habitat and the re-establishment of vegetation consistent with open mosaic habitat is likely to be well advanced within two – three growing seasons.	considered unlikely that cumulative effects could be significant. No cumulative effects identified during operation.
20	R/2016/0484/FFM	Proposed anaerobic biogas production facility	The Phase 1 habitat survey report states that the site is brownfield, characterised by predominately hardstanding with colonising grass species and scattered scrub. No effects upon designated sites are identified.	Habitats to be cleared outside of the nesting bird season. Treatment of horsetail sp. Within the site and a landscaping strategy which uses native species.	Potential for cumulative effects on Open Mosaic Habitat during construction. Habitat creation and restoration are proposed for the Proposed Development to offset losses of Open Mosaic Habitat and the re-establishment of vegetation consistent with open mosaic habitat is likely to be well advanced within two – three growing seasons.	As mitigation is proposed to avoid significant adverse effects on the majority of species and habitats assessed for the Proposed Development, and the effects of the other development are not significant, it is considered unlikely that cumulative effects could be significant. No cumulative effects identified during operation.
22	R/2019/0767/OOM	Director of Regeneration & Neighbourhoods Hartlepool, outline application for the construction of an energy recovery facility (ERF) and associated development, Grangetown Prairie Land east of John Boyle Road and west of Tees Dock Road, Grangetown.	The report to inform HRA screening identified that the nitrogen nutrient baseline deposition exceeds the minimum critical level (AQAL) of 8 kg/ha/yr regardless of the operation of the Proposed Facility. The maximum Process Contribution from the Proposed Facility anywhere within the Teesmouth and Cleveland Coast ecological site is 0.75 kg/ha/yr, which is 9.4% of the AQAL. As such the potential for significant effects cannot be discounted. The Appropriate Assessment states that the Proposed Facility will be required to demonstrate that Best Available Techniques (BAT) have been implemented during the Environmental Permitting process. A further Appropriate Assessment will be required once the detailed design has been completed. The site is brownfield and has suitability to support brown hare, common toad, grayling butterfly, wall butterfly, dingy skipper butterfly and small heath butterfly.	The Phase 1 habitat survey report recommends that an area of 5.73 acres (2.32 Ha) is retained and enhanced. Enhancement, or uplift, should be through clearing the site of industrial residue, levelling the site, leaving a bare and loose substrate and creating several ponds of varying depths. Tree and shrub planting should be avoided. The habitat improvements and subsequent management should follow a prepared conservation management plan.	As an updated Appropriate Assessment will be required for the other development at detailed planning stage, therefore potential cumulative effects upon air quality during operation cannot be discounted. There is also potential for cumulative loss of effects on Open Mosaic Habitat during construction. Habitat creation and restoration are proposed for the Proposed Development to offset losses of Open Mosaic Habitat and the re-establishment of vegetation consistent with open mosaic habitat is likely to be well advanced within two – three growing seasons.	As mitigation is proposed to avoid significant adverse effects on the majority of species and habitats assessed for the Proposed Development, and the effects of the other development are not significant, it is considered unlikely that cumulative effects on open mosaic habitat during construction could be significant. The air quality assessment for the Proposed Development has confirmed there will be no adverse effects cumulatively with other projects (refer to Appendix 8A and 8B (ES Volume III, EN070009/APP/6.4)). The potential for cumulative effects on air quality from the other project will be assessed as part of the consenting process and the development will only proceed if potential air quality effects are at an acceptable level both alone and in combination.

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30	R/2019/0031/FFM	Tourian Renewables Ltd, construction and operation of a plastic conversion facility including office and contemporary construction compounds, workshops, weighbridges and associated infrastructure, former Croda Site Wilton International, Redcar	The Phase 1 habitat survey report states that the site is currently of negligible ecological value. There is some vegetation present that is typical of early succession habitats, but this is not varied enough in its structure or composition to be classed as the priority habitat, "Open Mosaic Habitats on Previously Developed Land".	No mitigation measures are proposed.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction and operation.
33	R/2017/0906/OOM	Sirius Minerals Plc, outline planning application for an overhead conveyor and associated storage facilities in connection with the York potash project, land between Wilton International and Bran Sands, Redcar.	The ecology chapter of the ES states that the habitat types found within the Proposed Development Area are of minor ecological significance and no BAP habitat was recorded. The shadow HRA screening report concluded that there is potential for likely significant effects from noise and visual disturbance during construction, reduction in sightlines and overshadowing of Bran Sands lagoon. No likely significant effect is predicted for noise and visual disturbance during the operational phase.	Acoustic barriers and sensitive lighting are proposed to mitigate the effects of noise and visual disturbance on birds.	No potential cumulative effects on terrestrial ecology have been identified (cumulative effects on birds are considered in ES Chapter 14 (ES Volume I, EN070009/APP/6.2)). No additional mitigation required.	With the application of mitigation for noise and visual disturbance for both projects, there is no potential for cumulative effects with the Proposed Development during construction or operation.
35	R/2014/0627/FFM	York Potash Ltd: Full planning application: The winning and working of polyhalite by underground methods including the construction of a minehead at doves nest farm involving access, maintenance and ventilation shafts, the landforming of associated spoil, construction of buildings, access roads, car parking and helicopter landing site, attenuation ponds, landscaping, restoration and aftercare and associated works. In addition, the construction of an underground tunnel between doves nest farm and land at Wilton that links to the mine below, comprising 1 shaft at doves nest farm, 3 intermediate access shaft sites, each with associated landforming of associated spoil, construction of buildings, access roads and car	The ecology chapter of the ES identified the potential for permanent habitat loss, dust emissions and changes in lighting affecting foraging and commuting bats. The report to Inform HRA identified the potential for disturbance effects and changes in lighting to affect qualifying features of the Teesmouth and Cleveland Coast SPA and Ramsar.	A landscape strategy would be implemented, dust control measures and natural screening proposed, lighting proposals to consider Bat Conservation Trust guidance.	Potential for cumulative effects on the Teesmouth and Cleveland Coast SPA and Ramsar from disturbance effects and changes in lighting during construction. Sensitive lighting and noise attenuation measures are proposed for both projects. A mitigation strategy is proposed for Bran Sands Lagoon. It is predicted that with these mitigation measures in place, the risk of indirect impacts on waterbirds would be reduced to an insignificant level and would not have an adverse effect on the waterbird population of the Teesmouth and Cleveland Coast SPA. This conclusion was discussed at the meeting on 5 February 2015, and Natural England's view was that the conclusion that the impact would reduce to an insignificant level could only be drawn if it could be guaranteed that the construction works	Potential for significant cumulative effects on the Teesmouth and Cleveland Coast SPA and Ramsar at Bran Sands Lagoon and Dabholm Gut, from noise and lighting if the construction phases overlap. However, with mitigation proposed for both projects, No Significant effects are anticipated. No Significant cumulative effects are identified during operation.

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		parking, landscaping, restoration and aftercare, the construction of a tunnel portal at Wilton comprising buildings, landforming of spoil and associated works			would avoid the wintering period. However, Natural England accepted that these disturbance impacts would not have an adverse effect on the integrity of the Teesmouth and Cleveland Coast SPA due to the limited time period over which disturbance would occur (3 to 4 months) in combination with the mitigation proposed (Royal Haskoning DHV, 2016).	
41	R/2014/0372/OOM	The Lady Hewley Charity Trust Company Ltd & Taylor - Outline application for residential development (up to 1250 dwellings) (all matters reserved)	The phase 1 habitat survey report states that the site is characterised by arable land, poor semi-improved grassland and areas of plantation woodland and scattered scrub.	Site clearance should be completed outside of the nesting bird season. An appropriate treatment plan should be developed to eradicate Japanese knotweed from the Site. Native plant species sourced from local nurseries are recommended in the landscape proposals to enhance foraging opportunities for local birds and bats. A range of bat and bird boxes are recommended for the Site to enhance roosting and nesting opportunities.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.
42	R/2020/0357/OOM	South Tees Development Corporation (STDC): Outline planning application for demolition of existing structures on site and the development of up to 418,000 sqm (gross) of general industry (use class B2) and storage or distribution facilities (use class B8) with office accommodation (use class B1), HGV and car parking and associated infrastructure works all matters reserved other than access	The HRA Stage 1 assessment identified the following potential impacts to the Teesmouth and Cleveland Coast SPA and Ramsar sites: <ul style="list-style-type: none"> • During construction: the risk of disturbance and/or loss of habitats that support foraging and commuting activities, and/or roosting of the qualifying features, due to pollution from within the Proposed Development site; • During construction: the risk of noise/visual disturbance of small numbers of qualifying species utilising the adjacent SPA/Ramsar site for foraging and commuting activities, and/or roosting; and • During operation: the risk of disturbance and/or loss of habitats that support foraging and commuting 	The following mitigation will be incorporated in order to prevent significant effects as a result of construction of the Proposed Development: <ul style="list-style-type: none"> • Construction works along the north-western boundary of the Proposed Development site within 10 m or less of the River Tees are to be screened, to reduce the visual and noise impacts upon the Teesmouth and Cleveland Coast SSSI and the designated features that utilise the River Tees for foraging and commuting. Screening will involve use of opaque barriers, which would also prevent site operatives from unnecessary access to the 	The application is approved subject to the following conditions relating to ecology: Upon the approval of the Reserved Matters in accordance with the phasing plan agreed through discharge of condition 4, and prior to the implementation of the approved scheme, the development shall be the subject of an updated Habitats Regulations Assessment. The HRA shall confirm, based on the approved detail of the development and its processes and the conclusions of the Environmental Impact Assessment that the development will not give rise to significant adverse impacts on the Teesmouth and Cleveland Coast SPA and Ramsar sites. Where significant impacts not previously identified are assessed to arise from the approved detailed scheme, the additional information shall set out those mitigation	Potential for significant (Moderate Adverse) cumulative effects on designated sites, open mosaic habitat and invertebrates during construction. <p>The HRA for the Proposed Development has concluded that there will be No Significant Adverse effects alone. Assuming that the updated HRA for the other development can conclude no likely significant effects upon European designated sites during operation, no cumulative effects will occur.</p>

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			<p>activities, and/or roosting of the qualifying features, due to pollution from within the Proposed Development site.</p> <p>The Proposed Development will result in loss of all OMH within the Proposed Development site in order to facilitate construction. OMH is present across the Proposed Development site, with a variety of substrates and differing levels of bare ground and vegetative cover present across different units of OMH. Negative effects are also predicted for lowland calcareous grassland, broad-leaved woodland, open water, saltmarsh, intertidal mud, invertebrates, breeding and wintering birds and brown hare.</p>	<p>riverbank;</p> <ul style="list-style-type: none"> Construction of the Proposed Development will abide by the Final Construction Environmental Management Plan(s) (CEMP), which will outline measures to prevent sediment, dust, surface water run-off, or any other substance relating to construction from entering the River Tees. The Final CEMP(s) will be reviewed by a Suitably Qualified Ecologist (SQE); Contaminated liquids or sediments produced as a result of construction, i.e. through disturbance of known contaminated land, will be directed away from the River Tees. Measures to ensure contaminated substances do not reach the River Tees will be outlined within the Final CEMP(s); and Any lighting of the construction area is to be directed away from the River Tees or utilise directional shielding measures to prevent light-spill onto the river. Compensatory measures will be implemented in order to mitigate the residual impacts anticipated as a result of the Proposed Development. Compensatory measures will require extensive offsite habitat creation and enhancement, as well as species-specific compensation for faunal ecological features impacted. This compensation will be identified within the South Tees Regeneration Masterplan Environment & Biodiversity 	<p>measures to be employed to minimise or eliminate such impacts.</p> <p>Within one year of the grant of this planning permission, an Environment and Biodiversity Strategy shall be prepared and submitted to the local planning authority that confirms the feasibility of providing habitat mitigation and compensatory habitat equivalent to be 363.55 area based biodiversity units and 24 river units, (including habitats identified as of High Distinctiveness in Table 4.7 of the Supplementary Environmental Statement (September 2020) within the site and / or off-site, and the mechanisms for its provision and on-going management. That Strategy shall be approved by the local planning authority. Prior to the approval of reserved matters details of the layout of any phase of development, the Environment and Biodiversity Strategy shall be updated to include the following:</p> <ul style="list-style-type: none"> The details of any new and enhanced biodiversity to be created on site, within that phase of development; The details of viable compensatory habitat where on-site mitigation is demonstrated not to be feasible, relevant to that phase of development; The details of treatment of site boundaries and/or buffers around water bodies, relevant to that phase of development; The details of long-term maintenance regimes and management responsibilities, relevant to that phase of development. <p>The identified mitigation and, where demonstrated to be necessary and feasible, compensation shall be provided in accordance with the Strategy and any subsequent agreed amendments to it, and shall be implemented within one year of occupation.</p>	

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				Strategy with the extent and location of compensatory habitat creation and enhancements agreed with NE and RCBC. It is anticipated that these compensatory measures will mean the Proposed Development results in a biodiversity net gain.	Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to reduce potential cumulative impacts.	
48	R/2006/0433/00	P D Teesport: Outline application for development of a container terminal	The terrestrial ecology chapter of the ES states that habitats and plant communities are common and widespread and of low conservation value. INNS were recorded within the site.	It is recommended that works are completed outside of the breeding bird season. No mitigation is proposed for other species.	No potential cumulative effects have been identified. No additional mitigation required.	No Significant effects are identified during construction, operation.
51	R/2020/0819/ESM	South Tees Development Corporation (STDC): Outline planning application for development of up to 139,353 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourse including realignment and associated infrastructure works. All matters reserved.	A HRA has been completed for the Proposed Development, as set out under Regulation 63 of the Habitats Regulations [i], and is submitted alongside the planning application. The following impacts were identified as having the potential to have a likely significant effect at HRA Stage 1: <ul style="list-style-type: none"> • loss of supporting habitat caused by the Proposed Development; • Changes to flightlines or sightlines for waterbirds occasioned by the Proposed Development; • Disturbance caused to waterbirds caused by the Proposed Development; • Discharges to water caused by the Proposed Development; and • Emissions to air caused by the Proposed Development. The Stage 2 Appropriate Assessment concluded that, "The Proposed Development will not cause adverse effects to the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, either alone or in combination with other plans or projects, provided that the embedded mitigation measures specified in the application are satisfactorily delivered.".	No mitigation is proposed to address the loss of on-site habitats at this stage and therefore the effects on Dingy Skipper Butterfly, Odonata, Open Mosaic Habitat and Ruderal/ Ephemeral habitat remain significant.	Potential cumulative effects identified. Compensation, Enhancement and Monitoring will be taken forward through the South Tees Regeneration Master Plan Environment and Biodiversity Strategy to offset any habitat lost through development of the South Tees Development Corporation (STDC) area, including through the Proposed Development. Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to reduce potential cumulative impacts.	Potential for significant (Moderate Adverse) cumulative effects on open mosaic habitats and invertebrates during construction. This is due to the mitigation for the Other Development not yet being secured. No Significant effects are identified during operation.

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52	R/2020/0820/ESM	South Tees Development Corporation (STDC): Outline planning application for development of up to 92,903sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	The EclA report states that much of the habitat on site is comprised of ephemeral/ short perennial vegetation. Dingy skipper butterfly and brown hare were recorded on the site. No other protected, priority or otherwise notable species were recorded. All habitats on the site will be lost during the construction phase of the development. Therefore, the populations of species on the site would be lost as a result of the loss of habitats.	The Framework CEMP forms part of the embedded mitigation for the Proposed Development during the construction phase. With the embedded mitigation in place the residual effects that are of greater than negligible significance are: <ul style="list-style-type: none"> • the loss of a population of Dingy Skipper butterfly that is potentially of County importance; • the loss of an area of 1.96ha of Ephemeral/ short perennial habitat of local importance; and • the loss of habitats totalling 11.3 Biodiversity Units. 	The EclA report states that South Tees Development Corporation (STDC) is preparing an Environment and Biodiversity Strategy that will guide future decisions by South Tees Development Corporation (STDC) as to the delivery of habitat enhancement schemes to off-set biodiversity loss resulting from its development and regeneration activities. This will quantify all of the BDUs which will be lost as a result of development across the entire South Tees Development Corporation (STDC) area. It will also calculate the number of BDUs that can be created in the South Tees Development Corporation (STDC) area including on land outside of any areas proposed for development. The strategy will also identify any local, off-site habitat creation and enhancement measures that could be implemented, focusing primarily on the River Tees but potentially within the wider Tees catchment area if necessary. It is the intention that the Environment and Biodiversity Strategy will provide options and opportunities for South Tees Development Corporation (STDC), and those developing within the South Tees Development Corporation (STDC) area, to meet any biodiversity value deficit arising from development. <p>Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to reduce potential cumulative impacts.</p>	Potential for significant (Moderate Adverse) cumulative effects on open mosaic habitats and invertebrates during construction. <p>No Significant effects are identified during operation.</p>
53	R/2020/0821/ESM	South Tees Development Corporation (STDC): Outline planning application for development of up to 464,515sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use	The Teesmouth and Cleveland Coast SPA and Ramsar site is within 100m of the site at its closest point, which is Bran Sands Lagoon. A HRA has been completed and the following impacts were identified as having the potential to have a likely significant effects at Stage 1:	Mitigation will be required to prevent harm to reptiles during construction and to maintain the population of reptiles. In that instance, mitigation to protect the species whilst implementing development has been devised and approved by	No mitigation is proposed for the loss of open mosaic habitat. The ecology chapter of the ES states that an Environment and Biodiversity Strategy covering the entire South Tees Development Corporation (STDC) area will be prepared in agreement with Natural England and RCBC. This Strategy will allow	Potential for Significant (Moderate Adverse) cumulative effects upon open mosaic habitat and invertebrates during construction. <p>As mitigation is proposed to avoid significant adverse effects upon common lizard for the Proposed Development, and the effects of the other development on common lizard are not</p>

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		Class E), HGV and car parking and associated infrastructure works. All matters reserved.	<ul style="list-style-type: none"> • Loss of supporting habitat caused by the Proposed Development; • Changes to flightlines or sightlines for waterbirds occasioned by the Proposed Development; • Disturbance caused to waterbirds caused by the Proposed Development; • Discharges to water caused by the Proposed Development; • Emissions to air caused by the Proposed Development; and • Reduced groundwater infiltration caused by The Proposed Development. <p>The HRA Stage 2 assessment (Appropriate Assessment) concluded that, "The Proposed Development will not cause adverse effects to the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, either alone or in combination with other plans or projects, provided that the embedded mitigation measures specified in the application are satisfactorily delivered."</p> <p>The ecology chapter of the ES identified Moderate Adverse residual effects on open mosaic habitats. Surveys carried out in the wider South Tees Development Corporation (STDC) area confirmed the presence of common lizards.</p>	the local planning authority. A reptile survey encompassing all areas of suitable habitat on the site will, therefore be carried out prior to construction commencing. Should reptiles be found to be present then a reptile mitigation strategy will be drawn up and submitted for approval. The reptile mitigation strategy shall include measures to prevent harm to reptiles and to maintain the population of reptiles ex-situ. It will include a specific monitoring programme to ensure that the objectives of the strategy have been achieved. The recommendations of the reptile mitigation strategy will be implemented in accordance with the phasing therein.	for the provision of off-site compensation if it shows that there would be a net loss of biodiversity unit from development in the South Tees Development Corporation (STDC) area. Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to reduce potential cumulative impacts.	significant, it is considered unlikely that cumulative effects on the species could be significant. No Significant cumulative effects are identified during operation. The Proposed Development overlaps with parts of this other development. Where the overlaps occur, the Proposed Development will be brought forward in place of that permission and so there would be no cumulative impacts.
54	R/2020/0822/ESM	South Tees Development Corporation (STDC): Outline planning application for the development of up to 185,806sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourses including realignment and associated infrastructure works. All matters reserved.	A HRA has been completed and the following impacts were identified as having the potential to have a likely significant effect at Stage 1: <ul style="list-style-type: none"> • Loss of supporting habitat caused by the Proposed Development; • Changes to flightlines or sightlines for waterbirds occasioned by the Proposed Development; • Disturbance caused to waterbirds caused by the Proposed Development; • Discharges to water caused by the Proposed Development; • Emissions to air caused by the 	Adherence to measures outlined in the Framework CEMP will form part of the embedded mitigation for The Proposed Development during the construction phase. It has been assumed that the hydrology of Coatham Marsh will not be affected by any works to the Fleet watercourse. It is recommended that the submission and approval of a method statement for assessing any works to alter or realign the	The ES states that the implementation of an Environment and Biodiversity Strategy will ensure that compensatory measures are provided such that there is no net loss of biodiversity arising from the Proposed Development. Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to reduce potential cumulative impacts.	Potential for significant cumulative (Moderate Adverse) effects upon ephemeral habitats and invertebrates during construction. As mitigation is proposed to avoid significant adverse effects upon common lizard for the Proposed Development, and the effects of the other development on common lizard are not significant, it is considered unlikely that cumulative effects on the species could be significant. No Significant cumulative effects identified during operation.

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			<p>Proposed Development; and</p> <ul style="list-style-type: none"> • Reduced groundwater infiltration caused by the Proposed Development. <p>The HRA Stage 2 assessment (Appropriate Assessment) concluded that, "The Proposed Development will not cause adverse effects to the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, either alone or in combination with other plans or projects, provided that the embedded mitigation measures specified in the application are satisfactorily delivered."</p> <p>The ecology chapter of the ES identifies the potential for Significant Adverse effects on reptiles, dingy skipper, grayling, ruderal / ephemeral habitats and neutral grassland.</p>	<p>on-site watercourses which demonstrates this is a condition of any grant of outline planning permission.</p> <p>A reptile mitigation strategy will be drawn up and submitted for approval. The reptile mitigation strategy shall include measures to prevent harm to reptiles and to maintain the population of reptile's ex-situ. It will include a specific monitoring programme to ensure that the objectives of the strategy have been achieved.</p>		
55	R/2020/0823/ESM	<p>South Tees Development Corporation (STDC): Outline planning application for the development of up to 15,794sqm (gross) of office accommodation (Use Class E) and car parking and associated infrastructure works. All matters reserved.</p>	<p>HRA has been completed and the following impacts were identified as having the potential to have a likely significant effect at Stage 1:</p> <ul style="list-style-type: none"> • Loss of supporting habitat caused by the Proposed Development; • Changes to flightlines or sightlines for waterbirds occasioned by the Proposed Development; • Disturbance caused to waterbirds caused by the Proposed Development; • Discharges to water caused by the Proposed Development; • Emissions to air caused by the Proposed Development; and • Reduced groundwater infiltration caused by the Proposed Development. <p>The HRA Stage 2 assessment (Appropriate Assessment) concluded that, "The Proposed Development will not cause adverse effects to the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, either alone or in combination with other plans or projects, provided that the embedded mitigation measures</p>	<p>Adherence to measures outlined in the Framework CEMP will form part of the embedded mitigation for the Proposed Development during the construction phase.</p> <p>A reptile survey encompassing all areas of suitable habitat on the site will be carried out prior to construction commencing. Should reptiles be found to be present then a reptile mitigation strategy will be drawn up and submitted for approval. The reptile mitigation strategy shall include measures to prevent harm to reptiles and to maintain the population of reptile's ex-situ. It will include a specific monitoring programme to ensure that the objectives of the strategy have been achieved.</p>	<p>The potential effect on reptiles was Moderate Adverse. With the implementation of the mitigation the residual effect on reptiles will be Negligible and Not Significant.</p> <p>The ES states that the implementation of an Environment and Biodiversity Strategy will ensure that compensatory measures are provided such that there is no net loss of biodiversity arising from the Proposed Development.</p>	<p>As mitigation is proposed to avoid significant adverse effects upon common lizard for the Proposed Development, and the effects of the other development on common lizard are not significant, it is considered unlikely that cumulative effects on the species could be significant.</p> <p>No Significant effects are identified during operation.</p>

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			specified in the application are satisfactorily delivered.” The ecology chapter of the ES identified the potential for Significant Adverse effects on reptiles.			
65	MWP8 South Tees Eco-Park	Tees Valley Joint Minerals and Waste Development Plan Documents, A site of approximately 27 hectares is allocated for the development of the South Tees Eco-Park.	Insufficient information within the policies and sites development plan documents to identify impacts.	N/A	Potential for cumulative effects upon designated sites, habitats and species.	Insufficient information available to inform cumulative assessment. If developments are brought forward pursuant to this allocation it is assumed measures will be put in place to avoid adverse effects on biodiversity in accordance with relevant planning policy.
76	H/2022/0181	Outline planning application for the erection of up to 1400no. dwellings and up to 750sqm of non-residential floorspace (comprising Use Class E and Sui Generis) with associated parking, landscaping and infrastructure with all matters reserved except access.	The ES chapter notes that the site is within the same catchment of the Teesmouth and Cleveland Coast Ramsar and Special Protection Area. As such there is the potential for the development to add nitrogen and phosphate pollution to this site which is in unfavourable condition. The ES identifies the potential for significant effects upon ancient, replanted woodland and breeding birds.	Best practice measures will be incorporated into the construction phase of the Proposed Development. These will be delivered through a Final CEMP(s) which will be secured by way of a planning condition. Habitat creation is proposed to mitigate losses. It is expected that based on the location of the development that the foul flows will be treated at NWL's Billingham sewage treatment works (STW). Following discussions with Natural England and Hartlepool Borough Council it has been confirmed that a significant effect on the Teesmouth & Cleveland Coast SPA and Ramsar site can be excluded with discharges from foul or surface water from new development to the Seaton Carew Waste Water Treatment Works (WWTW), or Billingham WWTW, where discharges are via the long sea outfall to the North Sea.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.
80	H/2020/0276	Erection of 570 dwellings and provision of a new roundabout and associated infrastructure	Based on the ecological assessment completed, the overall ecological value of the Site is low due to domination by arable land, with narrow field margins and limited cover. No EPSs were	To prevent an adverse effect on the Teesmouth and Cleveland Coast SPA, Ramsar and SSSI, a financial contribution to the established warden scheme is	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.

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			recorded on the Site during survey work, with further survey work for reptiles and GCN, providing negative results, and surveys for bats and birds yielding a low level of activity for the area and habitats recorded.	required, as set out in the Hartlepool Local Plan Mitigation Strategy and Delivery Plan. A Landscape and Habitat Management Plan provides details of the mitigation and enhancement measures proposed.		
91	H/2014/0428	Erection of 1200 dwellings and provision of a new roundabout and associated infrastructure	HRA screening identified the potential for recreational disturbance to affect the qualifying species of the Teesmouth and Cleveland Coast SPA and Ramsar.	Mitigation was proposed at Appropriate Assessment including 15 Ha of on-site Sustainable Alternative Natural Green Space (SANGS), a financial contribution to the Hartlepool HRA Mitigation Strategy and Delivery Plan and an access route to Summerhill Country Park. Site clearance outside of the nesting bird season. Soft landscaping, bat and bird boxes to be provided.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.
121	21/0594/EIASCP	Redevelopment of land to provide urban logistics and industrial development	The scoping report scopes out biodiversity, however the scoping opinion highlights the potential for INNS within the site.	Not available.	As the scoping report scopes out biodiversity, no potential cumulative effects have been identified.	There is no potential for cumulative effects with the Proposed Development during construction or operation.
121	21/2124/SOR	Scoping request for outline planning permission with all matters reserved except for access comprising the demolition of existing buildings and the construction of employment floorspace (Use Classes E(g)(iii) (Light Industrial Processes), B2 (General Industrial) and B8 (Storage and Distribution) and ancillary office floorspace (E(g)(iii))), and associated infrastructure, drainage, landscaping and other works	The scoping report scopes out biodiversity.	Not available.	As the scoping report scopes out biodiversity, no potential cumulative effects have been identified.	There is no potential for cumulative effects with the Proposed Development during construction or operation.
131	22/2386/SOR	Scoping opinion for Green Hydrogen Production Facility and Wind Turbine	The scoping report identifies the potential for effects on the Teesmouth and Cleveland Coast SSSI, bats and habitats.	All terrestrial ecological mitigation will be incorporated into a Final CEMP(s). This Final CEMP(s) will outline all required	There may be potential for cumulative effects on designated sites.	There is insufficient information in the Scoping Report for the other development to allow for cumulative assessment to be undertaken at this stage. However, it is

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				mitigation and provide details on timelines for undertaking mitigation for each identified terrestrial receptor.		assumed that measures to avoid adverse effects on biodiversity will be applied in accordance with relevant planning policy and as such, there will be No Significant cumulative effects.
135	23/0090/EIS	Carbon capture facility for existing Energy from Waste site	Natural England correspondence states that there are potential significant effects on Teesmouth and Cleveland Coast Special Protection Area (SPA) and Ramsar Site from nitrogen. No other significant effects upon ecological receptors are predicted within the ecology chapter of the ES.	The Framework CEMP, enhancement and management plan and sensitive lighting scheme are proposed.	Potential for cumulative effects on designated sites from nitrogen. Natural England require further details to demonstrate if the proposed wastewater discharge will result in additional Total Nitrogen and other pollutants being discharged to the Tees catchment. A mitigation strategy may be required to prevent additional Total Nitrogen reaching the SPA.	The conclusions of the Nutrient Neutrality Assessment (EN070009/APP/5.13) for the Proposed Development ensures that there will be no adverse effects on the Teesmouth and Cleveland Coast SPA and Ramsar alone or in combination. The other development will also need to demonstrate to adverse effect on site integrity as part of the HRA process (including nutrient neutrality). Therefore, it is considered unlikely that a cumulative effect could occur. No Significant cumulative effects identified during construction or operation.
150	13/0342/EIS	Outline application for the construction of up to 500 houses, Primary School (inc Sport Facilities) and nursery, Retail Units (up to 500 sqm), Doctors Surgery, Community Facilities, access and associated landscaping, footpaths and open space (all matters reserved)	The Extended Phase 1 habitat survey identifies the potential for effects upon GCN.	A licence from Natural England will be required.	As mitigation and a licence from Natural England will be required to permit derogation from legislation for both developments, no cumulative impacts will occur.	No Significant effects are identified during construction or operation.
157	08/3644/EIS	Outline planning application for residential (Class C3), employment (Class B1), health care facility (Class D1), leisure (Class A3, A4, A5, C1 and D2), ancillary retail and services (Class A1 and A2) and car dealership (sui generis) with car parking and associated landscaping and infrastructure improvements	The ecology chapter of the ES identified the potential for significant effects on fish. No other significant effects identified.	Mitigation is proposed to prevent adverse effects on fish / aquatic ecology.	No potential cumulative effects have been identified. No additional mitigation required.	No Significant effects are identified during construction or operation.
166	13/2892/EIS	Development of materials recycling facility and production of energy from waste, including demolition of the existing offices and erection of new buildings, tanks and silos with access taken from the existing access at New Road, Billingham. The main building will be portal	No Significant effects on ecology are identified in the Flora and Fauna Chapter of the ES.	As No Significant effects are identified, no mitigation is proposed.	No potential cumulative effects have been identified. No additional mitigation required.	No Significant effects are identified during construction or operation.

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		frame, profiled steel clad with stacks at a maximum height of 80 m and 28 m. (Residual wastes will be processed through an advance thermal treatment process, gasification, to produce renewable heat and power)				
167	22/1145/SCO	Screening opinion for proposed hydrogen production plant, battery storage and hydrogen re-fuelling point.	Not available at this stage.	Not available at this stage.	There is insufficient information available to assess potential cumulative effects.	As the other project is at screening stage only, there is insufficient information available to assess cumulative effects. It is assumed that the other development will include mitigation to avoid adverse effects on biodiversity in accordance with relevant planning policy.
168	Stockton-on-Tees Local Plan, Policy SD4 Economic Growth Strategy	Stockton-on-Tees Local Plan, Main growth location for hazardous installations including liquid and gas processing, bio-fuels and bio-refineries, chemical processing, resource recovery, and waste treatment, energy generation, carbon capture and storage and other activities, Seal Sands.	A strategic policy document.	Not applicable.	The potential for cumulative effects on European designated sites is assessed within the local plan HRA.	As this is a strategic document, there is insufficient information available to allow for cumulative assessment to be undertaken.
172	R/2020/0685/ESM	South Tees Development Corporation (STDC): Outline planning application for demolition of existing redundant quay structures, capital dredging and development of new quay and associated works (PHASE 2)	The terrestrial ecology chapter of the ES identifies the potential for loss of broadleaved woodland, disturbance / loss of habitat for foraging and commuting bats, disturbance of foraging otter, loss of habitats for invertebrates and disturbance / loss of habitat for brown hare.	The Framework CEMP and screening and sensitive lighting are proposed.	No potential cumulative effects have been identified. No additional mitigation required.	No Significant effects are identified during construction, operation.
173	R/2022/0773/ESM	Construction of a Lithium Hydroxide Monohydrate manufacturing plant and ancillary development	The report to inform HRA confirms no Likely Significant Effects on European designated sites. INNS recorded on site.	The Framework CEMP is proposed.	No potential cumulative effects have been identified. No additional mitigation required.	No Significant effects are identified during construction, operation.
174	R/2014/0626/FFM	Mineral (Polyhalite) granulation and storage facility involving the construction of buildings, conveyor systems, substations, water treatment plant, internal access roads, car parking, attenuation ponds, landscaping, restoration and aftercare, and construction of a tunnel portal including the landforming of spoil and associated works	Loss of grassland and scrub habitat.	A landscape strategy to be implemented; Vegetation removal to be completed outside of the nesting bird season; Lighting to be designed with consideration of the Bat Conservation Trust's guidance; Precautionary working methods to avoid adverse effects on reptiles.	The environmental statement states: "the potential for cumulative impacts included effects on noise levels during construction and operation, air quality effects (nitrogen and acid deposition) and habitat loss. The York Potash Project cumulative impact associated with habitat loss is predicted to be of Minor Adverse significance, with other construction and operational phase	It is therefore considered that with appropriate mitigation, the Proposed Development would have No Significant cumulative ecological effects during construction or operation when considered with the other development.

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					cumulative impacts predicted to be of negligible significance at worst. Cumulative impacts are assessed as being of negligible significance" (Royal Haskoning DHV, 2015).	
178	R/2023/0291/ESM	Outline application (all matters reserved) for the development of a 3-line low-carbon lithium refinery and associated dock-side reception, handling, storage, and manufacturing facilities for the production of high-quality, battery-grade lithium hydroxide	The report to inform HRA confirms No Significant effects on European designated sites alone or in combination. The ecology chapter of the ES identifies the potential for Significant Adverse effects upon invertebrates (dingy skipper).	It is recommended that a strategy to address any shortfall in biodiversity obligations should be submitted to the Local Planning Authority for agreement prior to development commencing.	Potential for cumulative effects upon open mosaic habitat and the invertebrate assemblage.	Potential for significant (Moderate Adverse) cumulative effects from loss of open mosaic habitat suitable for notable invertebrates during construction. No Significant effects are identified during operation.
205	H/2023/0128	Scoping opinion in respect of Greatham North East Flood Alleviation Scheme	The scoping report indicates there is potential for effects upon designated sites, habitats, GCN, amphibians, invertebrates, reptiles, hedgehog, brown hare, otter, water vole and notable plant species.	Not available.	Potential for cumulative effects upon habitats and species.	This development is still at scoping stage, therefore full details are not yet available. However, as this site overlaps with the Proposed Development Site, based on a precautionary approach there is potential for significant (Major Adverse) cumulative effects on designated sites, habitats and GCN. Mitigation is proposed for the Proposed Development, and it is assumed that the other development will also require mitigation to avoid adverse effects on biodiversity, which may reduce the magnitude of the overall effect.
212	22/1525/EIS	Erection of an energy recovery facility and associated infrastructure for fuel receipt and storage, power generation, power export, process emissions control, maintenance, offices and car parking together with associated operations.	Natural England correspondence indicates that there is potential for air quality effects upon European designated sites. No Significant effects on terrestrial ecology are identified within the ecology report.	Habitats will be removed outside of the nesting bird season. Habitat enhancement is proposed and will be secured with a habitat creation and landscaping scheme.	Potential for cumulative effects upon air quality affecting designated sites.	Air quality modelling for the Proposed Development has confirmed no adverse effects alone or in-combination (refer to Appendix 8A and 8B (ES Volume III, EN070009/APP/6.4)).
219	23/1019/EIS	Development of Greenery Renewable Fuels and Circular Products Facility comprising a Sustainable Aviation Fuel Plant and Tyre Plant and associated infrastructure. A temporary construction compound, proposed services corridor, pipe bridge, ancillary buildings and car parking	The ecology chapter of the ES identifies the potential for effects upon designated sites, neutral grassland and reedbed, foraging and commuting bats, badger, notable invertebrates, reptiles and INNS.	The Framework CEMP and measures to control noise and lighting are proposed. A pre-commencement survey for badgers is recommended.	Residual Minor Adverse effects for loss of grassland habitat and invertebrates remain for the other development	Potential for significant (Moderate Adverse) cumulative effects during construction from loss of grassland / open mosaic habitat on invertebrates. No Significant effects are identified during operation.

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222	R/2023/0179/SCP	HyGreen Hydrogen Project	<p>Potential for adverse effects upon The Teesmouth and Cleveland Coast SPA and Ramsar from loss of functionally linked land, noise and visual disturbance of birds and changes in lighting.</p> <p>Temporary loss of Open Mosaic Habitat on Previously Developed Land.</p> <p>Temporary and permanent loss of habitat for invertebrates and reptiles.</p>	<p>Measures to control pollution, noise and lighting will be detailed within the Framework CEMP.</p> <p>A method statement will be used to avoid harm to reptiles during construction.</p>	<p>Mitigation is proposed for both projects to avoid adverse effects upon European designated sites.</p> <p>A method statement is proposed for both projects to avoid harm to reptiles during construction.</p>	<p>Potential for significant (Moderate Adverse) cumulative effects upon designated due to loss of open mosaic habitat, however, this loss will be temporary for both projects.</p>

Table 23D-8: Ornithology Assessment of Cumulative Effects

ID	APPLICATION REFERENCE	DEVELOPMENT NAME AND DETAILS	REPORTED EFFECTS OF OTHER DEVELOPMENT	MITIGATION PROPOSED TO ADDRESS EFFECTS OF OTHER DEVELOPMENT	POTENTIAL FOR CUMULATIVE EFFECTS WITH PROPOSED DEVELOPMENT AND POTENTIAL ADDITIONAL MITIGATION	SIGNIFICANCE OF CUMULATIVE EFFECTS
2	EN010082	The Tees Combined Cycle Power Plant. A gas fired combined cycle gas turbine (CCGT) power station with a maximum generating capacity of up to 1,700 MWe (Tbc). The project will utilise existing Gas and National Grid connections.	The ecology and nature conservation chapter of the ES reported negligible ecological value for habitats and species of flora and fauna, including for birds. No Significant effects were predicted. There were No Significant effects predicted on off-site habitats due to changes in air quality, nitrogen deposition and acid deposition. The HRA screening report concluded No Significant effects on European designated sites and by default No Significant effects on qualifying species of bird.	No specific mitigation was required, as all the reported effects of this project were Not Significant. The ecology and nature conservation chapter states that the Framework CEMP (EN070009/APP/5.12) has been prepared and developed to include standard mitigation and good practice in relation to advice on construction with regards to nesting birds.	No potential cumulative effects have been identified. No additional mitigation required.	As mitigation is proposed to avoid significant adverse effects on habitats and species assessed for the Proposed Development, and the effects of the other development are not significant, it is considered unlikely that cumulative effects could be significant during the construction or operation of the Proposed Development.

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3	EN10103	<p>Net Zero Teesside (NZE). A full chain carbon capture, utilisation and storage ('CCUS') project, comprising a CO₂ gathering network, including CO₂ pipeline connections from industrial facilities on Teesside to transport the captured CO₂ (including the connections under the tidal River Tees); a combined cycle gas turbine ('CCGT') electricity generating station with an abated capacity circa 850 gigawatts output (gross), cooling water, gas and electricity grid connections and CO₂ capture; a CO₂ gathering-booster</p>	<p>The ornithology chapter of the ES identified no pathways for construction or operation impacts on designated sites within the Zone of Influence of the development. Construction activities will result in the following impacts on species:</p> <ul style="list-style-type: none"> • Permanent losses of barn owl roost and nest sites. • Localised temporary disturbances to breeding birds. <p>No Significant effects on ornithology features were reported in the ES, although NZE needs to reduce nitrogen deposition to 1% to avoid adverse effects</p>	<p>Habitat clearance and establishment of site compounds will be undertaken outside of the breeding bird season., or an ecologist will check working areas for breeding birds beforehand and appropriate measure put in place.</p> <p>Pre-demolition checks for nesting Schedule 1 birds will be carried out and site-specific measures put in place to avoid impacts on occupied nests.</p> <p>Temporary habitat losses will be reinstated following completion of construction. Barn owl boxes to be erected to compensate for loss of known nest sites.</p>	<p>The Proposed Development will result in losses of semi-improved grassland, scrub and open mosaic habitat used by breeding and non-breeding birds during the construction phase and there is potential overlap of construction periods.</p> <p>Habitat creation and restoration is proposed to offset these losses, and the re-establishment of vegetation consistent with open mosaic habitat is likely to be well advanced within two – three growing seasons.</p>	<p>Although mitigation is proposed, based upon a precautionary approach, there is potential for cumulative losses of grassland and open mosaic habitats during the construction phase in the interim period between newly created and restored habitats reaching their target condition, and these would be expected to result in cumulative losses of habitats used by birds on a short term basis during construction. However, this short-term effect is reversible and is therefore assessed as Minor Adverse (Not Significant).</p> <p>Cumulative effects of noise and visual disturbance of breeding</p>

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		<p>station to receive the captured CO₂ from the gathering network and CCGT generating station; and the onshore section of a CO₂ transport pipeline for the onward transport of the captured CO₂ to a suitable offshore geological storage site in the North Sea.</p>	<p>on the Teesmouth and Cleveland Coast SPA.</p>	<p>Compensation for loss of grassland habitats and native scrub is proposed and detailed within an Indicative Landscape and Biodiversity Strategy; and</p> <p>Provision of a stormwater attenuation pond or wetland to provide ancillary gains for wetland birds.</p>		<p>and non-breeding birds during construction cannot be ruled out.</p> <p>The air quality assessment for the Proposed Development has confirmed that there will be no adverse effects cumulatively with other projects (refer to Appendix 8A and 8B (ES Volume III, EN070009/APP/6.4)). The potential for cumulative effects on air quality from the other project will be assessed as part of the consenting process and the development will only proceed if potential air quality effects are at an acceptable level both alone and in combination.</p>

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5	NZT Offshore Elements	NZT offshore elements to be consented by Marine Licence including CO ₂ Export Pipeline below MHWS and geological store and associated facilities.	Adverse effects on seabed and landfall habitats during construction potentially affecting red-throated diver (<i>Gavia stellata</i>), however these impacts were identified as not significant due to the very small spatial extent of affected habitat	No mitigation required.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.
6	EN010051	Forewind Ltd. (formerly Dogger Bank Teesside B) - Project previously known as Dogger Bank Teesside A&B. Dogger Bank Teesside A & B is the second stage of Forewind's offshore wind energy development of the Dogger Bank Zone (Zone 3, Round 3). Dogger Bank Teesside A & B will	This is an application to vary the Deemed Marine Licences (DML) contained within Schedules 8 and 10 of the Dogger Bank Teesside A and B Offshore Wind Farm Order 2015. No Significant effects upon ornithology, including on designated	No mitigation required.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.

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		<p>comprise up to two wind farms, each with an installed capacity of up to 1.2GW, which are expected to connect to the National Grid at the existing National Grid substation at Lackenby, near Eston. It follows that Dogger Bank Teesside A & B could have a total installed capacity of up to 2.4GW</p> <p>Dogger Bank Teesside A & B is located within The Dogger Bank Zone which comprises an area of 8,660 square kilometres (km²) located in the North Sea between 125 kilometres (km) and 290 km off the UK North East coast.</p>	<p>sites are reported within the Environmental Report.</p>			

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8	EN010150	'Waste-to-sustainable aviation fuel' facility with on-site generating station capacity of up to 150 MW	The scoping reports identifies the potential for effects upon the Teesmouth and Cleveland Coast SPA and Ramsar. There is also potential for effects on bird species. Baseline surveys for breeding and non-breeding birds are being completed.	Not available.	Potential for cumulative effects upon designated sites and bird species (breeding and non-breeding).	There is insufficient information in the Scoping Report for the other development to allow for a cumulative assessment to be undertaken.
19	R/2017/0876 /FFM	Construction and operation of a mineral processing and refining facility including ancillary development, car parking and landscaping.	The ecology chapter of the ES identified that the development would result in the loss of open mosaic habitat and scrub, resulting in permanent loss of nesting bird habitat and disturbance of breeding birds during construction. Damage to or destruction of active bird nests during	Existing areas of habitat adjacent to the site will be retained. An additional Ecological Enhancement Area is to be established including existing and new habitat to be enhanced / created / maintained around the site. An ECoW will be employed during construction to ensure compliance with legal requirements regarding protected species. Site	Combined habitat losses affecting breeding ringed plover and lapwing could occur during construction. However, mitigation is proposed to prevent adverse effects from the other development and No Significant residual effects remain.	As mitigation is proposed to avoid significant adverse effects on the majority of species and habitats assessed for the Proposed Development, and the effects of the other development are not significant, it is considered unlikely that cumulative effects could be significant.

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			<p>construction was identified as a locally significant impact.</p> <p>No effects on designated sites or non-breeding birds were identified.</p>	<p>clearance to be undertaken outside the breeding bird season where possible, otherwise, nesting bird checks and measures put in place to protect nests. This would reduce impacts to levels that are not significant.</p>	<p>Habitat creation and restoration are proposed for the Proposed Development to offset losses.</p>	<p>No Significant cumulative effects are identified during construction or operation.</p>
20	R/2016/0484 /FFM	Proposed anaerobic biogas production facility	<p>The Extended Phase 1 habitat survey report identified habitats suitable for nesting birds, although no nesting birds were identified at the time of the survey and therefore no effects on birds were identified.</p> <p>No effects upon designated sites were identified.</p>	<p>Habitats to be cleared outside of the nesting bird season where possible. If this is not possible, pre-clearance checks for nesting birds to be undertaken.</p>	<p>No potential for cumulative effects on birds during the construction or operation of the Proposed Development.</p>	<p>As mitigation is proposed to avoid significant adverse effects on nesting birds, it is considered unlikely that cumulative effects could be significant during construction or operation.</p>
22	R/2019/0767 /OOM	Director of Regeneration & Neighbourhoods Hartlepool, outline	<p>The report to inform HRA screening identified that the nitrogen nutrient</p>	<p>The ES states that an area of approx. 7ha will be safeguarded enhanced and managed for the lifetime of</p>	<p>As an updated Appropriate Assessment will be required at detailed planning stage for the other development, potential</p>	<p>As mitigation is proposed to avoid significant adverse effects on birds for the Proposed</p>

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		<p>application for the construction of an energy recovery facility (ERF) and associated development, Grangetown Prairie Land east of John Boyle Road and west of Tees Dock Road, Grangetown.</p>	<p>baseline deposition exceeds the minimum critical level (AQAL) of 8 kg/ha/yr regardless of the operation of the Proposed Facility. The maximum Process Contribution from the Proposed Facility anywhere within the Teesmouth and Cleveland Coast ecological site is 0.75 kg/ha/yr, which is 9.4% of the AQAL. As such the potential for significant effects on habitats used by breeding and non-breeding qualifying bird species cannot be discounted.</p> <p>The Appropriate Assessment states that the Proposed Facility</p>	<p>the facility as a designated biodiversity area, including the creation of “several” ponds or reedbeds, and the creation of brownfield habitat. The habitat improvements and subsequent management should follow a prepared conservation management plan.</p> <p>Pre-construction checks for nesting birds and/or checks for nesting birds prior to construction with safeguards in place to protect nests, eggs and chicks until they have fledged.</p> <p>Embedded mitigation in the facility design to ensure that safety measures are in place should an accidental release occur from the facility during operation – this measure is</p>	<p>cumulative effects upon air quality during operation cannot be discounted.</p> <p>There is also potential for cumulative effects on Open Mosaic Habitats with potential for cumulative losses of habitat used by birds during construction.</p> <p>Habitat creation and restoration are proposed for the Proposed Development to offset habitat losses and the re-establishment of habitat features and colonising vegetation is likely to be well advanced within two – three growing seasons.</p>	<p>Development, and the effects of the other development are not significant, it is considered unlikely that cumulative effects of habitat losses on birds could be significant during construction.</p> <p>The air quality assessment for the Proposed Development has confirmed there will be no adverse effects cumulatively with other projects (refer to Appendix 8A and 8B (EN070009/APP/6.4)). The potential for cumulative effects on air quality from the other project will be assessed as part of the consenting process and the development will only proceed if potential air quality effects are at an</p>

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			<p>will be required to demonstrate that Best Available Techniques (BAT) have been implemented during the Environmental Permitting process. A further Appropriate Assessment will be required once the detailed design has been completed.</p> <p>The site includes ponds used by herring gull and black – headed gull; and undisturbed open ground suitable for supporting ground nesting birds. One breeding territory for each of lapwing and skylark was detected during surveys carried out by INCA in 2018.</p>	<p>specified to protect birds during operation of the facility, but no further details are provided.</p>		<p>acceptable level both alone and in combination.</p>

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			Air pollution was identified as a potential impact pathway affecting birds.			
30	R/2019/0031 /FFM	Tourian Renewables Ltd, construction and operation of a plastic conversion facility including office and contemporary construction compounds, workshops, weighbridges and associated infrastructure, former Croda Site Wilton International, Redcar	<p>The preliminary ecological appraisal report identifies very limited habitat for ground nesting birds and no birds were recorded on site during the survey.</p> <p>No effects are identified on birds or designated sites.</p>	No mitigation measures are proposed.	<p>No potential cumulative effects have been identified.</p> <p>No additional mitigation required.</p>	There is no potential for cumulative effects with the Proposed Development during construction or operation.
33	R/2017/0906 /OOM	Sirius Minerals Plc, outline planning application for an overhead conveyor and associated storage facilities in connection with the York potash	The ecology chapter of the ES states that coastal birds and designated sites adjacent to the development have the potential to be affected	Acoustic barriers and sensitive lighting are proposed to mitigate the effects of noise and visual disturbance on birds.	The construction phases of the Proposed Development and other development may overlap and therefore cumulative effects of noise and visual disturbance cannot be ruled out, affecting birds at Bran Sands Lagoon and	With the application of mitigation measures for noise and visual disturbance for both projects, there is no potential for cumulative effects with the Proposed

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		<p>project, land between Wilton International and Bran Sands, Redcar.</p>	<p>by noise and visual disturbance, reduction of sightlines and overshadowing of birds using Bran Sands Lagoon. An improvement in the chemical quality of water discharged to the lagoon was identified as a beneficial impact on the foraging resource for birds.</p> <p>The shadow HRA screening report concluded that there is potential for likely significant effects from noise and visual disturbance during construction, reduction in sightlines and overshadowing of Bran Sands lagoon. No likely significant effect is</p>		<p>potentially Dabholm Gut during construction.</p> <p>Additional screening or location – specific timing of works to avoid simultaneous construction works may be required adjacent to Bran Sands Lagoon and Dabholm Gut.</p>	<p>Development during construction or operation.</p>

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			predicted for noise and visual disturbance during the operational phase.			
35	R/2014/0627 /FFM	York Potash Ltd: Full planning application: The winning and working of polyhalite by underground methods including the construction of a minehead at dove's nest farm involving access, maintenance and ventilation shafts, the landforming of associated spoil, construction of buildings, access roads, car parking and helicopter landing site, attenuation ponds, landscaping, restoration and aftercare and associated works. In addition, the	<p>The ecology chapter of the ES identified the potential for permanent habitat loss, dust emissions and changes in lighting affecting birds.</p> <p>The report to inform HRA identified the potential for disturbance effects and changes in lighting to affect qualifying features of the Teesmouth and Cleveland Coast SPA and Ramsar using Bran Sands Lagoon.</p>	<p>A landscape strategy would be implemented to include the creation of woodland and grassland habitats, dust control measures and natural screening proposed, lighting proposals to avoid lighting of sensitive habitats used by birds, limit the duration of use of artificial lighting and use of narrow spectrum bulbs in accordance with guidance from RSPB.</p> <p>Vegetation clearance to be undertaken outside the breeding bird season</p>	<p>Potential for cumulative effects on the Teesmouth and Cleveland Coast SPA and Ramsar from disturbance effects and changes in lighting during construction.</p> <p>Sensitive lighting and noise attenuation measures are proposed for both projects.</p> <p>A mitigation strategy is proposed for Bran Sands Lagoon. It is predicted that with these mitigation measures in place, the risk of indirect impacts on waterbirds would be reduced to an insignificant level and would not have an adverse effect on the waterbird population of the Teesmouth and Cleveland Coast SPA. This conclusion was</p>	<p>Potential for significant cumulative effects during construction on the Teesmouth and Cleveland Coast SPA and Ramsar at Bran Sands Lagoon and Dabholm Gut, from noise and lighting if the construction phases overlap. However, with mitigation proposed for both projects, No Significant effects are anticipated.</p> <p>No Significant effects are identified during operation.</p>

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		<p>construction of an underground tunnel between doves nest farm and land at Wilton that links to the mine below, comprising 1 shaft at doves nest farm, 3 intermediate access shaft sites, each with associated landforming of associated spoil, construction of buildings, access roads and car parking, landscaping, restoration and aftercare, the construction of a tunnel portal at Wilton comprising buildings, landforming of spoil and associated works</p>			<p>discussed at a meeting on 5 February 2015, and Natural England's view was that the conclusion that the impact would reduce to an insignificant level could only be drawn if it could be guaranteed that the construction works would avoid the wintering period. However, Natural England accepted that these disturbance impacts would not have an adverse effect on the integrity of the Teesmouth and Cleveland Coast SPA due to the limited time period over which disturbance would occur (3 to 4 months) in combination with the mitigation proposed (Royal Haskoning DHV, 2016).</p>	
41	R/2014/0372 /OOM	The Lady Hewley Charity Trust Company Ltd & Taylor - Outline application for	The extended phase 1 habitat survey report states that the site is characterised by arable	Site clearance should be completed outside of the nesting bird season.	No potential cumulative effects have been identified.	There is no potential for cumulative effects with the Proposed

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		residential development (up to 1250 dwellings) (all matters reserved).	land, poor semi-improved grassland and areas of plantation woodland and scattered scrub. Several species of common and widespread bird were identified on the site.	Native plant species sourced from local nurseries are recommended in the landscape proposals to enhance foraging opportunities for local birds. A range of bird boxes are recommended for the Site to enhance roosting and nesting opportunities.	No additional mitigation required.	Development during construction or operation.
42	R/2020/0357 /OOM	South Tees Development Corporation (STDC): Outline planning application for demolition of existing structures on site and the development of up to 418,000 sqm (gross) of general industry (use class B2) and storage or distribution facilities (use class B8) with	The HRA Stage 1 assessment identified the following potential impacts to the Teesmouth and Cleveland Coast SPA and Ramsar sites: i. During construction: the risk of disturbance and/or loss of habitats that support foraging and commuting	The following mitigation will be incorporated in order to prevent significant effects as a result of construction of the other development: i. Construction works along the north-western boundary of the other development site within 10 m or less of the River Tees are to be screened, to reduce the visual and noise impacts upon the Teesmouth	The application is approved subject to the following conditions relating to ecology. Upon the approval of the Reserved Matters in accordance with the phasing plan agreed through discharge of condition 4, and prior to the implementation of the approved scheme, the development shall be the subject of an updated HRA. The HRA shall confirm, based on the	Potential for cumulative effects on designated sites, breeding birds, breeding shelduck and wintering birds during construction. Through the implementation of mitigation measures the potential for cumulative effects on designated sites, breeding birds and non-breeding birds during

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		<p>office accommodation (use class B1), HGV and car parking and associated infrastructure works all matters reserved other than access.</p>	<p>activities, and / or roosting of the qualifying features, due to pollution from within the Proposed Development site;</p> <p>ii. During construction: the risk of noise / visual disturbance of small numbers of qualifying species utilising the adjacent SPA / Ramsar site for foraging and commuting activities, and/or roosting; and</p> <p>iii. During operation: the risk of disturbance and / or loss of habitats that support foraging and commuting activities, and / or roosting of the qualifying features, due to pollution from within</p>	<p>and Cleveland Coast SSSI and the designated features that utilise the River Tees for foraging and commuting. Screening will involve use of opaque barriers, which would also prevent site operatives from unnecessary access to the riverbank;</p> <p>ii. Construction of the other development will abide by a Final CEMP(s), which will outline measures to prevent sediment, dust, surface water run-off, or any other substance relating to construction from entering the River Tees. The Final CEMP(s) will be reviewed by a Suitably Qualified Ecologist (SQE);</p> <p>iii. Contaminated liquids or sediments produced as a result of construction, i.e.</p>	<p>approved detail of the development and its processes and the conclusions of the Environmental Impact Assessment that the development will not give rise to significant adverse impacts on the Teesmouth and Cleveland Coast SPA and Ramsar sites. Where significant impacts not previously identified are assessed to arise from the approved detailed scheme, the additional information shall set out those mitigation measures to be employed to minimise or eliminate such impacts.</p> <p>Within 12 months of the grant of this planning permission, an Environment and Biodiversity Strategy shall be prepared and submitted to the local planning authority that confirms the feasibility of providing habitat mitigation and compensatory</p>	<p>construction will be not significant.</p> <p>Assuming that the updated HRA can conclude no likely significant effects upon European designated sites during operation, no cumulative effects will occur.</p> <p>No Significant effects are identified during operation.</p>

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			<p>the Proposed Development Site. The HRA stage 2 assessment concluded No Significant effects on Teesmouth and Cleveland Coast Ramsar and SPA during any phase of the other development.</p> <p>The ES identified:</p> <p>Potential for damage or disturbance to Teesmouth and Cleveland Coast SSSI during construction and operation; and</p> <p>Habitat losses resulting in a Significant Adverse effect on a breeding bird assemblage, breeding shelduck and</p>	<p>through disturbance of known contaminated land, will be directed away from the River Tees. Measures to ensure contaminated substances do not reach the River Tees will be outlined within the Final CEMP(s);</p> <p>iv. Any lighting of the construction area is to be directed away from the River Tees or utilise directional shielding measures to prevent light-spill onto the river. Compensatory measures will be implemented to mitigate the residual impacts anticipated as a result of the other development. Compensatory measures will require extensive offsite habitat creation and enhancement, as well as species-specific compensation for faunal ecological features</p>	<p>habitat equivalent to be 363.55 area based biodiversity units and 24 river units, (including habitats identified as of High Distinctiveness in Table 4.7 of the Supplementary Environmental Statement (September 2020) within the site and / or off-site, and the mechanisms for its provision and on-going management. That Strategy shall be approved by the local planning authority. Prior to the approval of reserved matters details of the layout of any phase of development, the Environment and Biodiversity Strategy shall be updated to include the following:</p> <ul style="list-style-type: none"> • The details of any new and enhanced biodiversity to be created on site, within that phase of development; • The details of viable compensatory habitat where on-site mitigation is demonstrated 	

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			<p>a wintering bird assemblage were identified during construction.</p>	<p>impacted. This compensation will be identified within the South Tees Regeneration Masterplan Environment & Biodiversity Strategy with the extent and location of compensatory habitat creation and enhancements agreed with NE and RCBC. It is anticipated that these compensatory measures will mean the other development results in a biodiversity net gain; and</p> <p>v. Vegetation clearance will be undertaken outside of the bird breeding season or habitats will be checked for nesting birds before habitat clearance commences.</p>	<p>not to be feasible, relevant to that phase of development;</p> <ul style="list-style-type: none"> • The details of treatment of site boundaries and/or buffers around water bodies, relevant to that phase of development; • The details of long-term maintenance regimes and management responsibilities, relevant to that phase of development. The identified mitigation and, where demonstrated to be necessary and feasible, compensation shall be provided in accordance with the Strategy and any subsequent agreed amendments to it and shall be implemented within 12 months of occupation. <p>Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to</p>	

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					reduce potential cumulative impacts.	
48	R/2006/0433 /OO	P D Teesport: Outline application for development of a container terminal.	<p>Potential for loss of waterbird interest in Bran Sands lagoon if reclamation is required.</p> <p>Potential for impacts on breeding birds during construction.</p> <p>No effects identified during the operational phase.</p>	<p>Use of some of the capital dredged material to create bird islands in the Bran Sands area to compensate for habitat losses.</p> <p>It is recommended that works are completed outside of the breeding bird season.</p>	<p>No potential cumulative effects have been identified for the construction or operation of the Proposed Development.</p> <p>No additional mitigation required.</p>	There is no potential for cumulative effects with the Proposed Development during construction or operation.
51	R/2020/0819 /ESM	South Tees Development Corporation (STDC): Outline planning application for development of up to 139,353 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities	The ES identified very limited potential for SPA/SSSI birds and a very limited assemblage of breeding birds. No Significant impacts were identified for ornithology during any phase of the development.	Works will be timed to prevent harm to nesting birds.	<p>No additional mitigation required for birds.</p> <p>Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to</p>	No potential for cumulative effects on birds with the Proposed Development during construction or operation.

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		<p>(Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourse including realignment and associated infrastructure works. All matters reserved.</p>	<p>A HRA has been completed for the other development, as set out under Regulation 63 of the Habitats Regulations [i], and is submitted alongside the planning application. The following impacts were identified as having the potential to have a likely significant effect at HRA Stage 1:</p> <ul style="list-style-type: none"> i Loss of supporting habitat caused by the other development; ii Changes to flightlines or sightlines for waterbirds occasioned by the other development; 		<p>reduce potential cumulative impacts.</p>	

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			<p>iii Disturbance caused to waterbirds caused by the other development; iv Discharges to water caused by the other development; and v Emissions to air caused by the other development.</p> <p>The Stage 2 Appropriate Assessment concluded that, "The Proposed Development will not cause adverse effects to the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, either alone or in combination with other plans or projects, provided that the embedded mitigation measures specified in the</p>			

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			application are satisfactorily delivered.”			
52	R/2020/0820 /ESM	South Tees Development Corporation (STDC): Outline planning application for development of up to 92,903 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	The ES and HRA screening report identify very limited potential for breeding and non-breeding birds and no potential to support SPA, Ramsar and SPA qualifying species. No impacts on ornithology are identified during any phase of the other development. All habitats on the site will be lost during the construction phase of the development. Therefore, any birds breeding on the site would be lost as a result of the loss of habitats.	The Framework CEMP will form part of the embedded mitigation for the other development during the construction phase. This will include measures to avoid removal of nesting bird habitats during the breeding season.	The Assessment report states that South Tees Development Corporation (STDC) is preparing an Environment and Biodiversity Strategy that will guide future decisions by South Tees Development Corporation (STDC) as to the delivery of habitat enhancement schemes to off-set biodiversity loss resulting from its development and regeneration activities. This will quantify all of the BDUs which will be lost as a result of development across the entire South Tees Development Corporation (STDC) area. It will also calculate the number of BDUs that can be created in the South Tees Development Corporation (STDC) area including on land outside of the any areas proposed for	No potential for cumulative impacts on birds with the Proposed Development during construction or operation.

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					<p>development. The strategy will also identify any local, off-site habitat creation and enhancement measures that could be implemented, focusing primarily on the River Tees but potentially within the wider Tees catchment area if necessary. It is the intention that the Environment and Biodiversity Strategy will provide options and opportunities for South Tees Development Corporation (STDC), and those developing within the South Tees Development Corporation (STDC) area, to meet any biodiversity value deficit arising from the development.</p> <p>Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to</p>	

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					reduce potential cumulative impacts.	
53	R/2020/0821 /ESM	South Tees Development Corporation (STDC): Outline planning application for development of up to 464,515 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	The Teesmouth and Cleveland Coast SPA and Ramsar site is within 100 m of the site at its closest point, which is Bran Sands Lagoon. A HRA has been completed and the following impacts were identified as having the potential for likely significant effects at Stage 1: i Loss of supporting habitat caused by the other development; ii Changes to flightlines or sightlines for waterbirds occasioned by the other development;	Embedded mitigation includes the Framework CEMP that sets out measures during construction to prevent or limit noise, damage to soils, sediment, dust and surface water runoff/emissions, damage to bird nests; further site investigations to determine the need for additional surveys or remediation work.	No specific mitigation is proposed for impacts on birds. The ecology chapter of the ES states that an Environment and Biodiversity Strategy covering the entire South Tees Development Corporation (STDC) area will be prepared in agreement with Natural England and RCBC. This Strategy will allow for the provision of off-site compensation if it shows that there would be a net loss of biodiversity units from development in the South Tees Development Corporation (STDC) area. Although this is not proposed specifically for impacts on ornithology, it is anticipated that the compensatory measures would include the provision of	No potential for cumulative impacts on birds during construction or operation. The Proposed Development overlaps with this other development. Where the overlaps occur, the Proposed Development will be brought forward in place of that permission and so there would be no cumulative impacts.

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			<p>iii Disturbance of waterbirds caused by the other development; iv Discharges to water caused by the other development; v Emissions to air caused by the other development; and vi Reduced groundwater infiltration caused by the other development.</p> <p>The HRA Stage 2 assessment (Appropriate Assessment) concluded that, "The Proposed Development will not cause adverse effects to the Integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, either</p>		<p>habitats suitable for breeding and non-breeding birds.</p> <p>Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to reduce potential cumulative impacts.</p>	

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			<p>alone or in combination with other plans or projects, provided that the embedded mitigation measures specified in the application are satisfactorily delivered.”</p> <p>The ecology chapter of the ES did not identify any effects on birds.</p> <p>No operational effects were identified in the Ecology chapter of the ES.</p>			
54	R/2020/0822 /ESM	South Tees Development Corporation (STDC): Outline planning application for the development of up to 185,806 sqm (gross) of general industry (Use	A HRA has been completed and the following impacts were identified as having the potential to have a likely significant effect at Stage 1:	Embedded mitigation includes the Framework CEMP that sets out measures to prevent or limit noise, damage to soils, sediment, dust and surface water runoff/emissions, damage to bird nests; further site	The ES states that the implementation of an Environment and Biodiversity Strategy will ensure that compensatory measures are provided such that there is no net loss of biodiversity arising from the other development.	Potential for cumulative habitat losses across the South Tees Development Corporation (STDC) site affecting breeding birds during construction however, with mitigation measures in place for both

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		<p>Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourses including realignment and associated infrastructure works. All matters reserved.</p>	<p>i Loss of supporting habitat caused by the other development; ii Changes to flightlines or sightlines for waterbirds occasioned by the other development; iii Disturbance of waterbirds caused by the other development; iv Discharges to water caused by the other development; v Emissions to air caused by the other development; and vi Reduced groundwater infiltration caused by the other development.</p> <p>The HRA Stage 2 assessment (Appropriate</p>	<p>investigations to determine the need for additional surveys or remediation work.</p> <p>It has been assumed that the hydrology of Coatham Marsh will not be affected by any works to the Fleet watercourse and therefore hydrological effects on birds using the designated site will not occur. It is recommended that the submission and approval of a method statement for assessing any works to alter or realign the on-site watercourses which demonstrates this is a condition of any grant of outline planning permission.</p>	<p>This is expected to accommodate benefits for birds as well as addressing biodiversity impacts in the more general sense.</p> <p>Opportunities will be explored to engage with STDC in the development of its overarching Mitigation Strategy for Teesworks in order to identify measures to reduce potential cumulative impacts.</p>	<p>projects this would be not significant.</p> <p>No Significant cumulative effects identified during operation.</p>

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			<p>Assessment) concluded that, "The Proposed Development will not cause adverse effects to the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, either alone or in combination with other plans or projects, provided that the embedded mitigation measures specified in the application are satisfactorily delivered."</p> <p>The ecology chapter of the ES identifies potential for permanent habitat losses and harm to nesting birds during construction.</p>			

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55	R/2020/0823 /ESM	South Tees Development Corporation (STDC): Outline planning application for the development of up to 15,794 sqm (gross) of office accommodation (Use Class E) and car parking and associated infrastructure works. All matters reserved.	HRA has been completed and the following impacts were identified as having the potential to have a likely significant effect at Stage 1: i Loss of supporting habitat caused by the other development; ii Changes to flightlines or sightlines for waterbirds occasioned by the other development; iii Disturbance caused to waterbirds caused by the other development; iv Discharges to water caused by the other development; v Emissions to air caused by the other development; and	Embedded mitigation includes the Framework CEMP that sets out measures to prevent or limit noise, damage to soils, sediment, dust and surface water runoff/emissions, damage to bird nests during construction; further site investigations to determine the need for additional surveys or remediation work.	The ES states that the implementation of an Environment and Biodiversity Strategy will ensure that compensatory measures are provided such that there is no net loss of biodiversity arising from the other development. It is assumed that such a strategy to deliver net benefits for breeding and/or non-breeding birds.	No cumulative effects on birds or the qualifying bird interests of designated sites are identified during construction or operation.

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			<p>vi Reduced groundwater infiltration caused by the other development.</p> <p>The HRA Stage 2 assessment (Appropriate Assessment) concluded that, "The Proposed Development will not cause adverse effects to the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, either alone or in combination with other plans or projects, provided that the embedded mitigation measures specified in the application are satisfactorily delivered."</p>			

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			<p>No Significant effects on other designated sites or on breeding and non-breeding birds are identified during construction.</p> <p>No operational effects on birds are identified.</p>			
65	MWP8 South Tees Eco-Park	Tees Valley Joint Minerals and Waste Development Plan Documents, A site of approximately 27 hectares is allocated for the development of the South Tees Eco-Park.	Insufficient information within the policies and sites development plan documents to identify impacts.	N/A	Potential for cumulative effects upon designated sites, habitats and species.	Insufficient information available to inform cumulative assessment. If developments are brought forward pursuant to this allocation it is assumed measures will be put in place to avoid adverse effects on ornithology features in accordance with relevant planning policy.
76	H/2022/0181	Outline planning application for the erection of up to 1400 no. dwellings and up to	The ES chapter notes that the site is within the same catchment of the Teesmouth and	Best practice measures will be incorporated into the construction phase of the other development. These will	No potential cumulative effects on birds have been identified during any phase of the other development.	There is no potential for cumulative effects with the Proposed

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		750 sqm of non-residential floorspace (comprising Use Class E and Sui Generis) with associated parking, landscaping and infrastructure with all matters reserved except access.	<p>Cleveland Coast Ramsar and Special Protection Area. As such there is the potential for the development to add nitrogen and phosphate pollution to this site which is in unfavourable condition. Supporting documents state that the land is not functionally linked to the SPA/Ramsar.</p> <p>The ES identifies the potential for significant effects upon breeding birds during construction.</p>	<p>be delivered through a Final CEMP(s) which will be secured by way of a planning condition.</p> <p>Habitat creation is proposed to mitigate losses. It is expected that based on the location of the development that the foul flows will be treated at NWL's Billingham sewage treatment works (STW). Following discussions with Natural England and Hartlepool Borough Council it has been confirmed that a significant effect on the Teesmouth & Cleveland Coast SPA and Ramsar site can be excluded with discharges from foul or surface water from new development to the Seaton Carew Waste Water Treatment Works (WWTW), or Billingham Waste Water</p>	No additional mitigation required.	Development during construction or operation.

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				<p>Treatment Works (WWTW), where discharges are via the long sea outfall to the North Sea.</p> <p>Vegetation clearance will be undertaken outside of the bird breeding season and construction works will be overseen by an ECoW.</p> <p>Woodland, field trees and hedgerows will be incorporated in the design wherever possible.</p> <p>Habitat creation will include native woodland, scrub and grassland habitats.</p> <p>A standoff of 15m will be implemented around ancient woodland.</p>		
80	H/2020/0276	Erection of 570 dwellings and provision of a new roundabout and associated infrastructure.	Based on the ecological assessment completed, the overall ecological value of the Site is low. Habitats have potential to support breeding	To prevent an adverse effect on the Teesmouth and Cleveland Coast SPA, Ramsar and SSSI, a financial contribution to the established warden scheme is	No potential cumulative effects has been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.

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			<p>and non-breeding birds but very limited potential to support SPA/Ramsar birds. Surveys for birds yielded a low level of activity for the area and habitats recorded. HRA screening identified likely significant effects of recreational impacts (during operation) on Teesmouth and Cleveland Coast SPA through impacts on nesting tern species in coastal areas.</p>	<p>required, as set out in the Hartlepool Local Plan Mitigation Strategy and Delivery Plan. Vegetation clearance to be undertaken outside the bird breeding season. Nesting bird checks to be undertaken prior to construction. A Landscape and Habitat Management Plan provides details of the mitigation and enhancement measures proposed to provide habitats for nesting birds. Bird nest boxes to be installed on new buildings to compensate for operational habitat losses.</p>		
91	H/2014/0428	Erection of up to 1,200 dwellings and provision of a new roundabout and associated infrastructure	HRA screening identified the potential for recreational disturbance during operation to affect the qualifying species of	Mitigation was proposed at Appropriate Assessment including 15 Ha of on-site Sustainable Alternative Natural Green Space (SANGS), a financial contribution to the	No Significant residual impacts were identified, and no potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.

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			the Teesmouth and Cleveland Coast SPA and Ramsar.	Hartlepool HRA Mitigation Strategy and Delivery Plan and an access route to Summerhill Country Park. Site clearance outside of the nesting bird season. Soft landscaping and bird boxes to be provided. Lighting plan to include measures to reduce impacts of lighting on sensitive species and habitats. A buffer of 15m established around woodland to protect tawny owls and woodland birds.		
121	21/0594/EIAS CP	Redevelopment of land to provide urban logistics and industrial development - Link to 21-2124-SOR (ID: 231).	The scoping report scopes out biodiversity.	Not available.	As the scoping report scopes out biodiversity, no potential cumulative effects on birds have been identified.	There is no potential for cumulative effects with the Proposed Development during construction or operation.
121	21/2124/SOR	Scoping request for outline planning permission with all matters reserved except	The scoping report scopes out biodiversity.	Not available.	As the scoping report scopes out biodiversity, no potential cumulative effects on birds have been identified.	There is no potential for cumulative effects with the Proposed

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		for access comprising the demolition of existing buildings and the construction of employment floorspace (Use Classes E(g)(iii) (Light Industrial Processes), B2 (General Industrial) and B8 (Storage and Distribution) and ancillary office floorspace (E(g)(iii))), and associated infrastructure, drainage, landscaping and other works - Link to 21-0594-EIASCP (ID: 175).				Development during construction or operation.
131	22/2386/SOR	Scoping opinion for Green Hydrogen Production Facility and Wind Turbine.	The scoping report identifies the potential for effects on the Teesmouth and Cleveland Coast SSSI, bats and habitats.	All terrestrial ecological mitigation will be incorporated into a Final CEMP(s). This Final CEMP(s) will outline all required mitigation and provide details on timelines for undertaking	There may be potential for cumulative effects on designated sites and breeding birds during construction if the construction phase overlaps that of H2 Teesside.	There is insufficient information in the Scoping Report for the other development to allow for cumulative assessment to be undertaken at this stage. However, it is

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				mitigation for each identified terrestrial feature.		assumed that measures to avoid adverse effects on biodiversity will be applied in accordance with relevant planning policy and as such, there will be No Significant cumulative effects.
135	23/0090/EIS	Carbon capture facility for existing Energy from Waste site.	Natural England correspondence states that there are potential significant effects on Teesmouth and Cleveland Coast SPA and Ramsar Site from nitrogen. No other significant effects upon ecological features are predicted within the ecology chapter of the ES.	A Final CEMP(s), enhancement and management plan and sensitive lighting scheme are proposed.	Potential for operational cumulative effects on designated sites from nitrogen. Natural England require further details to demonstrate if the proposed wastewater discharge will result in additional Total Nitrogen and other pollutants being discharged to the Tees catchment. A mitigation strategy may be required to prevent additional Total Nitrogen reaching the SPA.	The Nutrient Neutrality Assessment for the Proposed Development concludes that there will be no adverse effects on the Teesmouth and Cleveland Coast SPA and Ramsar site alone or in combination. The other development will also need to demonstrate to adverse effect on site integrity as part of the HRA process. Therefore, it is considered unlikely that a cumulative effect could occur.

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150	13/0342/EIS	Outline application for the construction of up to 500 houses, Primary School (inc Sport Facilities) and nursery, Retail Units (up to 500 sqm), Doctors Surgery, Community Facilities, access and associated landscaping, footpaths and open space (all matters reserved).	Impacts on designated sites scoped out. Impacts of habitat loss with effects on breeding birds identified for the construction phase, however these effects were not predicted to be significant.	Vegetation clearance outside the breeding bird season. Substantial new native planting and biodiversity offsetting to replace lost habitats. Provision of bird boxes.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.
157	08/3644/EIS	Outline planning application for residential (Class C3), employment (Class B1), health care facility (Class D1), leisure (Class A3, A4, A5, C1 and D2), ancillary retail and services (Class A1 and A2) and car dealership (sui generis) with car parking and associated landscaping and	The ecology chapter of the ES identified No Significant effects on birds for any phase of the proposed development, however non-significant effects were reported for construction phase habitat losses and operational lighting.	Mitigation is proposed to prevent damage/destruction of nests during site clearance and compensation for habitat losses and effects of operational lighting.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with the Proposed Development during construction or operation.

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		infrastructure improvements.				
166	13/2892/EIS	Development of materials recycling facility and production of energy from waste, including demolition of the existing offices and erection of new buildings, tanks and silos with access taken from the existing access at New Road, Billingham. The main building will be portal frame, profiled steel clad with stacks at a maximum height of 80 m and 28 m. (Residual wastes will be processed through an advance thermal treatment process, gasification, to produce renewable heat and power) - related to	No Significant effects on ornithology are identified in the Flora and Fauna Chapter of the ES.	As No Significant effects are identified, no mitigation is proposed.	No potential cumulative effects have been identified. No additional mitigation required.	There is no potential for cumulative effects with any phase of the Proposed Development during construction or operation.

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		consented planning boundary of 13-1584-RNW.				
167	22/1145/SCO	Screening opinion for proposed hydrogen production plant, battery storage and hydrogen re-fuelling point.	Screening opinion only. No baseline information or assessments available	No information on proposed mitigation is available at this stage.	There is insufficient information available to assess potential cumulative effects.	As the other project is at screening stage only, there is insufficient information available to assess cumulative effects.
168	Stockton-on-Tees Local Plan, Policy SD4 Economic Growth Strategy	Stockton-on-Tees Local Plan, Main growth location for hazardous installations including liquid and gas processing, bio-fuels and bio-refineries, chemical processing, resource recovery, and waste treatment, energy generation, carbon capture and storage and other activities, Seal Sands.	A strategic policy document.	Not applicable.	The potential for cumulative effects on European designated sites is assessed within the local plan HRA.	As this is a strategic document, there is insufficient information available to allow for cumulative assessment to be undertaken.

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172	R/2020/0685 /ESM	South Tees Development Corporation (STDC): Outline planning application for demolition of existing redundant quay structures, capital dredging and development of new quay and associated works (PHASE 2).	<p>The terrestrial ecology; and Marine and Coastal Ornithology chapters of the ES identify the potential for the following Minor Adverse (non-significant) impacts and effects during construction:</p> <ul style="list-style-type: none"> • Disturbance and habitat losses for breeding birds; • Visual disturbance of SPA qualifying species; • Losses of supporting habitat for SPA qualifying species; • Reduced water quality resulting from increased suspended sediment within the River Tees 	<p>A Final CEMP(s), construction noise mitigation measures and screening and sensitive lighting are proposed.</p> <p>Habitat clearance to be completed outside the breeding bird season and/or nesting bird checks prior to site clearance;</p> <p>Limiting dredging operations to one side of the river channel at a time to minimise the “footprint” of the working area across the River Tees channel.</p> <p>Limiting vessel movements to along the axis of the river rather than across it, to minimise visual interactions between vessels and birds;</p>	<p>No potential cumulative effects have been identified.</p> <p>No additional mitigation required.</p>	<p>There is no potential for cumulative effects with the Proposed Development during construction or operation.</p>

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			<p>as a result of dredging.</p> <p>The following Moderate Adverse impact was identified:</p> <ul style="list-style-type: none"> Noise and visual disturbance of wetland birds during construction. <p>There will be No Significant operational impacts.</p>			
173	R/2022/0773 /ESM	Construction of a Lithium Hydroxide Monohydrate manufacturing plant and ancillary development.	<p>The report to inform HRA confirms no Likely Significant Effects on European designated sites.</p> <p>Minor (non-significant) effects on breeding birds identified during construction.</p>	<p>A Final CEMP(s) is proposed including:</p> <p>Pre-construction nesting bird checks.</p> <p>An operational EMP is proposed, which includes measures to control potential impacts on lighting and water quality, although no operational effects were identified for birds.</p>	<p>No potential cumulative effects have been identified.</p> <p>No additional mitigation required.</p>	<p>There is no potential for cumulative effects with the Proposed Development during construction or operation.</p>

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174	R/2014/0626 /FFM	Mineral (Polyhalite) granulation and storage facility involving the construction of buildings, conveyor systems, substations, water treatment plant, internal access roads, car parking, attenuation ponds, landscaping, restoration and aftercare, and construction of a tunnel portal including the landforming of spoil and associated works.	Loss of grassland and scrub habitat potentially in use by birds. Potential damage to bird nests during construction. No Significant impacts identified during operation.	A landscape strategy to be implemented; Vegetation removal to be completed outside of the nesting bird season or nesting bird checks prior to construction/site clearance; Lighting to be designed with consideration of Bat Conservation Trust and RSPB guidance.	Potential cumulative impacts include the effects of noise levels during construction and operation, air quality effects (nitrogen and acid deposition) and habitat loss. Beneficial effects on breeding birds are predicted during operational phase, as a result of the proposed habitat enhancements.	With appropriate mitigation, the Proposed Development would not have any significant cumulative ecological effects during construction or operation.
178	R/2023/0291 /ESM	Outline application (all matters reserved) for the development of a 3-line low-carbon lithium refinery and associated dock-side reception, handling, storage, and manufacturing facilities for the production of high-quality, battery-	The report to inform HRA confirms No Significant effects on European designated sites alone or in combination. The ecology chapter of the ES identifies the potential for adverse	It is recommended that a strategy to address any shortfall in biodiversity obligations should be submitted to the Local Planning Authority for agreement prior to development commencing.	Potential for cumulative effects of habitat losses on breeding birds during operation.	With appropriate mitigation, the Proposed Development would not have any significant cumulative effects on breeding birds through habitat losses during construction.

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		grade lithium hydroxide.	effects upon breeding birds through habitat loss and damage or destruction of nests, eggs and/or young during construction and habitat losses during the operational phase of the development.	Vegetation clearance outside of the bird breeding season; or nesting bird checks within 48hrs of vegetation clearance commencing. Retention of on-site habitats and habitat creation where possible, details of which are not provided in the ES but are stated as "may be possible as part of a future detailed application".		No Significant cumulative effects identified during operation.
205	H/2023/0128	Scoping opinion in respect of Greatham North East Flood Alleviation Scheme	The scoping report indicates there is potential for effects upon designated sites, and species including terrestrial and water birds. Natural England correspondence identifies the need to assess impacts on Teesmouth and	Not available.	Potential for cumulative effects upon breeding and non-breeding birds during the construction and operation phases of the proposed development.	There is insufficient information in the Scoping Report for the other development to allow for cumulative assessment to be undertaken at this stage.

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			Cleveland Coast SPA, Ramsar and SSSI.			
212	22/1525/EIS	Erection of an energy recovery facility and associated infrastructure for fuel receipt and storage, power generation, power export, process emissions control, maintenance, offices and car parking together with associated operations.	<p>Natural England correspondence indicates that there is potential for air quality effects upon European designated sites during operation of the proposed development. The ES reports the following effects on birds:</p> <p>Losses of bird nesting habitat during construction and operation.</p> <p>Risk of damaging or destroying nests during construction.</p>	<p>Habitats will be removed outside of the nesting bird season.</p> <p>Habitat enhancement is proposed and will be secured with a habitat creation and landscaping scheme.</p>	<p>Potential for cumulative effects upon air quality affecting designated sites.</p> <p>The residual effect of habitat losses and destruction of nests is reported as not significant</p>	<p>Air quality modelling for the Proposed Development has confirmed no adverse effects alone or in-combination (refer to Appendix 8A and 8B (EN070009/APP/6.4)). No Significant cumulative effects identified during construction.</p>

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219	23/1019/EIS	Development of Greenergy Renewable Fuels and Circular Products Facility comprising a Sustainable Aviation Fuel Plant and Tyre Plant and associated infrastructure. A temporary construction compound, proposed services corridor, pipe bridge, ancillary buildings and car parking.	The ecology chapter of the ES identifies the potential for effects upon designated sites through run-off/pollution, noise and visual disturbance during construction. Effects on nesting and non-breeding birds through habitat loss, accidental killing/injury to birds and destruction of nests, noise, vibration and visual impacts during construction. Potential for operational effects on designated sites through changes in drainage outputs, run-off and surface water pollution	A Final CEMP(s) with measures to control noise, protection of surface waters and ground waters, control of surface water runoff/flooding, noise and lighting are proposed. A SUDS treatment plant will; control operational impacts on water chemistry. Habitat clearance outside of the bird breeding season, or nesting bird checks prior to site clearance.	No residual significant adverse effects on birds for any phase of the proposed development.	No potential for cumulative effects on birds during construction or operation.

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222	R/2023/0179 /SCP	Scoping Opinion for HyGreen Hydrogen Project.	The scoping report confirms that a suite of ornithology surveys will be completed to inform the assessment.	Not available.	Potential for cumulative effects upon designated sites and breeding and non-breeding birds during construction.	There is insufficient information in the Scoping Report for the other development to allow for cumulative assessment to be undertaken at this stage.

Table 23D-9: Other developments Scoped In or Out of Marine Ecology Cumulative Effects Assessment

OTHER DEVELOPMENT	APPLICATION REFERENCE	DISTANCE FROM RLB (KM)	TIMING OF CONSTRUCTION	DESCRIPTION OF PROJECT AND ACTIVITIES RELATED TO MARINE IMPACTS	IMPACT PATHWAYS OF RELEVANCE
ID 3: NZT CCUS	EN010103	0.00	Works to begin in 2022 and are expected to continue into 2026	<ul style="list-style-type: none"> • CO₂ export pipeline connection to onshore; • Micro-bore tunnelling for breakout point; • Preparatory dredging; • Rock armour / scour protection installation; • Potential anchoring of work boats and / or barges. 	<p><u>Construction phase</u></p> <ul style="list-style-type: none"> • Changes in Marine Water Quality During Construction Activities including Surface Water Runoff); • Changes in the Airborne Soundscape During Construction; • Changes in Visual Stimuli including from Artificial Light; • Introduction, Transportation and Spread of INNS; and • Collision Risk between Proposed Development Vessels and Marine Mammals. <p><u>Operational phase</u></p> <ul style="list-style-type: none"> • Nutrient and Chemical Effects from the Dispersion and Discharge of Treated Effluent; and • Deposition of Airborne Pollutants including Nitrogen. <p><u>SCOPED IN</u> – the NZT CCUS project and Proposed Development are expected to overlap in some project aspects, including the discharge of treated effluent and the generation of airborne sound near Seal Sands.</p>

OTHER DEVELOPMENT	APPLICATION REFERENCE	DISTANCE FROM RLB (KM)	TIMING OF CONSTRUCTION	DESCRIPTION OF PROJECT AND ACTIVITIES RELATED TO MARINE IMPACTS	IMPACT PATHWAYS OF RELEVANCE
ID 5: NZT Offshore Elements (CO ₂ Export Pipeline)	EN010103	0.01	Works to begin in 2022 and are expected to continue into 2026	<ul style="list-style-type: none"> • Cable route clearance and sweeping; • Cable installation; • Rock placement; • Subsea infrastructure installation; and • Drilling of five CO₂ injection wells and monitoring wells. 	<p><u>Construction phase</u></p> <ul style="list-style-type: none"> • Changes in Marine Water Quality During Construction Activities including Surface Water Runoff <p><u>SCOPED OUT</u> – the connection for this project is located offshore and therefore, water quality effects between this project and the Proposed Development are considered to be separate.</p>
ID 6: Forewind Ltd offshore wind energy development	EN010051	5.97	Expected to take a maximum of 10 years to finish after consent awarded	<ul style="list-style-type: none"> • Piling with a maximum hammer energy of 3,000 kJ for monopole foundations; • Use of vessels; and • Installation of cables and anchors. 	<p><u>Construction phase</u></p> <ul style="list-style-type: none"> • Changes in Marine Water Quality During Construction Activities including Surface Water Runoff; and • Collision Risk between Proposed Development Vessels and Marine Mammals. <p><u>SCOPED OUT</u> – this project is located offshore and therefore, outside of the estuary. Any impacts resulting from this project are not expected to interact with those of the Proposed Development</p>
ID 8: Lighthouse Green Fuels Ltd 'Waste-to-sustainable aviation fuel' facility	EN010150	0.03	No overlap in construction but will be operational for 30 years	<ul style="list-style-type: none"> • Delivery of equipment and materials via vessels through the River Tees. 	<p><u>Construction phase</u></p> <ul style="list-style-type: none"> • Changes in Water Quality from Accidental Spills of Vessel Fuels and Oils; • Changes in the Airborne Soundscape during Construction; • Changes in Visual Stimuli, including from

OTHER DEVELOPMENT	APPLICATION REFERENCE	DISTANCE FROM RLB (KM)	TIMING OF CONSTRUCTION	DESCRIPTION OF PROJECT AND ACTIVITIES RELATED TO MARINE IMPACTS	IMPACT PATHWAYS OF RELEVANCE
					<p>Artificial Lighting; and</p> <ul style="list-style-type: none"> • Collision Risk between Proposed Development Vessels and Marine Mammals. <p><u>Operational phase</u></p> <ul style="list-style-type: none"> • Changes in the Airborne Soundscape during Operation; • Changes in Marine Water Quality During Construction Activities including Surface Water Runoff. <p><u>SCOPED IN</u></p>
<p>ID 42: South Tees Development Corporation (STDC) – demolition of existing structures and development of 148,000 sqm of general industry and storage facility</p>	<p>R/2020/0357/OOM</p>	<p>0.88</p>	<p>5 to 8 years from 2021</p>	<ul style="list-style-type: none"> • Piling (on dockside); and • Removal of intertidal habitat 	<p><u>Construction</u></p> <ul style="list-style-type: none"> • Changes in Marine Water Quality During Construction Activities including Surface Water Runoff; • Changes in Visual Stimuli, including from Artificial Lighting; • Changes in the Airborne Soundscape during Construction; • Changes in Water Quality from Accidental Spills of Vessel Fuels and Oils; and • Introduction and spread of INNS. <p><u>SCOPED IN</u></p>
<p>ID 48: PD Teesport Northern Gateway Container Terminal</p>	<p>R/2006/0433/OO</p>	<p>0.00</p>	<p>Overlap in operational periods</p>	<ul style="list-style-type: none"> • Capital dredging; • Realignment of approach channel to dock and turning 	<p><u>Construction</u></p> <ul style="list-style-type: none"> • Indirect Effects to Marine Ecology from Changes in Marine Water Quality During

OTHER DEVELOPMENT	APPLICATION REFERENCE	DISTANCE FROM RLB (KM)	TIMING OF CONSTRUCTION	DESCRIPTION OF PROJECT AND ACTIVITIES RELATED TO MARINE IMPACTS	IMPACT PATHWAYS OF RELEVANCE
				circles in River Tees; <ul style="list-style-type: none"> • Quay construction; and • Disposal of dredged material offshore 	Construction Activities including Surface Water Runoff; and <ul style="list-style-type: none"> • Changes in the Airborne Soundscape During Construction. <u>SCOPED IN</u>
ID 131: Tees Valley Net Zero Green Hydrogen Production Facility and Wind Turbine	22/2386/SOR	1.14	Unknown	<ul style="list-style-type: none"> • Not yet defined but construction of Hydrogen Production Facility located at docks on River Tees. 	<u>SCOPED OUT</u> The Tees Valley Net Zero Project is located upstream from the Proposed Development. There may be some minor surface water runoff effects and operational changes in water quality. However, these effects will be occurring at a distance upstream from the project where cumulative effects are not likely to occur
ID 157: Northshore Development Partnership Ltd application for residential, employment, healthcare, leisure and ancillary retail services	08/3644/EIS	2.98	Over fifteen years, start date uncertain	<ul style="list-style-type: none"> • Disturbance of sediment resulting in reduction in water quality; and • Piling of driven piles in River Tees 	<u>Construction phase</u> <ul style="list-style-type: none"> • Changes in the Airborne Soundscape During Construction; and • Changes in Marine Water Quality During Construction Activities including Surface Water Runoff. <u>SCOPED OUT</u> The Northshore Development Partnership is considered to be a sufficient distance away from the Proposed Development to avoid cumulative effects. Therefore, it has not been considered further

OTHER DEVELOPMENT	APPLICATION REFERENCE	DISTANCE FROM RLB (KM)	TIMING OF CONSTRUCTION	DESCRIPTION OF PROJECT AND ACTIVITIES RELATED TO MARINE IMPACTS	IMPACT PATHWAYS OF RELEVANCE
ID 168: Stockton-on-Tees Local Plan	N/A	0.46	2019 – 2032 and beyond	<ul style="list-style-type: none"> • Conservation and enhancement of the natural environment. 	<p><u>SCOPED OUT</u></p> <p>The aim of the Stockton-on-Tees Local Plan is to enhance and conserve the natural environment, including during development of the local area. Therefore, no adverse cumulative effects are expected, and it has not been considered further</p>
ID 172: STDC – demolition of existing quay, capital dredging and development of new quay and associated works	R/2020/0685/ESM	0.82	Phase 1 due to be operational by 2023. Construction of Phase 2 still uncertain.	<ul style="list-style-type: none"> • Removal of jetties and existing wharf; • Dredging; and • Placement of rock blanket • Habitat creation from berth pocket creation and installation of quay wall 	<p><u>Construction phase</u></p> <ul style="list-style-type: none"> • Collision Risk between Proposed Development Vessels and Marine Mammals; • Changes in the Airborne Soundscape During Construction; • Changes in Marine Water Quality During Construction Activities including Surface Water Runoff; and • Changes in Visual Stimuli, including from Artificial Lighting. <p><u>SCOPED IN</u></p>
ID 205: Greatham North East Flood Alleviation Scheme	H/2023/0128	0.36	Construction expected to start in Spring 2025	<ul style="list-style-type: none"> • Improve flood defences; • Create new intertidal habitat with high carbon sequestration and biodiversity potential; and • Preferred option is 'hold 	<p><u>Construction phase</u></p> <ul style="list-style-type: none"> • Changes in the Airborne Soundscape During Construction; • Indirect Effects to Marine Ecology from Changes in Marine Water Quality During Construction Activities including Surface

OTHER DEVELOPMENT	APPLICATION REFERENCE	DISTANCE FROM RLB (KM)	TIMING OF CONSTRUCTION	DESCRIPTION OF PROJECT AND ACTIVITIES RELATED TO MARINE IMPACTS	IMPACT PATHWAYS OF RELEVANCE
				the line and managed realignment'	Water Runoff. <u>SCOPED IN</u>
ID 219: Greenergy International Ltd - Greenergy Renewable Fuels and Circular Products Facility, Seal Sands, Billingham, Stockton-on-Tees	23/1019/EIS	0.23	Duration of three and a half years, start date not confirmed	<ul style="list-style-type: none"> • Potential water abstraction from the Tees; • Potential release of surface water into Tees; and • Production of noise and vibration during construction 	<u>Construction phase</u> <ul style="list-style-type: none"> • Changes in Marine Water Quality During Construction Activities including Surface Water Runoff; and • Introduction, Transportation and Spread of INNS. <u>SCOPED IN</u>
ID 222: HyGreen Hydrogen Project	R/2023/0179/SCP	0.00	Construction to commence in Q1 or Q2 of 2024 and will last one and a half to two years	• Installation of Hydrogen Production Facility with associated export pipelines, water connections and links to third party infrastructure.	<u>SCOPED OUT</u> All impacts to marine ecology have been scoped out for the HyGreen Project due to no interaction with the marine environment. Therefore, this project is not considered further in this assessment of cumulative effects.

Table 23D-10: Landscape Cumulative Effects Assessment

		CONSTRUCTION			OPERATION		
LANDSCAPE TYPE	RECEPTOR SENSITIVITY	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT
Redcar Flats Landscape Character Tract (LCTr)	Medium	A number of the cumulative developments are located within or adjacent to the Redcar Flats LCTr and if constructed simultaneously would add to the influence of the existing large-scale industrial complexes within and adjacent to this landscape. It is assessed that the impact of additional construction activity associated with the Proposed Development would result in only a limited additional influence on the LCTr. It is assessed that the cumulative impact on the LCTr would remain at low, as for the Proposed	Low	Minor Adverse (Not Significant)	The built form associated with the cumulative developments within the LCTr would not introduce uncharacteristic development into the LCTr but would further increase the influence of industrial development. It is assessed that the cumulative impact on the LCTr resulting from the addition of the Proposed Development to the cumulative baseline would be low, as for the Proposed Development assessed in isolation.	Low	Minor Adverse (Not Significant)

		CONSTRUCTION			OPERATION		
LANDSCAPE TYPE	RECEPTOR SENSITIVITY	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT
		Development assessed in isolation.					
Eston Hills LCTr	High	A number of the cumulative developments will introduce construction activity within views from this LCTr, adding to the existing influence of large-scale industrial complexes and transport infrastructure. The introduction of additional construction activity associated with the Proposed Development would result in little noticeable change to the cumulative baseline for this LCTr. It is assessed that the cumulative impact would be very low, as for the Proposed Development assessed in isolation.	Very low	Minor Adverse (Not Significant)	A number of the cumulative developments will introduce additional built form within views from the LCTr, further adding to the high number of existing large-scale industrial complexes and transport infrastructure that influence the LCTr. It is assessed that the Proposed Development would result in only a limited additional change to the LCTr and as such the cumulative impact would be very low, as for the Proposed Development assessed in isolation.	Very low	Minor Adverse (Not Significant)

		CONSTRUCTION			OPERATION		
LANDSCAPE TYPE	RECEPTOR SENSITIVITY	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT
East Billingham to Teesmouth Landscape Character Area (LCA)	Medium	A number of the cumulative developments will introduce construction activity within and adjacent to this LCA, further adding to the existing strong influence of large-scale industrial complexes and transport infrastructure. It is assessed that the impact of construction activity associated with the Proposed Development would result in a limited additional change to the LCA. The cumulative impact would be low, as is the case for the Proposed Development assessed in isolation.	Low	Minor Adverse (Not Significant)	A number of the cumulative developments will introduce additional built form within and adjacent to this LCA, further strengthening the influence of large-scale industrial complexes and transport infrastructure on the LCA. It is assessed that the impact associated with the addition of the Proposed Development to the cumulative baseline would result in a limited additional change to the LCA. It is assessed that the cumulative impact would be low, similar to the Proposed Development assessed in isolation.	Low	Minor Adverse (Not Significant)
Coastal Fringe Local	High	A number of the cumulative developments will introduce construction	Low	Minor Adverse (Not Significant)	A number of the cumulative developments will introduce built form within views from	Very low	Minor Adverse (Not Significant)

		CONSTRUCTION			OPERATION		
LANDSCAPE TYPE	RECEPTOR SENSITIVITY	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT
Character Type (LCT)		activity within views from this LCT, slightly increasing the influence of the high number of existing large-scale industrial complexes and transport infrastructure within and adjacent to this LCT. It is assessed that the impact of additional construction activity associated with the Proposed Development would result in a limited additional change to the LCT. It is assessed that the cumulative impact would be low, similar to the Proposed Development assessed in isolation.			the LCT, adding to the existing context of large-scale industrial complexes and transport infrastructure that influence the LCT. It is assessed that the addition of built form associated with the Proposed Development would result in a very limited additional change to the LCT. It is assessed that the cumulative impact would remain at very low, similar to the Proposed Development assessed in isolation.		
Estuarine LCT	Medium	As for Coastal Fringe LCT above, it is assessed that the cumulative impact would be at low, similar to	Low	Minor Adverse (Not Significant)	As for Coastal Fringe LCT above, it is assessed that the cumulative impact would be very low, similar to the	Very low	Negligible Adverse (Not Significant)

		CONSTRUCTION			OPERATION		
LANDSCAPE TYPE	RECEPTOR SENSITIVITY	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT	DESCRIPTION OF IMPACT	PREDICTED MAGNITUDE OF CUMULATIVE IMPACT	CLASSIFICATION OF EFFECT
		the Proposed Development assessed in isolation.			Proposed Development assessed in isolation.		

Table 23D-11: Reasons for Other Developments Scoped Out of Cumulative Visual Effects Assessment

ID	PROJECT	REASON FOR SCOPING OUT OF CUMULATIVE EFFECTS ASSESSMENT
2	Tees CAPP Project	Discounted due to lack of inter-visibility with the representative viewpoints and distance from the Proposed Development Site.
5	Net Zero Teesside Offshore Elements	Discounted due to distance from the Proposed Development and the height of the majority of elements being below sea level.
6	Dogger Bank	Discounted due to lack of inter-visibility with the representative viewpoints and scale of development.
19	Rare Earth Mineral Processing and Refining Facility	Discounted due to lack of inter-visibility with the representative viewpoints and scale of development.
20	Anaerobic Digester and CHP Plant Facility	Discounted due to lack of inter-visibility with the representative viewpoints and scale of development.
22	Energy Recovery Facility, Grangetown Prairie	Discounted due to lack of inter-visibility with the representative viewpoints and scale of development.
30	Plastic Conversion Facility	Discounted due to lack of inter-visibility with the representative viewpoints and scale of development.
41	Low Grange Farm, Eston	Residential development discounted due to proposed height of buildings and lack of inter-visibility with the representative viewpoints.
65	MWP8 South Tees Eco-Park	Discounted due to lack of inter-visibility with the representative viewpoints and scale of development.
91	Redevelopment of Land for Urban Logistics and Industrial Development	Discounted due to lack of inter-visibility with the representative viewpoints, distance from the Proposed Development, and scale of development.
131	Green Hydrogen Production Facility and Wind Turbine	Discounted due to lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
135	Suez Tees Valley Carbon capture Facility	Discounted due to lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
166	Energy From Waste Facility	Discounted due to lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.

ID	PROJECT	REASON FOR SCOPING OUT OF CUMULATIVE EFFECTS ASSESSMENT
167	Screening for Hydrogen Production Plant	Discounted due to lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.
168	Local Plan Allocation	Discounted – allocated site which development ID 219 lies within. Allocated site scoped out and development included for assessment.
172	STDC South Bank Quay	Discounted due to lack of inter-visibility with the representative viewpoints and scale of development.
173	Tees Valley Lithium Project	Discounted due to lack of inter-visibility with the representative viewpoints, scale of development and distance from the Proposed Development.
174	York Potash	Discounted due to lack of inter-visibility with the representative viewpoints and scale of development.
178	Green Lithium Refinery Project	Discounted due to lack of inter-visibility with the representative viewpoints.
205	Greatham North East Flood Alleviation Scheme	Discounted due to lack of inter-visibility with the representative viewpoints and distance from the Proposed Development.

Table 23D-12: Cumulative Visual Effects Assessment

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
Viewpoint 2: The Cliff, Seaton Carew	<ul style="list-style-type: none"> • Net Zero Teesside (ID 3); • York Potash overhead conveyor (ID 33); • York Potash (ID 35); • South Industrial Zone (ID 42); • Northern Gateway Container Terminal (ID 48); • STDC Dorman Point (ID 51); • STDC Long Acres (ID 54); • STDC Steel House (ID 55); • Energy Facility at Seal Sands (ID 212); • Greenergy 	High for residential and PRow users.	The construction of Net Zero Teesside (NZZ) and HyGreen will be visible at distance within the view. Construction of the structures associated with the South Tees Development Corporation (STDC) ownership and Energy Facility at Seal Sands will be barely visible within the view due to distance and intervening structures. The presence of the other characteristic, cumulative developments including stacks, will slightly intensify the built structures visible from this location. The addition of the construction activities associated with the Proposed Development will result in a low cumulative impact due to the distance from the receptor. However, this will be no greater than	The presence of the identified cumulative developments, including NZZ and HyGreen will slightly intensify the visibility of structures due to a stacking effect. The addition of the structures associated with the Proposed Development will result in a low cumulative impact, although no greater than that assessed for the Proposed Development in isolation. The impact will be long term and reversible, resulting in a Minor Adverse effect.	No additional mitigation for cumulative effects	Minor Adverse (Not Significant)	Minor Adverse (Not Significant)

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
	Renewable Fuels and Circular Products Facility (ID 219); and • HyGreen (ID 222).		that assessed for the Proposed Development in isolation. The impact will be short term and reversible, resulting in a Minor Adverse effect.				
Viewpoint 3: Teemouth National Nature Reserve, England Coast Path	<ul style="list-style-type: none"> • Net Zero Teesside (ID 3); • Lighthouse Green Fuels Project (ID 8); • South Industrial Zone (ID 42); • Northern Gateway Container Terminal (ID 48); • STDC Dorman Point (ID 51); • STDC Dorman Point (ID 51); • STDC Long Acres (ID 54); • STDC Steel 	High for recreational users.	The construction of the tallest elements associated with NZT, HyGreen, Energy Facility at Seal Sands, and Greenergy are likely to be visible at distance within the view. The construction of the STDC structures will be barely visible within the view due to distance, intervening structures and landform. The presence of the other characteristic, cumulative developments including stacks, will slightly intensify the built structures visible from this location. The addition of the construction operations associated with	The presence of the identified cumulative developments, including HyGreen and NZT will slightly intensify the visibility of structures due to a stacking effect. The addition of the structures associated with the Proposed Development will result in a low cumulative impact, although no greater than that assessed for the Proposed Development in isolation. The impact will be long term and reversible, resulting in a Minor Adverse effect.	No additional mitigation for cumulative effects	Minor Adverse (Not Significant)	Minor Adverse (Not Significant)

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
	<ul style="list-style-type: none"> House (ID 55); Energy Facility at Seal Sands (ID 212); Greenergy Renewable Fuels and Circular Products Facility (ID 219); and HyGreen (ID 222). 		<p>the Proposed Development will result in a low cumulative impact, although no greater than that assessed for the Proposed Development in isolation. The impact will be short term and reversible, resulting in a Minor Adverse effect.</p>				
Viewpoint 4: North Gare Sands	<ul style="list-style-type: none"> Net Zero Teesside (ID 3); Lighthouse Green Fuels Project (ID 8); York Potash overhead conveyor (ID 33); York Potash (ID 35); South Industrial Zone (ID 42); 	Medium for recreational users.	<p>Construction of the Proposed Development will add further activity immediately adjacent to NZT and HyGreen and other cumulative developments. Although this would add slightly to the concentration of construction in part of the view, it would not notably increase the extent of the view affected or fundamentally alter the impression of the view from</p>	<p>The Proposed Development will add further development immediately adjacent to NZT and HyGreen and other cumulative developments. Although this would add slightly to the concentration of structures in part of the view, it would not notably increase the extent of the view affected or fundamentally alter the impression of the view from that of the cumulative</p>	No additional mitigation for cumulative effects	Minor Adverse (Not Significant)	Minor Adverse (Not Significant)

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
	<ul style="list-style-type: none"> • Northern Gateway Container Terminal (ID 48); • STDC Dorman Point (ID 51); • STDC Foundry (ID 53); • STDC Long Acres (ID 54); • STDC Steel House (ID 55); • Energy Facility at Seal Sands (ID 212); • Greenergy Renewable Fuels and Circular Products Facility (ID 219); and • HyGreen (ID 222). 		that of the cumulative baseline. The impact will be short term and reversible, resulting in a low magnitude of cumulative impact, no greater than that assessed for the Proposed Development in isolation, and a Minor Adverse effect.	baseline. The impact will be long term and reversible, resulting in a low magnitude of cumulative impact, no greater than that assessed for the Proposed Development in isolation, and a Minor Adverse effect.			
Viewpoint 5: South	<ul style="list-style-type: none"> • Net Zero Teesside (ID 3); • Lighthouse 	Medium for recreational users.	The construction of NZT and HyGreen will be visible in the middle distance. The	The presence of the identified cumulative developments will intensify	No additional mitigation for	Minor Adverse (Not Significant)	Minor Adverse (Not Significant)

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
Gare Breakwater	<p>Green Fuels Project (ID 8);</p> <ul style="list-style-type: none"> • York Potash overhead conveyor (ID 33); • York Potash (ID 35); • STDC Foundry (ID 53); • South Industrial Zone (ID 42); • STDC Dorman Point (ID 51); • Northern Gateway Container Terminal (ID 48); • STDC Foundry (ID 53); • STDC Long Acres (ID 54); • STDC Steel House (ID 55); • Energy Facility at Seal Sands (ID 		<p>construction of the STDC structures and at Greenergy and the Energy Facility at Seal Sands will also be visible within the view. The presence of the other cumulative developments will slightly intensify the construction activity visible from this location. The addition of the construction operations associated with the Proposed Development will result in a minor cumulative impact, although no greater than that assessed for the Proposed Development in isolation. The impact will be short term and reversible, resulting in a Minor Adverse effect.</p>	<p>the visibility of characteristic built structures from this location. The addition of the structures associated with the Proposed Development to Net Zero Teesside and HyGreen will result in a cumulative impact which is no greater than that assessed for the Proposed Development in isolation. The impact will be long term and reversible, resulting in a Minor Adverse effect.</p>	cumulative effects		

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
	212); • Greenergy Renewable Fuels and Circular Products Facility (ID 219); and • HyGreen (ID 222).						
Viewpoint 7: England Coast Path, Warrenby	<ul style="list-style-type: none"> • Net Zero Teesside (ID 3); • York Potash overhead conveyor (ID 33); • York Potash (ID 35); • South Industrial Zone (ID 42); • Northern Gateway Container Terminal (ID 48); • STDC Foundry (ID 53); 	High for recreational users.	<p>Construction activity associated with NZT, STDC Long Acre and Steel House developments will be visible in the foreground.</p> <p>Construction activity associated with HyGreen will be partially screened by the Proposed Development and Net Zero Teesside (NZT).</p> <p>Construction activity associated with the Energy Facility and Greenergy will be partly visible due to other cumulative developments in the background of the view. The presence of the other</p>	The structures associated with NZT, STDC Long Acre and Steel House developments will be visible in the foreground. Structures associated with HyGreen will be partially screened by the Proposed Development and Net Zero Teesside. The tallest structures associated with the Energy Facility and Greenergy are likely to be partly visible due in the background of the view. The presence of the identified cumulative developments will intensify the visibility of	No additional mitigation for cumulative effects	Moderate Adverse (Significant)	Moderate Adverse (Significant)

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
	<ul style="list-style-type: none"> • STDC Long Acres (ID 54); • STDC Steel House (ID 55); • Energy Facility at Seal Sands (ID 212); • Greenergy Renewable Fuels and Circular Products Facility (ID 219); and • HyGreen (ID 222). 		<p>characteristic, cumulative developments, will intensify the construction activity visible from this location. The addition of the construction operations associated with the Proposed Development will result in a medium cumulative impact, although no greater than that assessed for the Proposed Development in isolation. The impact will be short term and reversible, resulting in a Moderate Adverse effect.</p>	<p>characteristic built structures from this location. The addition of the Proposed Development will result in a medium cumulative impact, although no greater than that assessed for the Proposed Development in isolation. The impact will be short term and reversible, resulting in a Moderate Adverse effect.</p>			
Viewpoint 8: Redcar seafront	<ul style="list-style-type: none"> • Net Zero Teesside (ID 3); • York Potash overhead conveyor (ID 33); • York Potash (ID 35); • South 	High for residential and recreational users.	<p>The construction of NZT and HyGreen will be visible in the centre of the view. Construction at the other cumulative developments are likely to be screened by buildings in Redcar. The presence of the other characteristic, cumulative</p>	<p>The structures associated with NZT will be visible in the centre of the view, however, will partially screen the structures associated with the Proposed Development. Although this would add to the concentration of structures in part of the</p>	No additional mitigation for cumulative effects	Moderate Adverse (Significant)	Minor Adverse (Not Significant)

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
	<p>Industrial Zone (ID 42);</p> <ul style="list-style-type: none"> • STDC Foundry (ID 53); • STDC Long Acres (ID 54); • STDC Steel House (ID 55); • Energy Facility at Seal Sands (ID 212); • Greenergy Renewable Fuels and Circular Products Facility (ID 219); and • HyGreen (ID 222). 		<p>developments will intensify the views of construction activity from this location. The addition of the construction operations associated with the Proposed Development will result in a medium cumulative impact, although no greater than that assessed for the Proposed Development in isolation. The impact will be short term and reversible, resulting in a Moderate Adverse effect.</p>	<p>view, it would not notably increase the extent of the view affected or fundamentally alter the impression of the view from that of the cumulative baseline. The impact will be long term and reversible, resulting in a low magnitude of cumulative impact, no greater than that assessed for the Proposed Development in isolation, and a Minor Adverse effect.</p>			
Viewpoint 9: Coatham Marsh Nature Reserve	<ul style="list-style-type: none"> • Net Zero Teesside (ID 3); • York Potash overhead conveyor (ID 33); • York Potash 	High for recreational users.	<p>The construction of tallest elements associated with NZT and HyGreen will be visible in the view. Construction at the other cumulative developments is likely to be screened by</p>	<p>The tallest structures associated with NZT will be visible in the centre of the view. Although this would add to the concentration of structures in part of the view, it would not notably</p>	No additional mitigation for cumulative effects	Minor Adverse (Not Significant)	Minor Adverse (Not Significant)

VIEWPOINT	DEVELOPMENTS INCLUDED IN ASSESSMENT	SENSITIVITY OF RECEPTOR	ASSESSMENT OF CUMULATIVE EFFECTS (CONSTRUCTION)	ASSESSMENT OF CUMULATIVE EFFECTS (OPERATION)	PROPOSED MITIGATION	RESIDUAL CUMULATIVE EFFECTS (CONSTRUCTION)	RESIDUAL CUMULATIVE EFFECTS (OPERATION)
	(ID 35); • South Industrial Zone (ID 42); • STDC Foundry (ID 53); • STDC Long Acres (ID 54); • STDC Steel House (ID 55); • Energy Facility at Seal Sands (ID 212); • Greenenergy Renewable Fuels and Circular Products Facility (ID 219); and • HyGreen (ID 222).		intervening vegetation, landform and buildings. However, where views are available, the presence of the other characteristic, cumulative developments will intensify the construction activity visible from this location. The addition of the construction operations associated with the Proposed Development will result in a minor cumulative impact, although no greater than that assessed for the Proposed Development in isolation. The impact will be short term and reversible, resulting in a Minor Adverse effect.	increase the extent of the view affected or fundamentally alter the impression of the view from that of the cumulative baseline. The impact will be long term and reversible, resulting in a low magnitude of cumulative impact, no greater than that assessed for the Proposed Development in isolation, and a Minor Adverse effect.			

Table 23D-13: Other Developments to be Assessed for Cumulative Socio-economic Effects

SHORTLISTED SCHEME	CONSTRUCTION EMPLOYMENT	CONSTRUCTION TIMELINE	ADDITIONAL INFORMATION	DECISION TO INCLUDE/EXCLUDE ²
2 - EN010082	131 jobs supported	Unknown	Construction investment value of £700m.	Included
3 - EN010103	2,440 jobs (equivalent to 240 FTEs)	Unknown	None	Included
6 - EN010051	1,680 FTE jobs, of which 1,092 are direct and 588 are indirect.	Unknown	This is expected to become operational in the year 2027. Planning permission was granted in August 2015	Included
22 - R/2019/0767/OOM	300 jobs	2022 to 2025	None	Included
35 - R/2014/0627/FFM	25,200 jobs	2016	None	Included
135 - 23/0090/EIS	50 jobs	2025 to 2027	None	Included
173 - R/2022/0773/ESM	1,000 jobs	2023	This development has just been granted planning permission.	Included
212 - 22/1525/EIS	200 jobs	2023 to 2026	None	Included
219 - 23/1019/EIS	700 jobs	Unknown	None	Included
222 - R/2023/0179/SCP	450 jobs	2025 to 2026	None	Included
Total of included jobs and FTEs	30,281 jobs			

² Shortlisted developments were excluded if they are situated outside of the Middlesbrough and Stockton Travel To Work Area (TTWA) or if sufficient information was not present to assess potential cumulative effects.

Table 23D-14: Receptor Groups Identified as Potentially Susceptible to Combined Effects

RECEPTOR GROUP	BRIEF DESCRIPTION	PHASE	REPRESENTATIVE NOISE / VISUAL / AIR QUALITY RECEPTORS WITHIN GROUP
Receptor Group 1	Residential Properties on Bolckow Road and Cresswell Road, Grangetown and Eversham Road and Broadway, Middlesbrough	Construction	Noise Receptor: NSR H2 Air Quality Receptors: R_008, R_006, and R_005
Receptor Group 2	Recreational receptors located at Marine Club and Tingdale Beach Caravan Park, Redcar and South Gare Breakwater	Operation	Air Quality Receptors: O3 and O4 Visual Receptors: Viewpoint 5
Receptor Group 3	Recreational receptors located at Cleveland Golf Links and England Coastal Path	Operation	Air Quality Receptor: O2 Visual Receptor: Viewpoint 7
Receptor Group 4	Residential Property Marsh House Farm, Redcar	Operation	Air Quality Receptor: O1 Noise Receptor: NSR H5
Receptor Group 5	Residential Properties located on Broadway West, Redcar	Operation	Air Quality Receptor: O6 Noise Receptor: NSR H6