


# REDCAR ENERGY CENTRE APPENDIX 4.1

## Scoping Report and Scoping Opinion



Redcar Energy Centre  
Environmental Statement  
July 2020

# REDCAR ENERGY CENTRE

## Environmental Statement Scoping Report



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## GLOSSARY

Term	Description
CIEEM	Chartered Institute of Ecology and Environmental Management
C&I	Commercial and Industrial waste
DBA	Desk Based Assessment
EfW	Energy from Waste
EIA	Environmental Impact Assessment
ERF	Energy Recovery Facility
ES	Environmental Statement
IBA	Incinerator Bottom Ash
IEF	Important Ecological Feature
FRA	Flood Risk Assessment
HRA	Habitats Regulation Assessment
LNR	Local Nature Reserve
MSW	Municipal Solid Waste
MWe	Mega Watts of electricity
NNR	National Nature Reserve
OS	Ordnance Survey
REC	Redcar Energy Centre
RDF	Refuse Derived Fuel
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific
ZTV	Zone of Theoretical Visibility



# 1 INTRODUCTION

- 1.1 This Scoping Report has been prepared by RPS on behalf of Redcar Holdings Limited (hereafter referred to as 'the Applicant'). The report sets out the proposed scope of the Environmental Impact Assessment (EIA) for Redcar Energy Centre (REC) on land at the Redcar Bulk Terminal (hereafter referred to as the 'Application Site') as shown on Figure 1: Site Location Plan.
- 1.2 The proposed REC (hereafter referred to as 'the proposed development') will include:
- a Materials Recovery Facility incorporating a Bulk Storage Facility;
  - an Energy Recovery Facility; and
  - an Incinerator Bottom Ash recycling facility.
- 1.3 The REC would be capable of generating up to 49.9 Mega Watts of electricity (MWe) from up to 450,000 tonnes per annum of mixed residual Municipal Solid Waste, Commercial and Industrial waste and/or Refuse Derived Fuel.
- 1.4 This Scoping Report sets out the proposed approach and key issues to be included within the EIA process. The purpose of this document is to provide information to Redcar and Cleveland Borough Council to enable a Scoping Opinion to be made under Regulation 15 of the Town and Country (Environmental Impact Assessment) Regulations 2017, as amended (hereafter referred to as 'the EIA Regulations'). A letter to the Council requesting such an opinion accompanies this report. It is also intended that this report will support future consultation by the Applicant with statutory and non-statutory consultees and stakeholders, building on consultation undertaken to date.

## Purpose of EIA

- 1.5 EIA is the process of identifying and assessing the significant effects likely to arise from a proposed development. This requires comparing the likely changes to the environment (where these changes arise as a consequence of the proposed development) with the existing baseline conditions and the predicted future baseline conditions in the absence of the proposed development.
- 1.6 The process of identifying and agreeing the issues to consider within the Environmental Statement (ES) (the report of the EIA process) is known as scoping. Scoping is not a mandatory requirement, however it is recognised as a useful means of identifying the main effects of a proposed development on the environment.
- 1.7 The identification of the main effects of a proposed development through scoping is an important preliminary procedure which sets the context for the study. Through the scoping exercise, the key environmental issues are identified at an early stage of the EIA process. This allows subsequent work to focus on those environmental topics for which significant effects may arise as a result of a proposed development.

## Purpose of this Report

- 1.8 This report sets out the proposed scope of the ES, which will be prepared in accordance with the EIA Regulations. The ES will support the planning application to be submitted to Redcar and Cleveland Borough Council.
- 1.9 The intention of this scoping exercise is to gain agreements from all key parties on the scope of the assessment and the proposed methodology for gathering baseline information and undertaking the assessment.

1.10 This Scoping Report has been informed by the following:

- desk-top studies, site visits and surveys;
- review of relevant websites, such as those provided by statutory consultees;
- local planning policy;
- the EIA Regulations and EIA good practice guidance; and
- environmental assessment experience of other similar developments.

### **The Applicant**

1.11 The Applicant for the proposed development is Redcar Holdings Limited, is a joint venture between PMAC Energy (a waste management company specialising in the supply of waste) and Low Carbon W2E Limited which is an experienced investor and developer of waste to energy facilities in the UK.

### **Public Consultation**

1.12 The Applicant has set up a website for the proposed development (PMAC, 2020). As part of the consultation process, the Applicant would continue to engage with the local community in order to inform local people about the proposals, to explain the development and its likely effects and to take on board any concerns or issues. The ES will include a summary of the pre-application public consultation carried out.



## 2 THE SITE AND THE PROPOSED DEVELOPMENT

### The Site and its Surroundings

- 2.1 The Application Site is located approximately 4.5 km west of Redcar town centre and 8.5 km to the north east of Middlesbrough town centre (Figure 1: Site Location Plan). The Application Site occupies an area of approximately 10.1 hectares (ha) and currently forms part of the Redcar Bulk Terminal. It comprises predominantly open land which has been used for the storage of materials from the terminal. There are also a number of small corrugated metal buildings located in the east of the Application Site.
- 2.2 The industrial site and associated infrastructure of the Teesside Steel Works borders the eastern edge of the site, with several of its outlying buildings making up the southern border of the Application Site. The steel works are currently redundant, and negotiations are ongoing for its sale. It is expected to be redeveloped to industrial use, however its specific use is unknown at this stage.
- 2.3 The north and north eastern boundaries of the Application Site are formed by an earth bund approximately 2 to 3 metres high, beyond which is an area of sand dunes associated with Coatham Sands. Coatham Sands is separated from the mudflats of Bran Sands along the mouth of the Tees Estuary by an area of reclaimed land known as South Gare.
- 2.4 An access road for the Redcar Bulk Terminal (and the Application Site) runs along the south west of the Application Site.
- 2.5 The surrounding landscape to the south, east and west is heavily dominated by industrial, distribution and storage activities. Major facilities and infrastructure in close proximity to the Application Site include:
- the docks associated with the Redcar Bulk Terminal which are located approximately 950 metres to the west;
  - PD Ports Teesport and associated areas of storage, a major deep-sea complex handling 28 million tonnes per year, is located approximately 2.5 km to the south;
  - Tesco Distribution Teesport is located approximately 1.8 km to the south of the Application Site which acts as a distribution warehouse to its stores;
  - BOC gas plant for the production of industrial gas is located approximately 2.5 km to the south east of the Application Site;
  - the biomass fuelled Teesport Renewable Energy Plant, which is due to be commissioned in 2020, is situated to approximately 3 km to the south west of the Application Site and the Tata steel works is situated 3 km to the south east;
  - a large water treatment works, Bran Sands, operated by Northumbria Water is located approximately 1.8 km to the south east of the Application Site;
  - Able Port - used for shipbreaking and decommissioning of oil rigs - is located approximately 3.5 km to the west of the Application Site, on the opposite side of the Tees Estuary;
  - Hartlepool Nuclear power station is located directly adjacent to Able Port on the opposite side of the Tees Estuary from the Application Site; and
  - the Teesside Refinery is located approximately 1.6 km to the south west of the Application Site. The refinery was both an oil refinery and chemical plant and refining was suspended in 2009, however, the site continues to operate as a terminal and storage facility.
- 2.6 The closest residential area is Dormanstown, approximately 3.4 km to the south east of the Application Site which contains a primary school, children's centre, post office and an industrial area.

- 2.7 The Application Site is adjacent to the Teesmouth and Cleveland Coast Site of Special Scientific Interest (SSSI) and the site itself is located within the SSSI Impact Risk Zone. The SSSI forms part of the Teesmouth and Cleveland Special Protection Area (SPA) and Ramsar site. In addition, the Saltholme Nature Reserve is approximately 700 metres to the north on Bran Sands.
- 2.8 With regards to historical and archaeological interest, the Application Site comprises disturbed ground, used for industrial purposes and there are no listed buildings within 2 km.

### **Project Description**

- 2.9 The proposed development includes the following key operational components:
- a Material Recovery Facility incorporating a Bulk Storage Facility;
  - an Energy Recovery Facility; and,
  - an Incinerator Bottom Ash Recycling Facility.
- 2.10 These key operational components may operate as a single facility or as standalone projects independent of each other with some or no inter-relationship. The ERF may receive residual waste directly from the MRF and from elsewhere. The IBA Recycling Facility may receive IBA directly from the ERF and from elsewhere.

### **Material Recovery Facility and incorporating Bulk Storage Facility**

- 2.11 The Materials Recovery Facility (MRF) will receive up to 200,000 tonnes per annum (tpa) of Municipal Solid Waste (MSW), and/ or Commercial and Industrial (C&I) waste. The specialist facility will separate, recover and store the waste sorting it into recyclable and non-recyclable materials i.e. residual waste.
- 2.12 The recyclable material will be reprocessed into products, materials or substances for their original purposes or new ones as part of the circular economy.
- 2.13 The residual non-recyclable materials left behind will be processed into a waste fuel or Refused Derived Fuel (RDF) from which energy will be recovered either in the adjacent ERF or elsewhere in the wider economy.
- 2.14 In addition, the proposed MRF building will also incorporate a dedicated Bulk Storage Facility where both unprocessed and processed recyclable materials, and residual waste and RDF can be stored and/ or bulked up for onward transportation off site.
- 2.15 The process equipment will be wholly enclosed within the MRF building.

### **Energy Recovery Facility**

- 2.16 The proposed Energy Recovery Facility (ERF) will recover energy from residual waste comprising of mixed C&I waste, MSW; and / or RDF using a two-line process.
- 2.17 The proposed ERF will be capable of generating up to 49.9 MW(e) of electricity from up to 450,000 tonnes per annum of waste. The mixed waste stream will have a predicted average net calorific value of 9.2 MJ/kg.
- 2.18 The sources of treated waste fuel have yet to be determined as they will be subject to the securement of commercial contracts. It is, however, envisaged that the majority of the throughput will be made up of RDF or C&I waste sourced regionally and nationally. MSW will also be sourced where contracts are available.
- 2.19 The electricity generated by the ERF will be provided:
- directly to the National Grid; and / or alternatively,

- directly by private wire agreement to existing and future planned business in the wider South Tees Development Corporation area including energy intensive users such as advanced manufacturing.

- 2.20 In addition, the proposed ERF will be a CHP Ready facility to ensure that where feasible and viable, it would be capable of exporting that energy to end users with minimal modification should existing and future planned users in the wider area be willing and able to use the thermal energy produced by the ERF.
- 2.21 It is likely that waste will be brought to the site along the existing strategic highway network and highway infrastructure by heavy goods vehicles (HGVs) with a minimum load of 6 tonnes. In addition, where feasible waste may also be brought to the site utilising the existing rail and port infrastructure.
- 2.22 The facility would utilise proven technology, which is designed to treat residual MSW and C&I waste that would otherwise go to landfill or require some other form of treatment, and RDF.
- 2.23 The EfW process equipment will be wholly enclosed within buildings. The main ERF building will be divided into a number of operational areas, relating to different functions of the plant process. These functions include:
- waste reception and storage;
  - combustion of waste; and
  - energy recovery.
- 2.24 Combustion gases will be subject to flue gas treatment to achieve the stringent limits set under the EU Industrial Emissions Directive (IED) (Council Directive 2010/75/EU), which would be enforced by the Environment Agency through the Environmental Permit, before being released to atmosphere via the stack. The flue gas treatment system will be subject to the assessment of Best Available Techniques, which is a requirement of the Environmental Permitting Regulations process.

### Incinerator Bottom Ash Recycling Facility

- 2.25 Incinerator Bottom Ash (IBA) is the inert or incombustible material from the combustion process. This will be equivalent to approximately 25% by weight of the waste treated which would equate to up to 112,500 tonnes per annum of IBA.
- 2.26 The provision of an IBA Recycling Facility will allow the IBA to be managed as a resource which is recovered and recycled and thus moved up the waste hierarchy.
- 2.27 The IBA Recycling Facility will include the infrastructure that is required to receive, store and process the IBA along with producing recyclable metals and creating secondary Incinerator Bottom Ash Aggregate (IBAA) which are used in the construction industry. During the processing of the IBA, both ferrous and non-ferrous metals will also be removed and recycled.

### Construction

- 2.28 The proposed development is anticipated to utilise standard construction methodologies (including piling) for infrastructure and buildings. The existing buildings will be demolished and a new circulatory road network installed.
- 2.29 The timing of the proposed development will be dependent on securing planning permission and the discharge of planning conditions. The indicative construction programme envisages approximately 32 months from start on site to end of commissioning.

## Planning Context

- 2.30 The Application Site is located within the administrative boundary of Redcar and Cleveland Borough Council. The Redcar and Cleveland Local Plan ('RCLP') (May 2018), and the Tees Valley Joint Minerals and Waste Core Strategy DPD ('TVCS') (September 2011) together set out the relevant strategic policy provisions of statutory development plan.
- 2.31 The Redcar and Cleveland Local Plan sets out the strategic policy for the South Tees Development Corporation ('STDC') area in which the development site is located. The RCLP sets out the spatial strategy for the area through its strategic economic aims:
- delivering significant economic growth and job opportunities through the South Tees Development Corporation;
  - support for the regeneration of the South Tees Development Corporation area through the implementation of the South Tees Area Supplementary Planning Document;
  - growing the environmental and recycling sector;
  - supporting the expansion and protection of the port and logistics sector; and
  - taking a lead role in supporting the future regeneration of the steel sites as part of the South Tees Development Corporation.
- 2.32 The RCLP also sets out that further strategic policy support is derived through the Application Site's location within an area where land and buildings will continue to be developed and safeguarded for employment uses including specialist uses, including suitable employment related sui generis users and general employment uses. Such uses would include waste management facilities such as the proposed REC. The RCLP requires proposals within the South Tees Development corporation to have regard to the South Tees Area SPD ('STASPD') (2018).
- 2.33 The TVCS identifies that proposals for large waste management facilities will be supported in areas including that south of the River Tees in which the Application Site is located.
- 2.34 The STASPD supports the economic and physical regeneration of the STDC area, one of its key objectives is to promote and support development uses aligned with a low carbon, circular economy while delivering redevelopment within a framework of reduced energy costs and waste minimisation.

### 3 GENERAL APPROACH TO EIA

#### Requirement for Environmental Impact Assessment

- 3.1 The legislative framework for EIA is set by European Directive 2011/92/EU, as amended by Directive 2014/52/EU (collectively referred to as the EIA Directive). Directive 2014/52/EU requires Member States to transpose its requirements into national law by 16 May 2017 and set out arrangements for a transitional period from the regime laid down by Directive 2011/92/EU.
- 3.2 The EIA Directive requires an EIA to be completed in support of an application for development consent for certain types of project. For projects of this type in England, the European legislative requirements are transposed into law by the EIA Regulations.
- 3.3 The process of identifying whether or not EIA is required for a development is known as screening. Projects of the type listed in Schedule 1 of the Regulations require EIA in all cases. Projects of the type listed in Schedule 2 may require EIA in certain circumstances.
- 3.4 The proposed development would fall within the category 10 of Schedule 1 of the Regulations: *'10. Waste disposal installations for the incineration or chemical treatment (as defined in Annex I to Directive 2008/98/EC under heading D9) of non-hazardous waste with a capacity exceeding 100 tonnes per day.'*
- 3.5 Therefore, the proposed development is classed as an EIA development and an ES must be submitted alongside a planning application.

#### Information Required

- 3.6 Although there is no statutory provision as to the form of an ES, it must contain the information specified in Regulation 18(3), including any relevant information specified in Schedule 4 of the EIA Regulations, as set out below:
1. *A description of the development including in particular:*
    - a. *A description of the location of the development;*
    - b. *A description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;*
    - c. *A description of the main characteristics and the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the minerals and natural resources (including water, land, soil and biodiversity) used;*
    - d. *An estimate, by type and quantity, of expected residues and emissions (such as water, air, soils and sub soil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.*
  2. *A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects;*
  3. *A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.*

4. *A description of the factors specified in regulation 4(2) likely to be significantly affected by the development; population, human health, biodiversity (for example fauna and flora), land, (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including archaeological aspects, and landscape.*
5. *A description of the likely significant effects of the development on the environment resulting from, inter alia:*
  - a. *The construction and existence of the development, including, where relevant, demolition works;*
  - b. *The use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;*
  - c. *The emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;*
  - d. *The risks to human health, cultural heritage or the environment (for example due to accidents or disasters);*
  - e. *The cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;*
  - f. *The impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;*
  - g. *The technologies and the substances used.*

*The description of the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project, including in particular those established under Council Directive 92/43/EEC(a) and Directive 2009/147/EC(b).*

6. *A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.*
7. *A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.*
8. *A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU(c) of the European Parliament and of the Council or Council Directive 2009/71/Euratom(d) or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.*

9. *A non-technical summary of the information provided under paragraphs 1 to 8.*
10. *A reference list detailing the sources used for the descriptions and assessments included in the environmental statement.*

3.7 The information supplied in the ES will provide a clear understanding of the likely significant effects of the proposed development upon the environment. The following sections outline the overall approach to EIA in order to meet these legal requirements.

### Structure of the Environmental Statement

3.8 The ES will be structured logically, enabling all relevant environmental information to be found quickly and easily. The ES will describe the EIA process and its findings and will include the following sections.

- Non-Technical Summary (as a stand-alone document);
- Written Statement;
- Figures and
- Appendices.

### EIA Methodology

#### Relevant EIA Guidance

3.9 The EIA process will take into account relevant government or institute guidance, including:

- Department for Communities and Local Government (2014) Planning Practice Guidance at <http://planningguidance.planningportal.gov.uk>;
- Department of the Environment, Transport and the Regions (DETR) (1997) Mitigation Measures in Environmental Statements. HMSO;
- Highways England et al. (2019) Design Manual for Roads and Bridges, Volume 11, Section 2, Part 4. LA 104;
- Institute of Environmental Management and Assessment (2004) Guidelines for Environmental Impact Assessment;
- Institute of Environmental Management and Assessment (2011) The State of Environmental Impact Assessment Practice in the UK. Special Report;
- Institute of Environmental Management and Assessment (2015a) Environmental Impact Assessment: Guide to Shaping Quality Development;
- Institute of Environmental Management and Assessment (2015b) Climate Change Resilience and Adaptation;
- Institute of Environmental Management and Assessment (2016) Environmental Impact Assessment: Guide to Delivering Quality Development;
- Institute of Environmental Management and Assessment (2017) Environmental Impact Assessment: Assessing Greenhouse Gas Emissions and Evaluating their Significance; and
- Institute of Environmental Management and Assessment (2017) Health in Environmental Impact Assessment: A Primer for a Proportional Approach.

3.10 Other topic-specific specialist methodologies and good practice guidelines will be drawn on as necessary.

## Key Elements of the General Approach

- 3.11 The assessment of each environmental topic will form a separate chapter of the ES. For each environmental topic, the following will be addressed:
- methodology and assessment criteria;
  - description of the environmental baseline (existing conditions);
  - identification of likely effects;
  - evaluation and assessment of the significance of identified effects, taking into account any measures designed to reduce or avoid environmental effects which form part of the project and to which the developer is committed; and
  - Identification of any further mitigation measures envisaged to avoid, reduce and, if possible, remedy adverse effects (in addition to those measures that form part of the project).

## Methodology and Assessment Criteria

- 3.12 Each topic chapter will provide details of the methodology for baseline data collection and the approach to the assessment of effects. Details of the proposed approach for each topic are provided in Section 5 of this Scoping Report. Each identified environmental topic will be considered by a specialist in that area. The identification and evaluation of effects will take into account relevant topic-specific guidance where available.

## Description of the Environmental Baseline

- 3.13 The existing and likely future environmental conditions in the absence of the proposed development are known as 'baseline conditions'. Each topic-based chapter will include a description of the current (baseline) environmental conditions. The baseline conditions at the site and within the study area form the basis of the assessment, enabling the likely significant effects to be identified through a comparison with the baseline conditions.
- 3.14 The baseline for the assessment of environmental effects will primarily be drawn from existing conditions during the main period of the EIA work. Consideration will also be given to any likely changes between the time of survey and the future baseline for the construction and operation of the project. In some cases, these changes may include the construction or operation of other planned developments in the area. Where such developments are built and operational at the time of writing and data collection, these will be considered to form part of the baseline environment. Where sufficient and robust information is available, such as expected traffic growth figures, other future developments will be considered as part of the future baseline conditions. In all other cases, planned future developments will be considered within the assessment of cumulative effects.
- 3.15 The consideration of future baseline conditions will also take into account the likely effects of climate change, as far as these are known at the time of writing. This will be based on information available from the UK Climate Projections project (UKCP18), which provides information on plausible changes in climate for the UK (Environment Agency and Met Office, 2018) and on published documents such as the UK Climate Change Risk Assessment 2017 (Committee on Climate Change, 2016).

## Assessment of Effects

- 3.16 The EIA Regulations require the identification of the likely significant environmental effects of the proposed development. Each topic chapter will take into account both the sensitivity of receptors affected and the magnitude of the likely impact in determining the significance of the effect.



## Sensitivity or Importance of Receptors

- 3.17 Receptors are defined as the physical resource or user group that would be affected by a project. The baseline studies will identify potential environmental receptors for each topic and will evaluate their sensitivity to the proposed development. The sensitivity or importance of a receptor may depend, for example, on its frequency or extent of occurrence at an international, national, regional or local level.

## Magnitude of Impact

- 3.18 Impacts are defined as the physical changes to the environment attributable to the project. For each topic, the likely environmental impacts will be identified. The magnitude of the impact will be described using defined criteria within each topic chapter.
- 3.19 The categorisation of the impact magnitude may take into account the following four factors:
- extent;
  - duration;
  - frequency; and
  - reversibility.
- 3.20 Impacts will be defined as either adverse or beneficial. Depending on discipline, they may also be described as:
- direct: Arise from activities associated with the project. These tend to be either spatially or temporally concurrent;
  - indirect: Impacts on the environment which are not a direct result of the project, often produced away from the project site or as a result of a complex pathway.
- 3.21 Impacts will be divided into those occurring during the construction phase, during operation and those occurring during decommissioning. Where appropriate, some chapters may refer to these as temporary and permanent impacts.

## Significance of Effects

- 3.22 Effect is the term used to express the consequence of an impact (expressed as the 'significance of effect'), which is determined by correlating the magnitude of the impact to the sensitivity of the receptor or resource.
- 3.23 The magnitude of an impact does not directly translate into significance of effect. For example, a significant effect may arise as a result of a relatively modest impact on a resource of national value, or a large impact on a resource of local value. In broad terms, therefore, the significance of the effect can depend on both the impact magnitude and the sensitivity or importance of the receptor.
- 3.24 Levels of significance that will be used in the assessment include, in descending order:
- substantial;
  - major;
  - moderate;
  - minor; and
  - neutral.

- 3.25 Where an effect is described as 'neutral' this means that there is either no effect or that the significance of any effect is considered to be negligible. All other levels of significance will apply to both adverse and beneficial effects. These significance levels will be defined separately for each topic within the methodology sections. In all cases, the judgement made as to significance will be that of the author of the relevant chapter with reference to appropriate standards/guidelines where relevant.

### Cumulative Effects

- 3.26 The cumulative effects of the proposed development in conjunction with other proposed schemes will be considered. The cumulative effects assessment will consider any developments that are formally in the planning system at the time of submission. Developments that are built and operational at the time of assessment will be considered as part of the baseline. Due to the location of the proposed development near the boundary of Redcar and Cleveland Borough Council local authority area, relevant applications to the west of the site in Hartlepool and Stockton-on-Tees have also been considered. A list of proposed developments and planning policy allocations likely to be included within the cumulative assessment is provided in Appendix A. Redcar and Cleveland Borough Council will be consulted on the development types that might have an effect in combination with the proposed scheme.
- 3.27 In addition to planning applications, a number of adopted Local Plan allocations have been identified (further information and allocations are provided in Appendix A).

### Mitigation Measures

- 3.28 The EIA Regulations require that where significant effects are identified '*a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce or, if possible, offset likely significant adverse effects on the environment*' should be included in the ES.
- 3.29 The development of mitigation measures is part of an iterative EIA process. Therefore, measures will be developed throughout the EIA process in response to the findings of initial assessments. The project that forms the subject of the planning application will include a range of measures designed to reduce or prevent significant adverse environmental effects arising, where practicable. In some cases, these measures may result in enhancement of environmental conditions. The assessment of effects will therefore take into account all measures that form part of the proposed development and to which the Applicant is committed.
- 3.30 The topic chapters will, therefore, take into account all measures that form part of the proposed development, including:
- measures included as part of the project design (sometimes referred to as primary mitigation);
  - measures to be adopted during construction to avoid and minimise environmental effects, such as pollution control measures. These measures would be implemented through a Code of Construction Practice (CoCP) to be submitted post consent; and
  - measures required as a result of legislative requirements.
- 3.31 Where required, further mitigation measures will be identified within topic chapters. These are measures that could further prevent, reduce and, where possible, offset any residual adverse effects on the environment.
- 3.32 In some cases, monitoring measures may be appropriate, for example, to ensure that proposed planting becomes established. Where appropriate, monitoring measures will be set out in the topic chapters.

## Summary Tables

- 3.33 Summary tables will be used to summarise the effects of the project for each environmental topic. These will be presented at the end of each of the topic chapters.

## 4 SCOPE OF ASSESSMENT

### Work Undertaken to Date

4.1 The following studies have been undertaken or are currently ongoing in relation to the proposed development.

- Wintering bird survey;
- Breeding bird survey and Intertidal Surveys; and
- Phase 1 Habitat Survey.

### Topics Scoped Out of Assessment

4.2 Taking into account the findings of the above studies, together with knowledge of the Application Site and surrounding area, it is proposed that the following topics are not included in the scope of the ES:

- land use, agriculture and recreation;
- historic environment;
- socioeconomics and community;
- human health;
- climate change;
- daylight, sunlight and microclimate;
- material assets;
- major accidents and disasters;
- residues and emissions;
- waste; and
- radiation and heat

4.3 Details on why these topic areas have been scoped out of the assessment are provided in the following sections.

### Land Use, Agriculture and Recreation

4.4 The Application Site is located within Redcar Bulk Terminal and comprises of predominantly open land which has been used for the storage of materials from the terminal. There are no Public Rights of Way (PRoW) or public access within or adjacent to the Application Site. The nearest PRoW is the Teesdale Way located approximately 175 metres to the north of the Application Site. This PRoW provides access to South Gare Lighthouse via the South Gare Breakwater and Tod Point Road.

4.5 The construction of the proposed development would not result in the loss of any agricultural land. The proposed development is likely to be visible from the Teesdale Way PRoW, however due to the location of the site within an industrial area, effects are not likely to be significant. The proposed development would not result in the loss or diversion of any recreation facilities.

### Historic Environment

4.6 There are no Scheduled Monuments or Listed Buildings located within or adjacent to the Application Site. The nearest listed buildings are located approximately 2.2 km to the north and 2.2 km to south east of the Application Site. The buildings to the south east comprise three Grade

II listed buildings at the same location: Marsh Farmhouse and Farm Cottage, Barn and Stable, and Garden Wall. A further Grade II listed building - South Gare Lighthouse - is situated on the headland to the north of the site.

- 4.7 The Application Site does not contribute to the setting or significance of any designated asset outside of its boundary and therefore, the proposed development will not impact upon the significance of any designated heritage assets.
- 4.8 The proposed development is located on a brownfield site which has previously been used for storage for the bulk shipping terminal nearby. Due to the Application Site's recent development history, the likelihood of any buried remains being present beneath the site is low.
- 4.9 Considering the historic environment baseline, it is not likely that the proposed development would result in significant effects in terms of historic assets or buried archaeology. Therefore, it is proposed that the historic environment is scoped out of the ES. However, the ES will include a Historic Desk Based Assessment (DBA) outlining the baseline environment and the likely potential for buried archaeology as a technical appendix. This assessment will provide further evidence that significant effects are not considered likely.

### Socioeconomics and Community

- 4.10 At the peak of construction, approximately 450 people may work at the Application Site. During operation, the proposed development is likely to result in the creation of up to 50 full time equivalent employees comprising operation and maintenance staff, clerical and administrative staff and plant management. In addition, an average of 100 contractors will be employed for planned annual shutdowns.
- 4.11 Given the temporary nature of the construction phase and the numbers of predicted employees during the operation phase, no additional pressures are envisaged on housing and on existing community facilities and significant effects are unlikely to occur.

### Human Health

- 4.12 The Application Site is located within an existing industrial area and is over 2km from the nearest residential property.
- 4.13 The consideration of an increase in traffic during the construction and operational phases of the proposed development would be considered within the Traffic and Transport chapter of the ES (see Table 4.1). Similarly, the effects of the proposed development in relation to air quality (including construction dust) would be included in the Air Quality chapter of the ES respectively (see Table 4.1).
- 4.14 The proposed redevelopment is not likely to generate significant construction traffic flows and best practice measures would be implemented during the construction phase to manage noise and air quality impacts in accordance with a CoCP. Therefore, a separate assessment of health impacts associated with these pathways is not considered necessary within this ES.
- 4.15 Some employment would be generated by the proposed development during construction and operation, however, it is not anticipated that the net increase in jobs would be sufficient to generate significant health effects.
- 4.16 Given the nature of the proposed development, the consideration of these topic areas in other sections of the ES and the lack of any additional health pathways likely to result in significant effects, a separate health assessment in the form of an additional chapter or Health Impact Assessment is not considered necessary in this instance and is proposed to be scoped out of the EIA process.

## Climate Change

- 4.17 The EIA Regulations require consideration of climate change. Although a separate climate change chapter is not proposed, climate change would be considered throughout the ES. The proposed approach is set out below.

### Climate Change Resilience

- 4.18 Resilience to future climate change will be considered during the design process. The design of the proposed redevelopment will take into account potential future climate change scenarios, for example, future flood risk and resilience to extreme weather events. The conceptual surface water drainage strategy for the proposed development will be designed to take flood risk into account, with an allowance for climate change. The ES would set out details of the proposed redevelopment's resilience to climate change in Chapter 2 (Project Description) and Chapter 8 (Hydrology and Flood Risk) of the ES.

### Climate Change: Changes to Future Environmental Conditions

- 4.19 Consideration of predicted changes in baseline environmental conditions, including changes resulting from climate change, will be set out within each ES topic chapter (Chapters 6 to 12), where robust information is available at the time of writing.
- 4.20 This will be based on the information available from the UK Climate Projections project (UKCP18), which provides information on plausible changes in the climate for the UK (Environment Agency and Met Office, 2018) and on published documents such as the UK Climate Change Risk Assessment 2017 (Committee on Climate Change, 2016).
- 4.21 Climate data from the UKCP18 database will be compiled for a 25 km<sup>2</sup> grid square containing the site, based on a medium emissions scenario. Mean air temperature and annual average precipitation data for the period 2020 to 2079 will be used to inform the consideration of how environmental conditions may change at the Application Site and in future.
- 4.22 The assessment of effects for each topic will take into account identified trends or changes predicted to arise as a result of climate change.

### Effects of the Project on Climate Change

- 4.23 Greenhouse gas emissions can occur throughout the lifecycle of a development, including during construction and operation of a proposed development. This can be affected by factors such as material use and energy demand.
- 4.24 The design of the proposed development would give consideration to measures to minimise and mitigate greenhouse gas emissions, where possible, such as measures to control energy demand and improve energy efficiency. Such measures would be set out in the Design and Access Statement and summarised in the Project Description chapter (Chapter 2) of the ES.
- 4.25 No further assessment of greenhouse gas emissions is considered necessary or appropriate at this stage.
- 4.26 Taking into account the above approach, it is not considered that a separate chapter on climate change is required to form part of the ES.

### Daylight, Sunlight and Microclimate

- 4.27 All the proposed works for the proposed development will be undertaken within the boundaries of the Application Site. Due to the location of the proposed works and the nature of the surrounding land use it is not considered likely that the proposed development will have significant effects in

relation to daylight and sunlight. In addition, the nature of the proposed development is not likely to result in microclimate changes and therefore this topic is also scoped out of the assessment.

### Material Assets

4.28 The EIA Regulations refer to 'material assets', including architectural and archaeological heritage. The phrase 'material assets' has a broad scope, which may include assets of human or natural origin, valued for socio-economic or heritage reasons. Material assets are in practice considered across a range of topic areas within an ES, in particular the socio-economic and historic environment chapters. These topics are proposed to be scoped out of the assessment as significant effects are not considered likely (outlined above), therefore a separate chapter on material assets is proposed to be scoped out of the assessment.

### Major Accidents and Disasters

4.29 The EIA regulations require consideration of vulnerability to major accidents and/or disasters. The risk of major accidents and disasters will be considered in the project description chapter of the ES. Furthermore, each topic chapter will assess the likely environmental effects related to a major accident or disaster which could occur from that particular discipline. Therefore, a separate chapter assessing the risk of major accidents and disasters is not considered necessary.

### Residues and Emissions

4.30 The generation and management of flue gas treatment residue will be described in Chapter 2: Project Description of the ES. No other residues will be generated by the proposed development. Stack emissions will be described in Chapter 11: Air Quality and will be managed through the Environmental Permit. On this basis, a separate chapter is considered unnecessary.

### Waste

4.31 Wastes generated from the construction of the proposed development will be managed through a Site Waste Management Plan that will be prepared post consent. IBA generated from the operation of the proposed development will be recycled at the on-site facility and will be managed through Environmental Permit along with other operational wastes. A summary of the construction and operational wastes will be provided in the Project Description chapter of the ES. No significant effects are envisaged and therefore, a separate chapter is considered unnecessary.

### Radiation and Heat

4.32 Given the nature of the proposed development, no significant radiation or heat effects are anticipated, and these effects have been scoped out of the assessment.

## Content of the Environmental Statement

4.33 Table 4.1 identifies the chapters that are proposed for inclusion in the ES. Further details of the approach to the assessment and its scope are provided in Section 5 of this Scoping Report.

**Table 4.1: Structure of the ES**

Structure of ES	
Non-Technical Summary	Summary of the ES using non-technical terminology
<b>Volume 1: Text</b>	
	Glossary
Chapter 1	Introduction

**Structure of ES**

Chapter 2	Project Description
Chapter 3	Need and Alternatives Considered
Chapter 4	Environmental Assessment Methodology
Chapter 5	Planning Policy
Chapter 6	Landscape and Visual Resources
Chapter 7	Ecology and Nature Conservation
Chapter 8	Hydrology and Flood Risk
Chapter 9	Geology, Hydrogeology and Contamination
Chapter 10	Traffic and Transport
Chapter 11	Air Quality
Chapter 12	Noise and Vibration
Chapter 13	Other Environmental Effects

**Volume 2: Figures**

Including all figures and drawings to accompany the text.

**Volume 3: Appendices**

Including specialist reports forming technical appendices to the main text.

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## 5 TECHNICAL ASSESSMENTS

### Chapter 1: Introduction

- 5.1 This chapter will provide the introduction to the ES, including details of the application, need for EIA and the structure of the ES.

### Chapter 2: Project Description

- 5.2 The ES will include a description of the project, which will form the basis of the assessment of effects. The EIA Regulations require an ES to include:

*'A description of the development comprising information on the site, design and size and other relevant features of the development.'*

- 5.3 This project description chapter will include details of the site, together with a description of the key components of the proposed development. The description will include the following information, as far as practicable at the time of writing:

- Construction phase - a description of the key works, activities and processes that would be required during the construction phase;
- Operational phase - a description of the completed development and its use;
- Decommissioning phase - a description of the key works, activities and processes that would be required during the decommissioning phase.

- 5.4 Where options remain at the time of the assessment (with regard to construction techniques, for example), the ES will provide a clear explanation of the assumptions made. Where appropriate, the realistic worst-case scenario will be assessed.

- 5.5 Where mitigation measures have been identified and developed through the EIA process and have been incorporated as part of the project, details of these measures will be set out within the project description chapter.

### Chapter 3: Need and Alternatives Considered

- 5.6 This chapter will briefly set out the need for the proposed development. In addition, the EIA Regulations require the alternatives considered by the applicant to be set out in the ES:

*'A description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment.'*

- 5.7 This chapter will summarise the reasons for the selection of the site and provide an outline of the alternatives considered during the EIA process, including a description of the alternative design and layout options that have been considered.

### Chapter 4: Environmental Assessment Methodology

- 5.8 Details of the overall approach to EIA will be set out in this chapter, together with details of the scoping process, consultation undertaken and the overall approach to the assessment of significance. Topic specific methodologies, such as survey methods, will be provided in each topic chapter.

## Chapter 5: Planning Policy

- 5.9 This chapter will provide an overview of the relevant legislative and planning policy framework in relation to the proposed development. It will inform the preparation of the ES as well as the growth context in which the environmental effects will be assessed. The chapter will consider national and local policy documents, where relevant. Legislation, policy and guidance relevant to each environmental topic will be summarised in the topic chapter. A separate Planning Statement will also be submitted with the planning application.

## Chapter 6: Landscape and Visual Resources

### Baseline Information

- 5.1 The Application Site is not subject to any statutory or non-statutory landscape designations. It is located within an industrial area on the east bank of the Tees Mouth. Immediately to the east of the proposed development site is the former steel works and to the south a railway line servicing the bulk terminal. To the north of the site are Bran Sands and Coatham Sands comprising areas of sand dunes, beaches and intertidal mud flats.
- 5.2 The Countryside Agency (now Natural England) undertook a landscape characterisation of England, which resulted in the publication of national character areas. The project site lies within National Character Area (NCA) 23: Tees Lowlands.
- 5.3 Whilst the NCA is of relevance, the assessment will also consider the potential landscape effects at the more detailed district level.
- 5.4 The Application Site Lies within the boundary of Redcar and Cleveland Borough Council (RCBC) and the current landscape character assessment for this area is the Redcar and Cleveland Landscape Character Assessment (RCBC, April 2006) and further information within the RCBC Local Development Framework Landscape Character Supplementary Planning Document (RCBC, March 2010).
- 5.5 There are no Public Rights of Way (PRoW) within the Application site or adjacent to the boundary. The nearest PRoW is the Teesdale Way located approximately 175 metres to the north of the Application Site. This PRoW provides access to South Gare Lighthouse via the South Gare Breakwater and Tod Point Road. Existing visual receptors would be restricted to workers at the nearby industrial sites and people on vessels travelling along the Tees River. There may be some visibility of the site from the west bank of the River Tees which would, in the main, be restricted to the industrial areas.

### Proposed Approach

#### Baseline Studies

- 5.6 The baseline assessment will include an assessment of the existing landscape character within the study area. The studies will identify the landscape/townscape resources and character of the surrounding area and examine how the proposed development will affect individual landscape features, elements, characteristics and the wider landscape/townscape character.
- 5.7 Baseline information on the landscape/townscape will be gathered through a combination of desk studies, consultation and field surveys. Documents used in the assessment may include aerial photographs, Ordnance Survey (OS) maps and published landscape character assessments.
- 5.8 Field surveys will be undertaken to gain a better understanding of the landscape and townscape of the Application Site and surrounding area, to determine its character and condition of the landscape resource and identify visual receptors and extent of views. The surveys will establish

the landscape/townscape resources that combine to give the distinct sense of place. Consultation will also take place with key statutory organisations/consultees.

- 5.9 Relevant landscape character assessments will be reviewed. Particular attention will be paid to the key landscape characteristics of the relevant landscape types/character areas of the Application Site and the surrounding areas.

### Assessment of Effects

- 5.10 The Landscape and Visual Impact Assessment (LVIA) undertaken as part of the Landscape and Visual Resources chapter, will identify and assess the likely significant effects that would arise as a result of the proposed development on the landscape and townscape resources (fabric, character and resource) and the visual impact experienced by receptors (people) in the context of the current baseline, i.e. the redundant steel works.
- 5.11 The LVIA will be based on the current published guidelines for landscape and visual assessment provided in:
- Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA) (Landscape Institute and Institute of Environmental Management & Assessment, 2013);
  - Landscape Character Assessment Guidance for England and Scotland (The Countryside Agency and Scottish Natural Heritage, 2002);
  - An Approach to Landscape Character Assessment (Natural England, 2014); and
  - Technical Guidance Note 06/19, Visual Representation of Development Proposals (Landscape Institute, September 2019).
- 5.1.1 In order to further determine the geographical extent of potential visibility, a computer-generated Zone of Theoretical Visibility (ZTV) model was generated. The ZTV broadly defines the study area for both the landscape character and visual assessment. A 25 km radius study area is proposed for this assessment due to the height of the project (up to 90 m Above Ordnance Datum). It is judged that any potential significant effects would lie within this radius.
- 5.12 The sensitivity of landscape and visual receptors will be assessed (through identification of the landscape resource's susceptibility to the proposed development/susceptibility of the visual receptor to change and value of the landscape resource/view), together with the predicted magnitude of impact on that receptor (through identification of the proposed development's size/scale, geographical extent and the duration and reversibility of effect). Combining sensitivity with magnitude of impact, a judgement will be made as to the significance of effect experienced by landscape resources and visual receptors during the construction phase, the operational and maintenance phase, as well as the decommissioning phase of the proposed development. A cumulative impact assessment will be undertaken of the developments within the Landscape and Visual Resources study area.
- 5.13 Where appropriate, mitigation measures will be identified to avoid or reduce landscape and visual effects as a result of the proposed development.

### Issues Proposed to be Scoped Out

- 5.14 No issues are proposed to be scoped out.

## Chapter 7: Ecology and Ornithology

### Baseline Information

- 5.15 The Application Site itself is fairly limited in terms of its ecological resource, however the Teesmouth and Cleveland Coast Site of Special Scientific Interest (SSSI) borders the site to the

north. The Teesmouth and Cleveland SSSI is an extensive mosaic of coastal freshwater habitats centred on the Tees Estuary. Habitats include sand dunes, saltmarshes, mudflats, rocky and sandy shores, saline lagoons, grazing marshes, reedbeds and freshwater wetlands. The SSSI includes the whole of the Tees Estuary. The Tees is heavily modified and the few semi-natural habitats that remain are nestled amongst industrial development including the busy container ports.

- 5.16 The coastal strip of the SSSI is predominantly sandy with rocky foreshores and includes large dune systems such as Coatham Sand Dunes adjacent to the Application Site.
- 5.17 The SSSI forms part of the Teesmouth and Cleveland SPA and Ramsar site located less than 100 metres from the site boundary. The SPA and Ramsar support internationally significant numbers of sea birds.
- 5.18 The Teesmouth National Nature Reserve is located approximately 1.8km to the west of the Application Site on the opposite side of the Tees Estuary. There are no local nature reserves within 2km of the site with the closest, Seaton Dunes and Common Local Nature Reserve, being located 3.7km to the north west of the Application Site also on the opposite side of the Tees Estuary. In addition, the Saltholme RSPB reserve is located approximately 5.6km to the south west of the Application Site
- 5.19 Further afield, the Northumbria Coast SPA and SSSI is located approximately 15km to the north west of the Application Site and the North York Moors SPA, SAC and SSSI is approximately 14km to the south.
- 5.20 A Phase 1 habitat survey was undertaken in September 2019. The Application Site itself is devoid of any notable ecological habitats or species. Whilst land to the north is of ecological significance, it is separated from the Application Site by a bund which is used by dog walkers throughout the day.
- 5.21 Breeding Bird and Intertidal Surveys were undertaken of the Application Site and a 500 metre buffer area during the bird breeding season in 2019 by RPS Ornithologists. Additionally, Winter Walkover Surveys of the intertidal area were completed in early 2020. The Application Site was largely found to be occupied by feral pigeons and gull species with a peregrine observed sitting on the stack and circling the site. The intertidal habitat to the north supports cormorant, gull species (black headed and herring gull) and meadow pipet, amongst numerous other species during the breeding season. Non-breeding surveys recorded species including oyster catcher, cormorant, dunlin, knot, redshank, turnstone and great-black back gull foraging and roosting on the intertidal and grassland habitat to the north of the Application Site.
- 5.22 The foreshore area is used for recreation and by bait-diggers at low tide, and with the industrial use of the area, it is likely that ecological species will be accustomed to a high level of disturbance.

## Proposed Approach

### Baseline Studies

- 5.23 The Ecology and Ornithology chapter will summarise the findings of the following baseline surveys previously undertaken for the site:
- 5.24 A desk study involving:
- A search of the Multi-Agency-Geographic-Information for the Countryside (MAGIC) website for freely available statutory information including information on statutory designations;
  - A review of the Tees Valley Wildlife Trust's databases
  - A Phase 1 habitat survey of the Application Site plus a 100 metre buffer;
  - Breeding Bird Survey and Intertidal Survey of the Application Site and a 500 metre buffer; and

- Wintering Bird Survey of the Application Site and a 500 metre buffer.

### Assessment of Effects

- 5.25 The assessment of ecological and ornithological effects for the ES chapter will be undertaken in accordance with the ecological impact assessment guidelines published by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018).
- 5.26 The ecological assessment will include evaluation of Important Ecological Features (IEFs) present at the site and surrounding area (with the proposed development's Zone of Influence), which may include protected sites, protected species, Priority Habitats and Priority Species. The evaluation will identify features on a geographical scale, based on that provided in the CIEEM guidance, as follows: International > National > County > District > Local > Site > Negligible.
- 5.27 In accordance with the CIEEM guidance, the purpose of the ecological assessment is to focus on those features that are most likely to be affected and are either protected or are of sufficient value to merit consideration of the EIA process, rather than consider the effects upon every feature that may be present, many of which may be common, widespread or robust. Accordingly, those features that are likely to be affected and which are statutorily protected or are deemed to be of at least local nature conservation value, or are deemed worthy of consideration by consultees will be taken forward for detailed assessment.
- 5.28 The likely impacts of the proposed development will be identified, including the likely positive and negative impacts on IEFs present. Such impacts may include changes in habitat quality or disturbance, for example through changes in lighting or noise.
- 5.29 The likely magnitude of the impacts will be assessed during the construction, operational and decommission phases of the proposed development. The assessment will take into account any mitigation measures that form part of the proposed development and to which the applicant is committed.
- 5.30 Where necessary, any further mitigation measures will be identified to ensure that the proposed development meets national and local planning policy (by avoiding 'significant harm to biodiversity' and delivering a proportionate net biodiversity gain).
- 5.31 Due to the proximity of the Application Site to internationally designated sites (SPA and Ramsar), a Habitat Regulations Assessment (HRA) screening report will also be completed and submitted alongside the ES as part of the application. This will provide both a screening of likely significant effects on internationally designated sites and, where necessary, an appropriate assessment of any identified effects, detailing mitigation/avoidance measures to ensure a conclusion of no adverse effect on the internationally site can be reached.

### Issues Proposed to be Scoped Out

- 5.32 All permanent land take will be within the red line boundary with no construction activity within the SSSI immediately north of the Application Site. As such, further consideration of the following ecological receptors have been scoped out of the Ecology and Ornithology chapter:
- Otters and all other terrestrial mammals;
  - Bats;
  - Invertebrates and reptiles; and
  - Amphibians.

## Chapter 8: Hydrology and Flood Risk

### Baseline Information

- 5.33 The Application Site is surfaced by significant areas of compacted gravel hard standing. There are no watercourses or surface water features located within the site boundary or immediately adjacent.
- 5.34 The Application Site is located within flood zone 1 which is land having a less than 1 in 1,000 annual probability of river or sea flooding. The nearest area at risk of flooding is located 60 metres to the north of the Application Site associated with the mouth of the River Tees.
- 5.35 There is no existing artificial drainage on site. An environmental permit for an adjacent site indicated that drainage was via soakaways.
- 5.36 A number of ponds are present 450 metres to the north east of the Application Site within the South Gare and Coatham Dunes SSSI.

### Proposed Approach

#### Baseline Studies

- 5.37 The baseline hydrological conditions will be identified from desktop information using publicly available data sources and existing reporting. The main information to be used in the assessment would include:
- Ordnance Survey (OS) maps;
  - Strategic Flood Risk Assessment;
  - Surface Water Management Plan,
  - flood mapping and related data; and
  - climate data.
- 5.38 The key sources of this data include the following:
- Multi-Agency-Geographic-Information for the Countryside (MAGIC) website
  - Redcar and Cleveland Borough Council;
  - Tees Valley;
  - the Centre for Ecology and Hydrology (CEH);
  - the Met Office; and
  - the Environment Agency.

#### Assessment of Effects

- 5.39 The chapter will assess the likely significant effects on the water environment. A flood risk assessment (FRA) will be undertaken in line with the National Planning Policy Framework (2019), and in accordance with Planning Practice Guidance ID7, BRE365 and The SuDS Manual (CIRIA). The FRA assess the risk to the proposed developed from sources of flooding (i.e. fluvial, tidal/surface water/sewers/groundwater/artificial sources), including the consideration of safe access/egress routes. The FRA will incorporate an outline drainage design of the proposed development to ensure the runoff rates do not exceed the existing rates. The outline drainage design will utilise appropriate mitigation measures such as the use of SuDS (sustainable drainage systems) and/or attenuation basins as appropriate.

- 5.40 As well as assessing the potential impacts of the proposed development on flood risk (and identifying appropriate mitigation measures), the ES chapter will consider potential impacts of the development on local hydrology, including impacts on the quality of runoff from the Application Site (during both construction, operational and decommissioning phases).
- 5.41 The surface water receptors and receptors potentially affected by flooding will be identified, together with the likely impacts on them. Taking into account the sensitivity of these receptors and the predicted magnitude of the impact, the significance of effects will be identified.

### Issues Proposed to be Scoped Out

- 5.42 The chapter will not include an assessment of the project in terms of the Water Framework Directive objectives set out in the River Basin Management Plan. The FRA will not include hydraulic modelling.

## Chapter 9: Geology, Hydrogeology and Contamination

### Baseline Information

- 5.43 The Application Site currently comprises vacant open land and forms part of the Redcar Bulk Terminal.
- 5.44 The Teesmouth and Cleveland SSSI adjacent to the Application site is partially designated for its geological importance. In terms of Jurassic geology, the foreshore exposures between Redcar Rocks and Coatham Rocks exhibit a Lower Jurassic succession ranging from the Liassic Zone of the Hettangian Stage through to the Margaritatus Zone of the Pliensbachian Substage.
- 5.45 British Geological Survey (BGS) online mapping and nearby available historical BGS borehole records indicate that the Application Site is underlain by Made Ground to depths of up to 5 metres below ground level (bgl), which is underlain by Tidal Flat Deposits (soft silty clay, with layers of sand, gravel and peat) to depths of between 12 metres and 20 metres bgl. Bedrock strata beneath the superficial deposits is indicated to comprise the Mercia Mudstone Group (mudstones and subordinate siltstones with thick halite-bearing units in some basinal areas).
- 5.46 The historical borehole records indicate the Made Ground to comprise gravel and cobble size pieces of slag and brick within the top layers, becoming sandy with depth within the lower parts of the Made Ground. Anecdotal evidence suggests that the site was used for rolling and storing of slag for the adjacent steelworks.
- 5.47 The Environment Agency classifies the Tidal Flats Deposits as a secondary Undifferentiated Aquifer and the Mercia Mudstone Group as a Secondary B Aquifer. The Application Site is not located in a Source Protection Zone

### Proposed Approach

#### Baseline Studies

- 5.48 Where appropriate, data will be sought from key statutory and non-statutory organisations and consultees, including the following:
- BGS maps and borehole records;
  - Environment Agency information on groundwater Source Protection Zones, environmental permitted facilities and waste sites;
  - commercially available data e.g. Groundsure/Envirocheck data;
  - review of historical maps of the site and surrounding area to determine the likelihood of historical contamination to be present within the soils and groundwater;

- review of Environment Agency and Redcar and Cleveland Borough Council records to identify whether the site has been subject to any enforcement action and/or reported pollution incidents; and
- review of any existing ground investigation reports to determine the ground conditions of the site and to provide an overview of levels of contamination within soil and groundwater.

5.49 The information will be compiled in a Phase 1 Preliminary Risk Assessment, which will form a technical appendix to the ES chapter.

### Assessment of Effects

5.50 The Geology, Hydrogeology and Contamination chapter will provide an assessment of the likely impacts of the construction of the proposed development on human health, controlled waters and the environment, based upon the result of the technical assessments and known baseline conditions.

5.51 A risk assessment will be completed, taking into account the identified environmental and human receptors. Potential receptors to be addressed by this chapter of the ES will include:

- future site users during the operation of the development;
- construction workers during demolition and development works;
- receptors neighbouring the site during construction of the proposed development;
- maintenance workers during the operation of the proposed development;
- groundwater in the Secondary B Aquifer beneath the site during construction and operation of the proposed development; and
- building materials and services during operation of the proposed development.

5.52 An assessment of the magnitude of the likely impacts and significance of effects on identified receptors would be undertaken for the construction and operational phases of the development.

5.53 A review would be undertaken of potential development constraints, mitigation measures and/or remediation measures likely to be required during construction and operational phases of the proposed development.

### Issues Proposed to be Scoped Out

5.54 No issues are proposed to be scoped out.

## Chapter 10: Traffic and Transport

### Baseline Information

5.55 Access to the Application Site would be taken via a series of internal access roads which serve the industrial area. The internal roads merge and join the A1085 Trunk Road as a single road via a roundabout approximately 2.7km to the south east of the Application Site. The A1085 Trunk Road provides access to Middlesbrough and beyond to the north and south via the A19.

5.56 The A1085 Trunk Road routes from the A1053 to the southwest, to the A1042 / A1085 Corporation Road junction to the northeast. To the south-west of the site, the A1085 Trunk Road provides access to a number of industrial sites such as British Steel and UK Wood Recycling. This section of the road network adjacent to the River Tees is heavily industrialised.

5.57 The A1053 Greystone Road routes from the A1085 Trunk Road via a signalised five-arm roundabout with the A1085 and Wilton International site access. The A1053 forms part of the



Strategic Road Network and is operated and maintained by Highways England. It is a dual carriageway road subject to the national speed limit.

- 5.58 The A174 routes from the A1053 Greystone Road via a four-arm roundabout to the south-west forming part of the Strategic Road Network operated and maintained by Highways England, and routes across the southern perimeter of Middlesbrough. The A174 provides access to principal roads and residential areas in south Middlesbrough before joining the A19 via a grade-separated four-arm roundabout.

### Proposed Approach

#### Policy Context

- 5.59 The Environmental Impact Assessment would be undertaken with reference to published guidance including the 'Guidelines for the Environmental Assessment of Road Traffic' published by the Institute of Environmental Assessment (IEA) (now Institute of Environmental Management and Assessment) (IEA, 1993).
- 5.60 A Transport Assessment (TA) will be prepared as a technical appendix to the Environmental Statement and will be undertaken with reference to published guidance, including the NPPF (2019) which sets out the Government's policies to enable sustainable development and PPG Travel Plans, Transport Assessments and Statements (2014). Additionally, Local planning policies are set out in the Redcar and Cleveland Local Plan (adopted May 2018).
- 5.61 The TA will assess the development proposals against these documents to ensure it accords with current planning policy guidance in respect to transport.

#### Baseline Studies

- 5.62 The Application Site benefits from close proximity to the Strategic Road Network and is located within a heavily industrialised area where there are large proportions of HGVs and the highway network is designed to accommodate these. All HGVs associated with the proposed development will utilise the network of A roads within the vicinity of the Application Site which route from the wider highway network.
- 5.63 The Department for Transport publishes street-level traffic data for road-links on the motorway, 'A' road and minor road network in Great Britain. The latest information available covers 2018. Additionally, Highways England directly monitor the speed and flow of roads using on road sensors.
- 5.64 Due to the proximity of the Application Site to the strategic road network, it is proposed to utilise existing data derived from the Department for Transport and Highways England to obtain traffic flow data.
- 5.65 Traffic flow data from the following locations for 2018 has been obtained from the Department for Transport.
- A1085 Trunk Road South of Access Roundabout;
  - A1053 between A66 and A1085 Trunk Road junction;
  - A1053 between A66 and A174 Junctions;
  - A66 between A1053 and A171 Junctions;
  - A1085 Trunk Road, between junction with A1053 and junction with Normanby Road;
  - A1085 Trunk Road / Longlands Road, between junction with Normanby Road and junction with A171 Cargo Fleet Lane;
  - A174 between the A1053 and A171;

- A1042 between the A1085 trunk Road and Waveney Road junction; and
  - A1085 Trunk Road between A1042 and Thrush Road junctions.
- 5.66 Highways England also provides additional traffic flow data for the A1053 and A174 which can be broken down by direction, hourly flows and vehicle length.
- 5.67 Other existing data will be used to inform the assessment, including the following:
- details of public transport services, including the availability of bus and train services;
  - details of existing pedestrian and cycle routes; and
  - Personal Injury Accident data.
- 5.68 This information would be obtained from the Local Highway Authority and from desktop analysis

### Assessment of Effects

- 5.69 When the proposed development is operational, assuming 75% of waste is bulked via a Waste Transfer Station (WTS) and 25% is delivered to the site directly by RCVs, initial estimations suggest there would be 204 two-way HGV movements per day. Over a 10-hour working day, this would equate to approximately 20 two-way HGV movements per hour, or over a 24-hour working day approximately 9 two-way HGV movements per hour.
- 5.70 The assessment to be included in the ES chapter will focus on:
- identification of vehicle movements likely to be generated during the operational phase (including both construction staff and HGV movements associated with the number of operational traffic movements);
  - consideration of the effects on the local highway network due to traffic generated during the operational phases;
  - consideration of the environmental effects of traffic during the operational phases, if thresholds are exceeded (as set out below); and
  - effects on the PRoW network during the operational phase and identification of any management measures or improvements required.
- 5.71 The assessment will be undertaken with reference to published guidance including the 'Guidelines for the Environmental Assessment of Road Traffic' published by the Institute of Environmental Assessment (IEA) (now Institute of Environmental Management and Assessment) (IEA, 1993).
- 5.72 The assessment of operational effects would be based on a quantitative assessment of increases in traffic flows. Where necessary, consideration will be given to any effects on junction capacity and delay on the highway network.
- 5.73 In considering whether effects are likely to be significant in environmental terms, an initial screening exercise will be undertaken as set out in the IEA Guidelines:
- Rule 1: include highway links where traffic flows would increase by more than 30% (or the number of heavy goods vehicles would increase by more than 30%); and
  - Rule 2: include any other specifically sensitive areas where traffic flows have increased by 10% or more.
- 5.74 In the event that these thresholds are likely to be exceeded, consideration of the environmental effects of traffic will be undertaken, including:
- severance;
  - driver delay;
  - pedestrian delay;
  - pedestrian amenity;

- accidents and safety; and
- hazardous loads.

- 5.75 A TA will be prepared, which will assess the operational traffic movements generated by the operation of the proposed development upon the safety, performance and operation of the highway network. The TA will form an appendix to the ES.
- 5.76 An analysis of road safety utilising Personal Injury Accidents (PIAs) covering the above network will be set out within the TA.
- 5.77 An impact assessment of the development traffic on each highway link will be undertaken. As the Application Site is located on high standard roads designed specifically for HGV movement, professional judgement will be used to consider the impact based upon absolute vehicle movements as part of the TA.
- 5.78 We would welcome details of any planned / programmed future changes to the highway network, pedestrian, cyclist or public transport facilities. Any such changes will be set out in the TA
- 5.79 Where relevant, consideration of air quality/dust and noise effects of traffic will be included within the Air Quality and Noise and Vibration chapters of the ES.

### Issues Proposed to be Scoped Out

- 5.80 It is envisaged that the level of HGV movements generated by the operational REC will be higher than those during the construction phase. Therefore, assessments will focus on the operational phase and these will cover the impact of construction traffic.

## Chapter 11: Air Quality

### Baseline Information

- 5.81 The nearest residential receptor is an isolated dwelling located approximately 2.2 km to the south east of the Application Site at Marsh Farm which is located on the western edge of Warrenby. The closest more densely populated areas to the development are located approximately 3 km to the south east of the site on Broadway West, Dormanstown and 3 km to the east of the site along York Road, Coatham.
- 5.82 The Application Site is not located within an Air Quality Management Area.

### Proposed Approach

#### Baseline Studies

- 5.83 Current air quality in the area will be characterised with specific regard to the findings of Redcar and Cleveland Borough Council's review and assessment process; the results of available local monitoring; the results available from UK monitoring networks; and data available in the Department for Food and Rural Affairs (Defra) maps, which provides estimated pollutant concentrations across the UK in 1 km grid squares.

#### Assessment of Effects

- 5.84 The approach to the assessment has been discussed with the Environmental Health Officer at Redcar and Cleveland Borough Council.
- 5.85 The risk of impacts from dust and emissions during demolition / construction of the proposed development will be assessed, having regard to the Institute of Air Quality Management (IAQM) 'Guidance on the assessment of dust from demolition and construction' (IAQM, 2014).

- 5.86 Generic mitigation measures designed to control dust nuisance effects and emissions during construction, consistent with the level of risk, will be recommended. These will be drawn from the IAQM 'Guidance on the assessment of dust from demolition and construction'.
- 5.87 A stack height determination will be undertaken to establish the minimum height at which local buildings are not predicted to affect dispersion. The air quality effects will then be assessed at an appropriate height taking into account other aspects of the project.
- 5.88 Emissions from the combustion plant stacks will be assessed at the limits set out in the Industrial Emissions Directive (IED) using the detailed dispersion model ADMS 5.2 and taking account of terrain, local building and meteorological effects. Modelling will also be undertaken for key pollutants to show the impacts assuming emissions are at the limits in the Best Available Techniques Associated Emissions Levels (the BAT-AELs). Hourly sequential meteorological data collated at Middlesbrough Longlands for five consecutive years will be used. Pollutant concentrations will be predicted for a grid of receptors centred on the combustion plant, selected sensitive human-health receptors and a grid of ecological receptors if necessary.

### Issues Proposed to be Scoped Out

- 5.89 There are few sensitive receptors located along routes likely to be used by vehicles during construction or once the EfW is operational. As such, it is proposed that a detailed assessment of vehicle-related emissions is scoped out.
- 5.90 The feedstock is likely to be significantly biologically active only if it contains putrescible material (e.g. rotting food). As no putrescible material will be accepted in the MRF, bioaerosol emissions are not expected to be significant and it is proposed that a risk assessment of bioaersols is scoped out.
- 5.91 Combustion air for the plant would be drawn from within the buildings creating a slight negative pressure ensuring that airflow and, therefore, odours are likely to be directed into rather than out of the building. The height of the stack and the destruction of odours during the incineration process should be enough to ensure that odours from the stack are unlikely to be detectable at ground level. As such, it is proposed that a risk assessment of odours is scoped out.
- 5.92 The accepted best practice approach for the primary control of dust releases is containment within the building, which is the technique that will be employed for the MRF. Air from within the waste reception hall and waste processing hall would be drawn for use as combustion air. As such, it is proposed that a risk assessment of dust emissions once the MRF is operational is scoped out.
- 5.93 Traffic generation on the local highway network associated with the construction of the proposed development is likely to be negligible. AADT are predicted to be just under 100 movements per day, therefore, the air quality impacts from construction vehicle exhaust emissions will not be modelled.

## Chapter 12: Noise and Vibration

### Baseline Information

- 5.94 The Application Site is located in an industrial area and the nearest residential receptor is approximately 2.2 km away. The proposed development has the potential to affect the ecological receptors (i.e. birds) associated with the neighbouring Teesmouth and Cleveland Coast Special Protection Area (SPA) and Ramsar.
- 5.95 It is anticipated that the main noise sources affecting the site is distant road traffic from the surrounding road network and industrial noise from the nearby industrial sites

## Proposed Approach

### Baseline Studies

- 5.96 The proposed approach has been discussed with the Environmental Health Officer at Redcar and Cleveland Council.
- 5.97 Normally, a baseline noise survey would be undertaken to establish the baseline noise conditions of the site and surrounding area. However, given the current situation related to covid-19 pandemic, the current road traffic levels are lower than normal, and it is also likely that the activities to the surrounding industrial sites are limited. This could result in lower than normal noise levels in the area. As a result, the noise survey levels would not necessarily be representative of the actual noise levels to which the ecological receptors are normally exposed. This would lead to an underestimation of the actual noise levels and will thus result in an assessment of an unrealistic scenario for the proposed development.
- 5.98 We would, therefore, propose the following approach for evaluating the baseline conditions. We would suggest undertaking a desktop study to assess the noise climate of the site and use the following data to validate our noise measurements:
- Use available road traffic data counts for the Redcar area from Department of Transport: Road traffic statistics (<https://roadtraffic.dft.gov.uk/#14/54.6096/-1.1312/basemap-countpoints>). This traffic counts will be used as input to the noise model to predict the noise levels in the area.
  - Use the noise maps from England Noise Viewer which cover this area (<http://www.extrium.co.uk/noiseviewer.html%20>);
  - If available, use noise data available from other noise surveys in the area undertaken within the past two years, available on the Redcar and Cleveland planning portal; and
  - Short-term noise measurements to be undertaken in order to identify the noise levels from industrial noise sources operating close to the Application Site.

### Assessment of Effects

- 5.99 A desk-based review of the site and the surrounding areas will be undertaken to identify any existing and/or proposed noise sources and any existing and/or proposed noise sensitive receptors.
- 5.100 The ES chapter will include considerations of noise and vibration effects on any nearby noise sensitive receptors occurring during the construction and operational phases of the proposed development. The chapter will further consider the suitability for the proposed development in accordance with relevant standards and guidance.
- 5.101 The construction of the proposed development may result in noise and vibration impacts to noise sensitive receptors in the vicinity of the proposed development. A qualitative assessment of construction noise effects would be undertaken in accordance with the guidance contained within BS 5228:2009+A1:2014: Code of Practice for Noise and Vibration Control on Construction and Open sites. Part 1: Noise (BS 5228-1).
- 5.102 If exact details on anticipated construction working areas, phases, methods and anticipated plant are not available at the time of drafting the ES, qualified assumptions will be made based on professional judgement and experience of similar projects.
- 5.103 A quantitative assessment of noise at the site during operation will be undertaken and on the basis of the results of the baseline modelling and short-term measurements, assuming the approach is accepted, constraints in the proposed development from existing and proposed noise sources within the area would be assessed for existing and/or proposed noise sensitive receptors.

## Issues Proposed to be Scoped Out

- 5.104 Given the distance of residential receptors to the Application Site, it is proposed that the effects of noise from the construction and operation of the proposed development on residential receptors is scoped out of the assessment. Given that levels of vibration attenuate through the ground within distances of 50 – 100 metres, it is considered that any vibration effects as a result of construction activity are unlikely to result in a significant environmental impact at the identified noise sensitive receptors. Therefore, on this basis, construction vibration effects are proposed to be scoped out of the assessment.
- 5.105 Traffic generation on the local highway network associated with the construction of the proposed development is likely to be negligible. A significant noise impact as a result of an increase in traffic flow during the construction phase is considered unlikely and therefore, is proposed to be scoped out of the assessment.
- 5.106 There are no significant sources of vibration associated with the operation of the proposed development. As such, vibration from the operation of the proposed development are unlikely to have adverse effects and therefore are proposed to be scoped out of further assessment.

## 6 REFERENCES

- Committee on Climate Change (2017) UK Climate Change Risk Assessment 2017
- Countryside Agency and Scottish Natural Heritage (2002) Landscape Character Assessment: Guidance for England and Scotland
- Department for Communities and Local Government (2014) Planning Practice Guidance://planningguidance.planningportal.gov.uk
- Department of the Environment, Transport and the Regions (DETR) (1997) Mitigation Measures in Environmental Statements.
- Environment Agency and Met Office (2018) UK Climate Projections 18 (UKCP18). [Online]. Available at: <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/index>
- Highways England, Transport Scotland, Welsh Government, Department for Infrastructure Northern Ireland (2019) Design Manual for Roads and Bridges, Volume 11, Section 2, Part f. LA 104
- Institute of Environmental Management and Assessment (2004) Guidelines for Environmental Impact Assessment
- Institute of Environmental Management and Assessment (2011) The State of Environmental Impact Assessment Practice in the UK
- Institute of Environmental Management and Assessment (2015a) Environmental Impact Assessment: Guide to Shaping Quality Development
- Institute of Environmental Management and Assessment (2015b) Climate Change Resilience and Adaptation
- Institute of Environmental Management and Assessment (2016) Environmental Impact Assessment: Guide to Delivering Quality Development
- Institute of Environmental Management and Assessment (2017) Environmental Impact Assessment: Assessing Greenhouse Gas Emissions and Evaluating their Significance
- Institute of Environmental Management and Assessment (2017) Health in Environmental Impact Assessment: A Primer for a Proportional Approach.
- Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment: Third Edition
- PMAC (2020) [www.pmacenergy.co.uk](http://www.pmacenergy.co.uk)

## FIGURES



# REDCAR ENERGY CENTRE - SCOPING REPORT

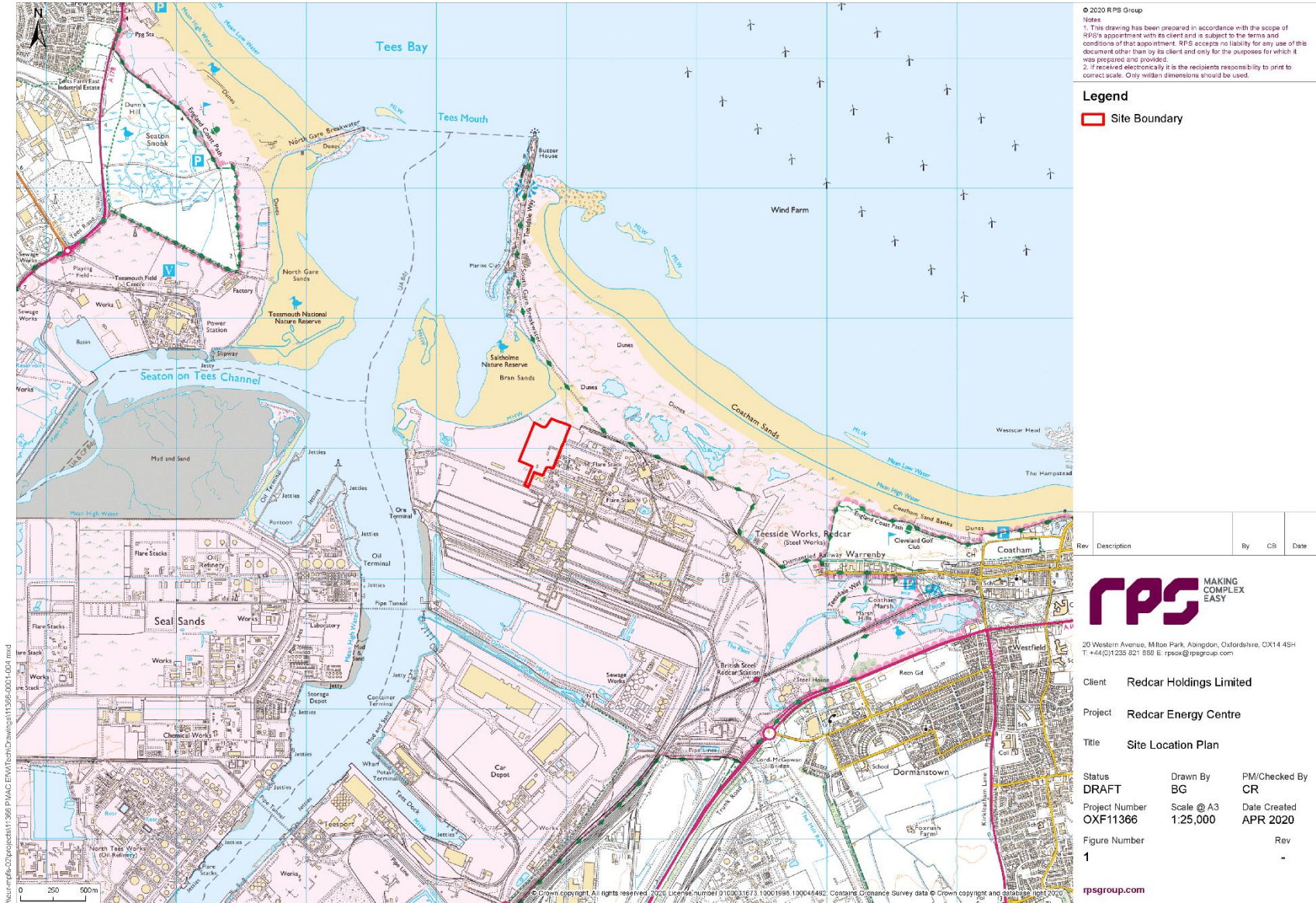


Figure 1: Site Location Plan

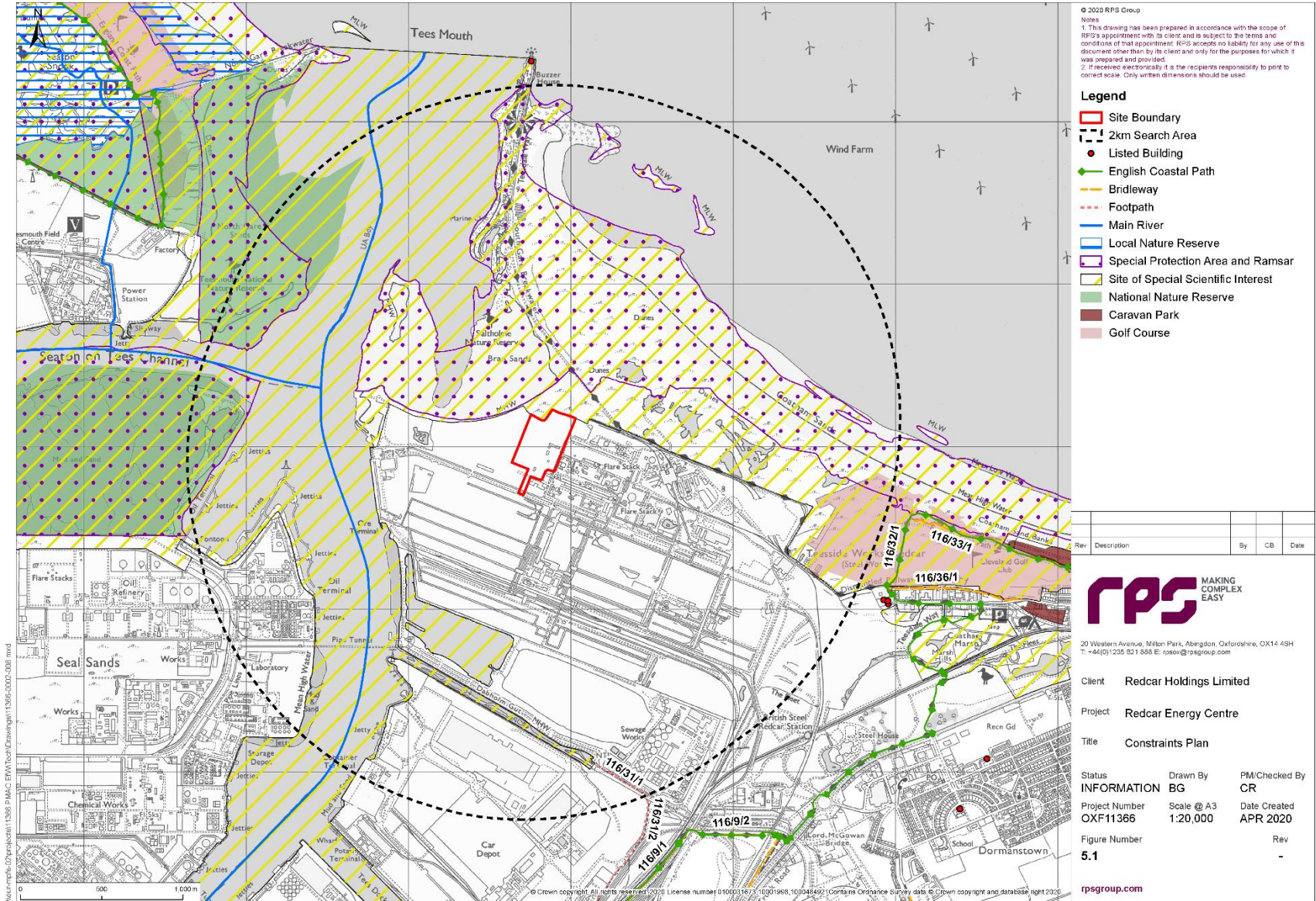


Figure 2: Constraints Plan

## APPENDIX A- LIST OF CUMULATIVE DEVELOPMENTS

Ref	Name	Application Ref	Description	Distance from Site	Planning Status
Tier 1					
1	Ground preparation for Soil for Storage	R/2019/0427/FFM	Demolition of structures and engineering operations associated with the ground preparation and temporary storage of soil and its final use in the remediation and preparation of land for regeneration and development.	1.96 km	Granted 27/09/19
2	Kirkleatham Lane	R/2016/0663/OOM	A development entailing the creation of up to 500 residential units, with associated access, landscaping and open space. The proposal has been granted outline consent, with the access having been constructed and issues being examined through Reserve Matters. The construction of the development is proposed to start in 2020.	3.97 km	Granted 25/05/17
3	Land at Low Grange Farm South Bank	R/2014/0372/OOM	This proposal is for a residential development comprising 1250 dwellings. The site is located on the Local Plan and the proposal has been granted outline consent. The start date is yet to be determined but the application has a ten year lifespan.	5.24 km	Granted 31/03/16
4	Tees Renewable Biomass Power Station	R/2008/0671/EA <a href="https://infrastructure.planninginspectorate.gov.uk/projects/north-east/port-blyth-new-biomass-plant/?ipcsection=docs">https://infrastructure.planninginspectorate.gov.uk/projects/north-east/port-blyth-new-biomass-plant/?ipcsection=docs</a>	Proposed construction of a 300 Mw biomass fired renewable energy power station on land adjacent to the main southern dock at Teeside on the south bank of the River Tees.	2.62 km	Granted 15/07/09
5	Dogger Bank Wind Farm	R/2018/0364/NID	Large offshore wind farm at Dogger Bank Teesside (in international waters) and associated offshore export cabling and onshore infrastructure, with a generating capacity of up to 4.8GW. Both developments will result in increases in employment in the area, during construction and operation.	5.41 km	Development Consent Order (DCO) made 17/02/15. Application for non-material amendment

Ref	Name	Application Ref	Description	Distance from Site	Planning Status
					submitted 11/01/19.
6	Teesside Combined Cycle Power Plant (CCPP)	R/2017/0119/DCO	Construction of a 1,700MWe combined-cycle gas turbine power station at Wilton International was granted permission.	5.18 km	DCO made 05/04/19
7	Northern Gateway Container Terminal	R/2006/0433/OO	Proposed container terminal at Teesport, Grangetown, with granted planning permission and reserved matters for landscaping.	1.29 km	Granted 04/10/07
8	Peak African Minerals Ltd.	R/2017/0876/FFM	Planning permission has been granted for this proposed refinery extracting rare earth minerals (neodymium, praseodymium, cerium, lanthanum) from the ore concentrates, although no further action has progressed.	4.78 km	Granted 16/01/18
9	York Potash Port and Materials Handling Facilities	R/2015/0218/DCO / R/2015/0218/DCO R/2014/0626/FFM, R/2014/0627/FFM,	A Development Consent Order Proposed has been granted for this port facility on Teesside for the export of polyhalite bulk fertiliser.  Planning permission has been granted for a proposed development by York Potash Limited (a subsidiary of Sirius Minerals plc) entailing the development of a new mine at Dove's Nest farm, south of Whitby	681 m	DCO made 20/07/16
10	Grangetown Prairie Energy Recovery Facility	R/2019/0767/OOM	Outline application for the construction of an energy recovery facility (REF) and associated development.	4.34 km	Application submitted 19/12/19

Ref	Name	Application Ref	Description	Distance from Site	Planning Status
11	Proposed new buildings, plant upgrade, swale and associated parking	19/2161/FUL	Erection of new plant, new buildings and extensions to existing buildings. Works to include Warehouse D Extension, Boiler House Structure, Amenities & Workshop Building, Drum Storage Workshop Extension, Amenities extension, 2 no. Warehouse buildings, Contractors cabins, Gate House and Weighbridge, Receivers, Driers, Extension to existing Tank Farm, Tanker Offloading stations, Process and control buildings, Installation of new and replacement cooling towers and industrial apparatus, Pipe Bridge, Swale and the demolition of old plant and buildings.	2.54 km	Granted 21/02/20
12	Graythorp Energy Centre	H/2019/0275	Energy recovery (energy from waste) facility and associated infrastructure.	4.36 km	Decision pending.
Tier 2					
13	Able South Bank	R/2019/0331/SCP	A port-based development for the Offshore Marine Energy Sector (offshore wind turbines) for land at South Bank, Redcar. The use of the port will include HGV for transporting and storing and assembling the components of an offshore wind turbine (OWT).	3.51 km	Scoping opinion issued 27/06/19
14	Net Zero Teeside Cluster Carbon Capture and Usage	NSIP <a href="https://infrastructure.planninginspectorate.gov.uk/projects/north-east/the-net-zero-teesside-project/?ipcsection=docs">https://infrastructure.planninginspectorate.gov.uk/projects/north-east/the-net-zero-teesside-project/?ipcsection=docs</a>	This proposal comprises the development of a Combined Cycle Gas Turbine (CCGT) gas-fired generating station and gas, electricity and cooling water connections and a CO <sub>2</sub> pipeline for the transport CO <sub>2</sub> to an offshore geological storage area.	951 m	Scoping opinion issued 02/04/19
Tier 3					
15	West of Kirkleatham Lane	H3.15	Allocated in the Redcar and Cleveland Borough Council 2018 Local Plan for 550 units.	3.97km	Allocation

Ref	Name	Application Ref	Description	Distance from Site	Planning Status
16	Land adjacent to Rye Hills School	H3.12	Allocated in the Redcar and Cleveland Borough Council 2018 Local Plan for 30 units	5.40 km	Allocation
17	St Hilda's Church	H3.11	Allocated in the Redcar and Cleveland Borough Council 2018 Local Plan for 25 units	4.39 km	Allocation
18	Teesside	EG1	General employment development focusing on logistics (B8 Use Class), manufacturing and engineering (B2 Use Class)	1.64km	Allocation

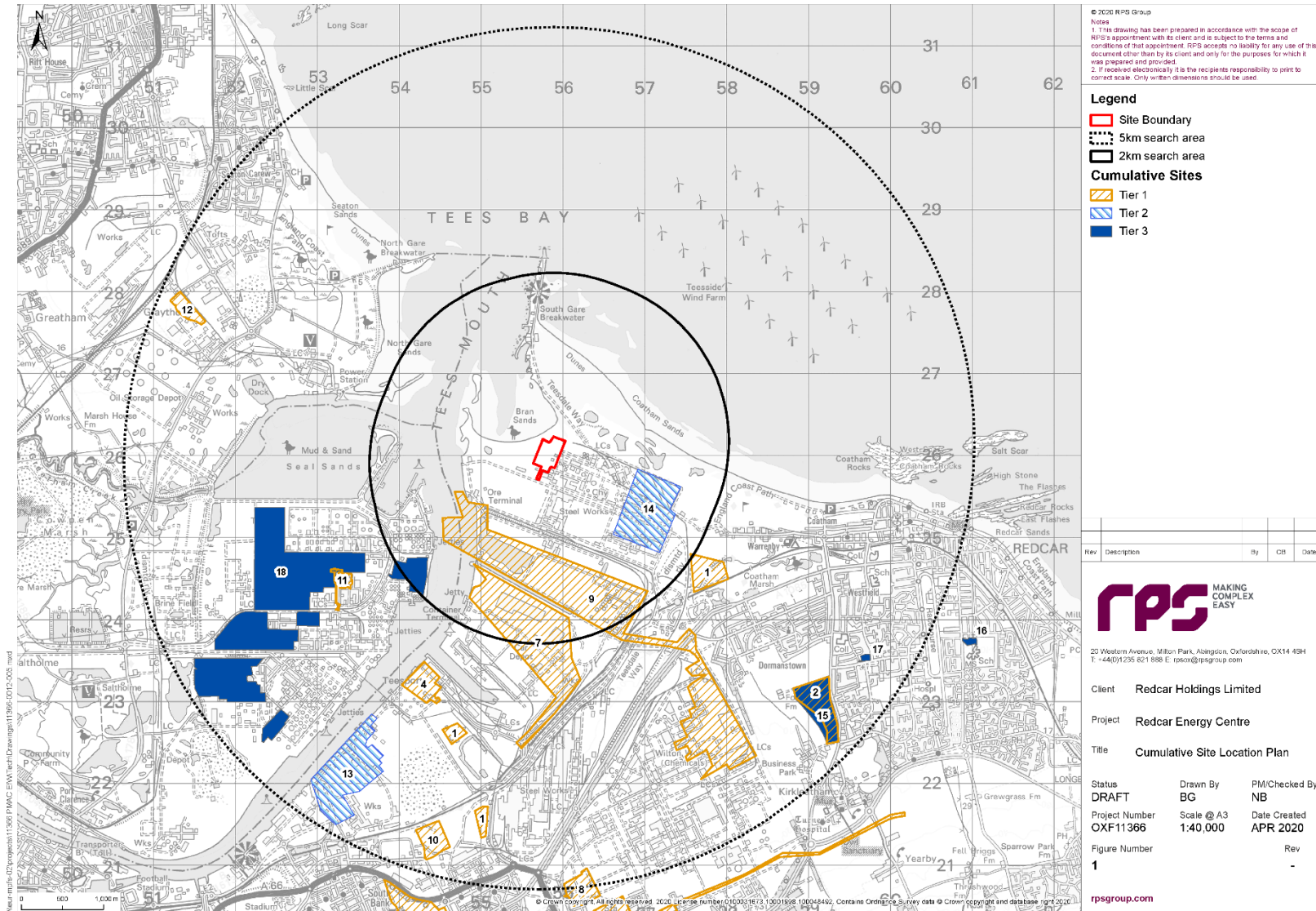


Figure A.1: Cumulative Site Location Plan





**Redcar & Cleveland Borough Council**  
**Corporate Directorate for Growth, Enterprise**  
**and Environment**  
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Redcar and Cleveland House  
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Direct line: 01287 612546

Our Ref: R/2020/0217/SCP  
Your Ref:  
Contact: Mr D Pedlow  
Date: 28 May 2020

Dear Sir/Madam

**PROPOSAL: SCOPING OPINION ON THE REDCAR ENERGY CENTRE UNDER  
REGULATION 17 OF THE TOWN AND COUNTRY PLANNING  
(ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017**  
**LOCATION: REDCAR BULK TERMINAL**  
**APPLICANT: REDCAR HOLDINGS LIMITED**

I am writing with regard to the submitted Scoping Opinion relating to the proposed development of the Redcar Energy Centre at Redcar Bulk Terminal.

The Scoping Request sets out the proposed format and content of the Environmental Statement. Within the document the following topics are set out as those that will be considered;

- Landscape and Visual Resources
- Ecology and Ornithology
- Hydrology and Flood Risk
- Geology Hydrogeology and Contamination
- Traffic and Transport
- Air Quality
- Noise and Vibration
- Cumulative Impacts

The proposed list above would appear to be a comprehensive list for the proposed development and would provide sufficient scope for the proposed ES.

A number of responses have been received by both internal and external consultees, copies of which are set out below. The responses can also be found on the Council website by using the following link; <https://planning.redcar-cleveland.gov.uk/Planning/Display?applicationNumber=R%2F2020%2F0217%2FSCP>

Ramblers Association

Thank you for consulting the Ramblers regarding the above application. We have no objection to the

proposal, provided safe and free access to the English Coast Path is guaranteed throughout construction.

### Cleveland Police

I recommend applicant contact me for any input, advice I can offer in regards to designing out opportunities for crime to occur in future.

### Environment Agency

Environment Agency position

We have reviewed the submitted scoping report. The following comments have been made in respect to:

- Water Quality
- Ecology
- Hydrology and Flood Risk

The comments made are to ensure that the environmental statement (ES) addresses the key environmental issues for this proposal.

### Natural England

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation dated 12 May 2020<sup>5</sup> which we received on the same day.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Case law<sup>1</sup> and guidance<sup>2</sup> has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter only please contact me on 0208 0265533 or [andrew.whitehead@naturalengland.org.uk](mailto:andrew.whitehead@naturalengland.org.uk).

For any new consultations, or to provide further information on this consultation please send your correspondences to [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

Please note that there are a number of annex's to the response that can be found on the original response from Natural England.

### NATS

Thanks for providing the requested information. The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

However, please be aware that this response applies specifically to the above consultation and only reflects the position of NATS (that is responsible for the management of en route air traffic) based on the information supplied at the time of this application. This letter does not provide any indication of the position of any other party, whether they be an airport, airspace user or otherwise. It remains your responsibility to ensure that all the appropriate consultees are properly consulted.

If any changes are proposed to the information supplied to NATS in regard to this application which become the basis of a revised, amended or further application for approval, then as a statutory consultee NERL requires that it be further consulted on any such changes prior to any planning permission or any consent being granted.

### Teesside Airport

With regards to the above mentioned scoping opinion, I can confirm that Teesside International Airport has no objection to the proposal in its current form. Should any change, amendment or further application for approval be submitted, we require that we are further consulted so that we may review our position.

### South Tees Development Corporation

We passed on the notification to our planning advisors, Lichfields, who are familiar with the EIA scoping process for the preparation of Environmental Statements (ES), as well as the regeneration objectives of STDC as set out in our Regeneration Master Plan (November 2019).

First and foremost, we wish to reiterate our in-principle support for the REC project, which will be a significant generator of jobs, directly and indirectly into the Tees Valley and also a contributor to the regeneration of the area, with investment in line with the industrial typologies that our Master Plan seeks to attract. STDC's vision is for the creation of up to 20,000 new jobs (directly and indirectly), focusing on higher skilled sectors and centred on manufacturing, innovation, and advanced technologies. The REC's delivery of 450 jobs during construction and 50 full time employees thereafter, is therefore welcomed.

The REC development site is located in the North Industrial Zone which is identified in the Master Plan for targeting energy and power innovation. The project offers a significant opportunity to reuse waste from the South Tees area during construction and operational phases of development. It also offers the opportunity to directly power businesses in the STDC area. Bringing this development forwards during the initial phase of delivery of the Master Plan will benefit the whole area and could enable greater levels of sustainability for future projects.

We comment below on the scope of the ES and its alignment with the work STDC is doing to deliver regeneration of the area. In view of the emerging and evolving detail of the project, we provide these comments as a holding response, and we are keen to be consulted with over the coming months as the scheme is further developed ahead of submission of the planning application.

### The Scoping Report

#### Development Parameters

The Scoping Report provides an overview of the proposed development including information on its nature and purpose and technical capacity as required by Regulation 15 of the EIA Regulations. We

do note, however, that the Report does not set out development parameters for the scheme (i.e., access, building zones, plots, heights, etc) and does not include any proposed drawings. Typically, these details would be included within a Scoping Request. In the absence of these details at this stage, STDC requests that it be kept informed as the parameters and details of the project are developed. For example, one area where we would seek greater clarity is on how the scheme proposes to connect to the electricity grid and whether detailed proposals will be coming forward regarding connection to the rail line and wharf.

The Scoping Report also includes a number of references to 'primary' mitigation measures (i.e., those that are embedded into the design of the scheme); however, these measures are not defined. It is, therefore, challenging at this stage to fully understand the nature of the development and its potential environmental impact.

The Report (at page 12) states that as well as primary mitigation measures, best practice measures such as a Code of Construction Practice will be taken into account during each technical assessment. Given the complexity of the project and that it is to be accompanied by an ES, these best practice measures should be submitted with the planning application.

### EIA Scope

The topics considered within the Scoping Report cover all of the requirements set out in Schedule 4 of the EIA Regulations. As above, however, there is limited commentary on the likely significant effects, which makes it difficult for STDC to fully understand the impact of the development at this point in time. We look forward to receiving further details in due course.

### Ecology and Ornithology

We note Natural England's (NE) response and their request that the ES should assess the impact of the proposals on protected species. Anglo American's (formerly Sirius) EIA of its adjacent development proposals did not identify an impact on great crested newts, water voles, badgers and bats, so we would concur with your intended approach to address this matter.

The proposed scope does not, however, include reference to an assessment of ecology within the River Tees or at the RBT wharf (intertidal surveys have been carried out but there is no information on their scope). The Scoping Report, however, makes clear that, where feasible, waste may also be brought to the site using the existing wharf. We would, therefore, welcome clarity as to the intentions regarding use of the wharf.

Additionally, we wish to highlight the opportunity for this development to be part of, and benefit from, the site-wide Environment and Biodiversity Strategy that STDC is preparing in partnership with key organisations such as Natural England and the Environment Agency. It would be helpful for the applicant to engage with STDC on the potential for the Strategy to assist in the project's mitigation requirements in respect of habitat and biodiversity net gains.

### Hydrology and Flood Risk

The site is located within Flood Zone 1. The main flood risk is tidal or coastal and STDC's Masterplan considers the site levels appropriate for development (see section 2.10.2 of the Master Plan).

### Geology, Hydrogeology and Contamination

Again, we would encourage the applicant to liaise with STDC to understand what information we hold, through preparing our Master Plan and various site-wide strategies, which could assist the baseline and mitigation stages of these assessments.

## Traffic and Transport

The Scoping Report suggests there would be 204 two-way HGV movements per day. This will impact on the South Tees area as a whole and we wish to discuss this element of the proposal in greater detail, in particular, because the Report refers to a variety of trip methods (HGV, rail and wharf). It would be useful for STDC to explain its intentions for changes and improvements to the road network in the area.

## Air Quality and Noise and Vibration

The Scoping Report advises that embedded mitigation measures will be included within the scheme to reduce the effects on air quality, noise and vibration (for example, the type of feedstock for the facility and stack height), however, no further details are given and we look forward to seeing these details in due course.

## Cumulative Effects

The Scoping Report includes information on its proposed cumulative assessment. The proposed schemes are included within Appendix A of the Report. We have reviewed the schedule of schemes and feel it is comprehensive. However, development proposals are now emerging across the wider STDC area and it would be prudent for the applicant to liaise with STDC on an ongoing basis in this regard.

## Other Matters

In due course, STDC would welcome further information on waste, site levels, development levels and contamination in order to understand the requirement for earthworks, levelling and the transportation of waste off site during construction. The application may need to be accompanied by an earthworks plan and these calculations taken into account in other chapters, such as transport. STDC would also welcome clarity on the timescales for a planning application to be made and also the range of other documents intended to accompany the submission. For example, with a project of this nature, it would be prudent for it to be accompanied by a Sustainability Statement and Energy and Utilities Statement.

We trust these comments are helpful and look forward to liaising with the applicant as the project develops towards the submission of a planning application.

## HSE

HSE's Advice: Do Not Advise Against, consequently, HSE does not advise, on safety grounds, against the granting of planning permission in this case.

## Northumbrian Water

Having assessed the proposed development against the context outlined above we have the following comments to make:

The Developer should develop their Surface Water Drainage solution by working through the Hierarchy of Preference contained within Revised Part H of the Building Regulations 2010. Namely:-

- Soakaway
- Watercourse, and finally
- Sewer

We recommend that the developer contact Northumbrian Water to agree allowable discharge rates and points into the public sewer network. This can be done by submitting a pre-planning enquiry

directly to us. Full details and guidance can be found at <https://www.nwl.co.uk/developers/predevelopment-enquiries.aspx> or telephone 0191 419 6559.

#### Network Rail

Network Rail has no observations to make

#### HSE

Do Not Advise Against, consequently, HSE does not advise, on safety grounds, against the granting of planning permission in this case.

#### Redcar and Cleveland Council Public Rights of Way Officer

The site is close to but does not directly abut the section of the England Coast Path from Warrenby to South Gare. Access to the site is due to be taken from internal roads so there are no Public Rights of Way objections.

#### Redcar and Cleveland Borough Council Natural Heritage Manager

I would have no objections based upon ecological/environmental proposals included within written proposals

#### Redcar and Cleveland Borough Council Development Engineers

I refer to the application and would offer no further comments.

#### Redcar and Cleveland Borough Council Environmental Protection (Nuisance)

No objection

#### Redcar and Cleveland Borough Council Environmental Protection Contamination

No objection

#### Redcar and Cleveland Borough Council LLFA

The LLFA have reviewed the scoping report and would offer the following comments;

Agreement of para. 4.18 (scope of assessment) with regards to Climate Change and future flood risk

With reference to Chapter 8 Hydrology and Flood Risk - No objection in principle and furthermore no additional comments to be made at this stage.

Applicant should consider Policy SD7 of the Local Plan and also the TEES VALLEY SUSTAINABLE URBAN DRAINAGE SYSTEMS (SUDS) GUIDANCE DESIGN GUIDE & LOCAL STANDARDS.

#### Other Comments

With regard to the list of cumulative developments I am of the opinion that the Tier 1 list is fairly comprehensive list however there are two applications that I would draw your attention to;

R/2019/0485/RMM – This is a reserved matters application relating to Ref 2 on the Tier 1 list for 375 dwellings. This has been granted.

R/2020/0075/F3M – This is for the provision of a new cinema on Redcar sea front. The application is still awaiting determination.

Tier 2 list which appears to pick up other scoping requests appears to be comprehensive again, however I would question the need for these within a cumulative impact assessment as these are not consented or application that are under consideration.

Tier 3 list which appears to be allocations within the Local Plan. I would again question the need for these within a cumulative impact assessment as these again are not committed developments.

I hope the above is helpful in progressing the application however if you require anything further please contact me.

Yours faithfully

Mr D Pedlow  
Principal Planning Officer