



Net Zero
Teesside

Preliminary Environmental Information Report

Volume I - Main Text

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



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Glossary of Abbreviations and Definitions of Frequently Used Terms

Definitions of Development Areas, as shown on Figure 3-2: Development Areas (PEI Report, Volume II)

Project Elements Definition/Notes

Proposed Development Refer to Figure 3-1 (PEI Report Volume II)	The Proposed Development comprises the construction and operation (including maintenance) of a CCUS facility comprising a gas-fired power station with a net (abated) electrical output of up to 2.1 GW together with equipment required for the capture and compression of CO ₂ emissions from the generating station. In addition, there is a need for the provision of supporting infrastructure and connections to facilitate the Proposed Development and to integrate it to a wider industrial carbon capture network in Teesside, the construction of which also forms part of the project. The project also includes high-pressure compression of CO ₂ and export for off-shore storage. The offshore elements will be separately consented and do not form part of the Proposed Development
CO₂ Export Pipeline Refer to Figure 3-2A (PEI Report Volume II)	High pressure CO ₂ export pipeline. CO ₂ export is expected to include an on-shore high pressure Compressor Station located adjacent to the Power and Capture plant, and the commencement of an export pipeline to the off-shore elements of the NZT development.
CO₂ Gathering Network Refer to Figure 3-2E (PEI Report Volume II)	Gaseous Phase CO ₂ Gathering Network connecting various industrial installations across the Tees Valley. The CO ₂ Gathering Network will predominantly use an existing above ground pipe network route running along existing pipe racks and using existing culverts and overbridges, however it may be necessary to install the pipe below ground if pipe racks are not available.
Electrical Connection Corridor Refer to Figure 3-2C (PEI Report Volume II)	Power export lines from the power station to the national transmission system to support the Proposed Development. The existing electrical infrastructure in the area comprises 275 kilovolt (kV) and 400 kV overhead lines as well as lower voltage underground cables that serve, amongst others, three substations. The size, timing and location of the connection to the national electricity transmissions system will be determined in consultation with National Grid.
Freshwater Connection Corridor Refer to Figure 3-2D (PEI Report Volume II)	A connection corridor to Northumbrian Water Ltd, for the provision of water for the Proposed Development. This is the preferred source of water subject to sufficient capacity being available.
Natural Gas Connection Corridor	Natural gas pipeline to supply the power station to support the Proposed Development. Natural gas will be used as the fuel for the operation of the Combined Cycle Gas Turbine (CCGT) power station. Subject to agreement with National Gas Grid (NGG), natural gas will

Refer to Figure 3-2B (PEI Report Volume II)

be supplied via a tie-in to the high pressure gas transmission network in the area.

CO₂ Conditioning and LP Compressor Station

The gas CO₂ stream from the capture plant will be saturated with water and will contain traces of oxygen which will need to be reduced in a gas conditioning facility at the emitter sites prior export to the CO₂ Gathering Network.

Refer to Figure 3-2A (PEI Report Volume II)

Power, Capture and Compressor site (PCC)

The site for the new-build low carbon gas-fired power station with integrated carbon capture unit, low pressure compression and associated utilities and buildings.

Refer to Figure 3-2A (PEI Report Volume II)

The Site

Refer to Figure 3-1 (PEI Report Volume II)

The proposed DCO application site (the Site) covers a wide area located within the administrative boundaries of Redcar and Cleveland Borough Council (RCBC) to the south of the River Tees (South Bank and Dormanstown Wards) and in Stockton-on-Tees Borough Council (STBC) to the north of the River Tees (Billingham South Ward).

Water Abstraction Corridor

Refer to Figure 3-2D (PEI Report Volume II)

An intake within the River Tees, which would be utilised in the event that the Northumbrian Water Ltd connection is not available or there is insufficient capacity, for provision of water for the Proposed Development.

Water Connection Corridors

Refer to Figure 3-2D (PEI Report Volume II)

Includes the Freshwater Connection Corridor, Water Abstraction Corridor and Water Discharge Corridor.

Water Discharge Corridor

Refer to Figure 3-2D of 5 (PEI Report Volume II)

Disposal of treated effluent to Tees Bay subject to Environment Agency Permitting requirements.

Abbreviations and Terms

Abbreviation/ Frequently used term

Definition/Notes

AADT	Annual Average Daily Traffic - a measure of the total volume of vehicle traffic of a highway or road for a year divided by 365 days.
AAWT	Annual Average Weekly Traffic Flow – the average 24-hour traffic volume occurring on weekdays throughout a full year.
ABC method	BS 5228 ABC method – A British Standard methodology used to measure construction noise.
Abated	With the application of carbon capture.
ACoP	Approved Code of Practice - guidance with specific legal standing, used to deal with a wide range of hazardous materials and working practices.
ADMS	Atmospheric Dispersion Model - a proprietary model for the assessment of effect of emissions to air from point sources and road sources.
AEL	Associated Emissions Levels – see BAT-AELs.
AEP	Annual Exceedance Probability – in relation to flooding, the 100-year flood (a flood likely to occur once every 100 years) can be expressed as the 1% AEP flood, which has a 1% chance of being exceeded in any year.
AGI	Above Ground Installation - installations used to support the safe and efficient operation of a pipeline; above ground installations are needed at the start and end of a cross-country pipeline and at intervals along the route.
AGL	Above Ground Level – a height above ground level is a height measured with respect to the underlying ground surface.
AIL	Abnormal Indivisible Load - a load that cannot be broken down into smaller loads for transport without undue expense or risk of damage. It may also be a load that exceeds certain parameters for weight, length and width.
AIS	Automatic Identification System – an automatic tracking system that can be used to provide an insight into the average vessel density in the area surrounding the Proposed Development.
ALARP	As Low As is Reasonably Practicable - a term often used in the regulation and management of safety-critical and safety-involved systems. The ALARP principle is that the residual risk shall be reduced as far as reasonably practicable.
ALC	Agricultural Land Classification - part of the planning system in England and Wales which classifies agricultural land into five categories according to versatility and suitability for growing crops.
AMAA	Ancient Monuments and Archaeological Areas Act 1979 - an Act to consolidate and amend the law relating to ancient monuments.
AMAP	Areas of Maritime Archaeological Potential - areas where there was a high potential for ship losses and high potential for the preservation of archaeological remains.
AMBI	AZTI Marine Biotic Index - software developed to assess the quality of benthic macro-invertebrates assemblages.

**Abbreviation/
Frequently used
term**

Definition/Notes

Amines	Amines are formally derivatives of ammonia, where one or more hydrogen atoms have been substituted by such as an alkyl or aryl group. They are used as a solvent for CO ₂ in the carbon capture process
AMP	Asbestos Management Plan – used to register and plan how asbestos will be managed within a development.
ANOSIM	Analysis of similarities – statistical test to see whether there is a significant difference between two or more groups
AOD	Above Ordnance Datum - a spot height (an exact point on a map) with an elevation recorded beside it that represents its height above a given datum.
APIS	Air Pollution Information System - provides a comprehensive source of information on air pollution and the effects on habitats and species. It supports the assessment of potential effects of air pollutants on habitats and species.
APM	Additional Protective Measures – used to provide additional protection against sulfate attack.
Approach Velocity	The velocity of water approaching the CWS intake screens.
AQALs	Air Quality Assessment Levels - the baseline level of each pollutant species used during air quality assessments. The results of modelling undertaken to predict concentrations of pollutants are compared against these AQALs.
AQAP	Air Quality Action Plan - a comprehensive series of measures that will help improve air quality and work towards achieving the national objectives for nitrogen dioxide and particles.
AQIA	Air Quality Impact Assessment – analysing the contribution to pollutant concentrations of specific emissions at receptor sites.
AQMA	Air Quality Management Areas - an area designated by the local authority to be managed, through the implementation of a Local Air Quality Management Area, to ensure that it meets national air quality objectives.
ARN	Affected Road Network - road networks affected by the Proposed Development.
ARS	Active Roost Site - found in any place where the owl may stop to feed or to rest.
ASNW	Ancient Semi-Natural Woodland – woodland cover for over 400 years. Developed naturally with most having being used by humans.
ASSI	Areas of Special Scientific Interest - the equivalent of a SSSI in Northern Ireland.
ATC	Automated Traffic Counts - a count of vehicular or pedestrian traffic conducted along a particular road, path or intersection.
AU	Assessment Units – International Council for the Exploration of the Sea Assessment Units
A-weighting	The A-weighting is an electronic filter that matches the response of a sound level meter to that of the human ear. A-weighting matches the response of a sound level meter to human hearing at low levels (~ 40-90 dB).

**Abbreviation/
Frequently used
term**

Definition/Notes

BAP	Biodiversity Action Plan – an internationally recognised program addressing threatened species and habitats, designed to protect and restore biological systems.
Barg	Measured pressure, in units of bars, above atmospheric pressure.
Baseline Conditions	The environment as it appears (or would appear) immediately prior to the implementation of a project development together with any known or foreseeable future changes that will take place before completion of the proposed development.
BAT	Best Available Technique - the available techniques which are the best for preventing or minimising emissions and impacts on the environment. BAT is required for operations involving the installation of a facility that carries out industrial processes. Techniques can include both the technology used and the way an installation is designed, built, maintained, operated and decommissioned.
BAT-AELs	Best Available Technique (BAT) Associated Emission Levels - Achievable emissions values following the implementation of the best available techniques for preventing or minimising emissions and impacts on the environment.
BDMLR	British Divers Marine Life Rescue - a voluntary marine animal rescue organisation based in the UK.
BEIS	Business, Energy and Industrial Strategy – UK Government department.
BGS	British Geological Survey - provider of objective and authoritative geoscientific data, information and knowledge for the UK.
Biodiversity	The variety of life in the world or in a particular habitat or ecosystem.
BLiCL	Bat Low-Impact Class Licence - a mitigation class licence that allows a registered ecological consultant to interfere with certain bats and their roosts.
BNL	Basic Noise Level - a measure of source noise at a reference distance from the nearside carriageway edge.
BOA	Biodiversity Opportunity Areas - regional priority areas of opportunity for restoration and creation of habitats.
BoCC	Birds of Conservation Concern – criteria used to assess population statuses of bird species which include global conservation status, recent decline, historical decline, European conservation status, rare breeders, localised species and international importance.
BOD	Biochemical Oxygen Demand - the amount of oxygen consumed by bacteria and other microorganisms while they decompose organic matter under aerobic conditions at a specified temperature.
Borehole	A hole bored into the ground, usually as part of investigations, typically to test the depth and quality of soil, rock and groundwater.
BPM	Best Practicable Means - actions undertaken and mitigation measures implemented to ensure that noise levels are minimised to be as low as practicable.
BRC	Biological Records Centre – established in 1964, with a focus on terrestrial and freshwater species recording.
BRE	Building Research Establishment

**Abbreviation/
Frequently used
term**

Definition/Notes

BRefs	Best Available Technique (BAT) reference documents - a series of reference documents covering industrial processes, their respective operating conditions and emission rates.
British Standard	Standard produced by the British Standards Institution based upon the principles of standardisation recognised inter alia in European Policy.
Broadband sound	Sounds distributed over wide frequency ranges.
BSAC	British Sub Aqua Club – national governing body of recreational diving.
BSI	British Standards Institute - business standards based upon the principles of standardisation recognised inter alia in European Policy.
Built heritage	A structure or building of historic value. These structures are visible above ground level.
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
BTO	British Trust for Ornithology – a bird research organisation founded in 1932
CAMS	Catchment Abstraction Management Strategy – assess the amount of water available in each river catchment.
Catchment	An area of land from which water flows into a watercourse or waterbody.
CATS	North Everest platform to Teesside Central Area Transmission System
CBC	Common Birds Census - ran from 1962 to 2000 and was the first of the British Trust for Ornithology's schemes for monitoring population trends among widespread breeding birds.
CBD	Convention on Biological Diversity
CCC	The Committee on Climate Change - independent advice to government on building a low-carbon economy and preparing for climate change.
CCGT	Combined Cycle Gas Turbine - a highly efficient form of energy generation technology. An assembly of heat engines work in tandem using the same source of heat to convert it into mechanical energy which drives electrical generators and consequently generates electricity.
CCP	Climate Change Predictions – predictions as to how the climate may change within a certain period of time.
CCR	Climate Change Resilience - the resilience of a development to climate change including how a development would be adapted to take account of the projected impacts of climate change.
CCR	Carbon Capture Ready - space to be set aside to accommodate future carbon capture equipment.
CCS	Carbon Capture and Storage - technology that can capture carbon dioxide (CO ₂) emissions produced from the use of fossil fuels in electricity generation and industrial processes.
CCTV	Closed-circuit Television

**Abbreviation/
Frequently used
term**

Definition/Notes

CCUS	Carbon Capture Utilisation and Storage – is group of technologies designed to reduce the amount of carbon dioxide (CO ₂) released into the atmosphere from coal and gas power stations as well as heavy industry including cement and steel production. Once captured, the CO ₂ can be either re-used in various products, such as cement or plastics (utilisation), or stored in geological formations deep underground (storage).
CD	Chart Datum - approximately the lowest level due to astronomical effects and excluding meteorological effects
CDM	Construction (Design and Management) Regulations 2007 – legal duties for safe operation of UK construction sites, including health and safety plans.
CEMP	Construction Environmental Management Plan - a plan to outline how a construction project will avoid, minimise or mitigate effects on the environment and surrounding area.
CEPU	Cleveland Emergency Planning Unit - an emergency planning service to ensure the local authorities are prepared to respond to emergencies and to support the emergency services and the community.
CFA	Continuous Flight Auger – an in-situ method of piling.
CFMP	Catchment Flood Management Plan - consider all types of inland flooding, from rivers, groundwater, surface water and tidal flooding.
CGS	Clean Growth Strategy - sets out the aims of the UK Government to deliver increased economic growth while reducing carbon emissions.
CH ₄	Methane – a chemical compound consisting of one carbon atom and four hydrogen atoms.
Chartered Environmentalist	A professional qualification (CEnv) obtained by knowledgeable, experienced, competent and committed environmental professionals.
CHP	Combined Heat and Power - a highly efficient process that captures and utilises the heat that is a by-product of the electricity generation process.
CIBSE	Chartered Institution Building Services Engineers
CIEEM	Chartered Institute of Ecology and Environmental Management
ClfA	Chartered Institute for Archaeologists
CIHT	Chartered Institution of Highways and Transportation
CL	Conservation Limits
CJEU	Court of Justice of the European Union – the supreme court of the European Union.
CO	Carbon Monoxide - a colourless, odourless and tasteless gas slightly less dense than air.
CO ₂	Carbon Dioxide - an inorganic chemical compound with a wide range of commercial uses it is a colourless, odourless and tasteless gas denser than air

**Abbreviation/
Frequently used
term**

Definition/Notes

CO _{2e}	Carbon dioxide equivalent – a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential, by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.
COD	Chemical Oxygen Demand - a measure of the capacity of water to consume oxygen during the decomposition of organic matter and the oxidation of inorganic chemicals.
COLREGS	Convention on the International Regulations for Preventing Collisions at Sea 1972 – regulations set by the International Maritime Organisation.
COMAH	Control of Major Accident Hazards Regulations to ensure that businesses take all necessary measures to prevent major accidents involving dangerous substances.
Combined Effect	A type of cumulative effect which occurs when different types of activity associated with the Proposed Development combine to have an effect on a specific receptor or resource.
Committed Development	A development that has full or outline planning permission or other relevant development consent or is allocated in an adopted development plan.
Conservation Area	An area designated under section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990 as being of special architectural or historic interest and with a character or appearance which is desirable to preserve or enhance.
CoPA	Control of Pollution Act 1974 – an act to deal with a variety of environmental issues including waste on land, water pollution, abandoned mines, noise pollution and the prevention of atmospheric pollution.
COSHH	Control of Substances Hazardous to Health - a United Kingdom Statutory Instrument stating general requirements on employers to protect employees and other persons from the hazards of substances used at work by risk assessment.
CRoW	Countryside and Rights of Way Act 2000 - gives a public right of access to land mapped as 'open country' (mountain, moor, heath and down) or registered common land.
CRTN	Calculation of Road Traffic Noise – The statutory method for determining entitlement to sound insulation. Eligible schemes are put forward for consideration in accordance with set criteria.
cSAC	Candidate Special Area of Conservation – See SAC for further detail.
CSM	Conceptual Site Model - a tool used to represent the physical, chemical and biological processes that control the transport, migration and actual/potential impacts of contamination (in soil, air, ground water, surface water and/or sediments) to human and/or ecological receptors.
CTMP	Construction Traffic Management Plan - a plan outlining measures to organise and control vehicular movement on a construction site so that vehicles and pedestrians using site routes can move around safely.

**Abbreviation/
Frequently used
term**

Definition/Notes

Cumulative effect	A cumulative impact or effect may arise as the result of the combined impact of a number of different projects within the vicinity (in combination with the Proposed Development) on a single receptor/resource.
CWS	Cooling Water System - used to remove heat from a process or piece of equipment.
CWTP	Construction Worker Travel Plan - a plan managing and promoting how construction workers travel to a particular area or organisation. It aims at promoting greener, cleaner travel choices and reducing reliance on the private car.
DAF	Dissolved Air Flotation – a wastewater treatment technique.
dB	Decibel – unit to measure the intensity of sound.
DCLG	Department for Communities and Local Government – formerly the UK department for communities and local government in England.
DCO	A Development Consent Order made by the relevant Secretary of State pursuant to The Planning Act 2008 to authorise a Nationally Significant Infrastructure Project. A DCO can incorporate or remove the need for a range of consents which would otherwise be required for a development. A DCO can also include rights of compulsory acquisition.
DDT	Directional Drilling Techniques - drilling technique that aims away from 180 degrees down.
Decibel (dB)	The scale used to measure noise is the decibel scale which extends from 0 to 140 decibels, corresponding to the intensity of the sound pressure level.
DEHA	Di-ethyl hydroxyl amine
DEMP	Decommissioning Environmental Management Plan - a plan to outline how a decommissioning project will avoid, minimise or mitigate effects on the environment and surrounding area.
DLN	Dry low NOx burners – fitted to gas turbines to minimise the formation of NOx.
DMRB	Design Manual for Roads and Bridges - a series of 15 volumes that provide standards, advice notes and other documents relating to the design, assessment and operation of trunk roads in the United Kingdom.
DoE	Department of Environment - the UK government department responsible for safeguarding the natural environment, supporting food and farming industry, and sustaining the rural economy.
DPD	Development Plan Documents – planning policy documents.
DQRA	Detailed Quantitative Risk Assessment – a site specific risk assessment.
DTM	Digital Terrain Model - a topographic model of the bare Earth – terrain relief that can be manipulated by computer programs.
DTMP	Decommissioning Traffic Management Plan - a plan outlining measures to organise and control vehicular movements associated with the decommissioning phase to minimise impacts upon local highways.

**Abbreviation/
Frequently used
term**

Definition/Notes

EALs	Environmental Assessment Levels - The Environment Agency's guidance "Air emissions risk assessment for your environmental permit" provides methods for quantifying the environmental impacts of emissions to all media. As well as referring to standards detailed above, it also contains long and short-term Environmental Assessment Levels (EALs) for releases to air derived from a number of published UK and international sources.
EAO	Marine Licensing Exempted Activities Order - this Order applies in relation to any area, and any licensable marine activity carried on in that area, for which the Secretary of State is the appropriate licensing authority under section 113 of the Marine and Coastal Access Act 2009(1).
EclA	Ecological Impact Assessment - a process by which the potential ecological impacts of a development proposal are assessed.
ECow	Ecological Clerk of Works - the preparation of documentation before construction commences and delivery of ecological requirements to meet key development milestones.
eDNA	Environmental DNA - genetic material obtained directly from environmental samples (soil, sediment, water, etc.)
EEA	European Economic Area - consists of the Member States of the European Union (EU) and three countries of the European Free Trade Association.
EEZ	UK Exclusive Economic Zone - an area beyond and adjacent to the territorial sea, subject to the specific legal regime, under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of Article 55 of the UN.
EFT	Emissions Factor Toolkit - published by Defra and the Devolved Administrations to assist local authorities in carrying out Review and Assessment of local air quality.
EIA	Environmental Impact Assessment – a term used for the assessment of environmental consequences (positive or negative) of a plan, policy, program or project prior to the decision to move forward with the proposed action.
ELV	Emission Limit Values - emission limit values based on the Best Available Techniques.
EMF	Electromagnetic Fields - a combination of invisible electric and magnetic fields of force.
EMS	Environmental Management System - the management of an organization's environmental programs in a comprehensive, systematic, planned and documented manner.
ENA	Energy Networks Association - represents the transmission and distribution network operators for gas and electricity in the UK and Ireland.
Entrainment	The passing of marine organisms, typically the eggs and larvae of fish, and planktonic stages of invertebrates, through the mesh of power station cooling water screens.

**Abbreviation/
Frequently used
term**

Definition/Notes

Entrapment	The inadvertent entry into the CWS of marine organisms caused by the ingress of water.
EPA	The Environmental Protection Act 1990 - an Act of the Parliament of the United Kingdom that defines, within England, Wales and Scotland, the fundamental structure and authority for waste management and control of emissions into the environment.
EPC	Engineering, Procurement and Construction
EPC contractor	Engineering, Procurement and Construction contractor – undertake the detailed engineering design of the project, the procurement and deliver the construction of the development.
EPR	Environmental Permitting Regulations - Regulations that came into force in 2008 combining Pollution Prevention and Control and Waste Management Licensing regulations.
EPS	European Protected Species – species that receive full protection under The Conservation of Species and Habitats Regulations 2010.
EPSML	European Protected Species Mitigation Licence
EQR	Ecological Quality Ratio - a measure of the ecologically quality of infaunal communities.
EQS	Environmental Quality Standards - standards that have been developed with the aim to meet the requirements of the Water Framework Directive (WFD) and other legislation.
ERIC	Environmental Records Information Centre North East – organisation that collates environmental data which is used to inform nature conservation.
ERL	Effects Range Low – the threshold below which toxic effects are not likely to be observed or predicted.
ERM	Effects Range Medium – the threshold at which are generally or always observed.
ES	Environmental Statement – a report in which the process and results of an Environment Impact Assessment are documented.
ESC	Energy Systems Catapult – an organisation set up to accelerate the transformation of the UK's energy system.
ETI	Energy Technologies Institute - a UK based company formed from global industries and the UK Government.
EU ETS	European Union Emissions Trading System - helps EU Member States to achieve their commitments to limit or reduce greenhouse gas emissions.
EUNIS	European Union Nature Information System - brings together European data from several databases and organisations into three interlinked modules on sites, species and habitat types.
FEED	Front End Engineering Design - engineering which comes after the conceptual design or feasibility study focusing on the technical requirements and estimated investment cost for the project.
FLO	Fisheries Liaison Officer – work to minimise impact on fishing activities.

**Abbreviation/
Frequently used
term**

Definition/Notes

Flood Zones	<p>A system devised by the Environment Agency to aid decision making in spatial planning. Flood zones are areas at potential risk of flooding from rivers or the sea, ignoring the presence of flood defences and the potential impacts of climate change. The zones are:</p> <ul style="list-style-type: none"> • Flood Zone 1: land outside the floodplain. There is little or no risk of flooding in this zone. Land is shown as 'clear' on the Flood Map – all land outside Zones 2 and 3). • Flood Zone 2: the area of the floodplain where there is a low to medium flood risk. Land is shown in light blue on the Flood Map; and • Flood Zone 3: the area of the floodplain where there is a high risk of flooding. Land shown in dark blue on the Flood Map.
Flue gas	Emissions from combustion process, emitted via a stack or passed to a carbon-capture plant.
FTE (job)	Full Time Equivalent
Future Baseline	The situation and conditions that would prevail should a proposed development not proceed. Such changes are taken into account in predicting impacts of a proposed development.
GCN	Great Crested Newt - a protected newt species native to Great Britain, northern and central continental Europe and parts of Western Siberia.
GEART	The Guidelines for the Environmental Assessment of Road Traffic - the guidelines provide a basis for a comprehensive and consistent approach to the appraisal of traffic and transport impacts.
GGBS	Ground Granulated Blast-furnace Slag - the slag from iron producing blast furnaces.
GHG	Greenhouse Gas - atmospheric gases such as carbon dioxide, methane, chlorofluorocarbons, nitrous oxide, ozone, and water vapour that absorb and emit infrared radiation emitted by the Earth's surface, the atmosphere and clouds.
GI	Green Infrastructure - a network contributing to solving urban and climatic challenges by building with nature, including storm water management, climate adaptation, less heat stress, more biodiversity, food production, better air quality, sustainable energy production, along with clean water and healthy soils.
GIS	Geographical Information System - a computer system for displaying spatial or geographic data.
GLVIA	Guidelines for Landscape & Visual Impact Assessment – a document published by the Landscape Institute providing detailed advice on the process of assessing the landscape and visual effects of developments and their significance.
GPA	Good Practice Advice - address plan-making and decision-taking, and other issues which are important in good decision-making affecting heritage assets. Produced by Historic England.
GPP	Guidance for Pollution Prevention – good practice guidance documents, currently in production.
GQRA	Generic Quantitative Risk Assessment – a risk assessment utilising generic assumptions to estimate risk.

**Abbreviation/
Frequently used
term**

Definition/Notes

Ground Investigation	An intrusive investigation undertaken to collect information relating to the ground conditions, normally for geotechnical or land contamination purposes.
Groundwater	All water which is below the surface of the ground and within the permanently saturated zone.
GWDTE	Groundwater Dependent Terrestrial Ecosystems - wetlands which critically depend on groundwater flows or chemistries.
Hazardous Substance Consent	An important mechanism in the overall control of major hazards as it enables the HSA to consider whether the presence of a significant quantity of a hazardous substance is acceptable in a particular location.
HAZID	Hazard Identification study - identify hazards associated with the operation of the Proposed Development and seek to design out these hazards.
HAZOP	Hazard and Operability study - systematically evaluate the potential hazards and how they are prevented, minimised or controlled.
HC	Hydrocarbons - a compound of hydrogen and carbon.
HDD	Horizontal Directional Drill - a trenchless method used to install pipelines below the ground.
HDV	Heavy Duty Vehicles
Hectare (Ha)	A metric unit of measurement, equal to 10,000 square metres or to 2.471 acres.
HER	Historic Environment Record - information services that provide access to comprehensive and dynamic resources relating to the archaeology and historic built environment of a defined geographic area.
HFCs	Hydrofluorocarbons – a group of industrial chemicals most often used for cooling and refrigeration.
HGV	Heavy Goods Vehicle - vehicles with a gross weight in excess of 3.5 tonnes.
HHRA	Human Health Risk Assessment - process to estimate the nature and probability of adverse health effects in humans who may be exposed to chemicals.
HMWBs	Heavily Modified Water Bodies – a water body modified by human activities.
HP	High pressure
HRA	Habitats Regulation Assessment - the assessment of the impacts of implementing a plan or policy on a Natura 2000 site required under the Habitats Directive.
HRO	Harbour Revision Order – local legislation governing a harbour/port.
HRSG	Heat Recovery Steam Generator - an energy recovery heat exchanger that recovers heat from a hot gas stream. It produces steam that can be used in a process (cogeneration) or used to drive a steam turbine (combined cycle).
HSC	Hazardous Substances Consents - enables the HSA to consider whether the presence of a significant quantity of a hazardous substance is acceptable in a particular location.

**Abbreviation/
Frequently used
term**

Definition/Notes

HSE	Health and Safety Executive - the body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare.
HSI	Habitat Suitability Index - a means of quantifying the suitability of aquatic habitats for GCN using a set of indices linked to geographical location, habitat types and a variety of biotic and abiotic factors.
HV	High Voltage - defined by the DOE Electrical Safety Guidelines as over 600 volts.
IAMMWG	Inter-Agency Marine Mammal Working Group
IAQM	The Institute of Air Quality Management – professional body for air quality air professionals.
ICCI	In-combination Climate Change Impacts - the in-combination effects of a changing climate.
ICES	The International Council for the Exploration of the Sea - an intergovernmental marine science organisation.
IEA	Institute of Environmental Assessment – now merged with The Institute of Environmental Management and the Environmental Auditor's Registration Association to form the Institute of Environmental Management and Assessment.
IED	Industrial Emissions Directive, EU Directive 2010/75/EU – European Union Directive committing member states to control and reduce the impact of industrial emissions on the environment.
IEF	Important Ecological Features – ecological features with high conservation value and importance.
IFC	International Finance Corporation – a global development institution.
IFCA	Inshore Fisheries Conservation Authorities - assist and promote the regional IFCAs to help ensure that the authorities develop a leading and effective national role in fisheries and conservation management in line with the IFCA vision.
IMO	International Maritime Organisation - the United Nations specialised agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships.
Impingement	The capture of marine organisms, typically adult and juvenile fish and invertebrates, on the mesh of Power Station cooling water screens because they are too large to pass through.
Impulsive sound	Impulsive sounds are made up short pulses of high frequency components.
INCA	The Industry Nature Conservation Association – a membership organisation that works with businesses to meet regulatory requirements.
INNS	Invasive and Non-Native Species – species that have occurred outside of their natural range. Invasive species have the potential to hinder or prevent survival of others within the ecosystem.
IPPC	Integrated Pollution Prevention and Control - the minimising of pollution from various industrial sources throughout the European Union (EU), as established by the IPPC Directive.

**Abbreviation/
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Definition/Notes

IPCC	Intergovernmental Panel on Climate Change - the United Nations body for assessing the science related to climate change.
IQI	Infaunal Quality Index - developed as part of the Water Framework Directive classification of transitional and coastal water bodies.
IROPI	Imperative Reasons of Over-riding Public Interest – reasons why a development is required or should proceed.
IRZ	Impact Risk Zone - a GIS tool established by Natural England to identify potential risks to SSSIs from development.
ISMP	Invasive Species Management Plan - preventing and managing the spread of invasive species and their potential impacts.
ISO	International Organization for Standardization - an international standard setting body composed of representatives for various national standards organisations.
IUCN	The International Union for Conservation of Nature - global authority on the status of the natural world and the measures needed to safeguard it.
L _{AF90}	The A-weighted sound pressure level exceeded for 90% of the time period with a FAST time constant.
L _{AF10}	The A-weighted sound pressure level exceeded for 10% of the time period with a FAST time constant.
L _{AFmax}	Maximum A-weighted sound pressure level measured with FAST time constant.
L _{Aeq}	The A-weighted equivalent continuous sound pressure level.
LAQM	Local Air Quality Management – the review and assessment of air quality by local authorities in the UK.
LBAP	Local Biodiversity Action Plan - partnerships that operate at a local authority level and help conserve and enhance biodiversity. The partnerships deliver a wide range of biodiversity conservation, communication and education work in their local areas.
LCA	Landscape Character Area - areas of homogenous landscape or townscape character. Typical components defining character include landform, land cover, settlement pattern, form and enclosure.
LCP	Large Combustion Plant - a combustion plant with a thermal capacity of 50MW or greater.
LCT	Local Character Type - a form of landscape classification based on characteristics of the land.
LCTr	Landscape Character Tracts - defined by combinations of physical and land cover characteristics and geographical context.
LDV	Light Duty Vehicles - vehicle with a gross weight of less than 3.5 tonnes.
LFU	Lobster Fisheries Units - There are six LFUs that have been defined for England based upon the distribution of the fisheries, hydrographic conditions and what is known of larval distributions and development.
LGM	Last Glacial Maximum - the last phase during which glacial ice was at maximum extent.
LGV	Large goods vehicle – requires the same licence as a heavy goods vehicle.

**Abbreviation/
Frequently used
term**

Definition/Notes

LGS	Local Geological Sites - sites of geological or geomorphological value.
Listed Building	A building of special architectural or historic interest. Listed buildings are graded I, II* or II, with Grade I being the highest. Listing includes the interior as well as the exterior of the building.
LLFA	Lead Local Flood Authorities - flood risk management body.
LOAEL	Lowest Observable Adverse Effect Level - the lowest concentration or amount of a substance found by experiment or observation that causes adverse effects. In relation to noise, the level above which adverse effects on health and quality of life can be detected.
LNR	Local Nature Reserve - A non-statutory site of local importance for wildlife, geology, education or public enjoyment.
LP	Low pressure – the LP Compressor Station will compress the CO ₂ stream to a pressure between 12 and 20 bar above ambient pressure (barg).
LPA	Local Planning Authority – the planning department within the local authority where a development is situated.
LSE	Likely Significant Effect
LSOA	Local Super Output Areas - part of a set of geographies designed specifically for statistical purposes. They set boundaries to allow data monitoring over time. LSOAs have a smaller population than Middle Super Output Areas.
LTT gap analysis	Long Term Trend gap analysis - an approach within the Design Manual for Roads and Bridges to adjust predictions for improvements in vehicle emissions.
LUP	Land Use Planning - a potential solution for sustainable use of land in the long term by optimising the effective use of land resources.
LVIA	Landscape and Visual Impact Assessment – the process of evaluating the effect of a proposal upon the landscape and views of it.
L _w	Sound Power Levels – the measure in decibels of the amount of sound power emitted by a source.
LWS	Local Wildlife Site - defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species with a national, region.
MAGiC	Multi-agency geographical information for the countryside – interactive mapping and information tool provided by Defra.
MAHP	Major Accident Hazard Pipeline - these include high pressure natural gas supply transmission and distribution network. They also cover other pipeline systems transporting oils, chemicals and other gases
MAPD	Major Accident Prevention Document – used to assess the risks associated with major accident hazard pipelines.
MAPP	Major Accident Prevention Plan - sets out the major accident prevention policy.
MBBR	Moving Bed Bio-Reactor – a wastewater treatment process.
MCA	Maritime and Coastguard Agency - work to prevent the loss of life on the coast and at sea
MCAA	Marine and Coastal Access Act (2009) - the primary legislation relevant to marine development plans.

**Abbreviation/
Frequently used
term**

Definition/Notes

MCMS	Marine Case Management System – service provided by the Marine Management Organisation for licencing, regulations and marine activities.
MCZ	Marine Conservation Zones - a type of marine nature reserve in UK waters. They are areas designated with the aim to protect nationally important, rare or threatened habitats and species.
MDS	Multidimensional Scaling - an MDS plot is a visual representation of the relative dissimilarity (distance) among samples.
MEA	Monoethanolamine – an organic chemical compound
MHCLG	Ministry of Housing, Communities and Local Government – UK Government department responsible for local government.
MHWS	Mean High Water Springs - the height of mean high-water springs is the average throughout the year (when the average maximum declination of the moon is 23.5°) of two successive high waters during those periods of 24 hours when the range of the tide is at its greatest.
MIS	Marine Information System - an interactive tool for marine licensing applicants and decision makers, supporting marine plan implementation.
Mitigation	Measures intended to avoid, reduce and, where possible, remedy significant adverse environmental effects.
ML	Marine Licence – licence required to undertake certain activities in and around the sea.
MLA	Marine Licence Application – an application to the Marine Management Organisation for a marine licence.
MLWS	Mean Low Water Springs - the height of the mean low water springs is the average height obtained by the two successive low waters during those periods of 24 hours when the range of the tide is at its greatest.
MMO	Marine Management Organisation - an executive, non-departmental body in the United Kingdom with the responsibility of licencing, regulating and planning marine activities in the seas around England so that they are carried out in a sustainable way.
MMP	Materials Management Plan - A mechanism by which those who are developing a site can comply with Environment Agency regulations for excavated ground materials.
MNCR	Marine Nature Conservation Review - commenced in 1987 with the main objectives of extending knowledge of benthic marine habitats, communities and species, and identifying sites and species of nature conservation importance.
MOC	Minimum Offtake Connection from the National Grid.
MOU	Memorandum of Understanding - a formal agreement between two or more parties.
MPS	Marine Policy Statement - the framework for preparing Marine Plans and taking decisions affecting the marine environment.
MW	Megawatts – unit of energy.
N-Amines	Nitrosamines and nitramines – degradation products of amines.

**Abbreviation/
Frequently used
term**

Definition/Notes

NAQSs	National Air Quality Strategy Objectives – national air quality objectives and policy options to further improve air quality in the UK.
Natural England	Executive non-departmental public body constituted under the Natural Environment and Rural Communities Act 2006 (section 2(1)) to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development.
NCA	National Character Area - a natural subdivision of England based on a combination of landscape, biodiversity, geodiversity and economic activity.
NE	Natural England - the government's adviser for the natural environment in England.
NECP	National Energy and Climate Plan - the UK's draft National Energy and Climate Plan sets out integrated climate and energy objectives, targets, policies and measures.
NEMP	North East Marine Plan – includes inshore and offshore marine plans
NERC	Natural Environment and Rural Communities Act 2006 - An Act to make provision about bodies concerned with the natural environment and rural communities; to make provision in connection with wildlife, sites of special scientific interest, National Parks and the Broads; to amend the law relating to rights of way; to make provision as to the Inland Waterways Amenity Advisory Council; to provide for flexible administrative arrangements in connection with functions relating to the environment and rural affairs and certain other functions; and for connected purposes.
NF ₃	Nitrogen trifluoride – a colourless gas that is made of nitrogen and fluorine atoms.
NFPD	National Fish Populations Database - information collected from fisheries monitoring work on rivers, lakes and transitional and coastal waters
NGG	National Gas Grid – the national gas transmission network.
NGR	National Grid Reference – system of geographical grid references.
NH ₃	Ammonia – a compound of nitrogen and hydrogen.
NHLE	National Heritage List for England - a register of all nationally protected historic buildings and sites in England.
NIPH	Norwegian Institute of Public Health - a government agency under the Ministry of Health and Care Services.
NMBAQC	North East Atlantic Marine Biological Quality Control
NMUs	Non-Motorised Users – someone who is walking, cycling or a horse rider.
NNR	National Nature Reserves - established to protect important habitats, species and geology.
NO	Nitric oxide - a colourless gas made up of nitrogen and oxygen.
N ₂ O	Nitrous oxide – a gas made up of nitrogen and oxygen.
NO _x	Oxides of Nitrogen - a mixture of gases that are composed of nitrogen and oxygen.
NOAEL	No Observed Adverse Effect Level

**Abbreviation/
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term**

Definition/Notes

NOEL	No Observed Effect Level - the greatest concentration or amount of a substance, found by experiment or observation, that causes no detectable adverse effects. In relation to noise, this is the level below which there is no detectable effect on health and quality of life due to the noise.
NPPF	National Planning Policy Framework - Policy Framework which came into effect on 27 March 2012 (with some transitional arrangements) replacing the majority of national planning policy other than NPSs. The NPPF is part of the Government's reform of the planning system intended to make it less complex, to protect the environment and to promote sustainable growth. It does not contain any specific policies on Nationally Significant Infrastructure Projects but its policies may be taken into account in decisions on DCOs if the Secretary of State considers them to be both important and relevant. The revised NPPF was updated on 19 th of February 2019.
NPS	National Policy Statements - Statement produced by Government under the Planning Act 2008 providing the policy framework for Nationally Significant Infrastructure Projects. They include the Government's view of the need for and objectives for the development of Nationally Significant Infrastructure Projects in a particular sector such as energy and are used to determine applications for such development.
NPSE	Noise Policy Statement for England - policy setting out the long term vision of government noise policy, to promote good health and a good quality of life through the management of noise.
NRA	Navigational Risk Assessment - assesses the hazards and risks affecting vessel navigation.
NRMM	Non Road Mobile Machinery - machinery typically used off the road, such as construction machinery.
NSIP	Nationally Significant Infrastructure Projects - defined by the Planning Act 2008 and cover projects relating to energy (including generating stations, electric lines and pipelines); transport (including trunk roads and motorways, airports, harbour facilities, railways and rail freight interchanges); water (dams and reservoirs, and the transfer of water resources); wastewater treatment plants and hazardous waste facilities. These projects are only defined as nationally significant if they satisfy a statutory threshold in terms of their scale or effect.
NSR	Noise Sensitive Receptor - locations or areas where dwelling units or other fixed, developed sites of frequent human use occur which may be sensitive to noise impacts.
NVC	National Vegetation Classification (NVC) survey - a detailed botanical survey of a site.
NWL	Northumbrian Water Limited
NZT	Net Zero Teesside
NRRM	Non-Road Mobile Machinery - machinery typically used off the road, such as construction machinery.
OEL	Ocean Ecology Limited
O&M	Operation and Maintenance phases of the development.

**Abbreviation/
Frequently used
term**

Definition/Notes

OMH	Open Mosaic Habitats on Previously Developed Land - found mainly in urban and formerly industrial areas and have high biodiversity value.
ONS	Office for National Statistics - UK's largest independent producer of official statistics.
Opening Year	The year of opening (post-construction) of a scheme, when it becomes operational.
OS	Ordnance Survey - the national mapping agency for Great Britain.
OWF	Offshore Wind Farm
PAH	Polycyclic Aromatic Hydrocarbons - a class of chemicals that occur naturally in coal, crude oil, and gasoline and are produced through the burning of coal, oil, gas, wood, garbage, and tobacco.
PAWS	Plantations on Ancient Woodland Sites
PC	Process Contribution - represents the change caused by the Proposed Development.
PCBs	Polychlorinated Biphenyls - an organic chlorine compound.
PCC	Power, Capture and Compressor site
PDS	Proposed Development Site
PDV	Phocine Distemper Virus – a species of morbillivirus
PE	Polyethylene - a lightweight, durable thermoplastic with variable crystalline structure.
PEA	Preliminary Ecological Appraisal - an ecological assessment method which evaluates the existing ecological value of a site.
PEC	Predicted Environmental Concentration - PC plus background concentration.
PEI Report	Preliminary Environmental Information Report– an initial statement of the main environmental information available for a study area.
PEL	Probable Effects Level - the level above which adverse effects are expected to occur frequently.
PFCs	Perfluorocarbons - a group of human-made chemicals composed of carbon and fluorine only.
PFRA	Preliminary Flood Risk Assessment – assesses floods that have taken place in the past and floods that could take place in the future
PIC	Personal Injury Collision
PIG	Pipeline Inline Gauging - the process of locating and identifying internal defects such as dents, debris or other internal restrictions in pipelines.
PINs	Planning Inspectorate – executive agency of the Department for Communities and Local Government of the United Kingdom Government. It is responsible for determining final outcomes of town planning.
PHEA	Preliminary Hazard and Environmental Assessment – determines the scope of hazards and environmental impacts related to a project.
PM _{2.5}	Fine particulate matter less than 2.5 µm in size – an air pollutant.
PM ₁₀	Particulate matter less than 10 µm in size – an air pollutant.

**Abbreviation/
Frequently used
term**

Definition/Notes

PMRA	Protection of Military Remains Act - an Act to secure the protection from unauthorised interference of the remains of military aircraft and vessels that have crashed, sunk or been stranded and of associated human remains; and for connected purposes.
PNS	Potential Nest Site – an area that has characteristics suitable for nesting.
PPG	Planning Practice Guidance - guidance expanding upon and supporting the NPPF.
PPV	Peak Particle Velocity - a way to measure ground vibration. PPV refers to the movement within the ground of molecular particles in metres per second.
PRA	Preliminary Risk Assessment – the initial step in an assessment of land contamination.
Priority Habitats	Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.
pRamsar	Proposed Ramsar site – see Ramsar for further details.
PRoW	Public Rights of Way - a highway where the public has the right to walk. It can be a footpath (used for walking), a bridleway (used for walking, riding a horse and cycling), or a byway that is open to all traffic (including motor vehicles).
PSA	Particle Size Analysis – technique used to measure the mean particle size.
PSD	Particle Size Distribution – the amount of particles present according to size.
pSPA	Potential Special Protection Area – see SPA for further details.
PSSR	Preliminary Sources Study Report - uses the findings of the Desk Study and assesses the viability of the proposed development
PTS	Permanent Threshold Shift - a permanent, irreversible increase in the threshold of audibility at a specified frequency or portion of an individual's hearing range above a previously established reference level. This is considered to be auditory injury.
PVC	Polyvinyl Chloride – a thermoplastic polymer
PWA	Protection of Wrecks Act 1973 - an Act to secure the protection of wrecks in territorial waters and the sites of such wrecks, from interference by unauthorised persons; and for connected purposes.
PWMS	Precautionary Working Method Statement
RAF	Royal Air Force
Ramsar	Wetland sites that are of international importance, as designated under Article 2(1) of the Convention on Wetlands of International Importance.
RBBP	Rare Breeding Birds Panel – ornithological body that produces a confidential report of rare breeding birds.
RBI	Risk Based Inspection - a risk based approach to planned plant inspection
RBMPs	River Basin Management Plans – plans that set out how organisations, stakeholders and communities will work together to improve the water environment.

**Abbreviation/
Frequently used
term**

Definition/Notes

RCBC	Redcar and Cleveland Borough Council
RCM	Reliability Centred Maintenance - a maintenance strategy that is implemented to optimise the maintenance program of a company or facility.
RCP	Representative Concentration Pathways - a set of standards used by climate modellers.
RDB	Red Data Book - a public document created for recording endangered and rare species.
REP	Renewable Energy Power station
Residual Effect	The predicted consequential change on the environment from the impacts of a development after mitigation.
RHS	River Habitat Survey - a method designed to characterise and assess the physical structure of freshwater streams and rivers, including recognition of vegetation types and basic geomorphological principles and processes.
RIGS	Regionally Important Geological Sites - sites of regional and local importance for their geology that have not been designated a Site of Special Scientific Interest.
RL	Received Level – the sound level after subtracting transmission loss.
RLB	Red Line Boundary – the proposed Site boundary.
RSPB	The Royal Society for the Protection of Birds – the UK’s largest nature conservation charity.
RYA	Royal Yachting Association - the national body for all forms of boating.
SAC	Special Areas of Conservation - High quality conservation sites that are protected under the European Union Habitats Directive, due to their contribution to conserving those habitat types that are considered to be most in need of conservation.
STBC	Stockton-on-Tees Borough Council
Scheduled monument	An historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport.
SCI	Sites of Community Importance – sites agreed as worthy of designation by the Commission and EU Member States.
Scoping	The process of identifying the issues to be addressed by the Environmental Impact Assessment process. It is a method of ensuring that an assessment focuses on the important issues and avoids those that are considered to be not significant.
Scoping Opinion	The written opinion of the relevant authority, following a request from the applicant, as to the information to be provided in an Environmental Statement/PEI Report.
Scoping Report	A report which records the outcomes of the scoping process and is typically submitted as part of a formal request for a Scoping Opinion.
SCR	Selective Catalytic Reduction – process for removal of nitrogen oxides from flue gas.
SEL	Sound Exposure Levels - the constant sound level that has the same amount of energy in one second as the original noise event.

**Abbreviation/
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term**

Definition/Notes

SEN	Special Educational Needs - learning difficulties or disabilities that make it harder for children to learn than most children of the same age.
SEP	Strategic Economic Plan – plans set out by local authorities illustrating their strategies for growth.
SF ₆	Sulphur hexafluoride - gas whose molecules consist of one sulfur atom and six fluorine atoms.
SFRA	Strategic Flood Risk Assessment - assessment usually showing risk from all sources of flooding, cumulative impact that development or changing land use would have on the risk of flooding and effect of climate change on risk.
Simple Index Approach	Risk-based method for selecting appropriate sustainable (urban) drainages systems (SuDS) for the treatment of surface water runoff.
SIMPER	Similarity Percentage tests can be used to determine the individual taxa that contribute to the differences between groups of samples and the similarities between samples within a group.
SLA	Sensitive Landscape Area - a Landscape area with particular qualities which make it more sensitive to development.
SLA	Special Landscape Area - countryside of very high visual quality; a combination of impressive landscape, buildings of architectural and historical significance and areas of ecological importance.
SLM	Sound Level Meters – instrumentation used during acoustic surveys.
SNCI	Sites of Nature Conservation Importance - a designation given to sites that have substantive local nature conservation and geological value.
SO ₂	Sulphur Dioxide - a pungent corrosive gas.
SOAEL	Significant Observed Adverse Effect Level – the noise level above which significant adverse effects on health and quality of life occur.
SoCC	Statement of Community Consultation – agreed with the relevant local authorities. The SoCC must set out the proposed community consultation.
SoS	Secretary of State - the decision maker for DCO applications and head of Government department.
SPA	Special Protection Area - strictly protected sites classified in accordance with article 4 of the EC birds directive. Special Protection Areas are Natura sites which are internationally important sites for the protection of threatened habitats and species.
SPD	Supplementary Planning Document – add further details to the policies in the local plan.
SPG	Supplementary Planning Guidance – documents provided by local authorities alongside their plans.
SPL	Sound Pressure Levels – represents the sound pressure of a sound relative to a reference pressure.
SSC	Suspended Sediment Concentrations - the total value of both mineral and organic material carried in suspension by a river.
SSI	Sahaviriya Steel Industries UK Limited
SSL	Sound Source Level – the level of sound measured at the source.

**Abbreviation/
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term**

Definition/Notes

SSSI	Site of Special Scientific Interest - nationally designated Sites of Special Scientific Interest, an area designated for protection under the Wildlife and Countryside Act 1981 (as amended), due to its value as a wildlife and/or geological site.
Stakeholder	An organisation or individual with a particular interest in a development project.
STBC	Stockton-on-Tees Borough Council
STDC	South Tees Development Corporation – the area covers 4,500 acres of land south of the River Tees in the borough of Redcar and Cleveland.
Study Area	The area within which environmental effects which may be classed as significant are assessed (i.e. extending a distance from the project footprint).
SuDS	Sustainable Drainage Systems – drainage systems that are designed to efficiently manage surface water drainage whilst minimising flood risk
SWMP	Site Waste Management Plan - a plan setting out how resources will be managed and waste controlled at all stages during a construction project.
TA	Transport Assessment - comprehensive and systematic process that sets out various transport issues relating to a development.
TEL	Threshold Effects Level - the concentration below which adverse biological effects are expected to occur rarely.
TEMPRO	Trip End Model Presentation Program - allows users to view the NTEM dataset and provides forecasts of trip ends and associated documentation.
TGN	Technical Guidance Note
TH	Trinity House - charity dedicated to safeguarding shipping and seafarers, providing education, support and welfare to the seafaring community.
THC	Total Hydrocarbon Content - the quantity of the measured hydrocarbon impurities present.
TIN	Technical Information Note
TL	Transmission Loss - the transmission loss at a distance r from the source.
Tonal sound	Sounds comprising one discrete frequency, with a high proportion of sound energy at a single frequency
Trenchless technology	Trenchless construction includes such construction methods as tunneling, microtunneling, horizontal directional drilling also known as directional boring, horizontal auger boring and other methods for the installation of pipelines and cables below the ground with minimal excavation.
TraC	Transitional and Coastal waters – estuarine and coastal waters

**Abbreviation/
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term**

Definition/Notes

TTS	Temporary Threshold Shift - A temporary, reversible increase in the threshold of audibility at a specified frequency or portion of an individual's hearing range above a previously established reference level.
TPH	Total Petroleum Hydrocarbon - a term used to describe several hundred chemical compounds that originally come from crude oil.
TR	Traffic receptor – receptor experiencing effects from traffic including air and noise emissions.
TraC	Transitional and Coastal – estuarine and coastal waters.
TS	Transport Statement - comprehensive review of all the potential transport impacts of a proposed development.
TTS	Temporary Threshold Shifts - temporary shift in the auditory threshold.
TTWA	Travel to Work Area - statistical tool used by UK Government agencies and local authorities to indicate an area where the population would generally commute to a larger town or city for employment purposes.
UAEL	Unacceptable Adverse Effect Level - noticeable and very disruptive noise changes that should be prevented.
UKBAP	UK Biodiversity Action Plan - the UK Government's response to the Convention on Biological Diversity (CBD).
UKCP18	UK Climate Projections 2018 - provides an up-to-date assessment of how the climate of the UK may change over the 21st century.
UKHO	United Kingdom Hydrographic Office – a centre for hydrography, specialising in marine geospatial data.
Unabated	Without the application of carbon capture.
UXB	Unexploded Bombs – explosive weapons that are unexploded.
UXO	Unexploded Ordnance – unexploded bombs/weapons.
VDV	Vibration Dose Values - a cumulative measurement of the vibration level received.
VFS	Vortex flow separator – treatment for surface water runoff from process areas.
Visual Amenity	The enjoyment or benefit that people (individually or as a group) gain from a particular view that may change as a consequence of a proposed development during its construction, operation or decommissioning.
VOC	Volatile Organic Compounds - chemicals that have a high vapour pressure at ordinary room temperature.
VTs	Vessel Tracking System – used to monitor a ships position.
WCA	Wildlife and Countryside Act 1981 (as amended) - legislation which protects animals, plants and habitats in the UK.
WeBS	Wetland Bird Survey - monitors non-breeding waterbirds in the UK.
WFD	Water Framework Directive - European Union directive which commits member states to achieve good qualitative and quantitative status of all water bodies.

**Abbreviation/
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term**

Definition/Notes

WHO	World Health Organisation – an agency of the United Nations focusing on public health.
WMP	Water Management Plan - provides information about current water uses and water-reduction goals.
Worst-case assumption (or scenario)	An assumption adopted within an environmental impact assessment which identifies a scenario or parameter that would likely result in the maximum environmental effect (termed the worst-case). This is typically applied where uncertainty exists over the detail of a particular development component or approach to project delivery, for which a basis of assessment is needed.
WRZ	Water Resource Zone - the largest practical spatial area within which managing supply and demand for water is largely self-contained (apart from defined bulk transfers of water); where the resource units, supply infrastructure and demand centres are linked such that customers within the zone experience the same risk of supply failure.
WT	Wildlife Trust – Tees Valley Wildlife Trust
WTP	Water Treatment Plant – location where wastewater is treated.
WTP	Workplace Travel Plans - a way of encouraging efficient and environmentally friendly methods for travelling to work and at work.
WWT	Wildfowl and Wetlands Trust – a wetland conservation organisation.
WwTW	Wastewater Treatment Works – location where wastewater is treated.
Zoi	Zone of Influence - the potential visibility of a proposed development in the landscape.
ZTV	Zone of Theoretical Visibility - a computer generated tool to identify the likely (or theoretical) extent of visibility of a development.