

H2Teesside Project

Environmental Statement

Volume III – Appendices

Appendix 1D: Glossary of Abbreviations and Definitions of Frequently Used Terms

Document Reference: 6.4.4

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

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



TABLE OF CONTENTS

1D.0 GLOSSARY OF ABBREVIATIONS AND DEFINITIONS OF FREQUENTLY USED
TERMS 3

TABLES

Table 1D-1: Definitions of Frequently Used Terms 3
Table 1D-2: Abbreviations and Terms 5

1D.0 GLOSSARY OF ABBREVIATIONS AND DEFINITIONS OF FREQUENTLY USED TERMS

Table 1D-1: Definitions of Frequently Used Terms

| PROJECT ELEMENTS | DEFINITION/NOTES |
|----------------------------------|--|
| The Proposed Development | H2Teesside. |
| The Applicant | The Applicant is H2 Teesside Limited, a bp company. |
| The Hydrogen Production Facility | The Hydrogen Production Facility to be built on the Main Site. |
| The Proposed Development Site | All the land required for the development i.e., within the DCO application boundary/ red line boundary, including the Main Site and connections. |
| The Main Site | The land where the Hydrogen Production Facility will be located (the Foundry, owned by STDC/ Teesworks). |
| CO ₂ Export Pipeline | Route from the Hydrogen Production Facility to CO ₂ offtake/connection with NEP infrastructure.. |
| Hydrogen Pipeline Corridor | Gaseous phase hydrogen pipeline network for the purpose of connecting to potential off-takers at various industrial installations across the Tees Valley. This is interchangeable with Hydrogen Distribution Network and Hydrogen Pipeline Network. |
| Hydrogen Distribution Network | Gaseous phase hydrogen pipeline network for the purpose of connecting to potential off-takers at various industrial installations across the Tees Valley. This is interchangeable with Hydrogen Pipeline Corridor and Hydrogen Pipeline Network. |
| Hydrogen Pipeline Network | Gaseous phase hydrogen pipeline network for the purpose of connecting to potential off-takers at various industrial installations across the Tees Valley. This is interchangeable with Hydrogen Pipeline Corridor and Hydrogen Distribution Network. |
| Natural Gas Connection Corridor | The routing for connection to the National Gas Grid (NGG). |
| Other Gases Connection Corridor | Other gas connection pipelines which may be required for the transportation of compressed O ₂ and N ₂ for use at the Hydrogen Production Facility. |
| Water Connections Corridor | The route by which water will be supplied to and from the Proposed Development (i.e., including both potential water supply and discharge connections). |

| PROJECT ELEMENTS | DEFINITION/NOTES |
|---|--|
| Electrical Connection Corridor | An electricity supply would be required. Various options are being considered which include a connection to existing and proposed 66 kilovolt (kV) substations at Teesworks or connection to NZT's electrical network. |
| Connection Corridors Refer to Chapter 4: Proposed Development (ES Volume I, EN070009/APP/6.2) | <p>This term is used to describe the pipeline and connection corridors outlined below as a collective:</p> <ul style="list-style-type: none"> ● CO₂ Export Corridor ● Hydrogen Pipeline Corridor ● Natural Gas Connection Corridor. ● Electrical Connection Corridor. ● Water Connections Corridor. ● Other Gases Connection Corridor (O₂ and N₂). |
| Embedded Mitigation | Measures that have been integrated into the Proposed Development to avoid, prevent, reduce or offset adverse environmental effects. Such measures include refinement of the design and layout of the Proposed Development to avoid impacts on sensitive receptors, and adherence to relevant legislation, guidance, and best practice. The assessment of impacts and effects has been undertaken on the basis of these measures being implemented (i.e. they are 'embedded mitigation'). |
| Essential Mitigation | These are measures required to reduce and if possible offset likely significant adverse environmental effects of construction, operation and decommissioning stages of the proposed development They are critical to achieve the effects reported within the ES. |

Table 1D-2: 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. |
| 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 – set by the CDM (Construction (Design and Management) Regulations) regulations, for staff and designers to follow. |
| AEL | Associated Emissions Levels – see BAT-AELs. |
| 1% AEP | 1% Annual Exceedance probability- A one in a hundred chance of being exceeded in any year. |
| AECOM | AECOM Limited. |
| 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. |
| AL | Action Level(s) – non-statutory threshold values used to inform the assessment of suitability of material for disposal to sea; there are two levels – AL1 and AL2. |
| 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. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| 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. |
| AMP | Asbestos Management Plan – used to register and plan how asbestos will be managed within a development. |
| 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. |
| AOS | Appraisal of Sustainability – a systematic process to appraise the social, environmental, and economic effects of a plan, required by the NPS EN-5 |
| 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. |
| 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. |
| ASNW | Ancient semi-natural woodland. |
| ASU | Air Separation Unit – a plant that separates atmospheric air into its components; typically oxygen and nitrogen. |
| ATC | Automated Traffic Counts - a count of vehicular or pedestrian traffic conducted along a particular road, path or intersection. |
| ATR | Auto Thermal Reformer – using oxygen and carbon dioxide or steam in a reaction with methane to form syngas. |
| 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). |
| BAP | Biodiversity Action Plan – an internationally recognised program addressing threatened species and habitats, designed to protect and restore biological systems. |
| Baseline Conditions | The environment as it appears (or would appear) immediately prior to the implementation of a project development together with any |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| | 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. |
| BEIS | Business, Energy and Industrial Strategy – Former department of the UK Government, now split into the Department for Business and Trade, the Department for Energy Security and Net Zero and the Department for Science, Innovation and Technology. |
| BGL | Below Ground Level. |
| BGS | British Geological Survey - provider of objective and authoritative geoscientific data, information and knowledge for the UK. |
| BIS | Department for Business, Innovation and Skills, now part of the UK Department for Energy Security and Net Zero (DESNZ). |
| Biodiversity | The variety of life in the world or in a particular habitat or ecosystem. |
| BMV | Best and Most Versatile - the best and most versatile land is defined as Grades 1 (excellent quality), 2 (very good quality) and 3a (good quality) agricultural land. |
| BNL | Basic Noise Level - a measure of source noise at a reference distance from the nearside carriageway edge. |
| 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. |
| Borehole | A hole bored into the ground, usually as part of investigations, typically to test the depth and quality of soil, rock and groundwater. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| BPM | Best Practicable Means - actions undertaken and mitigation measures implemented to ensure that noise levels are minimised to be as low as practicable. |
| BRE | Building Research Establishment. |
| BRef | Best Available Technique (BAT) reference document – this is 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. |
| BSI | British Standards Institute - business standards based upon the principles of standardisation recognised inter alia in European Policy. |
| BTO | British Trust for Ornithology – a bird research organisation founded in 1932. |
| CAA | Civil Aviation Authority. |
| 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. |
| 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. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| 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. |
| CCRA | Climate Change Resilience Assessment – An assessment published every 5 years by the UK Government which assesses the risks and opportunities facing the UK from climate change. |
| CCRO | Closed circuit reverse osmosis – a water purification process. |
| CCG | Clinical Commissioning Group - clinically-led statutory NHS bodies responsible for the planning and commissioning of health care services for their local area. |
| CCS | Carbon, Capture and Storage. |
| CCTV | Closed-circuit Television. |
| CDM | Construction (Design and Management) Regulations 2007 – legal duties for safe operation of UK construction sites, including health and safety plans. |
| CEFAS | Centre for Environment, Fisheries and Aquaculture Science - the UK government’s marine and freshwater science experts. |
| 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. |
| CEMS | Continuous Emissions Monitoring System - a facility to measure flow, dust, concentration of air pollutants. |
| 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. |
| 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 process that captures and utilises the heat that is a by-product of the electricity generation process. |
| CIBSE | Chartered Institution of Building Services Engineers. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| CIEEM | Chartered Institute of Ecology and Environmental Management. |
| CIfA | Chartered Institute for Archaeologists. |
| CIHT | Chartered Institution of Highways and Transportation. |
| CIRIA | Construction Industry Research and Information Association. |
| CL | Conservation Limits. |
| CL | Critical Levels. |
| CL:AIRE | A UK charity committed to providing a valuable service for all those involved in sustainable land reuse. |
| CLR (11) | The Model Procedures for the Management of Land Contamination, replaced by LC:RM (Land Contamination risk management). Published by the EA. |
| CMS | Congestion Management Strategy. |
| CNP | Critical National Priority – Concluded by the Government in NPS EN-1 to be the need that exists for the provision of nationally significant low carbon infrastructure such as the Proposed Development. |
| 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. |
| 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. |
| 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 combine to have an effect on a specific receptor or resource. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| Committed Development | A development considered as part of cumulative effects assessment, identified pursuant to the process set out in Chapter 23 Cumulative and combined effects (ES Volume III, EN070009/APP/6.4). |
| 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. |
| CP | Cathodic Protection - a technique used to control the corrosion of a metal surface by making it the cathode of an electrochemical cell. |
| 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. |
| 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. |
| COVID-19 | Coronavirus. |
| 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. A Framework CTMP has been submitted as part of this ES (EN070009/APP/5.16). |
| Cumulative effect | A cumulative impact or effect may arise as the result of the combined impact of a number of different projects within the |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| | vicinity (in combination with the Proposed Development) on a single receptor / resource. These effects can be inter-project(s) and or intra-project. |
| CWS | Cooling Water System - used to remove heat from a process or piece of equipment. |
| CWTP | Construction Workers 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. A Framework CWTP has been submitted as part of this ES (EN070009/APP/5.15). |
| DAF | Dissolved Air Flotation – part of the process for removal of ions as part of water treatment. |
| dB (A) | A-weighted decibels. The human ear system does not respond uniformly to sound across the detectable frequency range and consequently instrumentation used to measure noise is weighted to represent the performance of the ear. This is known as the 'A weighting' and annotated as dB(A). |
| DBT | Department for Business and Trade - UK department. |
| DCLG | Department for Communities and Local Government – former UK department for communities and local government in England, this is now the Department for Levelling Up, Housing and Communities. |
| DCO | A DCO made by the relevant Secretary of State pursuant to The Planning Act 2008 to authorise a Nationally Significant Infrastructure Project and a Project of National Significance. 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) | Unit to measure the intensity of sound. 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. |
| DECC | Department of Energy and Climate Change. |
| Defra | Department for Environment, Food and Rural Affairs. |
| DEMP | Decommissioning Environmental Management Plan - a plan to outline how a decommissioning project will avoid, minimise or |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| | mitigate effects on the environment and surrounding area. This will be submitted pursuant to DCO Requirement. |
| DESNZ | Department for Energy Security and Net Zero. |
| DIN | Dissolved inorganic nitrogen. |
| DLUHC | Department for Levelling Up, Housing and Communities, previously the Ministry of Housing, Communities and Local Government (MHCLG). |
| 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. |
| DMW | Demineralised Water – produced when a Demineralisation Plant is used to treat water supplied to the Hydrogen Production Facility and also for stripped process condensate, flare knockout liquid and steam condensate from blowdown. |
| DoE | Department of Environment - the UK Government department responsible for safeguarding the natural environment, supporting food and farming industry, and sustaining the rural economy. |
| DPDs | Development Plan Documents – planning policy documents. |
| EA | Environment Agency. |
| 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. |
| EBS | Environmental Baseline Survey. |
| ECC | East Coast Cluster – comprises of industrial clusters on Teesside and Humberside. |
| EcIA | 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. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| EEA | European Economic Area – A partnership of 30 countries that share the EU's single market. Connecting the EU with Iceland, Liechtenstein and Norway. |
| EHA | Explosion Hazard Analysis. |
| 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. |
| \bar{E}_m | Maintained average light levels. |
| EMP | Environmental Management Plans - outline how a project will avoid, minimise or mitigate effects on the environment. |
| EMODnet | European Marine Observation Data Network. |
| EMS | Environmental Management System - the management of an organization's environmental programs in a comprehensive, systematic, planned and documented manner. |
| 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(s) | Engineering, Procurement and Construction Contractor(s) – undertake the detailed engineering design of the Proposed Development, the procurement and deliver the construction of the Proposed Development. |
| EPR | Environmental Permitting Regulations (2016)- 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. |
| 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. |
| ES | Environmental Statement – a report in which the process and results of an Environment Impact Assessment are documented. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| ETP | Effluent Treatment Plant – used to produce a stream of clean water to be used in the hydrogen production plant. The ETP will consist of an oily water separator, neutralisation sump, storm water sump and any other suitable treatment to meet agreed discharge standards. |
| ETS | Emissions Trading Scheme. |
| EU | European Union. |
| 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. |
| EWC | European Waste Catalogue (Code). |
| 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. |
| FAS | Flood Alleviation Scheme. |
| FHA | Fire Hazard Analysis. |
| FID | Final Investment Decision. |
| 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. |
| FOIA | Freedom of Information Act, 2000, established by UK Parliament which creates a public 'right of access' to any information that's recorded by public sector organisations. |
| FTE (job) | Full Time Equivalent. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| 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. |
| 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. |
| GHR | Gas Heated Reformer. |
| 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. |
| GI | Ground Investigation - an intrusive investigation undertaken to collect information relating to the ground conditions, normally for geotechnical or land contamination purposes. |
| 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. |
| GPR Surveys | Ground Penetrating Radar - a geophysical survey method that uses pulses of electromagnetic waves to image the subsurface. |
| GVA | Gross Value Added. |
| Groundwater | All water which is below the surface of the ground and within the |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| | permanently saturated zone. |
| GT | Gross Tonnage. |
| GW | Gigawatt. |
| 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. |
| HBC | Hartlepool Borough Council. |
| HDD | Horizontal Directional Drill - a trenchless method used to install pipelines below the ground. |
| HCL | Hydrochloric Acid. |
| Ha | Hectare - a metric unit of measurement, equal to 2.471 acres or 10,000 m ² . |
| HE | Highways England. |
| 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 – man made organic compounds that contain hydrogen, fluorine and carbon. |
| HGV | Heavy Goods Vehicle - vehicles with a gross weight in excess of 3.5 tonnes. |
| HP | High pressure. |
| HPI | Habitats of Principal Importance – according to Section 41 of the 2006 UK NERC act. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| 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. |
| HRS | Hours. |
| HSE | Health and Safety Executive - the body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare. |
| IAMMWG | Inter-Agency Marine Mammal Working Group. |
| IAQM | The Institute of Air Quality Management – professional body for air quality air professionals. |
| ICI | Imperial Chemical Industries – a British Company that for a long time was the largest manufacturer in Britain. |
| 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. |
| ICSS | Integrated Control and Safety Systems - a technology platform that combines elements of process control and functional safety into a single architecture. |
| ICNIRP | International Commission on Non-Ionizing Radiation Protection - an independent non-profit organization, which provides scientific advice and guidance on the health and environmental effects of non-ionizing radiation (NIR) to protect people and the environment from detrimental NIR exposure. |
| 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. |
| IEMA | Institute of Environmental Management and Assessment. |
| IFCA | Inshore Fisheries Conservation Authorities - assist and promote the regional IFCAs to help ensure that the authorities develop a leading |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| | and effective national role in fisheries and conservation management in line with the IFCA vision. |
| IHBC | Institute of Historic Building Conservation- the professional body for building conservation practitioners and historic environment experts. |
| ILE | Institute of Lighting Engineers. |
| ILI | Inline Inspection – a system used to perform inspections directly on the production line. |
| ILP | Institute of Lighting Professionals – the current body of the former Institute of Lighting Engineers (ILE), they produce guidance documents which are considered when developing new installations. |
| IMD | Index of Multiple Deprivation - measures relative deprivation in small areas in England. |
| 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. |
| 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. |
| IPC | Infrastructure Planning Commission - was a non-departmental public body responsible for the examining and in certain circumstances the decision-making body for proposed nationally significant infrastructure projects. The Commission was abolished in 2012 with responsibility being passed to the Planning Inspectorate. |
| IPCC | Intergovernmental Panel on Climate Change - the United Nations body for assessing the science related to climate change. |
| ISO | International Organization for Standardization - an international standard setting body composed of representatives for various national standards organisations. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| IUCN | The International Union for Conservation of Nature - global authority on the status of the natural world and the measures needed to safeguard it. |
| JM | Johnson Matthey – A British multinational company that specialises in chemicals and sustainable technologies. |
| JNCC | Joint Nature Conservation Committee – a public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation. |
| K | Kelvins – a measurement in lighting referring to the colour temperature of any specific light source |
| Kph | Kilometres per hour. |
| kV | Kilovolt, unit of electrical potential. There are 1,000 volts in a kilovolt. |
| L _{A90} | The A-weighted sound pressure level exceeded for 90% of the time period with a FAST time constant. |
| L _{A10} | The A-weighted sound pressure level exceeded for 10% of the time period with a FAST time constant. |
| L _{Amax} | Maximum A-weighted sound pressure level measured with FAST time constant. |
| L _{Aeq} | The A-weighted equivalent continuous sound pressure level. |
| L _{Aeq,Tr} | The equivalent continuous 'A'-weighted sound pressure level at the assessment position produced by the specific noise source over a given reference time interval. |
| L _{Ar,Tr} | Rating Level- The specific noise level plus any adjustment for characteristic features of the noise. |
| 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. |
| LCH | Low Carbon Hydrogen. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| 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. |
| LGS | Local Geological Sites - sites of geological or geomorphological value. |
| LHV | Lower Heat Value – (of a fuel) is the amount of heat released by combusting a specified quantity of the fuel and returning the temperature products to its LHV. |
| LIDAR | Light Detection and Ranging – a remote sensing technique |
| 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. |
| 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. |
| 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. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| 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. |
| MAH | Major Accident Hazards. |
| MA&D | Major Accidents and Disasters - potentially significant effects of a development on the environment as a result of its vulnerability to, or introduction of, risks of major accidents and/or disasters. |
| MAPP | Major Accident Prevention Plan - sets out the major accident prevention policy. |
| MarLIN | Marine Life Information Network. |
| MATTEs | Major Accidents to the Environment. |
| MBT | Micro-bored Tunnel - a solution for constructing small diameter tunnels. |
| MCC | Manual Classified Counts (traffic). |
| MCHW | Manual for Contract Documents for Highway Works. |
| 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. |
| mDEA | Activated Methyldiethanolamine – a chemical compound being utilised in the Proposed Development. |
| MGN | Marine Guidance Notes. |
| MHCLG | Former UK Government Department Ministry of Housing.. Now called Department for Levelling Up, Housing and Communities (DLUHC). |
| 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. |
| Mitigation | Measures intended to avoid, reduce and, where possible, remedy significant adverse environmental effects. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| MLD | Minimum liquid discharge plant – part of the effluent treatment plant. MLD is clean water produced through ultrafiltration and closed-circuit osmosis. |
| 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. |
| MOL% | Molar percentage – a unit of measurement for the composition of a mixture in terms of the number of moles or a component divided by the total number of moles in the mixture. |
| MOP | Maximum operating pressure – the maximum pressure at which CO ₂ will be sent through the CO ₂ export connection pipeline. |
| MPS | Marine Policy Statement - the framework for preparing Marine Plans and taking decisions affecting the marine environment. |
| MSFD | Marine Strategy Framework Directive - aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend. |
| Mt | Megatonnes. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| MWC | A policy within Redcar and Cleveland relating to minerals, waste and recycling processing, allocated in the Tees Valley Joint Minerals and Waste DPD. |
| MWP | Mineral and Waste Policies – Within the Tees Valley Joint Minerals and Waste DPD. |
| MWth | Megawatt Thermal. |
| n.d | No date (where it relates to a reference within the text of the Environmental Statement). |
| N ₂ | Nitrogen. |
| Natural England (NE) | 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. |
| NDT | Non-destructive Inspection – the examination of materials, components or systems without causing damage or affecting their integrity. |
| NEP | Northern Endurance Partnership. |
| 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, non-flammable toxic gas with a slightly musty odor. |
| NGR | National Grid Reference – system of geographical grid references. |
| NH ₃ | Ammonia – a compound of nitrogen and hydrogen. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| NHLE | National Heritage List for England - a register of all nationally protected historic buildings and sites in England. |
| NHS | National Health Service. |
| NNR | National Nature Reserves - established to protect important habitats, species and geology. |
| N ₂ O | Nitrous oxide – a gas made up of nitrogen and oxygen. |
| NO ₂ | Nitrogen Dioxide – brownish and odourless gas made up of nitrogen and oxygen. Primarily from the burning of fuel. |
| NO ₃ | Nitrate. |
| NO _x | Oxides of Nitrogen - a mixture of gases that are composed of nitrogen and oxygen. |
| 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 | <p>National Planning Policy Framework –</p> <p>The National Planning Policy Framework was introduced in March 2012 and last updated in December 2023. It sets out the Government’s planning policies for England. It is a material consideration in planning decisions.</p> <p>It does not contain any specific policies on Nationally Significant Infrastructure Projects or Projects of National Significance 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.</p> |
| NPS | National Policy Statements - Statements 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. Relevant NPS’s in this ES are The Overarching NPS for Energy (EN-1), the NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4), and the NPS for Electricity Networks Infrastructure (EN-5). |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| 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); waste water 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. |
| NTS | Non-Technical Summary – a summary of the Environmental Statement written in non-technical language. |
| NVC | National Vegetation Classification (NVC) survey - a detailed botanical survey of a site. |
| NWL | Northumbrian Water Ltd. |
| NZT | Net Zero Teesside is a DCO Project granted by the Secretary of State for DESNZ on 16 February 2024. |
| O ₂ | Oxygen. |
| O&M | Operations and Maintenance – team that has the responsibility for daily operations, including troubleshooting and effecting minor repairs on the plant. |
| OBS | Occupied Breeding Site. |
| OGA | Oil and Gas Authority - works with DESNZ to regulate and promote the UK oil and gas industry. |
| -OH | Hydroxyl Group. |

| 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. |
| OR | Operational Receptor. |
| OS | Ordnance Survey - the national mapping agency for Great Britain. |
| OLBMP | Outline Landscape and Biodiversity Management Plan. |
| PA | Planning Act 2008. |
| PAWS | Plantations on ancient woodland sites. |
| PAS | Publicly Available Specification. |
| 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. |
| PC | Process Contribution - represents the change caused by the Proposed Development. |
| PDV | Phocine Distemper Virus – a species of morbillivirus. |
| PEA | Preliminary Ecological Appraisal - an ecological assessment method which evaluates the existing ecological value of a site. |
| PEI Report | Preliminary Environmental Information Report – an initial statement of the main environmental information available for a study area. A PEI Report was produced and was published for statutory consultation on 14 September 2023 and the consultation period ended on 26 October 2023, the findings of this informed the assessments undertaken in this ES. |
| 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. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| PIA | Personal Injury Accident. |
| PIC | Personal Injury Collision. |
| PIG | Pipeline Inline Gauging - the process of locating and identifying internal defects such as dents, debris or other internal restrictions. |
| The Inspectorate | Planning Inspectorate – executive agency of the Department for Communities and Local Government of the United Kingdom Government. |
| PHE | Public Health England – governmental department who's role it is to protect and improve the nation's health and wellbeing, and reduce health inequalities. |
| PHEA | Preliminary Hazard and Environmental Assessment – determines the scope of hazards and environmental impacts related to a project. |
| PM | Particulate matter – an air pollutant. |
| PM _{2.5} | Fine particulate matter – an air pollutant. |
| PM ₁₀ | Particulate matter of 10 micrometres (µm) diameter or less. |
| PNS | Project of National Significance. A project brought into the Planning Act 2008 regime by a section 35 direction by the Secretary of State. The Proposed Development is a PNS. |
| PPE | Personal Protective Equipment. |
| PPG | Planning Practice Guidance - guidance expanding upon and supporting the NPPF. |
| PPG-N | PPG Noise Guidance – Guidance expanding upon and supporting the NPPF but for noise. |
| 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. |
| PPWs | Permitted Preliminary Works - early that works are needed to facilitate the construction of the Proposed Development. These are defined by the DCO and further details can be found in Chapter 5 (ES Volume I, EN070009/APP/6.2). |
| PRA | Preliminary Risk Assessment – the initial step in an assessment of land contamination. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| Priority Habitats | Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance. |
| 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). |
| PRP | Processing Requirement Protocol. |
| 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 | Provisional Special Protection Area – see SPA for further details. |
| PSR | Pipelines Safety Regulations. |
| 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. |
| QRA | Site Quantitative Risk Assessment - a tool to quantify the risk generated by an activity, industrial site or area compromised by multiple industrial sites. |
| 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. |
| RBT | Redcar Bulk Terminal - a deep-water marine terminal situated on the South Bank of the River Tees on the North-East coast of the UK. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| RCBC | Redcar and Cleveland Borough Council. |
| RCM | Reliability centred maintenance – a concept of mainatanence planning to ensure that systems continue to do what the user requires in the present operating context. |
| 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. |
| REC | Redcar Renewable Energy Centre. |
| REP | Renewable Energy Power Station. |
| Residual Effect | The predicted consequential change on the environment from the impacts of a development after mitigation. |
| RFC | Ration of Flow to Capacity - this value indicates the extent to which traffic flows on an intersection arm approach capacity. An intersection arm operating at capacity would have an RFC value of 1. |
| 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. |
| RO | Reverse Osmosis - used to remove ions from water when treating raw water supplies. |
| Rochdale Envelope | The Rochdale Envelope approach is employed where some details of a proposed development are yet to be confirmed and therefore some flexibility is necessary to address uncertainty. Where this is the case the ES needs to assess a worst-case scenario of what a proposed development could reasonably be to ensure potential significant effects are not unassessed within the ES. |
| 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. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| S41 | Section 41 of the of the Natural Environment and Rural Communities Act. Section 41 lists species and habitats of principal importance for nature conservation in England. |
| SACs | 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. |
| SAM | The reference given to the formal process involved in agreeing a sampling plan and scope of physical/chemical analysis with the MMO. |
| SAP | Salmon Action Plan. |
| 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. This is presented in Appendix 1B (ES Volume III, EN070009/APP/6.4). Responses to the Scoping Opinion can be found in Appendix 1E: Scoping Opinion Responses (ES Volume III, EN070009/APP/6.4). |
| 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. This is presented in Appendix 1A (ES Volume III, EN070009/APP/6.4). |
| SCR | Selective Catalytic Reduction - the removal of nitrogen oxides from the 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. |
| SEN | Southern North Sea. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| SF6 | Sulphur Hexafluoride. |
| 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. |
| SgZs | Safeguard Zones. |
| 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. |
| SIP | Site Improvement Plan - provide a high level overview of the issues affecting the condition of the site and identify the priority actions to address the issues. |
| SLA | Sensitive Landscape Area - a Landscape area with particular qualities which make it more sensitive to development. |
| SLL | Society for Light and Lighting. |
| SLM | Sound Level Meters – instrumentation used during acoustic surveys. |
| SNRHW Cells | Stable Non-Reactive Hazardous Waste Cells e.g. for asbestos. |
| 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. |
| SOCE | Statement of Combined Effects. |
| SOPEP | The Shipboard Oil Pollution Emergency Plan – a plan where all vessels have a contingency plan for marine oil pollution. |
| SoS | Secretary of State - the decision maker for DCO applications and head of Government department. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| 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 – adds further details to the policies in the local plan. |
| SPG | Supplementary Planning Guidance – documents provided by local authorities alongside their plans. |
| SPZ | Source Protection Zone – Zones which show the level of risk to the groundwater source from contamination. These are split into three main catchments, SPZ1 – inner, SPZ2 – outer, SPZ3 – total catchment. |
| SPL | Sound Pressure Levels – represents the sound pressure of a sound relative to a reference pressure. |
| SQM | Sky Quality Metre - an instrument used to measure the luminance of the night sky. |
| SRAM | Safety Report Assessment Manual – used to demonstrate that the application is duly made to the regulator. |
| SRN | Strategic Road Network. |
| SSC | Suspended Sediment Concentrations - the total value of both mineral and organic material carried in suspension by a river. |
| SSL | Sound Source Level – the level of sound measured at the source. |
| 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. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| Study Area | The area within which environmental effects are assessed (i.e. extending a distance from the project footprint). |
| STW | Sewage Treatment Works. |
| SuDS | Sustainable (urban) Drainage Systems – drainage systems that are designed to efficiently manage surface water drainage within an urban environment. |
| SVOCs | Semi-volatile Organic Compounds. |
| SWMP | Site Waste Management Plan - a plan setting out how resources will be managed and waste controlled at all stages during a construction project. An Outline SWMP has been submitted in this ES and is Appendix A to the Framework Construction Environmental Management Plan (EN070009/APP/5.12). |
| TA | Transport Assessment - comprehensive and systematic process that sets out various transport issues relating to a development. A TA has been submitted in this ES at Appendix 15A (ES Volume III, EN070009/APP/6.4). |
| TAR | Plant Turnaround. |
| 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. |
| TG | Technical Guidance. |
| TGN | Technical Guidance Note. |
| TL | Transmission Loss - the transmission loss at a distance r from the source. |
| TNT | Trinitrotoluene, a chemical compound which may be used in the manufacture of explosive ordnance. |
| TOC | Total Organic Carbon - a measure of the total amount of carbon in organic compounds. |
| Tonal sound | Sounds comprising one discrete frequency, with a high proportion of sound energy at a single frequency. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| Trenchless Technology | Trenchless construction includes such construction methods as tunnelling, microtunnelling (MTM), horizontal directional drilling (HDD) also known as directional boring, horizontal auger boring (HAB) and other methods for the installation of pipelines and cables below the ground with minimal excavation. |
| 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. |
| TPA | Tonnes Per Annum. |
| TPH | Total Petroleum Hydrocarbon - a term used to describe several hundred chemical compounds that originally come from crude oil. |
| TRS | Temporary Rest Site. |
| TS | Transport Statement - comprehensive review of all the potential transport impacts of a proposed development. |
| 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. |
| UF | Ultrafiltration – used to remove fine solids from water when treating raw water supplies. |
| UK | United Kingdom. |
| 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. |
| Unabated | Without the application of carbon capture. |
| UNESCO | United Nations Educational, Scientific and Cultural Organization is a specialised agency of the United Nations aimed at promoting world peace and security through international cooperation in education, the sciences, and culture. |
| UNFCCC | United Nations Framework Convention on Climate Change. |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|---|
| UXO | Unexploded Ordnance – unexploded bombs/weapons. |
| VDV | Vibration Dose Values - a cumulative measurement of the vibration level received. |
| VES | Visual Encounter Survey. |
| 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. |
| V _{RES} | Peak Particle velocity – the measurement of maximum ground particle movement speed. |
| WBCSD | World Business Council for Sustainable Development. |
| WBM | Water-Based Mud. |
| 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. |
| 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. |
| WRI | The World Resources Institute – giving a GHG Protocol with overarching guidance on developing GHG inventories and supporting standards (With the WBCSD). |

| ABBREVIATION/ FREQUENTLY USED TERM | DEFINITION/NOTES |
|--|--|
| 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. |
| 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. |
| WwTP | Wastewater Treatment Plant – location where wastewater is treated. |
| WwTW | Wastewater Treatment Works – location where wastewater is treated. |
| Zol | Zone of Influence – Study Areas identified for the purposes of the Cumulative and Combined Effects assessment. |
| ZTV | Zone of Theoretical Visibility - a computer generated tool to identify the likely (or theoretical) extent of visibility of a development in the landscape. |