

GLOSSARY AND ABBREVIATIONS

HyNet Carbon Dioxide Pipeline DCO

Planning Act 2008

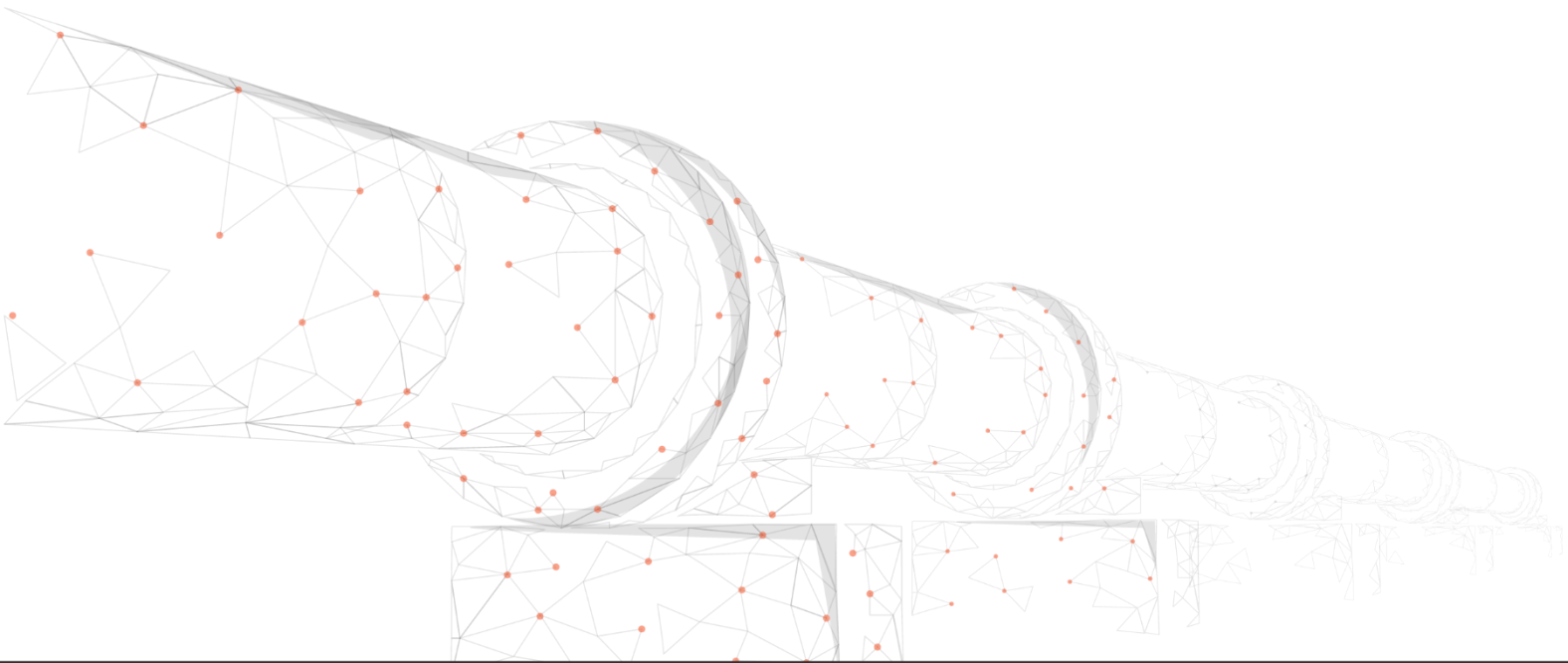
The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulations 5(2)(q)

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TABLE OF CONTENTS

1. INTRODUCTION.....	1
2. GLOSSARY	2
3. ABBREVIATIONS	44

1. INTRODUCTION

- 1.1.1. This document provides definitions for the terms and abbreviations used throughout the documentation associated with the HyNet Carbon Dioxide Pipeline Project (the DCO Proposed Development).
- 1.1.2. For information, the terms used to describe some components of the DCO Proposed Development have changed since the EIA Scoping Reports and the PEIR were submitted. These include:

Previous term	New term
Flint to PoA Pipeline	Flint Connection to PoA Terminal Pipeline
Grinsome Road AGI	Ince AGI
Alcohols Site AGI	Stanlow AGI
Grinsome Road AGI to Alcohols Site AGI CO ₂ Pipeline	Ince AGI to Stanlow AGI Pipeline
Alcohols Site AGI to Flint AGI CO ₂ Pipeline	Stanlow AGI to Flint AGI Pipeline
Existing Pipeline Works	DCO Proposed Development
Proposed Development	DCO Proposed Development

2. GLOSSARY

Term	Definition
Abnormal Indivisible Load (AIL)	Any load which cannot be broken down into smaller loads for the purposes of transportation, without undue expense or risk of damage.
Above-Ground Heritage Asset	An above ground building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage Assets include Designated Heritage Assets and Non-Designated Heritage Assets .
Above Ground Installation (AGI)	<p>A secure compound above ground level containing equipment relating to the Carbon Dioxide Pipeline which is necessary for its operation and maintenance. The AGIs provide an interface with Upstream Emitters, and between different sections of the Carbon Dioxide Pipeline. They typically include PIG Launching and Receiving Facilities, an Electrical and Instrumentation Kiosk and ancillary infrastructure (including lighting and parking provisions).</p> <p>In the context of the DCO Proposed Development, the following AGIs are proposed:</p> <ul style="list-style-type: none"> • Ince AGI; • Stanlow AGI; • Flint AGI; • Northop Hall AGI.
Adaptive Capacity	The capacity of Receptors to adjust to potential damage, to take advantage of opportunities, or to respond to consequences.
Affected land	Land within the Order Limits that is subject to Compulsory Acquisition.
Agricultural Land	Land devoted to agriculture particularly rearing livestock and production of crops.

Term	Definition
Agricultural Land Classification (ALC)	A framework for determining the physical quality of the land at national, regional, and local levels. This is based on the long-term physical limitations of land for agricultural use. There are a number of factors that affect the grade, mainly, climate, site and soil characteristics, and the interactions between them.
Air Quality Management Area (AQMA)	Air Quality Management Areas (AQMA) are areas that are likely to exceed the national air quality objective for a specific pollutant. They are determined by Local Authorities .
Alternating Current	A flow of electrical current which reaches maximum in one direction, decreases to zero, then reverses itself and reaches maximum in the opposite direction. The cycle is repeated continuously and the number of cycles per second is described as the frequency. The National Electricity Transmission System (NETS) is an AC network that uses a frequency of 50 Hz.
Ancient Woodland	Ancient Woodland is defined as an area that has been wooded continuously since at least 1600 AD. Ancient Woodland is divided into ancient semi-natural woodland and plantations on Ancient Woodland sites. Both types are classed as ancient woods.
Applicant	The organisation (Liverpool Bay CCS Limited) preparing and submitting the DCO Application .
Application	The Application for a Development Consent Order (DCO) that is submitted by the Applicant to the Secretary of State (SoS) for Business, Energy and Industrial Strategy (BEIS) .
Aquifer	Underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand, or silt).
Arboricultural Clerk of Works (ACoW)	Appointed project arboriculturalist, who supervises the Construction Works, and provides arboricultural advice on Site.
Arboricultural Method Statement (AMS)	A methodology for the implementation of any aspect of development which is within the root protection area , or has the capacity to adversely affect, any retained tree.

Term	Definition
Archaeological Interest	There will be archaeological interest in a Heritage Asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.
As Low As Reasonably Practicable (ALARP)	Reasonably practicable involves weighing a risk against the cost effectiveness needed to control it. Thus, ALARP describes the level to which the Health & Safety Executive (HSE) expect to see workplace risks controlled. For a Risk to be ALARP, the cost, time or effort involved in reducing the Risk further would be grossly disproportionate to the benefit gained.
Associated Development	Associated development is defined in the Planning Act 2008 (PA2008) as development which is associated with the principal development. Sub-sections (2) to (4) of 115 of the PA2008 set out other requirements relating to associated development.
Barg	The unit for the measurement of pressure above that of atmosphere. Short for bar gauge.
Baseline	A reference level of existing Environmental Conditions against which a project is measured and controlled.
Baseline Studies	Work done to determine and describe the Environmental Conditions against which any future changes can be measured or predicted and assessed.
Bed Material	The sediment type located at the bed of the river.
Bedding Material	Granular material laid evenly at the bottom of the pipeline trench upon which the pipeline is installed and supported.
Below-Ground Heritage Asset	Below-ground heritage assets include both known and hitherto unknown buried archaeological remains.

Term	Definition
Best and Most Versatile Agricultural Land (BMV)	Defined as Grades 1, 2 and 3a in the Agricultural Land Classification by the revised National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) . This is land, which is determined to be most flexible, productive, and efficient in response to inputs and which can best deliver future crops for food and non-food uses such as biomass, fibres, and pharmaceuticals. Grades 3b, 4, and 5 are used to classify land that is of moderate quality to very poor quality.
Best Available Techniques (BAT) / Best Practicable Means (BPM)	The available techniques which are the best for preventing or minimising Emissions and Impacts on the environment.
Biodiversity	The biological diversity of the earth's living resources. The total range of variability among systems and organisms at the following levels of organisation: bioregional, Landscape , ecosystem, Habitats , communities, Species , populations, individuals, genes, and the structural and functional relationships within and between these different levels.
Biodiversity Net Gain (BNG)	Biodiversity Net Gain is an approach to development that leaves Biodiversity in a better state than before. The process follows the mitigation hierarchy, which sets out that everything possible must be done to firstly avoid, secondly minimise and thirdly compensate for unavoidable impacts on or off site.
Block Valve	An underground valve which can rapidly stem the flow of the CO₂ stream , designed, and located to minimise the inventory loss in the event of a breach of the Carbon Dioxide Pipeline .
Block Valve Station (BVS)	A secure compound above ground level containing equipment relating to the Carbon Dioxide Pipeline which is necessary for its operation and maintenance. The BVSs contain a Block Valve to isolate sections of the Carbon Dioxide Pipeline . They also include an Electrical and Instrumentation Kiosk and ancillary infrastructure (including lighting and parking provisions).
Book of Reference	A list of all of the land over which compulsory acquisition powers will be sought for the DCO Proposed Development , as well as the owners and occupiers of the Affected Land and those with an interest in it.

Term	Definition
Best Available Technique Reference Documents (BREF) Notes	The European Commission (EC) produces Best Available Technique reference documents or BREF notes. They contain Best Available Techniques (BAT) for installations.
BS PD8010-1	British Standard BS PD 8010-1: Pipeline systems – Part 1: Steel pipelines on land – Code of practice.
BS 5837	British Standard BS 5837:2012 ‘Trees in relation to design, demolition and construction – Recommendations’ - This standard ‘gives recommendations and guidance on the relationship between trees and the design, demolition and construction process. It sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures’.
Built Environment Indicators	Receptors located along highway links used to determine affected parties and the sensitivity of highway links. For example, Residential Properties, Schools, and Public Rights of Way (PRoWs) .
Department of Energy, Business and Industrial Strategy (BEIS)	Government Department “leading economy-wide transformation by backing enterprise and long-term growth, generating cheaper, cleaner, homegrown energy and unleashing the UK as a science superpower through innovation.”
Cadw	Cadw is the historic environment service of the Welsh Government which works to protect the historic buildings and structures, the landscapes and heritage sites of Wales.
Carbon Capture	The capture of CO ₂ from industrial sources that would otherwise be emitted into the atmosphere.
Carbon Capture and Storage	The combined processes of Carbon Capture , transportation (by pipeline or otherwise), and Carbon Dioxide Storage .

Term	Definition
Carbon Dioxide (CO₂) Pipeline	<p>The infrastructure to transport a CO₂ stream between the Ince AGI, Stanlow AGI and Flint AGI to the Point of Ayr Terminal.</p> <p>For the purpose of the DCO Proposed Development, the following sections comprise the Carbon Dioxide Pipeline:</p> <ul style="list-style-type: none"> • the Newbuild Carbon Dioxide Pipeline; and • The repurposed Flint Connection to PoA Terminal Pipeline (which is a section of the existing Connah's Quay to PoA Pipeline) (24").
Carbon Dioxide Pipeline Strategic Corridors	Four broad Strategic Corridors defined during the options selection phase. One of these was chosen within which to develop more detailed Carbon Dioxide Pipeline Route options.
Carbon Dioxide Pipeline Route Options	Potential routes for the Carbon Dioxide Pipeline , identified during the options appraisal.
Carbon Dioxide Pipeline Route	Indicative alignment of the Newbuild Carbon Dioxide Pipeline , for the purposes of assessment. During Detailed Design the alignment could move anywhere within the Permanent Acquisition of Subsurface Area .
Carbon Dioxide Storage	The locations for or act of providing the long-term sub-sea geological storage of carbon dioxide.
Catchment	The total area which drains to a specific point on a watercourse.
Cathodic Protection (CP)	A technique used to control the corrosion of a metal surface by making it the cathode of an electrochemical cell.
Cathodic Protection (CP) Transformer	Power supply for the CP System. Its full descriptive name being the 'TRU' (Transformer-Rectifier Unit). It does two tasks of transforming power from the main source to a lower voltage and converts the Alternating Current (AC) to Direct Current (DC) to feed into the CP system.

Term	Definition
Centralised Compound	A type of Construction Compound . A temporary compound which would be used to facilitate the construction of the DCO Proposed Development . The Centralised Compounds would serve as points for accepting deliveries and storage of pipe and other materials/equipment. Each of the Centralised Compounds would provide temporary material yards, secure plant storage areas, single-storey offices, staff welfare facilities, workshops, and a vehicle parking area. They would be linked to one or more Localised Compound .
CF Fertiliser Plant	The CF Fertilisers UK Ltd manufacturing plant located at Ince, Cheshire.
Circular Economy	Maximising the sustainable use and value of resources, eliminating waste from all stages of the resource lifecycle, whilst benefiting both the economy and the environment.
Cluster	For the purposes of the Project , a cluster is a Consortium of businesses and institutions working in unison to create new decarbonisation and hydrogen networks.
CO₂ Compressor	A unit used to compress the CO ₂ to the desired pressure for transportation, processing and storage purposes.
CO₂ Stream	A fluid comprising in the majority of CO₂ that has been captured from industrial sources, which also contains incidental associated substances derived from the source materials and the capture process (impurities), and any substances added to the stream to enable or improve the injection process.
CO₂ Vent Facility	A means whereby a CO ₂ stream under pressure may be safely depressurised and vented to atmosphere.
Combined Effects	The interaction and combination of different residual (post-mitigation) environmental effects of the DCO Proposed Development affecting the same Receptor . For example, visual and noise effects during construction affecting the same residential dwelling.
Community Council	Local authority areas, which form part of County Councils (Principal Areas) in Wales. Established under the Local Government Act 1972. Equivalent to the Parish Council in England.

Term	Definition
Competent Authority	The relevant Secretary of State (SoS) is the Competent Authority for the purposes of the Habitats Directive and the Habitats Regulations in relation to applications for Nationally Significant Infrastructure Projects (NSIPs) .
Compression Train	A set of compressors and ancillary components in a process system with the capability for each set (i.e. 'train') to independently manage the full load fluids and achieve the required compression at its outlet by working through a multistage compression process.
Compressor Plant	A compressor is a mechanical device that increases the pressure of a gas by reducing its volume.
Confluence	The point at which two watercourses meet.
Connah's Quay Power Station	The existing power station located at Connah's Quay, which operates via Combined Cycle Gas Turbine technology and is connected to the Connah's Quay to Point of Ayr Pipeline .
Connah's Quay to Point of Ayr Pipeline	An existing 24" natural gas pipeline between Connah's Quay and the Point of Ayr (PoA) Terminal , of which the Flint Connection to PoA Terminal Pipeline section will be repurposed to transport a CO₂ stream .
Consortium	The delivery consortium for the Project . The Consortium partners include (but are not limited to) Cadent, Eni, Essar, Hanson and Inovyn Progressive Energy and the University of Chester.
Construction Exclusion Zone (CEZ)	An area within which all site clearance and construction activities, access and storage of materials are prohibited.
Construction Stage	The stage during which construction works for the DCO Proposed Development will take place.
Consultation Documents	The documents submitted to support the formal pre-application consultation under the PA2008 . They included "plans and maps showing the nature and location of the proposed development" as stated in subsection (4) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

Term	Definition
Construction Compound	A secure area from which construction activities are managed and resourced, including but not limited to temporary offices, workshops, parking and storage. Construction compounds can either be Centralised Compounds , Localised Compounds or Trenchless Crossing Compounds in the context of the DCO Proposed Development .
Construction Contractor	The person or organisation appointed by the Applicant to undertake the construction of the DCO Proposed Development including the management of the construction process and health and safety on Site .
Consultation Zone	The Health & Safety Executive (HSE) sets a Consultation Distance (CD) around major hazard sites and major accident hazard pipelines after assessing the risks and likely effects of major accidents site/pipeline. The area enclosed within the CD is referred to as the consultation zone. The Local Planning Authority is notified of this CD and has a statutory duty to consult HSE on certain proposed developments within the zone the CD forms.
Contaminated Land	Land where (prior to commencement of the Construction Stage) substances are causing or have a significant possibility to cause significant harm to people, property or protected species; or, where significant pollution is being caused or has a significant possibility of being caused to controlled waters.
Cumulative Effects	The effects of the DCO Proposed Development cumulation with other existing developments and/or approved developments.

Term	Definition
Current Voltage Gradient Survey	Current voltage gradient is a survey technique used for assessing the effectiveness of corrosion protection on buried steel structures. For a buried pipeline protected using Impressed Current Cathodic Protection any defects in the coating will result in electric current flowing from the surrounding soil and into the pipe. These currents cause voltage gradients to be set up in the soil, which can be measured using a voltmeter. By looking at the direction of these gradients, the location of coating faults may be identified. By plotting the direction of voltage gradients around a fault, the type and nature of faults may be deduced. By measuring the localized soil potentials with respect to remote earth, a measure of the effectiveness of the cathodic protection may be calculated.
Davit	Any of various cranelike devices used singly or in pairs for supporting, raising, and lowering.
Decommissioning	The process of shutting down, and where relevant, removing the DCO Proposed Development infrastructure when it is no longer required once it has reached its end of life.
Decommissioning Environmental Management Plan (DEMP)	Control Plan setting out methods to avoid, minimise and mitigate likely environmental effects as a result of the decommissioning of the DCO Proposed Development . It will include the protocols to be followed in implementing these measures in accordance with environmental commitments during the Decommissioning Stage .
Detailed Construction Environmental Management Plan (CEMP)	Control Plan setting out methods to avoid, minimise and mitigate likely environmental effects as a result of the DCO Proposed Development during construction. It will include the protocols to be followed in implementing these measures in accordance with environmental commitments during the Construction Stage .
DCO Application	The Application for a Development Consent Order (DCO) that is submitted by the Applicant to The Planning Inspectorate on behalf of the Secretary of State (SoS) for Business, Energy, and Industrial Strategy (BEIS) .
DCO EIA Regulations	For the purpose of the DCO Application , the EIA Regulations are the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

Term	Definition
DCO Proposed Development	<p>The development for which a Development Consent Order (DCO) is sought. This includes:</p> <ul style="list-style-type: none"> • The Newbuild Carbon Dioxide Pipeline; • The repurposing of the Flint Connection to PoA Terminal Pipeline (which is a section of the existing Connah's Quay to PoA Pipeline) (24"); • Ince AGI; • Flint AGI; • Stanlow AGI; • Northop Hall AGI; • Block Valve Stations (BVS) located along the Carbon Dioxide Pipeline. <p>Other infrastructure such as Cathodic Protection (CP) transformer rectifier cabinets.</p> <p>Ancillary works integral to the construction of the Newbuild Carbon Dioxide Pipeline, including Construction Compounds and temporary access tracks.</p>
Depleted Reservoir	<p>A reservoir in sub-surface sand or rock formation that has previously produced oil or gas. Depleted reservoirs are usually those that have produced all or part of their economically recoverable gas.</p>
Design Life	<p>Design life is the time period for which an asset (including the Newbuild Carbon Dioxide Pipeline, the AGIs and BVSs for the DCO Proposed Development) is to be used for its intended purpose with planned integrity management.</p>
Design Parameters	<p>The boundary which defines the maximum or minimum height/width/length/depth parameters of infrastructure, which will be shown on parameter plans and secured through the DCO.</p>
Detailed Design	<p>The level of design which follows the Preliminary Design, and is the basis on which the DCO Proposed Development is approved under the requirements of the DCO.</p>
Development Consent Order (DCO)	<p>A Development Consent Order (DCO) is a Statutory Instrument (SI) made by the Secretary of State (SoS) pursuant to the Planning Act 2008 (as amended) (PA2008).</p>

Term	Definition
Development Study Area	Refer to definition of Newbuild Infrastructure Boundary .
Dewatering	The removal of surface or ground water to dry and/or solidify a location to enable construction activity during the Construction Stage .
Dewpoint	The temperature at any given pressure, or the pressure at any given temperature, at which liquid initially condenses from a gas or vapour.
Direct Current	A flow of continuous electrical current which flows in one direction.
Direct Effect	An effect that is directly attributable to the DCO Proposed Development .
Direct Employment	An increase in local employment arising from further economic activity (jobs, expenditure, or income) associated with additional local income and local supplier purchases.
Disaster	In the context of the DCO Proposed Development , a naturally occurring phenomenon such as an extreme weather event (e.g. storm, flood, temperature) or ground-related hazard events (e.g. subsidence, landslide, earthquake) with the potential to cause an event or situation that meets the definition of a Major Accident .
District Level Licensing (DLL)	District Level Licencing is categorised into three different zones, Red, Amber and Green to correspond to the likelihood of Great Crested Newt (GCN) presence. Red is the highest risk zone where populations here are considered too important to affect and are excluded from any DLL application.
District Network Operator (DNO)	A transmission licence holder responsible for local electrical supply cables and infrastructure.
Douglas Complex	A system of three interlinked offshore platforms located in Liverpool Bay. Currently serves to facilitate the extraction of oil and gas from the Liverpool Bay oil and gas fields and will be redeveloped as part of the Project .

Term	Definition
Easement	An easement is a legal, propriety agreement that confers a right to cross/use a third party's land for a particular purpose e.g. installing a pipeline along with access rights to enter the land to undertake routine inspections or repairs. An easement is registered with the Land Registry and binds future successors in title.
Effluent Treatment Plants (ETPs)	Treatment process of industrial waste water for its reuse /safe disposal (as per law of land).
Electrical and Instrumentation (E&I) Kiosk	A cabinet type container housing electrical equipment necessary to monitor and operate the facilities within the AGIs and BVSs .
Electrolysis	Electrolysis is the process of using electricity to split water into hydrogen and oxygen.
Electrolytic Hydrogen	Hydrogen produced using electrolysis .
Emission	A material that is expelled or released to the environment. Usually applied to gaseous or odorous discharges to the atmosphere.
Emission Rate	The quantity of a pollutant released from a source over a given period of time.
Enhancement	Measures to improve the environment, such as landscape resource and the Visual Amenity of the DCO Proposed Development and its wider setting, over and above its Baseline condition.
Environmental Impact Assessment (EIA)	In relation to the DCO Proposed Development , this is a systematic means of assessing the significance of effects from the DCO Proposed Development , undertaken in accordance with The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (DCO EIA Regulations).
Environment Impact Assessment (EIA) Directive	The initial European Union (EU) Directive of 1985 and its three amendments were codified by Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment of 13 December 2011. Directive 2011/92/EU was amended in 2014 by Directive 2014/52/EU.

Term	Definition
Environmental Statement (ES)	A statement prepared in accordance with the DCO EIA Regulations that includes the information that is reasonably required to assess the likely effects of a development and which the Applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile.
Equipment Yard	At each Trenchless Crossing location (refer to Construction Compounds), an equipment yard will be required. The equipment yards will be located in proximity to the start/end points of each trenchless crossing and will be used to store equipment for the trenchless crossing.
European Designated Site	An area of land subject to protection through European legislation, including Special Area of Conservation (SAC) and Special Protection Area (SPA) .
Examining Authority (ExA)	The Inspector(s) appointed by the Secretary of State (SoS) responsible for conducting the examination and making a recommendation on a DCO Application .
Exceedance	A period of time where the concentration of a pollutant is greater than the appropriate quality standard.
Expansive Study Area	The Expansive Study Area extends to the availability of construction materials and the capacity of waste management facilities within the UK and the regions where the DCO Proposed Development is located.
External Influencing Factor	A factor which occurs beyond the limits of the DCO Proposed Development that may present a risk to the DCO Proposed Development , e.g. if an external disaster occurred (e.g. earthquake, COMAH site major accident) it would increase the risk of serious damage to an environmental receptor associated with the DCO Proposed Development .
Feed Gas	Gas to supply the Hydrogen Plant , which comprises a mixture of natural gas, synthetic natural gas, and refinery off gas .
Fluid Catalytic Cracker (FCC) Carbon Capture Project	The fluid catalytic cracker (FCC) capture project being developed by Essar Oil (UK) Limited on the Stanlow Manufacturing Complex .

Term	Definition
Flint AGI	The AGI which will be located south of Flint and will act as the tie-in point from the Flint AGI to Flint Connection Pipeline .
Flint AGI to Flint Connection Pipeline	A new 24" section of Carbon Dioxide Pipeline linking the Flint AGI to the Flint Connection .
Flint Connection	The joint between the short length of new 24" Carbon Dioxide Pipeline from the Flint AGI and the existing 24" natural gas pipeline between Connah's Quay and Point of Ayr .
Flint Connection to PoA Terminal Pipeline	The section of the existing 24" Connah's Quay to Point of Ayr Terminal Pipeline (PoA) between Flint and the PoA Terminal . The Flint Connection to PoA Terminal Pipeline will be repurposed to carry CO ₂ as part of the DCO Proposed Development .
Flood Consequence Assessment (FCA)	An assessment of the risk of flooding in Wales. A document that reviews a development in its proposal form to assess it against the risk of flooding, whether that be from groundwater, river (fluvial), surface water (pluvial), estuary/coastal (tidal), or from sewer sources.
Flood Map for Planning	Defines Flood Zones based on annual probability of flooding from Fluvial and tidal sources to inform development planning and flood risk assessment. Nationally consistent delineation of 'high', 'medium' and 'low' flood risk updated by the Environment Agency as deemed appropriate, typically on a quarterly basis.
Flood Risk Assessment (FRA)	An assessment of the risk of flooding in England. A document that reviews a development in its proposal form to assess it against the risk of flooding, whether that be from groundwater, river (fluvial), surface water (pluvial), estuary/coastal (tidal), or from sewer sources.
Flood Zones	Zones based on the annual probability of flooding from Fluvial and tidal sources, as defined in the Flood Map for Planning . Areas are categorised into one of the following: Flood Zone 1, Flood Zone 2, Flood Zone 3a or Flood Zone 3b .

Term	Definition
Flood Zone 1	This zone comprises land assessed as having less than a 1 in 1,000 (0.1%) annual probability of flooding from rivers or the sea in any year.
Flood Zone 2	This zone comprises land assessed as having between a 1 in 100 (1%) and 1 in 1000 (0.1%) annual probability of flooding from rivers, or between a 1 in 200 (0.5%) and 1 in 1,000 (0.1%) annual probability of flooding from the sea in any year.
Flood Zone 3a	This zone comprises land assessed as having a 1 in 100 (1%) or greater annual probability of flooding from rivers or a 1 in 200 (0.5%) or greater annual probability of flooding from the sea in any year.
Flood Zone 3b	This zone comprises land where water has to flow or be stored in times of flood.
Flume Pipe	A type of culvert pipe that is used to carry or transport water under an obstacle.
Fluvial	Processes associated with rivers and streams and the deposits and landforms created by them.
Fiscal Metering Package	A supervisory system for fluid (liquid or gas) flow measurement, usually at the point of fluid transfer between two parties, with sufficient accuracy to enable financial accounting or billing of the volume of fluid transferred.
Fugitive Emissions	The unintentional and undesirable emission, minor leakage, or discharge of gases or vapours from pressure-containing equipment or facilities, including pipelines.
Fulcrum NorthPoint Sustainable Aviation Fuel Plant	The sustainable aviation fuel plant being developed by Fulcrum Bioenergy Limited, Essar Oil (UK) Limited and Stanlow Terminals Limited on the Stanlow Manufacturing Complex .
Future Baseline	The likely evolution of the baseline without implementation of the DCO Proposed Development .
Gas Filter	Filtration unit used to remove particulate matter and impurities from the CO₂ stream .

Term	Definition
Geo-Environmental Surveys	An investigation to determine the chemical/asbestos content of soils and groundwater in order to understand if they pose a risk to human health and/or controlled waters for the purpose of design and construction.
Geographical Information System (GIS)	A system that captures, stores, analyses, manages, and presents data linked to location. It links spatial information to a digital database.
Geomorphology	Study of landforms, their processes, form, and sediments at the surface of the Earth.
Geophysical Survey	Making and interpreting measurements of physical properties of the earth to determine subsurface conditions.
Geotechnical Survey	An investigation to determine the nature and engineering properties of the soil and other materials and to determine soil profiles and property assignments for the purpose of design and construction.
Greenfield Runoff Rate	The peak rate of runoff of surface water for a specific return period due to rainfall falling on a given area of vegetated land (pre-development).
Greenhouse Gas (GHG)	Gases that absorb and emit reflected solar radiation which result in the warming of the Earth's atmosphere. It is absorbed and emitted at specific wavelengths within the spectrum of infrared radiation emitted by the earth's surface, the atmosphere, and clouds. The six main GHGs whose emissions are human caused are: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbon, and sulphur hexafluoride. In combination, these GHG emissions are commonly expressed in terms of 'carbon dioxide equivalents' (CO ₂ e) according to their relative global warming potential. For this reason, the shorthand 'carbon' may be used to refer to GHGs.
Ground Investigation (GI)	The physical investigation which can include Geotechnical Surveys, Geophysical Surveys and Geo-Environmental Surveys . Comprises targeted investigations including both intrusive and non-intrusive techniques to prove ground conditions, determine soil / rock parameters, chemical/asbestos concentrations and identify hazards associated with the ground conditions to inform a proposed development.

Term	Definition
Ground Investigation Contractor	The contractor tasked with undertaking the Ground Investigation , including all associated activities and consents.
Groundwater	Groundwater is the store of water present beneath Earth's surface in rock and soil pore spaces and in the fractures of rock formations.
Groundwater Dependent Terrestrial Ecosystems	Wetlands such as springs, flushes and fens which are fed by groundwater rather than rainfall or surface runoff. They are particularly sensitive to hydrological and ecological changes caused by development.
Groundwater Source Protection Zone (SPZ)	Also, Source Protection Zone (SPZ) , defined for 2,000 groundwater sources such as wells, boreholes and springs used for public drinking water supply, show the risk of contamination from any activities that might cause pollution in the area. The closer the activity, the greater the risk. The SPZ maps show three main zones (inner, outer, and total catchment) and a fourth zone of special interest, which the Environment Agency occasionally apply to a groundwater source.
Guided Auger Bore	A Trenchless Installation Technique which is used over relatively short distances and usually at shallow depths, and where space is limited. It accurately tunnels between two points in order to install the pipeline without disturbing the obstacles on the surface.
Habitat	The environment in which populations or individual species live or grow.
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna.
Habitats Regulations	The Conservation of Habitats and Species Regulations 2017 which covers the terrestrial environment.
Habitats Regulations Assessment (HRA)	The stages of assessment carried out by the competent authority in accordance with Habitats Regulations and the Conservation of Offshore Marine Habitats and Species Regulations 2017 to determine if a project may affect the protected features of a European site and European offshore marine site, before deciding whether to undertake, permit or authorise it.

Term	Definition
Habitats Site	Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites.
Haul Road	Temporary roads provided within a Construction Compound to allow for the movement of construction materials, construction machinery and/or construction labour around the Construction Compound .
Hazard	Anything with the potential to cause harm, including ill-health and injury, damage to property or the environment; or a combination of these.
Hazardous Waste	Waste that by legal definition may cause particular harm to human health or the environment.
Heritage	The historic environment and especially valued assets and qualities such as historic buildings and cultural traditions.
Heritage Asset	A building, monument, site, place, area, or Landscape identified as having a degree of significance meriting consideration in planning decisions, because of its Heritage interest. Heritage Assets include Designated Heritage Assets and Non-Designated Heritage Assets .
High Integrity Pressure Protection System (HIPPS)	A series of components, specifically engineered to isolate the source of high pressure in the case of an overpressure event.
Horizontal Directional Drilling (HDD)	A Trenchless Installation Technique used to install pipes underground without disturbing the ground surface above. The drill is launched from one HDD Compound and retrieved from the HDD Compound at the other end, and except for the launch and retrieving spaces above ground, the entire process takes place underground.
Hydrate inhibition	Devices or chemical substances designed to control the formation of hydrates. Hydrate inhibitors help avoid problems arising from hydrate formation such as hydrate plugs and line blockages.

Term	Definition
Hydrogen Pipeline	The pipeline, along with the associated hydrogen distribution infrastructure, will transport hydrogen from the production site at the Hydrogen Plant to points of use. It forms part of the Project .
Hydrogen Production Plant	The facility at the Stanlow Manufacturing Complex which will produce hydrogen for the Project . The purpose of the Hydrogen Plant is to manufacture hydrogen from Feed Gas and incorporate Carbon Capture . The hydrogen is exported into the Hydrogen Pipeline .
Hydrogen Storage	Sub-terranean facility connected to the Hydrogen Pipeline , whereby hydrogen can be stored and subsequently accessed when demand requires it.
Hydrogen Supply Project	Plants producing Low Carbon Hydrogen will be developed initially on the Stanlow Manufacturing Complex and then subsequently across the region. The Hydrogen Supply Project is developing the 350MWth (HHV) Hydrogen Plant on which the Project will be based. Additional plants are envisaged by 2030 to provide 30TWh/yr of Low Carbon Hydrogen supply for the region.
Hydrostatic Test	A test which involves filling pipelines with water which is then pressurised to test the line for leaks.
HyNet North West (The Project)	<p>The Project is being developed by the Consortium. The goal of the Project is to reduce carbon dioxide emissions from industry, homes and transport and support economic growth in the North West of England and North Wales. This includes, but is not limited to the DCO Proposed Development, Carbon Capture (including the TCPA Proposed Development), Carbon Dioxide Storage, Hydrogen Plant, Hydrogen Pipeline and associated AGIs, and the Hydrogen Storage.</p> <p>For the avoidance of doubt, the Project is not a single project within the meaning of the Environmental Impact Assessment Regulations. This will be explained in Chapter 2 - The Project of the Environmental Statement for the DCO Application.</p>
Impact	A physical or measurable change to the environment attributable to the DCO Proposed Development .
Ince AGI	The AGI that will be located at Ince.

Term	Definition
Ince AGI to Stanlow AGI Pipeline	A section of the Newbuild Carbon Dioxide Pipeline (20" in diameter) to transport CO ₂ from the Ince AGI to the Stanlow AGI .
Incidental Extraction	Extraction of Mineral Resources as a necessity to enable the construction to be accomplished.
Index of Multiple Deprivation (IMD)	The indices of deprivation measures relative deprivation in local authorities across England and Wales (WIMD).
Indicative Alignment (for assessment)	The indicative alignment of the Newbuild Carbon Dioxide Pipeline which has informed the basis of assessment for some environmental topics in the Environmental Statement . The alignment has only been used for assessment purposes.
Indirect Effect	An effect that results indirectly from the DCO Proposed Development , as a consequence of a ' Direct Effect ', often occurring away from the Site , or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the Source of the Effect .
Indirect Employment	Employment growth arising locally through manufacturing services and suppliers to the construction process (indirect or supply linkage multipliers).
Induced Employment	Employment associated with local expenditure as a result of those who derive incomes from the direct and supply linkage impacts of the DCO Proposed Development .
Inerting	Introducing an inert gas into a confined space to displace an already-present gas that poses some sort of hazard.
The Planning Inspectorate ('The Inspectorate')	The Government agency responsible for administering applications for development consent under the Planning Act 2008 (as amended) (PA2008) on behalf of the Secretary of State (SoS) .
Instant-off Potential	A method of testing the effectiveness of a Cathodic Protection (CP) system by measuring electrical currents at a specific point along the pipeline.
Internal Drainage Board (IDB)	A public body that manages water levels in an area, known as an internal drainage district, where there is a special need for drainage. They undertake works to reduce flood risk to people and property and manage water levels for agricultural and environmental needs within their district.

Term	Definition
Internal Influencing Factor	A factor which occurs within the limits of the DCO Proposed Development that may present a risk to the DCO Proposed Development .
Isolation Joint (IJ)	An isolation joint (IJ) is designed to act as electrical isolation component that is welded or joined (joint) to the pipeline.
Joint Strategic Needs Assessment (JSNA)	The purpose of this document is to support emerging health and wellbeing boards as they engage with the refresh of Joint Strategic Needs Assessments and develop their preparatory joint health and wellbeing strategy.
Knock Out Drums	A vessel designed to remove and accumulate condensed and entrained liquids from gas pipework or pipelines.
LA90	The A-weighted sound pressure level that is exceeded by the residual sound at the assessment location for 90% of a given time interval, T, measured using time fast time-weighting (F). Generally used to describe the 'background' sound conditions
LAeq	Equivalent Continuous Level. When a noise varies over time, the LAeq is the equivalent continuous sound which would contain the same sound energy as the time varying sound.
Land Cover	The surface cover of the land usually expressed in terms of vegetation cover or lack of it. Related to, but not the same as, Land Use .
Land Drainage	The disposal of rainwater, achieved by a combination of watercourses of various types.
Land Use	The purpose for which land is used, based on broad categories of functional land cover, such as urban and infrastructure use and the different types of agricultural and forestry.
Landscape and Visual Impact Assessment (LVIA)	A tool used to identify and assess the likely significant effect of change resulting from development both on the Landscape as an environmental resource in its own right and on people's views and Visual Amenity .
Landscape Character	A distinct, recognisable and consistent pattern of Elements in the Landscape that makes one Landscape different from another.

Term	Definition
LAm_{ax}	LAm _{ax} is the maximum A - weighted sound pressure level recorded over the period stated. LAm _{ax} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the overall LA_{eq,T} noise level but will still affect the noise environment.
Laydown Area	An area used for the receipt, temporary storage, and sometimes for the assembly of construction equipment and other supplies.
Lead Local Flood Authority (LLFA)	The local authority responsible for taking the lead on local flood risk management as defined within the Flood and Water Management Act 2010.
Leak Detection System	A system which provides early warning and remote identification of leakages in the CO ₂ transport and storage system.
Likely Significant Effect	<p>The significance of an environmental effect is typically a function of the 'value' or 'sensitivity' of the Receptor and the 'magnitude' or 'scale' of the Impact. Combining the environmental value of the resource or receptor with the magnitude of change produces a significance of effect category.</p> <p>The definition of a significant effect for each environmental topic will be contained within their respective chapters of the Environmental Statement.</p>
Limits of Deviation (LoD)	These limits show the maximum area within which the DCO Proposed Development could be installed. This flexibility is required in order to deal with unforeseen circumstances, such as ground conditions and local features. The LoD for each element of the DCO Proposed Development are described in the Works Package .
Liverpool Bay CCS Limited	The Applicant submitting the DCO Application (also referred to as the Applicant).
Local Development Plan (LDP)	The set of documents and plans that sets out the Local Planning Authority's policies and proposals for the development and use of land in their area.

Term	Definition
Local Nature Reserve (LNR)	A site of importance for wildlife, geology, education or public enjoyment. Some are also nationally important Site of Special Scientific Interest (SSSI) . Local Nature Reserves must be controlled by the Local Planning Authority through ownership, lease, or agreement with the owner.
Local Planning Authority (LPA)	The function of a local authority that is empowered by law to exercise statutory town planning functions for a particular area of the UK.
Localised Compound	A type of Construction Compound . A small temporary compound which would be used to facilitate the construction of the DCO Proposed Development . They would be linked to a Centralised Compound .
Low Carbon Hydrogen	Hydrogen which has been produced with minimal atmospheric emissions of carbon dioxide.
Lower Layer Super Output Area (LSOA)	A geographic area with an average population of 1500 residents, identified for the purpose of reporting census data by the Office for National Statistics (ONS).
Lowest Observed Adverse Effect Level (LOAEL)	The level above which adverse effects on health and quality of life can be detected as a result of noise or vibration.
Main River	A watercourse shown as such on the Flood Map for Planning and can include any structure or appliance for controlling or regulating the flow of water in, into or out of a main river. Main Rivers are usually larger streams and rivers, but also include smaller watercourses of strategic drainage importance. Main Rivers are under the jurisdiction of the Environment Agency who have powers to carry out flood defence works to Main Rivers.

Term	Definition
Major Accident	<p>In the context of the DCO Proposed Development, an event that threatens immediate or delayed serious damage to human health, welfare and/or the environment and requires the use of resources beyond those of the Applicant or its contractors to respond to the event. Serious damage includes the loss of life or permanent injury and/or permanent or long-lasting damage to an environmental receptor that cannot be restored through minor clean-up and restoration efforts. The significance of this effect will take into account the extent, severity and duration of harm and the sensitivity of the receptor.</p> <p>Major accidents are defined as low likelihood, high consequence events.</p>
Magnitude	A combination of the scale, extent and duration of an effect.
Marker Post	A distinctive marker at road, rail, river, canal and other crossings, to identify and notify of changes in pipeline direction, and boundaries.
Mean High Water Mark (MHWM)	The average throughout the year, of two successive high waters, during a 24-hour period in each month when the range of the tide is at its greatest.
Mean Low Water Springs (MLWS)	The average height of lower low water at spring tides at a location.
Micro tunnelling	<p>Micro-tunnelling uses a micro-tunnel boring machine to drill between two pits or shafts, installing segments of concrete pipe as it progresses.</p> <p>The effect is to leave a hollow concrete tunnel between two points, which allows for a steel pipeline to be threaded between them without disrupting infrastructure above the path of installation.</p>
Mineral Resources	Geological deposits of economic interest.
Mineral Safeguarding Area	An area designated by a Mineral Planning Authority which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.

Term	Definition
Mitigation Hierarchy	The Mitigation Hierarchy is to first try to avoid, then prevent and then reduce likely significant adverse effects on the environment and, if possible, offset any residual likely significant adverse effects on the environment.
Mitigation Measures	Actions proposed to prevent, reduce and where possible, offset significant adverse effects arising from the whole or specific elements of the DCO Proposed Development .
Mud Slurry	Mud Slurry is a fluid suspension of small particles in liquid. In trenchless construction, there are many methods and practices which include a slurry mixture. The use of slurry allows for the rapid movement of solid particles during the excavation process, and it is useful in applying pressure to stabilize a borehole. Bentonite is one of the more commonly used components of a slurry mixture. Mud Slurry is also referred to as drilling mud or drilling fluid.
National Nature Reserve (NNR)	Established to protect sensitive features and to provide 'outdoor laboratories' for research.
National Planning Policy Framework (NPPF)	The document that sets out Government's planning policies for England and how these are expected to be applied. The NPPF was last revised in July 2021.
National Policy Statement (NPS)	Policy designated under the Planning Act 2008 (as amended) (PA 2008) concerning the planning and consenting of Nationally Significant Infrastructure Projects (NSIPs) in the UK. Where applicable, they form the primary policy framework for the consenting of NSIPs.
National Trail	Designated long-distance paths.
Nationally Significant Infrastructure Project (NSIP)	Projects which fall under one of the categories in Part 3 of the Planning Act 2008 (as amended) (PA2008).
Nationally Designated Site	Areas of land subject to project through UK legislation, including Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR).
Net-Zero	Net zero refers to a state in which the greenhouse gases going into the atmosphere are balanced by removal out of the atmosphere.

Term	Definition
Newbuild Carbon Dioxide Pipeline	<p>The newbuild sections of the Carbon Dioxide Pipeline, which includes:</p> <ul style="list-style-type: none"> • Ince AGI to Stanlow AGI Pipeline (20"); • Stanlow AGI to Flint AGI Pipeline (36"); • Flint AGI to Flint Connection Pipeline (24").
Newbuild Infrastructure Boundary	<p>The Newbuild Infrastructure Boundary extends from Ince (Cheshire, England) to Flint (Flintshire, Wales), and includes the areas required for the Newbuild Carbon Dioxide Pipeline, as well as the AGIs and BVSSs along both the Newbuild Carbon Dioxide Pipeline and the Flint Connection to PoA Terminal Pipeline.</p> <p>The Newbuild Infrastructure Boundary includes the maximum extent of all potential permanent and temporary construction works required as part of the DCO Proposed Development. The boundary is shown on Figure 3-2 DCO Proposed Development (Volume IV). See also definition of the Order Limits, which includes additional land where powers under the DCO will be sought.</p>
Nitrogen Generation Package	A set of machinery used to supply nitrogen gas from atmospheric air.
Nitrogen Purging Facilities	Facilities to enable displacement of any hazardous atmosphere present within equipment or piping with an inert nitrogen atmosphere.
Noise Action Plan Priority Area (NAPPA)	Areas where people's homes are exposed to a day-evening-night noise level exceeding 73 dB, or where people live alongside concrete trunk roads. These areas are identified as priority areas for intervention in the Noise Action Plan produced by the Welsh Government.
Noise Important Area (NIA)	Noise 'hotspots' as defined by the Noise Action Plan produced by DEFRA in England. Important Areas are defined as the areas where the 1% of the population that are affected by the highest noise levels are located according to the results of the strategic noise mapping undertaken by DEFRA.

Term	Definition
Noise Sensitive Receptor	Any identified Receptor likely to be affected by noise. These are generally human Receptors, and may include residential dwellings, work places, schools, hospitals, community facilities, places of worship, recreational spaces and ecological Receptors.
Nomis	Nomis is a service hosted by the Office for National Statistics (ONS) which provides access to the most detailed and up-to-date UK labour market statistics from official sources.
Non-Destructive Testing	An array of inspection methods that allow inspectors to evaluate and collect data about a material, system, or component without permanently altering it. e.g. Ultrasonic Testing (UT)X-Ray, Digital Radiography (DR), Eddy Current (ET), Ground Penetrating Radar (GPR), Liquid Penetrant (PT).
No Observed Effect Level (NOEL)	The level below which no effect from noise or vibration can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.
Northop Hall AGI	AGI adjacent to Northop Hall incorporating a Block Valve Station and designed to accommodate a future additional connection(s).
Non-Statutory Consultation	Consultation with stakeholders on the DCO Proposed Development which occurs in addition to the Statutory Consultation .
Open Cut	Open Cut is a method of installing a length of pipeline by clearing the ground along the Carbon Dioxide Pipeline Route , excavating a trench and installing a length of pipe. Following pipeline installation, the trench is backfilled and the ground returned to its previous condition.
Open Drain System	Drainage system for water run-off within an operational plant boundary, where run-off water is treated before discharge.
Operational Stage	The stage after which the DCO Proposed Development is handed over by the relevant construction contractors and approved for operation.

Term	Definition
Operations and Maintenance Environmental Management Plan (OMEMP)	Control Plan setting out methods to avoid, minimise and mitigate likely environmental effects as a result of the operation of the DCO Proposed Development during the Operation Stage . It will include the protocols to be followed in implementing these measures in accordance with environmental commitments during the Operational Stage .
Order Limits	The limits of land within which the DCO Proposed Development will be constructed, operated and maintained. The Order Limits will be shown on the Plans submitted with Volume 2 of the DCO Application .
Ordinary Watercourse	Any river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) and passage through which water flows that does not form part of a Main River . The Lead Local Flood Authority (LLFA) or Internal Drainage Board (IDB) where relevant, has powers for Ordinary Watercourses that are similar to those held by the Environment Agency for Main Rivers .
Outline Construction Environmental Management Plan (OCEMP)	Control Plan setting out the indicative methods to avoid, minimise and mitigate likely environmental effects as a result of the DCO Proposed Development during construction, as outlined in the Environmental Statement and Register of Environmental Actions and Commitments submitted with the DCO Application . It includes the minimum protocols to be followed in implementing these measures in accordance with environmental commitments during the Construction Stage .
Overburden	The material overlying the Mineral Resource , which may be of little or no economic value.
Padeswood Cement Works	The Hanson Cement plant located at Padeswood, Flintshire.
Parameters	A limit or boundary which defines the maximum or minimum height/width/length/depth parameters of infrastructure, which will be shown on parameter plans and secured through the DCO (Rochdale envelope) .
Parish Council	A type of council forming the lowest tier in local government. The councils are elected bodies and are responsible for areas known as civil parishes.

Term	Definition
Permanent Acquisition of Subsurface Area	The corridor within the Newbuild Infrastructure Boundary where the final alignment of the Newbuild Carbon Dioxide Pipeline will be located.
Phase 1 Habitat Survey	An ecological survey technique that provides a standardised system to record vegetation and wildlife Habitat . It enables a basic assessment of Habitat type and its potential importance for nature conservation.
Polymerase Chain Reaction (PCR)	A method of amplifying DNA within a sample, to allow for DNA to be detected and measured for identification.
Pipeline Inspection Gauge (PIG)	A device used for internal maintenance, cleaning, and monitoring of a pipeline.
PIG Launching and Receiving Facility	Used to launch the PIG into the pipeline, and PIG receivers are used to receive the PIG after they have made a successful run.
Pigging	Use of a PIG .
Pipeline Construction Activities	Construction activities specific to the Newbuild Carbon Dioxide Pipeline , to include methods such as Horizontal Directional Drilling and Guided Auger Boring .
Pipe Jacking	Pipe jacking is a Trenchless Installation Technique used to form small diameter tunnels without disturbing the ground surface above by pushing prefabricated pipes through the ground from a starting shaft to an exit shaft as controlled excavation is undertaken at the face. Except for the shafts at either end, the entire process takes place underground.
Planform	The shape or outline of a watercourse when viewed from above
Planning Policy Wales (PPW)	The document that sets out Government's planning policies for Wales and how these are expected to be applied.
Planning Practice Guidance (PPG)	The Planning Practice Guidance (PPG) provides context and guidance to the National Planning Policy Framework (NPPF) in England. The PPG is web-based and is updated regularly section by section.
Point of Ayr (PoA) Terminal	The existing terminal facility at Point of Ayr which is currently used to process natural gas and will be repurposed as part of the TCPA Proposed Development to process a CO₂ stream .

Term	Definition
Pollution	The introduction of harmful materials into an environment.
Preliminary Design	For the purposes of the DCO Proposed Development , this term refers to the design of the Proposed Development to inform the Environmental Statement which supports the DCO Application .
Preliminary Ecological Appraisal (PEA)	Preliminary ecological surveys have a range of purposes; one key use is to gather data on existing conditions, often with the intention of conducting a preliminary assessment of likely impacts of proposed developments or establishing the baseline for future monitoring. As a precursor to a proposed project, some evaluation is usually made within these appraisals of the ecological features present, as well as scoping for notable Species or Habitats , identification of potential constraints and recommendations for Mitigation Measures .
Preliminary Environmental Information (PEI)	Information which has been compiled by the Applicant and is reasonably required for the consultation bodies to develop an informed view of the Likely Significant Environmental Effects of the DCO Proposed Development (and of any associated development). It is published during the Statutory Consultation period.
Preliminary Environmental Information Report (PEIR)	The Preliminary Environmental Information Report (PEIR) is the report prepared by the Applicant , containing Preliminary Environmental Information (PEI).
Primary Access Locations	Primary access locations are those which will serve the following: Centralised Compounds ; Above Ground Installations (AGIs); or Block Valve Stations .
Primary Mitigation	Modifications to the location or design of the DCO Proposed Development made during the pre-application phase that are an inherent part of the DCO Proposed Development and do not require additional action to be taken.
Principal Area	County and county borough in Wales. These are further split into Community Councils .

Term	Definition
Principal Aquifer	Layers of rock or drift deposits that have high intergranular and / or fracture permeability (provide a high level of water storage). They may support water supply and/or river base flow on a strategic scale. In most cases, Principal Aquifers are aquifers previously designated as major aquifers.
Prior Extraction	The recovery of a mineral resource before development commences if the development could cause the Mineral Resource to be sterilised .
Priority Area	Areas where people's homes are exposed to a day-evening-night noise level exceeding 73 dB, or where people live alongside concrete trunk roads. These areas are identified as priority areas for intervention in the Noise Action Plan produced by the Welsh Government.
Priority Habitat Inventory	A spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 Habitats of Principal Importance (HPI).
Project	See HyNet North West .
Proximity Area	Priority areas which highlight situations such as those where noise levels at all the highly exposed residential properties have effectively been calculated within 7.5 metres of the noise source. These are typically areas where residents might say they have the traffic going right past their window. In such areas, engineering solutions such as noise barriers are not an option.
Proximity Principle	Managing waste as near as possible to the location where it is produced.
Public Right of Way (PRoW)	A public right of way is a right by which the public can pass along linear routes over land at all times. Although the land may be owned by a private individual, the public have a legal right across that land along a specific route.
Q95	The flow in cubic metres per second which is equalled or exceeded for 95% of the time. The Q95 flow is a significant low flow parameter particularly relevant in the assessment of river water quality consent conditions.
Quiet Area	Identified in the Noise and Soundscape Action Plan 2018 – 2023 as tranquil urban green spaces

Term	Definition
Ramsar Site	Wetlands of international importance designated under the Ramsar Convention 1971.
Receptor	A component of the natural, created or built environment such as a human being, water, air, a building, or a plant that has the potential to be affected by the DCO Proposed Development .
Recovery	Processing waste to prevent it being disposed of to landfill. Recovery processes include incineration with energy recovery, advanced thermal treatment, anaerobic digestion, and composting.
Recycle	Any recovery operation where waste is reprocessed into products, materials or substances whether for its original or other purposes. Recycling includes the reprocessing of organic material but excludes energy recovery and the reprocessing of waste into materials to be used as fuels or for backfilling operations.
Register of Environmental Actions and Commitments (REAC)	The Register of Environmental Actions and Commitments (REAC) identifies the design, construction and operational commitments included within the Technical Chapters of the Environmental Statement (ES) to address the potential environmental effects of the DCO Proposed Development .
Remediation	The removal of pollution or contaminants from the environment (usually soil, groundwater, sediment, or surface water).
Residual Effects	Effects arising from the DCO Proposed Development that cannot be mitigated following implementation of Mitigation Measures .
Resilience (climate change)	The vulnerability of the DCO Proposed Development to climate change.
Reuse	Any operation by which products or components that are not waste are used again for the same purpose for which they were conceived; reuse presumes that significant reprocessing is not required.
Right of Way	In pipeline terminology, the route through which land has been cleared to enable pipeline construction.

Term	Definition
Riparian	Relating to or living or located on the bank of a natural watercourse (such as a river) or sometimes of a lake or a tidewater.
Risk	The likelihood of an impact occurring, combined with the effect or consequence(s) of the impact on a Receptor if it does occur.
Risk Event	An identified, unplanned event, which is considered relevant to the DCO Proposed Development and has the potential to be a Major Accident and/or Disaster subject to assessment of its potential to result in a significant adverse effect on an environmental Receptor .
River LEAFPACS2	The standard methodology for the assessment of macrophytes in rivers.
Rochdale Envelope	An acknowledged way of dealing with an application comprising Environmental Impact Assessment Development , where details of a project have not been fully resolved by the time the application is submitted. The term is used to describe those elements of a scheme that have not yet been finalised, but yet can be accommodated within certain limits and parameters allowing the likely significant effects of a project to be presented in the Environmental Statement as a worst case. It also provides the opportunity to assess aspects of a development where the Detailed Design is to be developed post grant of a DCO .
Root Protection Area (RPA)	Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's vitality.
Salmonid Water	A directive which defines freshwaters as being waters capable of supporting Salmon (<i>Salmo Salar</i>), Trout (<i>Salmo trutta</i>), Char (<i>Salvelinus</i>) and whitefish (<i>Coregonus</i>) and are hereby designated as Salmonid waters.
Section	A division of the Newbuild Carbon Dioxide Pipeline route (Sections 1-7). The Sections aid the assessment and reporting of the Environmental Statement .
Scoping	An exercise undertaken pursuant to the DCO EIA Regulations to determine the topics to be addressed within the Environmental Statement (ES).

Term	Definition
Scoping Boundary	The boundary considered to be the limits of the DCO Proposed Development as studied as part of the Scoping Reports .
Scoping Opinion	For the DCO Application , the Scoping Opinion is the Secretary of State's (SoS) written opinion as to the scope, and level of detail, of the information to be provided in the Environmental Statement .
Scoping Report	For the DCO Application , the Scoping Report is a report prepared by an applicant to provide the information required under the EIA Regulations to request a Scoping Opinion from the Secretary of State (SoS) .
Secondary Access Locations	Access locations where access for construction traffic will take place over a number of days or weeks, and outside of these activities the associated traffic volumes would be negligible.
Secondary Aquifer	<p>These include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage. Secondary Aquifers are subdivided into two types:</p> <ul style="list-style-type: none"> • Secondary A - permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers. • Secondary B - predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons, and weathering. These are generally the water-bearing parts of the former non-aquifers. <p>The term 'Secondary Undifferentiated' is also used in cases where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.</p>

Term	Definition
Secondary Mitigation	Actions that will require further activity in order to achieve the anticipated outcome. These may be imposed as part of the planning consent, or through inclusion in the Environmental Statement .
Secretary of State (SoS)	In case of the DCO Proposed Development , the Secretary of State for Business, Energy, and Industrial Strategy (BEIS).
Sensitivity	<p>The sensitivity of a Receptor is a function of its value, and capacity to accommodate change reflecting its ability to recover if it is affected. It is typically defined by the following factors:</p> <ul style="list-style-type: none"> • Adaptability – the degree to which a receptor can avoid, adapt to or recover from an effect. • Tolerance – the ability of a receptor to accommodate temporary or permanent change. • Recoverability – the temporal scale over and extent to which a receptor will recover following an effect.
Sheet Piling	The process of installing sheet piles. Sheet piles are sections of sheet materials with interlocking edges that are driven into the ground to provide earth retention and excavation support. Sheet piles are most commonly made of steel, but can also be formed of timber or reinforced concrete.
Shut Down Valve	A valve designed to stop the flow of fluid or gas upon the detection of an emergency event, for safety protection.
Significance	A measure of the importance or gravity of the effect defined by significance criteria specific to the environmental topic.
Significant Observed Adverse Effect Level (SOAEL)	The level above which significant adverse effects on health and quality of life occur as a result of noise or vibration. (see also: Significance).
Site of Importance for Nature Conservation (SINC)	Sites of Importance for Nature Conservation are usually selected within a local authority area and support both locally and nationally threatened Habitats and Species that are priorities under the county or UK Biodiversity Action Plan (BAP).

Term	Definition
Site of Special Scientific Interest (SSSI)	A site statutorily notified under the Wildlife and Countryside Act 1981 (as amended) as being of special nature conservation or geological interest. Site of Special Scientific Interest (SSSIs) include Habitats , geological features, and Landforms .
Source Protection Zone (SPZ)	Areas which show the level of risk to the source of groundwater from contamination. SPZ 1 (Inner zone) is based on a 50-day travel time of pollutant to source with a 50 m default minimum radius. SPZ2 (outer zone) is based on a 400-day travel time of pollutant to source with 250 or 500 m minimum radius around the source depending on the amount of water abstracted. SPZ 3 (total catchment) area around a source within which all the groundwater ends up at the abstraction point.
Special Area of Conservation (SAC)	Areas of protected habitats and species as defined in the Habitats Directive .
Special Protection Area (SPA)	Sites classified in accordance with Article 4 of the EC Birds Directive (79/409/EEC) which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex 1 of the Directive), and for regularly occurring migratory Species .
Species	A group of interbreeding organisms that seldom or never interbreed with individuals in other such groups, under natural conditions; most species are made up of subspecies or populations.
Stanlow AGI	The AGI that will be located within the Stanlow Manufacturing Complex .
Stanlow Manufacturing Complex	The Essar refinery located at Stanlow site at Ellesmere Port. The site will also contain Vertex Hydrogen Production Plants 1&2.
Stanlow AGI to Flint AGI Pipeline	A section of onshore pipeline (36" in diameter) to transport CO ₂ from the Stanlow AGI to the Flint AGI .
Stringing	Placing joints of pipe end to end along a pipeline Right of Way in preparation for laying, i.e., welding the joints together to form the pipeline.

Term	Definition
Stroke Testing	The process of driving a shutdown valve partially or fully closed to verify that it is not stuck/that there are no unrevealed failures which would cause the valve not to close when a demand is placed on it. A signal is forced from the control system and the valve response measured.
Study Area	The area around the Newbuild Infrastructure Boundary within which specialist assessment is undertaken. Each technical topic uses individual Study Areas, details of which can be found in Technical Chapters 6-19 (Volume II) of the Environmental Statement .
Statutory Consultation	The Planning Act 2008 (as amended) (PA 2008) requires an applicant to undertake public consultation in advance of submitting a Development Consent Order (DCO) application to the Secretary of State (SoS).
Statutory Undertaker	The various companies and agencies who are given general licence to carry out certain development and highways works. Generally, these are utilities and telecoms companies or nationalised companies.
Statement of Community Consultation	The Planning Act 2008 (as amended) (PA2008) requires an applicant to undertake public consultation in advance of submitting a Development Consent Order (DCO) application to the Secretary of State (SoS). A Statement of Community Consultation (SoCC) must be prepared, setting out how the Applicant proposes to consult people living in the vicinity of the DCO Proposed Development .
Survey Area	The area within which environmental surveys (including intrusive and non-intrusive surveys) are undertaken.
Survey Buffer	An area additional to the core Survey Area within which surveys may be required.
Sustainable Drainage System	A collection of water management practices that aim to align modern drainage systems with natural water processes.
Synthetic Natural Gas	A substitute natural gas produced from biomass, with a composition compliant with the Gas Safety (Management) Regulations 1996 (GSMR).
Town and Country Planning Act (TCPA) Application	The planning applications submitted by the Applicant to Flintshire County Council for the TCPA Proposed Development .

Term	Definition
TCPA Proposed Development	The elements of the Project comprising modifications to the Point of Ayr Terminal , the new Foreshore Cables , and the 3 BVSs located on the existing Connah's Quay to PoA Pipeline , for which planning permission will be sought under separate TCPA Applications.
Telemetry	The in-situ collection of measurements or other data at remote points and their automatic transmission to receiving equipment (telecommunication) for monitoring.
Temporary Works	Those parts of the works that allow or enable construction of the DCO Proposed Development and which do not remain in place at the completion of the works.
Tertiary Mitigation	Actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental Effects .
Thermal Oxidiser Stack	A process unit used to decompose hazardous gases at a high temperature to allow them to be released into the atmosphere.
Town and Country Planning Act	The Town and Country Planning Act 1990 (as amended) gives Local Planning Authorities in England and Wales the power to regulate and grant permission for local development. It is used to permit development for the Project which does not fall under the Planning Act 2008 (as amended) , including the TCPA Proposed Development .
Townscape	The character and composition of the built environment including the buildings and the relationships between them, the different types of open urban space, including green spaces, and the relationship between buildings and open spaces.
Towns Water	The water distribution system operated by the Town that is supplied with Bulk Water (i.e. Municipal drinking quality water - tap water).
Transect	Survey technique for surveying birds, wintering birds and breeding birds, with surveyors walking pre-defined routes.

Term	Definition
Transformer	A static piece of apparatus with two or more windings which, by electromagnetic induction, transforms a system of alternating voltage and current into another system of voltage and current usually of different values and at the same frequency for the purpose of transmitting electrical power.
Tree Preservation Orders (TPO)	An order made by the Local Planning Authority to protect specific trees, groups of trees or woodlands in the interests of amenity.
Trenchless	Trenchless technology is the science and engineering of installing underground pipes using techniques which minimise the amount of excavation and associated environmental disturbance associated with Open Cut techniques.
Trenchless Installation Technique	Trenchless installation techniques use a machine to drill or 'bore' a hole through the ground from one side of specific feature (for example, major roads) to the other. Typically, a pit is dug at either end of the trenchless section where the machinery can be located. Trenchless installation techniques can include Horizontal Directional Drilling (HDD) , Guided Auger Boring (GAB) , Unguided Auger Boring (UAB) and micro-tunnelling .
Trenchless Crossing	The location of where Trenchless Installation Technique are used to cross a feature.
Trenchless Crossing Compound	A type of Construction Compound . A small temporary compound which would be used to facilitate the Trenchless Crossings . They would be linked to a Centralised Compound .
Tributaries	Smaller watercourses which drain to a large watercourse
Unguided Auger Bore (UAB)	A Trenchless Crossing technique which is used over relatively short distances and usually at shallow depths.
Upstream Emitters / Emitters	Facilities which have partnered with the Project to have their Carbon Dioxide emissions captured.
Vent Stack	Elevated vertical termination of a disposal system that discharges vapours into the atmosphere without combustion or conversion of the relieved fluid.

Term	Definition
Vibroacoustic Monitoring System	A type of pipeline leak detection technology. Includes a network of passive multi-channel vibroacoustic stations mounted on pipelines, which allow for real time detection, localisation and classification of leaks or pipeline deformations.
Visual Amenity	Overall enjoyment of a particular area, surroundings, or views in terms of people's activities - living, recreating, travelling through, visiting, or working.
Visual Effect	An effect on specific views and on the general visual amenity experienced by people.
Visual Receptor	Individuals and / or defined groups of people who have the potential to be affected by the DCO Proposed Development .
Vulnerability	In the context of the 2014 EU Directive, the term refers to the 'exposure and resilience' of the DCO Proposed Development to the risk of a major accident and/or disaster. Vulnerability is influenced by sensitivity, adaptive capacity, and magnitude of impact.
Waste	Any substance or object which the holder discards or intends or is required to discard.
Waste Hierarchy	A guiding theme for waste policy at all levels. Establishes an order of preference for the management of waste, to maximise the prevention of waste, whilst minimising disposal. The Waste (Management) Hierarchy is established in the Waste Framework Directive (Directive 2008/98/EC), and prescribes the following: <ul style="list-style-type: none"> • Prevention (Most preferred option) • Preparing for reuse • Recycling • Recovery • Disposal (Least preferred option)
Water abstractions	The process of taking water from any source, either temporarily or permanently, for flood control or to obtain water for, for example, irrigation.
Water Framework Directive (WFD)	European directive which commits member states to achieve good qualitative status of all water bodies.

Term	Definition
Water Body	A discrete body of water forming a physical Feature .
Water Quality	The chemical, physical, and biological characteristics of water based on the standards of its usage.
Wetlands	Areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.
Whalley, Hawkes, Paisley and Trigg (WHPT) metric	A metric based on the tolerance of different aquatic macroinvertebrates to organic pollution, where each family is assigned a score from -1.6 to 13 depending on their tolerance to pollution.
Wildlife and Countryside Act 1981 (as amended)	The principal piece of UK legislation relating to the protection of wildlife.
Working Width	The temporary boundary within which Pipeline Construction Activities are expected to take place.
Zone of Influence (ZOI)	The areas / resources that may be affected by the changes caused by activities associated with a project.
Zone of Theoretical Visibility (ZTV)	A map, digitally produced, showing areas of land within which, the DCO Proposed Development theoretically visible.

3. ABBREVIATIONS

Abbreviation	Definition
AADT	Annual Average Daily Traffic
ACoW	Arboricultural Clerk of Works
AC	Alternative Current
AD	Anno Domini
AEGLs	Acute Exposure Guideline Levels
AGI	Above Ground Installation
AIA	Arboricultural Impact Assessment
AIL	Abnormal Indivisible Load
ALARP	As Low as Reasonably Practicable
ALC	Agricultural Land Classification
ALS	Agricultural Land Survey
AMS	Arboricultural Method Statement
AOC	Accidentally Oil Contaminated
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
API	American Petroleum Institute
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
ARS	Active Roost Site
ASSI	Area of Special Scientific Interest
ASPT	Average Score Per Taxon
ATC	Automatic Traffic Count
AWI	Ancient Woodland Inventory
BAT	Best Available Techniques
BEI	Built Environment Indicators
BEIS	Department for Business, Energy, and Industrial Strategy
BES	Building Research Establishment Environmental Sustainability Standard

Abbreviation	Definition
BGS	British Geological Society
BMV	Best and Most Versatile agricultural land
BNL	Basic Noise Level
BOAT	Byways Open to All Traffic
BoCC	Birds of Conservation Concern
BPM	Best Practicable Means
BSI	British Standards Institution
BS 5837	British Standard BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'
BTO	British Trust for Ornithology
BVS	Block Valve Station
CA	Conservation Area
CAPAS	Chester Archaeological Planning Advisory Service
CBRN	Chemical, Biological, Radiological and Nuclear
CCC	Committee on Climate Change
CCR	Centralised Control Room
CCS	Carbon Capture and Storage
CCI	Community Conservation Index
CD	Consultation Distance
CDE	Construction, Demolition and Excavation
CDM	Construction, Design, Management
CEMP	Construction Environmental Management Plan
CEZ	Construction Exclusion Zone
CHER	Cheshire Historic Environment Record
CIEEM	Chartered Institute of Ecology and Environmental Management
CifA	Chartered Institute for Archaeologists
CIRIA	Construction Industry Research and Information Association
CL:AIRE	Contaminated Land: Applications in Real Environments
CLX	Canal Crossing

Abbreviation	Definition
CME	Coronal mass ejections
CO₂	Carbon dioxide
COMAH	Control of Major Accidents and Hazards
CoSHH	Control of Substances Hazardous to Health
CPAT	Clwyd-Powys Archaeological Trust
CP	Cathodic Protection
CTRN	Calculation of Road Traffic Noise
CWCC	Cheshire West and Chester Council
CWT	Cheshire Wildlife Trust
CWTP	Construction Workers Travel Plan
CZ	Consultation Zone
dB	Decibel
DC	Direct Current
DCO	Development Consent Order
DECC	Department for Energy and Climate Change
Defra	Department for Environment, Food and Rural Affairs
DEMP	Decommissioning Environmental Management Plan
DEPZ	Detailed Emergency Planning Zone
DfT	Department for Transport
DHRA	Development in a High Risk Area (Coal Mining)
DLL	District Level Licensing
DMP	Dust Management Plan
DMRB	Design Manual for Roads and Bridges
DNO	District Network Operator
DSEAR	Dangerous Substances and Explosive Atmospheres
DTM	Digital Terrain Model
EA	Environment Agency
EC	European Commission
EcIA	Ecological Impact Assessment

Abbreviation	Definition
eDNA	Environmental DNA
EfW	Energy from Waste
EIA	Environmental Impact Assessment
END	Environmental Noise Directive
EMS	Environmental Management System
EPC	Engineering, Procurement and Construction
EPD	Environmental Product Declarations
EPUK	Environmental Protection UK
EPS	European Protected Species
EPSL	European Protected Species Licence
ES	Environmental Statement
ESG	Environmental, Social and Governance
EU	European Union
EQR	Ecological Quality Ratio
ExA	Examining Authority
FCA	Flood Consequence Assessment
FCC	Flintshire County Council
FCC	Fluid Catalytic Cracker
FEED	Front End Engineering Design
FEP	Farm Environment Plan
FOC	Fibre Optic Cable
FRA	Flood Risk Assessment
FTE	Full time equivalent
GAB	Guided Auger Bore
GCN	Great Crested Newt
GCR	Geological Conservation Review
GGBS	Ground Granulated Blast-furnace Slag
GIS	Geographic Information Systems
GHG	Greenhouse Gas

Abbreviation	Definition
GSMR	Gas Safety (Management) Regulations 1996
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GPS	Global Positioning System
GWDTE	Ground Water Dependent Terrestrial Ecosystem
H&S	Health and Safety
H₂S	Hydrogen Sulphide
ha	Hectare
HASWA	Health and Safety at Work Act
HAZID	Hazard Identification Studies
HDD	Horizontal Directional Drill / Drilling
HE	Highways England
HEDBA	Heritage Environmental Desk Based Assessment
HER	Historic Environment Record
HGV	Heavy Goods Vehicle
HIA	Health Impact Assessment
HIPPS	High Integrity Pressure Protection System
HM	Her Majesty's
HMG	Her Majesty's Government
HMWB	Heavily Modified Waterbody
HPI	Habitats of Principle Importance
HSE	Health and Safety Executive
HVAC	Heating, Ventilation and Air Conditioning
IA	Noise Important Areas
IAQM	Institute of Air Quality Management
ICE	Inventory of Carbon and Energy
ICSS	Integrated Control and Safety Systems
IDA	Industrial Denatured Alcohol
IEMA	Institute of Environmental Management and Assessment
IJ	Isolation Joint

Abbreviation	Definition
IMD	Index of Multiple Deprivation
INNS	Invasive Non-Native Species
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
JSNA	Joint Strategic Needs Assessment
ktCO₂	Total greenhouse gas emissions
LA90 dB	Background Sound
LAeq, T dB	Equivalent Continuous Sound Level
LAQM	Local Air Quality Management
LCRM	Land Contamination: Risk Management
LDP	Local Development Plan
LGV	Light Goods Vehicle
LI	Landscape Institute
LiDAR	Light Detection and Ranging
LIFE	Lotic-invertebrate Index for Flow Evaluation
LLFA	Lead Local Flood Authority
Lmax	Highest Measured Sound Pressure Level
Lmin	Lowest Measured Sound Pressure Level
LNR	Local Nature Reserve
LOAEL	Lowest Observed Adverse Effect Level
LPA	Local Planning Authority
LRN	Local Road Network
LSOA	Lower Layer Super Output Area
LT	Long Term
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Site
MA&D	Major Accidents and Disasters
MAGIC	Multi Agency Geographic Information for the Countryside
MAH	Major Accident Hazard

Abbreviation	Definition
MCZ	Marine Conservation Zone
MMP	Materials Management Plan
MRA	Mineral Resource Assessment
MSA	Mineral Safeguarding Area
MtCO₂e	Millions of tonnes of carbon dioxide equivalent
Mtpa	Million tonnes per annum
MS	Method Statement
N/A	Not Applicable
NAPPA	Noise Action Plan Priority Areas
NBN	National Biodiversity Network Atlas Wales
NCA	National Character Area
NCN	National Cycle Network
NE	Natural England
NERC	Natural Environment Research Council
NGR	National Grid Reference
NMWTRA	North and Mid Wales Trunk Road Agent
NNR	National Nature Reserve
NO₂	Nitrogen dioxide
NOEL	No Observed Effect Level
NO_x	Nitrogen oxides
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPS	National Policy Statement
NPSE	Noise Policy Statement for England
NRW	Natural Resources Wales
NSIP	Nationally Significant Infrastructure Project
NTS	Non-Technical Summary
NTAXA	Number of Scoring Taxa
NVC	National Vegetation Classification

Abbreviation	Definition
NVQ	National Vocatioanl Qualification
NWWT	North Wales Wildlife Trust
OBS	Occupied Breeding Site
OCEMP	Outline Construction Environmental Management Plan
OCZ	Outer Consultation Zone
OMEMP	Operations and Maintenance Environmental Management Plan
ONR	Office for Nuclear Regulation
ONS	Office for National Statistics
PAS 2080	Publicly Available Specifications: 2080 Carbon management in Infrastructure
PBRA	Preliminary Bat Roost Assessment
PCR	Polymerase Chain Reaction
PEA	Preliminary Ecological Appraisal
PEI	Preliminary Environmental Information
PEIR	Preliminary Environmental Information Report
PHE	Public Health England
PIA	Personal injury accident data
PIG	Pipeline Inspection Gauge
PINS	Planning Inspectorate
PM	Particulate Matter
PM10	Particulate Matter with an aerodynamic diameter of less than 10 micrometres
PM2.5	Particulate Matter with an aerodynamic diameter of less than 2.5 micrometres
PNS	Potential Nest Site
PoA	Point of Ayr
PPE	Personal Protective Equipment
PPG	Planning Practice Guidance
PPV	Peak Particle Velocity
PPW	Planning Policy Wales
PRoW	Public Right of Way

Abbreviation	Definition
PRF	Potential Roost Feature
PSI	Proportion of Sediment-sensitive Invertebrates metric
PSYM	Predictive System for Multimetrics
RBMP	River Basin Management Plan
RCN	Regional Cycle Network
RCP	Representative Concentration Pathway
RDX	Road Crossing
REAC	Register of Environmental Actions and Commitments
NFG	Number of functional groups
RICS	Royal Institute of Chartered Surveyors
RICT	River Invertebrate Classification Tool
RIGS	Regionally Important Geological Site
RMNI	River Macrophyte Nutrient Index
RLB	Red Line Boundary
RLX	Rail Crossing
RPA	Root Protection Area
RSPB	Royal Society for the Protection of Birds
NTAXA	Number of macrophyte taxa
RVX	River Crossing
SAB	SuDS Approving Body
SAC	Special Area of Conservation
SDV	Shut Down Valve
SFRA	Strategic Flood Risk Assessment
SINC	Site of Importance for Nature Conservation
SOAEL	Significant Observed Adverse Effect Level
SoCC	Statement of Community Consultation
SoS	Secretary of State
SPA	Special Protection Area
SPZ	Source Protection Zone

Abbreviation	Definition
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
ST	Short Term
SWMP	Site Waste Management Plan
SuDS	Sustainable Drainage System
T&S	Transport and Storage
TAN	Technical Advice Note
TCPA	Town and Country Planning Act 1990 (as amended)
TGN	Technical Guidance Note
TMP	Traffic Management Plan
TPO	Tree Preservation Order
TN	Target Note
TRS	Temporary Rest Site
UAG	Unguided Auger Bore
UK	United Kingdom
UKCP	UK Climate Projections
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UXO	Unexploded Ordnance
WCA	Wildlife and Countryside Act 1981
WCH	Walkers, Cyclists and Horse Riders
WEL	Workplace Exposure Limit
WFD	Water Framework Directive
WFDa	Water Framework Directive Assessment
WFDUKTAG	Water Framework Directive – United Kingdom Technical Advisory Group
WHO	World Health Organisation
WHPT	Whalley, Hawkes, Paisley and Trigg metric
WIMD	Welsh Index of Multiple Deprivation
ZOI	Zone of Influence
ZTV	Zone of Theoretical Visibility

Abbreviation	Definition
μg	Microgram