



LIGHTHOUSE GREEN FUELS PROJECT

Preliminary Environmental Information Report

Glossary

The Inspectorate Reference: **EN010150**

May 2024

Volume 1



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GLOSSARY

Term	Definition
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.
Adaptive Capacity	The capacity of receptors to adjust to potential damage, to take advantage of opportunities, or to respond to consequences.
Abnormal Indivisible Loads (AIL)	Loads which can't be divided into two or more loads to be transported by road.
Additional Mitigation	Actions that will require further activity to achieve the anticipated outcome. These may be imposed as part of the Development Consent Order, or through inclusion in the Environmental Statement .
Agricultural Land	Land devoted to agriculture particularly rearing livestock and the production of crops.
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 and the main ones are climate, site and soil characteristics, and the interactions between them.
Allision	In a collision, two moving objects strike each other; for example, two passing ships. An allision, however, involves an accident where only one of the objects is moving. For instance, this maritime term can refer to an accident where a moving boat runs into a stationary bridge fender.
Ambient Air Pollution	A broader term used to describe air pollution in outdoor environments. Poor ambient air quality occurs when pollutants reach high enough concentrations to affect human health and/or the environment.

Term	Definition
As Low As Reasonably Practicable (ALARP)	For a risk to be ALARP, the cost, time or effort involved in reducing the risk further would be locally disproportionate to the benefit gained.
Alcohol-to-Jet (AtJ)	A process for the conversion of alcohols to an alternative jet fuel blend stock based on catalytic steps historically utilised by the petroleum refining and petrochemical industry.
Alfanar	A company that specialises in developing and investing in renewable energy projects and is the parent company to the Applicant.
Ancient Woodland	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 woodland.
Applicant	Lighthouse Green Fuels Ltd
Application for Development Consent	The DCO application as prepared and submitted for examination.
Application Site	The area covered by the proposed planning application boundary – this term should be used in most instances.
Aquifer	Underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand, or silt).
Artificial Ground	Artificial ground relates to the areas where ground surface has been significantly modified by human activity.
Associated Development	All development on and off-site associated with the Applicant.
Atmospheric dispersion modelling	The mathematical simulation of how air pollutants disperse in the ambient atmosphere.
Baseline	A reference level of existing environmental conditions against which a development is measured and controlled.

Term	Definition
Benthic ecology	The study of organisms that make up bottom communities (sediments, seagrass communities and rock outcrops) in lakes, streams, estuaries and oceans, to determine environmental health and conduct environmental impact studies.
Best and most versatile agricultural land (BMV)	Defined as Grades 1, 2 and 3a by the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG). This is the land that 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)	The available techniques which are the best for preventing or minimising emissions and impacts on the environment.
Biocarbon Feedstock	Refers to biomass black pellets produced by processing, thermally treating and densifying as received ("green" or "raw") waste or biomass feedstocks. Raw waste and/or waste biomass (for example recycled wood) and/or biomass residues (for example forest residues) will be converted into biocarbon feedstock at remote feedstock processing facilities located in several locations across the UK.
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) Assessment	A BNG Assessment compares baseline conditions to post-development plans. BNG is achieved if the post-development plans provide a net improvement by 10% to the biodiversity of a site.

Term	Definition
Biogenic	Produced by living organisms or biological processes.
British Geological Survey	Provider of objective and authoritative geoscientific data, information and knowledge for the UK.
Carbon Capture	The capture of carbon dioxide that would otherwise be emitted into the atmosphere from industrial sources.
Carbon Capture and Storage (CCS)	The capture and subsequent storage of carbon dioxide that would otherwise be emitted into the atmosphere from industrial sources.
Climate Change	Large-scale, long-term shift in the Earth's weather patterns or average temperature.
The Climate Risk Indicators (CRI)	A set of parameters that describe the changing climate without reducing climate change to only temperature. They comprise key information for the most relevant domains of climate change: temperature and energy, atmospheric composition, ocean and water as well as the cryosphere.
Code of Construction Practice (CoCP)	A code of construction practice (CoCP) sets out the standards and procedures to which a developer or contractor must adhere in order to manage the potential environmental impacts of construction works.
Combined Cycle Gas Turbine (CCGT) Power Plant	An electrical power plant in which a gas turbine and steam turbine are used in combination to generate power, achieving a greater efficiency than would be done so independently.
Conceptual Site Model (CSM)	The Conceptual Site Model (CSM) is an iterative, 'living representation' of a site that summarizes and helps project teams visualize and understand available information.

Term	Definition
Consultation Zone	The Health and Safety Executive (HSE) sets a consultation distance around major hazard sites and major accident hazard pipelines after assessing the risks and likely effects of major accidents at the major hazard site/pipeline. The area enclosed within the consultation distance is referred to as the consultation zone (CZ). The local planning authority is notified of this consultation distance and has a statutory duty to consult the HSE on certain proposed developments within that consultation zone.
Construction Phase	The stage during which construction works for the Proposed Scheme will take place.
Construction Traffic Management Plan (CTMP)	Construction Traffic Management Plan (CTMP) details how the construction traffic associated with a development will be managed. The CTMP sets out the commitments of the contractor in order to ensure the safety of those working on the site and the general public. The purpose of the CTMP is to help developers to minimise construction impacts and relates to both on site activity and the transport arrangements for vehicles servicing the site.
Contaminated Land	Where 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.
Construction Workers Travel Plan (CWTP)	A plan managing and promoting how construction workers travel to a particular area or organisation.
Contracts of Difference (CfD) auction	A competitive auction process, incentivising cost-effective projects to come forward, balancing delivery of decarbonisation commitments with potential impacts on consumer bills.
Controlled Waters	As defined under section 104 of the Water Resources Act 1991.

Term	Definition
Control of Major Accidents and Hazards (COMAH)	Regulations ensuring that businesses: <i>"Take all necessary measures to prevent major accidents involving dangerous substances. Limit the consequences to people and the environment of any major accidents which do occur"</i>
Cumulative Effects	The effects of the Proposed Scheme in cumulation with other existing development and/or approved development.
Daylighting	The opening up and restoration of a previously buried watercourse, one which had at some point been diverted below ground.
dB (decibel)	The scale on which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure (2x10 ⁻⁵ Pa).
dB(A)	A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.
DCO Application	The application for a development consent order that will be submitted by the Applicant for the Proposed Scheme.
Decarbonisation	The process of reducing the amount of carbon, mainly carbon dioxide (CO ₂), sent into the atmosphere.
Decommissioning Phase	Is the process of shutting down a building and/or removing it from operation or use.
Designated Heritage Assets	Designation highlights a building, site or area's special interest and value to this and future generations. It gives protection under law or policy to manage, enjoy and celebrate England's historic buildings, parks, monuments, gardens, wreck sites and battlefields.

Term	Definition
Development Consent Order (DCO)	A Statutory Instrument (SI) made by the Secretary of State (SoS) pursuant to the Planning Act 2008 to authorise a Nationally Significant Infrastructure Project (NSIP).
Dewatering	A term to describe the removal of groundwater or surface water from for example a construction site.
Direct Employment	An increase in employment arising from further economic activity (jobs, expenditure or income) associated with additional income and supplier purchases.
Disaster	In the context of the Proposed Scheme, 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.
Draft Development Consent Order (dDCO)	A draft version of the Development Consent Order.
Early works	Associated with the main works but some aspects of those works are carried out earlier than the main works starting; such as demolition works, site preparation works, Geotech and other surveys / activities.
Earth bund	A sloped embankment or bund constructed from Earth designed to withhold water and prevent flooding.
Earthworks	Excavation and piling of Earth in connection with an engineering operation.
Effect	The consequence of an impact on the environment.
Effluent	Liquid waste or sewage discharged into a river or the sea.

Term	Definition
EIA Directive	Directive 85/337/EEC (as amended). The initial Directive of 1985 and its three amendments have been codified by Directive 2011/92/EU of 13 December 2011. Directive 2011/92/EU has been amended in 2014 by Directive 2014/52/EU.
EIA Regulations	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
EIA Scoping Opinion	The Secretary of State's written opinion as to the scope, and level of detail, of the information to be provided in the Environmental Statement.
EIA Scoping Report	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.
Embedded 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 (direct and indirect).
Emission	A material that is expelled or released to the environment. Usually applied to gaseous or odorous discharges to the atmosphere.
Enabling works	Works (temporary works) associated with the construction of permanent main works (plant facility); i.e. MOF, temporary facilities – offices, camp, laydown and temporary utilities, etc. These will be removed after constructing the permanent facility/completing the main works.
Energy from Waste	The conversion of waste into a useable form of energy, often electricity and/or heat.
Enhancement	Measures to improve the environment, such as Biodiversity Net Gain.

Term	Definition
Environmental Assessment Level (EAL)	A term used by the Environment Agency to judge the acceptability of proposed emissions to air from industrial sites, and their relative contribution to the environment. EALs represent a pollutant concentration in ambient air at which no significant risks to human health are expected.
Environmental Impact Assessment (EIA)	A systematic means of assessing the significance of effects of the Proposed Scheme, undertaken in accordance with the EIA Regulations.
Environmental Statement (ES)	A statement prepared in accordance with the 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 but that includes at least the information required in the EIA Regulations and which is prepared in accordance with the latest Scoping Opinion adopted by the Secretary of State (where relevant).
EU Member State Level Importance	Over the years, EU member states have harmonized laws and adopted common policies on an increasing number of economic, social, and political issues.
Examination	Examination of the application, including hearings.
Examining Authority (ExA)	The group of Inspectors appointed by the Planning Inspectorate to examine a specific application.
External Influencing Factor	A factor that occurs beyond the Site that may present a risk to the Proposed Scheme, e.g. if an external major event occurred (e.g. earthquake or a Control of Major Accident Hazards (COMAH) site major accident) it would increase the risk of serious damage to a receptor associated with the Proposed Scheme.
Feedstock	Raw materials to supply or fuel a process or machine. The feedstock for Lighthouse Green Fuels will be waste and/or waste biomass.

Term	Definition
Feedstock storage and pre-processing area	Facilities for the storage of waste and/or waste biomass. Feedstock pre-processing equipment may also be installed in this area
Flare	A safety device used to burn off flammable gas released during start-up or shutdown events or abnormal plant operations.
Fischer-Tropsch (FT) Process	The main gas-to-liquid conversion technology to be used by Lighthouse Green Fuels to create sustainable aviation fuel (SAF).
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)	As assessment of the risk of flooding.
Flood Zone 1	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	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	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 which would naturally flood with an annual probability of 1 in 20 (5%) or greater in any year, and where water has to flow or be stored in times of flood.

Term	Definition
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.
Fluvial	Of, or relating to, or inhabiting a river or stream.
FTE	Full time employees.
Fugitive Dust	Dust that is not emitted from definable point sources, such as industrial smokestacks. Sources include open fields, roadways and storage piles. It results from dry conditions where there is insufficient moisture content in the ground to maintain adhesion and hold the soil together.
Future Baseline	The likely evolution of the Baseline without implementation of the Proposed Scheme.
Gasification	The gasification facilities convert solid waste and/or waste biomass feedstocks into synthesis gas (syngas).
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.
Geo-Environmental Survey	Geo-environmental surveys are used to identify and evaluate unacceptable risks associated with contamination and geotechnics, and the potential impact on a site or planned redevelopment.
Geophysical Survey	Geophysical survey is a broad term covering the suite of detection methods used to map contrasts between the physical properties of buried archaeological remains and the surrounding soil.
Geotechnical Survey	The process of a geotechnical survey involves testing the soil consistency and structure, groundwater level, and making recommendations for any technical project based on the results. Boreholes are drilled at the site and samples are taken from the ground and analyzed in a lab.

Term	Definition
Greenhouse Gas (GHG)	Gas that absorbs and emits reflected solar radiation which results 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.
Green Naphtha	A by-product of the sustainable aviation fuel (SAF) production process. Green naphtha is an excellent feedstock for sustainable chemical production processes.
Groundwater dependent terrestrial ecosystems	A terrestrial ecosystem of importance at EU Member State level that is directly dependent on the water level in or flow of water from a groundwater body (that is, in or from the saturated zone).
Groundwater dewatering	Involves the temporary lowering of groundwater level to below an excavation level or depressurisation of groundwater pressures to enable an excavation to be undertaken in stable ground conditions.
Gross Value Added (GVA)	The measure of the value of goods and services produced in an area, industry or sector of an economy.
Naphtha	A flammable liquid hydrocarbon mixture which is an associated product of the sustainable aviation fuel production process.

Term	Definition
Ground Investigation	The physical ground investigation which can include a Geotechnical Survey, Geophysical Surveys and Geo-Environmental Surveys. Comprised of 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 the Proposed Scheme.
Groundwater	The store of water present beneath Earth's surface in rock and soil pore spaces and in the fractures of rock formations.
Groundwater Flooding	The emergence of groundwater at the ground surface away from perennial river channels or the rising of groundwater into man-made ground, under conditions where the normal ranges of groundwater level and flow are exceeded.
Groundwater Vulnerability	Assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one-kilometre square grid.
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 of Principal Importance (HPI)	Semi-natural habitat types identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UKBAP).
Habitats Regulations	The Conservation of Habitats and Species Regulations 2017 which cover the terrestrial environment and implement the Habitats Directive.

Term	Definition
Habitats Regulations Assessment (HRA)	The stages of assessment carried out by the Secretary of State 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 National Network Site before deciding whether to undertake, permit or authorise it. A report is prepared by the Applicant to inform the assessment carried out by the Secretary of State.
Habitat Suitability Index (HSI)	A numerical representation of a wildlife dwelling that determines whether or not it has the necessary capacity to support the relevant species occupying it.
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 is generally considered hazardous if it (or the material or substances it contains) are harmful to humans 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.
HGV	Heavy goods vehicle – a large vehicle over 3,500kg.
Homogeneous pelletized solid recovered fuel (SRF)	Produced from recovered waste. Also known as refuse-derived fuels, this is a high-yield energy source for generating heat and electricity, and a credible alternative to landfill.

Term	Definition
Hydraulic connectivity	The physical connection and interaction of the streams and waterways throughout a river network. A condition where a highly permeable material is connected to an aquifer and allows free movement of water or effluent under a hydraulic gradient.
Hydraulic modelling analysis	A collection of mathematical equations that give a simple representation of reality. They estimate: flow, water level and velocity in river channels, pipe networks, tidal systems and floodplains.
Hydrology	The movement, distribution, and quality of water throughout the Earth.
Hydromorphology	The physical characteristics of the shape, boundaries, and content of a water body.
Impact	A physical or measurable change to the environment attributable to the Proposed Scheme.
Important Ecological Features	Those ecological features (habitats, species, ecosystem and their functions/processes) are important and should be subject to detailed assessment. Such ecological features will be those that are considered to be important and potentially affected by the Proposed Scheme.
Index of Multiple Deprivation	The most widely used data set for relative deprivation in local authorities across England.
Indirect Employment	Employment growth arising through manufacturing services and suppliers to the construction process (indirect or supply linkage multipliers).
Induced Employment	Employment associated with expenditure as a result of those who derive incomes from the direct and supply linkage impacts of the Proposed Scheme.
Inert and non-hazardous waste	A material that hasn't been contaminated by harmful substances such as heavy metals or chemicals.

Term	Definition
Internal Drainage Board	Each internal drainage board (IDB) is a public body that manage water levels in an area, known as an internal drainage district, where there is a special need for drainage. IDBs undertake works to reduce flood risk to people and property, and manage water levels for agricultural and environmental needs within their district.
Invasive non-native species (INNS)	Organisms introduced by human beings into areas outside their native range, where they then threaten biodiversity, ecosystems, human health or the way people live.
Internal Influencing Factor	A factor which occurs within the Site that may present a risk to the Proposed Scheme.
L_{Aeq}	This is the equivalent continuous sound level. When a noise varies over time, the L _{Aeq} is the equivalent continuous sound which would contain the same sound energy as the time varying sound. Measured in dB.
L_{Aeq,T}	Defined as the notional steady sound level which, over a stated period of time (T), would contain the same amount of acoustical energy as the A-weighted fluctuating sound measured over that period.
L_{Aeq,16h}	The annual average noise level (in dB) for the 16-hour period between 0700-2300.
L_{Amax}	L _{Amax} is the maximum A-weighted sound pressure level recorded over the period stated. L _{Amax} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the overall L _{Aeq,T} noise level, but will still affect the noise environment.
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.

Term	Definition
Land Use	What land is used for based on broad categories of functional land cover, such as urban and infrastructure use and the different types of agricultural and forestry.
Landform	The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation, and physical processes.
Landscape	An area, as perceived by people, the character of which is a result of the action and interaction of natural and/or human factors.
Landscape and Visual Impact Assessment (LVIA)	A tool used to identify and assess the likely significance of the effects 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, rather than better or worse.
Landscape Character Area (LCA)	Single, unique and discrete geographical areas of a particular landscape type. A landscape character area has its own individual character and identity, even though it may share the same generic characteristics with other areas of the same type. Landscape character areas will tend to have place-specific names. Landscape character areas may be defined at differing scales, or resolutions for purposes of national, regional or local character assessment. Landscape character areas and types rarely conform to administrative boundaries.

Term	Definition
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment.
Landscape receptors	Defined aspects of the landscape resource that have the potential to be affected by a proposal.
Landscape value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.
Lead Local Flood Authority (LLFA)	Local Authority responsible for taking the lead on local flood risk management as defined within the Flood and Water Management Act (2010).
Leakage effects	Proportion of outputs that benefit those outside of the intervention's target area or group.
Likely Significant Effect (LSE)	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. The definition of a significant effect for each environmental topic will be contained within their respective chapters of the Environmental Statement.
L_{night}	The night-time annual average noise (in dB) where night is defined as 2300-0700.
Local Authority	A local authority is an organisation that is officially responsible for all the public services and facilities in a particular area.
Local Development Plan (LDP)	The set of documents and plans that present the local planning authority's policies and proposals for the development and use of land in its area.

Term	Definition
Local Nature Reserve (LNR)	A site of importance for wildlife, geology, education, or public enjoyment.
Local Planning Authority (LPA)	The local authority or council that is empowered by law to exercise statutory town planning functions for a particular area of the UK.
Local Wildlife Site (LWS)	Non-statutory designated sites with substantive nature conservation value.
Lower Super Output Area (LSOA)	Lower layer Super Output Areas (LSOAs) are made up of usually four or five Output Areas (the lowest level of geographical area for census statistics), comprising between 400 and 1,200 households with a resident population between 1,000 and 3,000 persons.
Lowest Observed Adverse Effect Level (LOAEL)	The level above which adverse effects on health and quality life can be detected as a result of noise and vibration.
Made Ground	Area where material is known to have been placed by people on the pre-existing (natural or artificial) land surface (including engineered fill).
Magnitude	A combination of the scale, extent, and duration of an effect.
Magnitude of Impact	<p>The magnitude of an impact is typically defined by the following factors:</p> <ul style="list-style-type: none"> – extent – the area over which an effect occurs; – duration – the time for which the effect occurs; – frequency – how often the effect occurs; and – severity – the degree of change relative to existing conditions.
Main Application Site	The sustainable aviation fuel plant site excluding off-site works – to be used in specific circumstances where distinction is needed, typically the ES.

Term	Definition
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 which has powers to carry out flood defence works to them.
Major Accident	In the context of the Proposed Scheme, 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. 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.
MA&D	Major Accident and Disasters.
MA&D Category	A set of values used to categorise events within a related parent MA&D Group.
MA&D Group	A MA&D which can be grouped as either a Natural Hazard (Disaster) or Technological or Manmade Hazard (Major Accident).
MA&D Type	A set of values used to sub-categorise events within a MA&D Category.
Marine Policy Statement (MPS)	Marine Policy Statement (MPS).
Materials Recycling Facility (MRF)	A specialized plant that receives, separates and prepares recyclable materials for marketing to end-user manufacturers.
Mitigation Measures	Actions proposed to prevent, reduce, and where possible offset, significant adverse effects arising from the whole or specific elements of the Proposed Scheme.

Term	Definition
National Character Area (NCA)	Areas defined at the national level, which describe the geographical, ecological and historical variations in landscape character that make one area different from another. Their boundaries follow natural lines in the landscape rather than administrative boundaries, making them a good decision-making framework for the natural environment.
National Landscape Character Area (NLCA)	The same as a NCA, but for Wales.
National Nature Reserve (NNR)	A site of importance for wildlife, geology, education, or public enjoyment.
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)	Overarching policy designated under the Planning Act 2008 concerning the planning and consenting of Nationally Significant Infrastructure Projects (NSIPs) in the UK.
National Network Site	An area of land subject to protection through the Habitats Regulations, including Special Areas of Conservation (SAC) and Special Protection Areas (SPA).
Nationally Designated Site	Areas of land subject to protection under UK legislation, including Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR).
Nationally Significant Infrastructure Project (NSIP)	Projects which fall under one of the categories in Part 3 of the Planning Act 2008 and therefore require authorisation by way of a DCO.
Navigation Risk Assessment (NRA)	An assessment to evaluate the risks due to major shipping accidents from faulty navigation or major failures.
Net Zero	The balance between the amount of greenhouse gas (GHG) that's produced and the amount that's removed from the atmosphere.

Term	Definition
Nitrate Vulnerable Zone (NVZ)	Areas designated as being at risk from agricultural nitrate pollution. The designations are made in accordance with the Nitrate Pollution Prevention Regulations 2015. Waters are defined within the Nitrates Directive as polluted if they contain or could contain, if preventative action is not taken, nitrate concentrations greater than 50mg/L.
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.
Noise Sensitive Receptors	Any identified receptor likely to be affected by noise. These are generally human receptors, and may include residential dwellings, workplaces, schools, hospitals, community facilities, places of worship, recreational spaces, and ecological receptors.
Non-Designated Heritage Assets	Buildings, monuments, sites, places, areas or landscapes identified as having a degree of significance meriting consideration in planning decisions because of their heritage interest, but which do not meet the criteria for designated heritage assets. These can include those identified by a local planning authority such as 'local interest' buildings.
Non-native Invasive Species (NNIS)	An invasive non-native species is any living thing which has spread outside its native range and causes environmental and/or economic harm in its new environment.
Non-Statutory Consultation	Consultation with stakeholders on the Proposed Scheme which occurs in addition to the Statutory Consultation required under the PA2008 and EIA Regulations.
Non-Statutory Consultees	Consultees who, whilst not designated in law, are likely to have an interest in a proposed development and should therefore be consulted on the Proposed Scheme.

Term	Definition
Non-Technical Summary (NTS)	A non-technical summary (NTS) is a concise document that provides a description of the EIA process and its findings in a manner that is both appealing to read and easily understood by the general public.
Net Zero Teesside (NZN)	A Carbon Capture, Utilisation and Storage (CCUS) project, based in Teesside in the North East of England.
Off-gases	A gas that is produced as a by-product of an industrial process or that is given off by a manufactured object or material.
Operation Phase	If permission is granted, the stage that occurs after the Proposed Scheme is handed over by the relevant construction contractor(s) and approved for operation. During the Operation Phase maintenance will be undertaken. It will remain in its Operation Phase until it is decommissioned.
Order Limitss	Red line boundary covering the limits of lands to be acquired or used permanently or temporarily shown on the land plans and works plans where the authorised development may be carried out.
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 LLFA, or Internal Drainage Board where relevant, has powers for Ordinary Watercourses that are similar to those held by the Environment Agency for Main Rivers.
Ordnance Survey (OS)	Great Britain's national mapping agency.
Outline Code of Construction Practice (OCoCP)	Outline document setting out methods to avoid, minimise and mitigate Impact on the environment and surrounding area and the protocols to be followed in implementing these measures in accordance with environmental commitments during the Construction Phase.

Term	Definition
Outline Drainage Strategy (ODS)	A foul water drainage system that will drain to a package sewage treatment plant within the Site. The processed water from this treatment plant would then discharge into an onsite drainage field or nearby watercourse.
Phase 1 Habitat Survey	An ecological survey technique that provides a standardised system to record vegetation and wildlife habitats. It enables a basic assessment of habitat type and its potential importance for nature conservation.
Piling	The process of driving or boring pile foundations into the ground beneath a building that is under construction. These piles transfer loads from the structure to the ground, helping to support it. Pile foundations are often used where the ground is too weak to underpin the structure.
Planning Inspectorate	The Government agency responsible for administering applications for development consent under the Planning Act 2008 (PA2008) on behalf of the Secretary of State.
Planning Obligations	Planning S106 agreements and obligations.
Planning Requirements	Planning conditions, controls and requirements.
Personal Protective Equipment (PPE)	Personal Protective Equipment (PPE) is equipment that will protect the user against health and safety risks at work. It can include items such as safety helmets and hard hats, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses.

Term	Definition
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 to the Proposed Scheme and recommendations for mitigation measures.
Preliminary Environmental Information Report (PEIR)	An in-depth description of the Project, the effects the Project would have on the environment and the measures proposed to reduce the impacts.
Principal Aquifer	These are layers of rock or drift deposits that have high intergranular and / or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale.
Primary Habitat	Habitat used by a species for critical life cycle functions, such as raptor nest sites, mammal denning sites and localised food resources.
Priority Habitat	Habitats which have been deemed to be of principal importance for the purpose of conserving biodiversity, being listed in the UK Biodiversity Action Plan, and with maintenance and restoration of these habitats being promoted through agri-environment schemes.
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 vessel	A project vessel or project cargo vessel is specifically designed and built to transport large, heavy or sensitive cargo which requires special handling.

Term	Definition
Proposed Scheme	The scheme for which a DCO will be sought. See Chapter 2: Site and Proposed Scheme Description for further details.
Public Right of Way (PRoW)	A right by which the public can pass along linear routes over land (which may be privately owned) at all times. The mode of transport may be restricted (i.e. foot, horse pedal cycle, non-motorised vehicle, or all vehicles).
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, habitat or plant that has the potential to be affected by the Proposed Scheme.
Regionally Important Geological Sites (RIGSs)	Sites of regional and local importance for their geology that have not been designated a Site of Special Scientific Interest.
Register of Commitments	Summarises the committed impact avoidance, mitigation and enhancement measures within the chapters of the Environmental Statement, and associated appendices, that are to be adopted in relation to the Proposed Scheme and its potential identified impacts.
Relevant Planning Authorities	Stockton-on-Tees Borough Council and Redcar and Cleveland Borough Council.
Residual Effects	Effects arising from the Proposed Scheme that cannot be mitigated following implementation of mitigation measures.
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 Assessment and Method Statement (RAMS)	A risk assessment will identify if an activity is high risk or complex, while the method statement will detail how the job or task is to be carried out safely.

Term	Definition
Risk Event	An identified, unplanned event, which is considered relevant to the Proposed Scheme and has the potential to be a MA&D subject to assessment of its potential to result in a significant adverse effect on a receptor.
Rochdale Envelope	A term derived from EIA case law which seeks to balance the need for flexibility for a development not fully defined with the ability to assess the likely significant effects of such a scheme upon the environment, and any necessary mitigation, and to set these out in an Environmental Statement. A consent must create "clearly defined parameters" within which the framework of development must take place.
SAF Plant Site	The area within the Site where the main SAF Plant will be constructed.
Severance	The perceived division that can occur within a community when it becomes separated from places and other people. The severance may be caused by a physical barrier created by a development or by the difficulty of crossing roads due to an increase in traffic flow.
Scoping	An exercise undertaken pursuant to the EIA Regulations, to determine the topics to be addressed within the ES.

Term	Definition
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> <p>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.</p> <p>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>
Secondary Undifferentiated Aquifer	Assigned 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.
Secretary of State (SoS)	In case of the Proposed Scheme, the Secretary of State for Energy Security and Net Zero.
Sedimentation	The process of settling down of heavier insoluble particles at the bottom of a liquid.
Self Propelled Modular Transporter (SPMT)	A heavy hauler vehicle used for transporting large objects.
Sens Slope statistic	A method for estimating the slope of a regression line that fits a set of (x, y) data elements based on a least-squares estimate.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.

Term	Definition
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	The area for which the DCO will be sought.
Site Boundary	The outer perimeter of the Site, as shown on Figure 1-1 – Proposed DCO Application Boundary .
Site Character	A distinct, recognisable and consistent pattern of elements within the Site Boundary.
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).
Site of Special Scientific Interest (SSSI)	A site statutorily notified under the Wildlife and Countryside Act 1981 as being of special nature conservation or geological interest. SSSIs include habitats, geological features, and landforms.
Soiling	Deposition of dust onto a surface potentially resulting in diminished appearance, aesthetics or value of property and/or damage to sensitive ecological habitats.
Solid Recovered Fuel (SRF)	A fossil fuel alternative produced from commercial and industrial waste.
Source Protection Zone (SPZ)	The Environment Agency has designated SPZs for 2000 groundwater supply sources. The SPZs are designed to control activities close to water supplies intended for human consumption. These water sources include wells, boreholes and springs, all of which are used for public drinking. Contamination of these zones from any activity might cause pollution in the area and pose a risk to the public who consume tap water. The closer the activity is to the water source, the greater the risk.

Term	Definition
Source Protection Zone 1 (SPZ 1)	Also referred to as the 'inner zone'. In relation to contamination risks to groundwater sources, the 50-day travel time from any point below the water table to the source, as defined by the Environment Agency as. This zone has a minimum radius of 50 metres.
SPZ Outer Protection Zone (Zone 2)	Defined by a 400 day travel time from a point below the water table. The previous methodology gave an option to define SPZ2 as the minimum recharge area required to support 25 per cent of the protected yield. This option is no longer available in defining new SPZs and instead this zone has a minimum radius of 250 or 500 metres around the source, depending on the size of the abstraction.
SPZ Total Catchment (Zone 3)	Defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source. In confined aquifers, the source catchment may be displaced some distance from the source. For heavily exploited aquifers, the final Source Catchment Protection Zone can be defined as the whole aquifer recharge area where the ratio of groundwater abstraction to aquifer recharge (average recharge multiplied by outcrop area) is >0.75 . There is still the need to define individual source protection areas to assist operators in catchment management.
Special Area of Conservation (SAC)	High quality conservation sites that are protected under the European Union Habitats Directive, due to their contribution to conserving those habitat types that are considered to be most in need of conservation.
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.

Term	Definition
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.
Standard of Protection (SoP)	The SoP that a flood defence offers is expressed in terms of the likelihood of a particular flood event (or level) being equalled or exceeded in any given year. Therefore, if a flood defence offers a SoP of 1 in 50, it will take a 1 in 50 (or greater) flood event to overtop or bypass it.
Statutory Consultees	The PA2008 and EIA Regulations prescribe circumstances where the Secretary of State is required to consult specified bodies prior to a decision being made on an application.
Study Area	The area, defined for each technical topic, within which the effect(s) of the Proposed Scheme is assessed.
Superficial Deposits	The youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 2.6 million years from the present. They rest on older deposits or rocks referred to as bedrock.
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.
Sustainable Aviation Fuel (SAF)/Synthetic Paraffinic Kerosene (SPK)	SAF/SPKs are renewable or waste-derived aviation fuels that meet strict sustainability criteria. SAF is a safe, proven fuel. SAF derived from waste and/or waste biomass sources such as municipal solid waste or waste wood have the potential to reduce lifecycle carbon emissions by up to 80% compared with conventional aviation fuel.
Sustainable Drainage Systems (SuDS)	Drainage solutions that provide an alternative to the direct channelling of surface water through networks of pipes and sewers to nearby watercourses.

Term	Definition
Swept Path Analysis	The evaluation and calculation of the space required when a vehicle makes turning manoeuvres.
Synthesis gas (Syngas)	A mixture of carbon monoxide and hydrogen generated from the gasification process, where solid feedstocks are turned into gaseous species. Syngas is cleaned and used as the input feed gas stream for the Fischer Tropsch unit.
Technological Readiness Level (TRL)	<p>Technological Readiness Level (TRL) are a type of measurement system used to assess the maturity level of a particular technology. A technology project is evaluated against the parameters for each technology level and can then be assigned a TRL rating based on the projects progress.</p> <p>There are nine technology readiness levels. TRL 1 is the lowest and TRL 9 is the highest.</p>
Temporary Construction Compound	A secure area from which site work is managed and resourced, including but not limited to temporary offices, workshop, parking, and storage.
Transitional and Coastal (TraC) waterbody	Transitional water relates to bodies of surface water in the vicinity of river mouths which are partly saline in character, as a result of their proximity to coastal waters but are substantially influenced by freshwater flows.
Tertiary Mitigation Measures	Actions that would occur with or without input from the EIA feeding into the design process.
UKHab Classification survey	Survey method used to categorise habitats within a defined survey area and record their condition and distinctiveness against set criteria.
Unproductive Strata	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

Term	Definition
Vessel traffic Services (VTS)	Shore-side systems which range from the provision of simple information messages to ships, such as position of other traffic or meteorological hazard warnings, to extensive management of traffic within a port or waterway.
Vibration Dose Values (VDV)	A parameter that combines the magnitude of vibration and the time for which it occurs.
Visual Amenity	Overall enjoyment of a particular area, surroundings, or views in terms of peoples' 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 Proposed Scheme.
Vulnerability	In the context of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (on the assessment of the effects of certain public and private projects on the environment) the term refers to the 'exposure and resilience' of the Proposed Scheme to the risk of a MA&D. Vulnerability is influenced by sensitivity, adaptive capacity and magnitude of impact.
Waste Hierarchy	Sets out the priorities that must be applied when managing waste.
Water Framework Directive (WFD)	European Union directive which commits member states to achieve good qualitative status of all water bodies. This has been retained in UK law following the UK's exit from the European Union.
Waterbody	A discrete body of water forming a physical feature.
Water Strike	The level at which water is first encountered. Comparisons of water strike to rest water level can be used to identify perched water table (strike > level) or confined conditions (strike < level).

Term	Definition
WCH	Walking, Cycling and Horse-riding
WFD Designated Waterbodies	Includes rivers, lakes, transitional waters, groundwater and coastal waters out to 1 nautical mile (12 nautical miles for chemical status, i.e. for territorial waters). These waters are divided into units called water bodies. Member States monitor and report on the characteristics of these waterbodies under the objectives of the WFD.
Wildlife and Countryside Act 1981 (as amended)	The principal piece of UK legislation relating to the protection of wildlife.
Zone of Influence (Zol)	The areas/resources that may be affected by the biophysical changes caused by activities associated with a project.
Zone of Theoretical Visibility (ZTV)	A map, digitally produced, showing areas of land within which, the Proposed Scheme is theoretically visible.

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