

Glossary and Acronyms

Advice Note 17 (AN17): The Planning Inspectorate's Advice Note 17: Cumulative effects assessment relevant to nationally significant infrastructure projects.

Aids to Navigation (AtoN): A device, system or service, external to vessels, designed and operated to enhance safe and efficient navigation of individual vessels and/or vessel traffic.

Air Quality Action Plan (AQAP): A plan through which local authorities, in collaboration with national agencies and others, can state their intentions for working towards air quality objectives, following the declaration of an Air Quality Management Area (AQMA).

Air Quality Management Area (AQMA): An area identified by a local authority in which exposure to air pollution breaches the National Air Quality Objectives.

All Measures Necessary (AMN): The Control of Major Accident Hazards Regulations 2015 (COMAH) requires operators of sites storing bulk hazardous products to, *"take all measures necessary [AMN] to prevent major accidents and to limit their consequences for human health and the environment"* (Regulation 5).

Annual Average Daily Traffic (AADT): A measure of vehicle traffic, calculated by dividing the total volume of vehicle traffic on a road by 365 days.

Annual Status Report (ASR): An annual report prepared by local authorities to fulfil the requirements of Local Air Quality Management (LAQM) under Part IV of the Environment Act 1995, showing the strategies employed by the local authority to improve air quality and any progress that has been made.

Appropriate Assessment (AA): An assessment conducted by a competent authority of the implications of a plan or project on a European designated site, where the potential for likely significant effects cannot be excluded.

As low as reasonably practicable (ALARP): The Control of Major Accident Hazards Regulations 2015 (COMAH) requires operators of sites storing bulk hazardous liquids to reduce the risk of a major accident to as low as is reasonably practicable (Regulation 4).

Astronomical Tide Range (HAT-LAT): The range between the highest and lowest level of tides.

Automatic Urban and Rural Network (AURN): A network of monitoring sites in the UK which measure nitrogen dioxide in the atmosphere.

Biodiversity Action Plan (BAP): The UK Biodiversity Action Plan (UK BAP), was the UK Government's response to the Convention on Biological Diversity (CBD), which the UK signed up to in 1992 in Rio de Janeiro.

Carbon Dioxide (CO₂): A compound. Its molecules consist of one carbon atom joined to two oxygen atoms.

Carbon Dioxide Equivalent (CO_{2e}): A measure used to compare the emissions of different Greenhouse Gases (GHGs) by converting them to the equivalent amount of Carbon Dioxide (CO₂) with the same Global Warming Potential (GWP).

Castle Point Borough Council (CPBC): The local authority covering the areas of Canvey Island, Benfleet, Thundersley and Hadleigh.

Chart datum (CD): The plane below which all depths are published on a navigational chart.

Chartered Institute of Ecology and Environmental Management (CIEEM): Professional membership body which represents and supports ecologists and environmental managers in the UK, Ireland and internationally.

Competent Harbour Authority (CHA): An authority with statutory powers in relation to the regulation of shipping movements and the safety of navigation within its harbour. It has duties to assess the need for pilotage and powers to provide the appropriate pilotage services and impose pilotage directions as necessary to secure safety.

Conceptual Site Model (CSM): A written or illustrative representation of the conditions and the physical, chemical and biological processes that determine the ways that contaminants move from sources through the environmental media to environmental receptors.

Construction Environmental Management Plan (CEMP): A document which sets out the principles, controls and management measures which will be implemented during construction to manage potential impacts that may arise.

Contaminated Land Exposure Assessment (CLEA): The CLEA model uses generic assumptions about the fate and transport of chemicals in the environment, and a generic conceptual model for site conditions and human behaviour to estimate child and adult exposures to soil contaminants for those living, working, and/or playing on contaminated sites over long time periods.

Control of Major Accident Hazards Regulations 2015 (COMAH): These regulations cover operational sites which involve a large quantity of hazardous substances. For COMAH to apply, threshold quantities of hazardous substances (in aggregate) must be met or exceeded. Sites to which COMAH applies have specific obligations for their management (environmental and safety risk).

Cumulative Effects Assessment (CEA): An assessment which considers the cumulative effects of the proposed project in question and other projects in the vicinity.

Dead Weight Tonnes (DWT): A measurement of the weight of a ship when it is empty.

Department for Business, Energy and Industrial Strategy (BEIS): A Government department responsible for business, industrial strategy, energy and clean growth.

Department for Environment, Food and Rural Affairs (DEFRA): The UK government department with responsibility for protecting the natural environment, supporting farmers and supporting the rural economy.

Department for Transport (DfT): A UK Government department responsible for the UK's transport network and infrastructure.

Development Consent Order (DCO): The development consent needed to undertake a NSIP made under the Planning Act 2008.

Ecological Impact Assessment (EclIA): A process of identifying, quantifying and evaluating potential effects of development or other proposed actions on habitats, species and ecosystems.

Ecological Mitigation Area (EMA): An area set aside as part of an ecological strategy specifically designed to provide a safe and suitable habitat for wildlife.

Emissions Factors Toolkit (EFT): A tool published by DEFRA and the Devolved Administrations to assist local authorities in carrying out a review and assessment of local air quality as part of their duties under the Environmental Act 1995.

Environment Agency (EA): Executive non-departmental public body, sponsored by DEFRA. The EA seeks to protect and enhance the environment, for example through flood risk management.

Environmental Impact Assessment (EIA): The process of identifying and assessing the likely significant environmental effects of a proposed project.

Environmental Protection UK (EPUK): National charity providing policy analysis and information on air quality, land quality and noise and their effects on people and communities.

Environmental Risk Assessment (ERA): A structured assessment involving formulating a problem, assessing risk, appraising options and addressing risk.

Environmental Statement (ES): The document which reports the process, findings and recommendations of the EIA carried out to assess the environmental effects of a project.

Essex County Council (ECC): The county council which governs the county of Essex.

European Commission (EC): The executive body of the European Union. It proposes and enforces legislation, and implements decisions made by other EU institutions such as the European Parliament.

Fatty Acid Methyl Esters (FAME): A renewable energy source, also known as biodiesel, usually obtained from plant oils.

Flood Risk Assessment (FRA): An assessment of the risk to a development if there was a flood event, considering flooding from sources including tidal, fluvial, surface water run-off, groundwater and artificial sources and including an allowance for climate change.

Global Warming Potential (GWP): The ratio of the warming caused by a substance to the warming caused by a similar mass of carbon dioxide.

Good Environmental Status (GES): The desired condition of marine waters by 2020 as described in the EU Marine Strategy Framework Directive (2008/56/EC), includes 11 descriptors.

Government Pipeline Storage System (GPSS): System of fuel distribution pipelines and associated storage depots across the United Kingdom, now known as the Exolum Pipeline System.

Great Crested Newt (GCN): Largest species of newt.

Green Infrastructure (GI): Networks of green spaces and watercourses and water bodies that connect rural areas, villages, towns and cities.

Greenhouse Gas (GHG): Gaseous compounds that have been identified as contributing to a warming effect in the earth's atmosphere.

Guidelines for Landscape and Visual Impact Assessment (GLVIA3): A resource produced by the Landscape Institute and IEMA. Contains appropriate methodologies for carrying out LVIA.

Habitat Suitability Index (HSI): Ecological field survey technique developed by Oldham *et al.* (2000) for Great Crested Newts (GCNs). Numerical index between 0 and 1. Values close to 0 indicate an unsuitable habitat, a value of 1 indicates optimal habitat.

Habitats of Principal Importance (HoPI): 56 habitats identified in accordance with the Natural Environment and Rural Communities (NERC) Act 2006 to be of principal importance for the conservation of biodiversity in England.

Habitats Regulations Assessment (HRA): An assessment of a development which has the potential to have an impact on a European protected site, either individually or cumulatively with other projects.

Hazardous Substances Consent (HSC): Consent granted to hold certain quantities of hazardous substances at defined limits.

Health and Safety Executive (HSE): The national regulator for workplace health and safety. With the EA, the HSE comprises the Competent Authority for the enforcement of COMAH at the Oikos Facility.

Heavily Modified Water Body (HMWB): A body of surface water which as a result of physical alterations by human activity, is substantially changed in character.

Heavy Duty Vehicle (HDV): A vehicle designed for heavy work such as a bus or truck.

Heavy Goods Vehicle (HGV): A large road vehicle designed for carrying heavy loads.

Highest Astronomical Tide (HAT): The highest level that can be expected to occur under average meteorological conditions and under any combination of astronomical conditions.

Historic Landscape Characterisation (HLC): Historic characterization is the identification and interpretation of the historic dimension of the present day landscape or townscape within a given area.

Important Ecological Feature (IEF): Ecological features requiring specific assessment within Ecological Impact Assessment. Ecological features can be important for a variety of reasons (e.g., quality and extent of designated sites or habitats, habitat / species rarity).

Inshore Fisheries Conservation Authority (IFCA): Bodies with a collective vision to manage a sustainable marine environment and inshore fisheries with powers and duties laid down in the Marine and Coastal Access Act 2009.

Institute of Air Quality Management (IAQM): Professional body for air quality professionals.

Institute of Environmental Management and Assessment (IEMA): Professional body for environmental practitioners in the UK and worldwide.

Institution of Lighting Professionals (ILP): Professional body for lighting professionals.

International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA): Organisation which seeks to achieve worldwide improvement and harmonization of Marine Aids to Navigation. Publishes recommendations.

International Maritime Organization (IMO): Specialised agency of the United Nations responsible for regulating shipping.

International Regulations for Preventing Collisions at Sea 1972 (COLREGS): Rules that all vessels must follow, for example in relation to traffic separation schemes.

Joint Nature Conservation Committee (JNCC): Public body which advises the Government on nature conservation.

Landscape and Visual Impact Assessment (LVIA): An assessment which seeks to identify the effect of new development on the landscape and views.

Landscape Character Areas (LCAs): These are single unique areas which are discrete geographical areas of a particular landscape type.

Landscape Value: The relative value that is attached to different landscapes. A landscape may be valued by different stakeholders for a whole variety of reasons.

Lead Local Flood Authority (LLFA): Under The Flood and Water Management Act 2010 and Flood Risk Regulations 2009, a Lead Local Flood Authority is responsible for managing local flood risk such as groundwater flooding, surface water run-off and ordinary watercourses.

Local Air Quality Management (LAQM): The statutory process by which local authorities monitor, assess and take action to improve local air quality.

Local Authority Pollution and Prevention Control (LAPPC): Regime aimed at controlling emissions of installations which carry out certain activities or use certain hazardous substances.

Local Enterprise Partnership (LEP): A local partnership between local authorities and businesses which decides local economic priorities to promote economic growth and create local jobs.

Local Wildlife Site (LWS): Wildlife-rich sites selected for their local nature conservation value.

Lower London Tertiaries (LLT): Geological layer comprising the Harwich Formation, Lambeth Group and Thanet Formation.

Lowest Astronomical Tide (LAT): The lowest level that can be expected to occur under average meteorological conditions and under any combination of astronomical conditions.

Mapping European Seabed Habitats (MESH): Framework for mapping European seabed habitats, led by the JNCC.

Marine Accident Investigation Branch (MAIB): Independent unit within the Department for Transport (DfT) responsible for investigating marine accidents involving UK vessels worldwide and all vessels in UK territorial waters.

Marine and Coastal Access Act 2009 (MCAA): Act which covers a range of marine issues, including: the establishment of the Marine Management Organisation (MMO), streamlining of the existing marine licensing system, and provision of a framework for establishing Marine Conservation Zones (MCZs).

Marine Conservation Zone (MCZ): Areas that protect a range of nationally important, rare or threatened habitats and species. They can be designated in English, Welsh and Northern Irish territorial and offshore waters.

Marine Loading Arm (MLA): A mechanical arm consisting of articulated steel pipes and equipment that connects to a tanker vessel and enables the loading or unloading of product.

Marine Management Organisation (MMO): Non-departmental public body, responsible for licensing, regulating and planning marine activities in the seas around England so that they are carried out sustainably.

Marine Policy Statement (MPS): Statutory policy issued by DEFRA which provides the framework for preparing Marine Plans and taking decisions affecting the marine environment.

Marine Protected Area (MPA): Any area of sea especially dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources and managed through legal and other effective means.

Marine Safety Management System (MSMS): Required as part of the Port Marine Safety Code and comprises a formal risk assessment of marine operations.

Marine Strategy Framework Directive (MSFD): EU Directive which seeks to achieve Good Environmental Status (GES) of the EU's marine waters by 2020.

Maritime and Coastguard Agency (MCA): A UK executive agency working to prevent loss of lives at sea and responsible for implementing international maritime law and safety policy.

Mean High Water Neap (MHWN): The average height of the high waters of neap tides above Chart Datum

Mean High Water Spring (MHWS): The average height of the high waters of spring tides above Chart Datum

Mean Low Water Neap (MLWN): The average height of the low waters of neap tides above Chart Datum

Mean Low Water Spring (MLWS): The average height of the low waters of spring tides above Chart Datum

Mean Sea Level (MSL): The midpoint between mean low and mean high tides.

Multi-Agency Geographic Information for the Countryside (MAGIC): Website which provides geographic information about the natural environment across Great Britain, covering marine, coastal and urban environments. Information is presented in an interactive map.

National Planning Policy Framework (NPPF): National planning policy published by the Ministry of Housing, Communities and Local Government (MHCLG) which sets out the government's national planning policies and how these are expected to be applied.

National Policy Statement for Energy (NPSfE): National Policy Statement produced by the former Department for Energy and Climate Change which provides the framework for decisions on UK development proposals within the energy sector.

National Policy Statement for Ports (NPSfP): National Policy Statement produced by Department for Transport which provides (amongst other things) the framework for decisions on UK port development proposals.

Nationally Significant Infrastructure Project (NSIP): A major infrastructure development which requires development consent under the Planning Act 2008.

Natural England (NE): An executive non-departmental public body which advises the government on the conservation, enhancement and management of the natural environment in England.

Natural Environment and Rural Communities (NERC) Act: Act of Parliament designed to achieve a rich and diverse natural environment and thriving rural communities.

Navigational Risk Assessment (NRA): Identifies and assesses the hazards and risks affecting vessel navigation, before considering current controls to mitigate risks and further controls that could be adopted to minimise risk as low as reasonably practicable (ALARP).

Non-Road Mobile Machinery (NRMM): Machines used for purposes other than for passenger or goods transport that have engines, for example excavators, bulldozers, front loaders and compressors

Ordnance Datum Newlyn (ODN): Mean sea level calculated from Newlyn, Cornwall and used for height calculations.

Particle Size Analysis (PSA): Technical procedure or technique which determines the size range, and/or the average, or mean size of the particles in a powder or liquid sample.

Planning Inspectorate (PINS): On 1 April 2012, under the Localism Act 2011, the Planning Inspectorate became the government agency responsible for operating the planning process for Nationally Significant Infrastructure Projects (NSIPs).

Port Marine Safety Code (PMSC): National standard for UK harbour authorities aimed at maintaining and promoting nationally recognised safety standards for the port marine industry.

Port of London Authority (PLA): Statutory Harbour Authority of relevance to the OMSSD project, and freehold owner of the site of the Oikos Facility and land to the north.

Preliminary Environmental Information Report (PEIR): Produced to inform the statutory consultation process (section 42 and section 47 of The Planning Act 2008) to allow for preliminary identification and assessment of the likely significant environmental effects of the proposal.

Public Right of Way (PRoW): Footpath, bridleway, restricted byway, byway open to all vehicular traffic or a public road which can be used by all members of the public.

Red Data Book (RDB): A public document recording endangered and rare species of plants, animals, fungi as well as some local subspecies which are present in a particular region.

Risk Based Corrective Action (RBCA): A streamlined approach to environmental management to ensure protection of human health and the environment.

Royal Society for the Protection of Birds (RSPB): Charitable organisation aimed at protecting birds and wildlife.

Safety Management System (SMS): a management system to manage safety.

Secretary of State (SoS): Cabinet minister in charge of a government department. Anybody wishing to construct an NSIP must first apply for consent to do so. For such a project, the Planning Inspectorate examines the application and will make a recommendation to the relevant Secretary of State, who will make the decision on whether to grant or to refuse development consent.

Sensitivity: A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposal and the value related to that receptor.

Site of Special Scientific Interest (SSSI): The finest sites for wildlife and natural features in England, supporting many characteristic, rare and endangered species, habitats and natural features. Land is notified as an SSSI under the Wildlife and Countryside Act 1981 (as amended).

SO₂ Emissions Control Area (SECA): Sea areas in which stricter controls were established to minimise airborne emissions from ships as defined by Annex VI^[1] of the 1997 MARPOL Protocol. The emissions specifically include SO_x, NO_x, ODSs and VOCs.

Society of Brownfield Risk Assessment (SOBRA): Society supporting professionals working in land contamination.

Special Protection Area (SPA): Protected areas for birds classified under Directive 79/409 on the Conservation of Wild Birds. SPAs protect rare and vulnerable birds (as listed on Annex I of the Birds Directive), and regularly occurring migratory species.

Species of Principal Importance (SoPI): Species considered to be of principal importance for conserving biodiversity, also known as priority habitats and species.

Standard of Protection (SoP): The return period of a flood event against which a flood defence should be effective.

Standards of Training, Certification and Watchkeeping for Seafarers (STCW): Minimum qualification standards for masters, officers and watch personnel on seagoing merchant ships on large yachts.

Statutory Harbour Authority (SHA): Authority responsible for the safety of vessels and people with the harbour, efficient navigation and the protection of the port environment.

Strategic Economic Plan (SEP): An overarching growth strategy for a region's economy produced by the Local Enterprise Partnership.

Strategic Flood Risk Assessment (SFRA): A strategic level assessment of flood risk on a local planning authority scale. The NPPF requires local planning authorities to undertake an SFRA which should be used to help various parties consider flood risk when making planning decisions about the design and location of any development or flood risk management feature/structure.

Susceptibility: The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.

Suspended Sediment Concentration (SSC): The concentration of suspended sediment particles being transported in the river and an important factor in measuring the quality of water.

Sustainable, Drainage Systems (SuDS): Approaches to manage surface water that take account of water quantity (flooding), water quality (pollution) biodiversity (wildlife and plants) and amenity.

Thames Estuary 2100 (TE2100): The Thames Estuary 2100 Plan sets out how the Environment Agency and its partners can work together to manage tidal flood risk in the Thames Estuary, taking account of predicted climate change through until 2100.

Trailer Suction Hopper Dredging (TSHD): Dredging methodology using suction tubes to dredge loose and soft soils, sand, gravel, silt or clay.

Transport Assessment (TA): A comprehensive and systematic process that sets out transport issues relating to a proposed development.

UK Oil Pipeline (UKOP): Part of the UK's oil pipeline network operated by the British Pipeline Agency.

United Kingdom Hydrographic Office (UKHO): UK's agency for providing hydrographic and marine geospatial data to mariners and maritime organisations across the world.

Upward Light Ratio (ULR): Proportion of the luminous flux of a luminaire or installation that is emitted, at and above the horizontal, when the luminaire(s) is (are) mounted in its (their) installed position(s).

Vapour Recovery Unit (VRU): Specialist system design to capture and absorb volatile organic compound (VOCs) using activated carbon.

Vertical Illuminance: Light which may fall onto a surface in the vertical plane, such as the window of a building or private dwelling.

Vessel Traffic System (VTS): A marine traffic monitoring system used by port and harbour authorities.

Visually Verified Montage (VVM): A view created from a real location using quantifiable data.

Volatile Organic Compounds (VOC): Organic compounds with a high vapour pressure that evaporate at ordinary room temperature. Many are harmful to the environment and human health and they are strictly regulated in the UK.

Water Framework Directive (WFD): An EU Directive which introduced a comprehensive river basin management planning system to protect and improve the ecological health of rivers, lakes, estuaries and coastal and groundwaters by applying a range of environmental standards.

Water Injection Dredging (WID): Dredging methodology which injects water at low pressure directly into the sediments, which are then transported by natural means to deeper areas.

Wetland Bird Survey (WeBS): A survey monitoring non-breeding waterbirds in the UK which aims to provide the principal data of their populations and wetland habitats.

Zone of Influence (Zoi): The geographic area within which a project's environmental receptors are located. The Zoi, stated as a distance from the limit of the project, can vary between individual environmental topics.

Zone of Visual Influence (ZVI): A map, usually digitally produced, showing areas of land within which a development is theoretically visible.