

13 GLOSSARY

"A" Weighting (dB(A))	The human ear does not respond uniformly across the audible frequency range. The "A" weighting is commonly used to simulate the frequency response of the ear.
AADT	Annual average daily traffic
Above Ordnance Datum (AOD)	The distance above the mean tides at Newlyn, Cornwall.
ADL 2021	Part L2A of Approved Document Part L 2021
ADMS	Atmospheric dispersion modelling system
AOI	Area of Impact
Air pollutants	Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects on humans, animals, vegetation and/or materials
Air quality	A measure of the degree to which air is polluted.
Air quality sensitive receptors	People, property or designated sites for nature conservation that may be at risk from exposure to air pollutants that could potentially arise as a result of the development.
Air Quality Objective	Air quality targets to be achieved locally as set out in the Air Quality Regulations 2000 and subsequent Regulations. Objectives are expressed as pollution concentrations over certain exposure periods, which should be achieved by a specific target date. Some objectives are based on long term exposure (e.g. annual averages), with some based on short term objectives. Objectives only apply where a member of the public may be exposed to pollution over the relevant averaging time.
Ambient	Background levels.
Ambient Noise Level, $L_{Aeq,T}$	The equivalent continuous A-weighted sound pressure level of the totally encompassing sound in a given situation at a given time that is usually composed of sound from many sources near and far.
Ancient Woodland	Woodland that has existed continuously since 1600 or before in England, Wales and Northern Ireland.
AADF	Annual average daily flow
AADT	Annual average daily traffic
Annual mean concentration	The average (mean) of the hourly pollutant concentrations measured or predicted for a one year period.
AQAL	Air Quality Assessment Level
AQAP	Air quality action plan
AQMA	Air quality management area. Areas where the air quality objectives are likely to be exceeded. Declared by way of an order issued under the Section 83(1) of the Environment Act 1995.
ASR	Annual status report
Background Noise Level $L_{A90,T}$	The A-weighted sound pressure level of the residual noise at the assessment position that is exceeded for 90% of a given time interval, T, measured using the fast time weighting, F, and quoted to the nearest whole number.

Baseline	Existing environmental conditions present on, or near a site, against which future changes may be measured or predicted.
Biodiversity	The variety of life forms that inhabit the earth.
BREEAM	The Building Research Establishment's Environmental Assessment Method for rating the environmental performance of an office building.
BRES	Business Register and Employment Survey
CAZ	Clean Air Zone
CCC	Committee on Climate Change
CCG	Clinical Commissioning Group
CERC	Cambridge Environmental Research Consultants
Circular economy	In contrast to a linear economy, a circular economy creates and maintains value of products, materials and buildings by using them for as long as possible and minimising both resource use and waste. The use of virgin materials is minimised whilst re-use, repurposing and recycling are maximised. In a pure circular economy, resources are not lost from the system so nothing is landfilled.
CO₂equivalent emissions	CO ₂ e emissions refers to carbon dioxide equivalent emissions, which is a measure used to compare the emissions from various greenhouse gases based upon their global warming potential, in order to standardise the climate effects of greenhouse gases.
Construction Environmental Management Plan (CEMP)	A documented management system with environmental procedures to monitor residual impacts of the construction and operational phases of the development.
Contamination	Contamination is the addition, or the result of addition, or presence of a material or materials to, or in, another substance to such a degree as to render it unfit for its intended purpose.
Cumulative effects	Effects that result from incremental changes caused by other past, present or reasonably foreseeable actions.
DAS	Design and Access Statement
DCLG	Department for Communities and Local Government
Decibel (dB)	The decibel is a logarithmic ratio of two values of a variable. The range of audible sound pressures is approximately 2×10^{-5} Pa to 200 Pa. Using decibel notation presents this range in a more manageable form, 0 dB to 140 dB.
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
DfT	Department for Transport
Directive	European Commission (EC) Directives impose legal obligations on European Member States. They are binding as to the results to be achieved, but allow individual states the right to decide the form and methods used to achieve the results. An example of this is the EC Air Quality Framework Directive 96/62 that is brought into legal effect in the UK by the Air Quality (England) Regulations (2000).
DLUHC	Department for Levelling Up, Housing, and Communities

DM	Do-minimum
DS	Do-something
Dust	Fine particles of solid materials ranging in size from 1 to 75µm diameter (see British Standard 3405) capable of being resuspended in air and settling only slowly under the influence of gravity where it may cause nuisance.
Dust deposition rate	The rate at which particulate matter is deposited on to surfaces typically expressed in units of mg/m ² /day.
DWG	Department for Work and Pensions
EA	Environment Agency
Earthworks	The process of soil stripping, ground-levelling, excavation and landscaping.
Ecology	The study of living organisms in relation to their surroundings.
Ecosystem	Term used to describe a community of interdependent organisms and the physical environment they inhabit.
Effluent	A fluid discharged or emitted to the external environment.
EFT	Emission Factor Toolkit
EGAs	Employment Generating Areas
EHO	Environmental Health Officer
Embodied carbon	Those carbon emissions resulting from the construction and use of a building over its entire life, including its demolition and disposal; i.e. those associated with raw material extraction, manufacture and transport of building materials, construction and the emissions associated with maintenance, repair and replacement as well as dismantling, demolition and eventual material disposal.
Emission	A material that is expelled or released to the environment. Usually applied to gaseous or odorous discharges to the atmosphere.
Emission factors	The average emission rate of a given pollutant for a given source, relative to units of activity. Used to model future pollution concentrations under different scenarios.
Energy use intensity	An annual measure of the total energy consumed in a building. EUI can be expressed in GIA (Gross Internal Area) or NLA (Net Lettable Area) and is measured in kWh.
Environmental Impact Assessment (EIA)	A technique for ensuring that the likely effects of new development on the environment are fully understood and taken into account before the development is allowed to go ahead. It provides a focus for public scrutiny of the project and enables the importance of the predicted effects, and the scope for modifying or mitigating them, to be properly evaluated by the decision-making authority.
Environmental impact	The total effect of any operation on the surrounding environment.
Environmental Statement (ES)	The outcome of the Environmental Assessment presented in a formal document or documents in accordance with EC Directive 85/337. Includes such information that is reasonably required to assess the environmental effects of a development.
EPUK	Environmental Protection United Kingdom

EU	European Union
EU limit values	Limits set by the European Union on air quality to be achieved by member states. In the UK this EU Directive is prescribed under the Air Quality Limit Values (England) Regulations (2003) and subsequent amendments. For nitrogen dioxide the annual mean limit value and the annual mean objective value are set at the same concentration.
EUI	Energy Use Intensity
EV	Electric vehicle
Exceedance	Concentrations of a specified air pollutant greater than the appropriate Air Quality Objective.
Fauna	The animal life characteristics of a particular biome.
Flood	The inundation of normally dry land by water.
Flood plain	An area of limited relief bordering a river inundated when a river overflows its banks during a flood.
Flora	The combination of plant life in a particular geographical area.
Fluvial flooding	Flooding occurs in the floodplains of rivers and watercourses when the capacity of watercourse is exceeded as a result of rainfall or snow and ice melts within catchment areas further upstream.
Frequency (Hz)	The number of cycles per second (i.e., the number of vibrations that occur in one second); subjectively this is perceived as pitch.
Frequency Spectrum	The relative frequency contributions that make up a noise.
FTEs	Full Time Equivalents
Fumes	The Clean Air Act 1993 (s.64) defines fumes as any airborne solid matter smaller than dust. In this assessment fume is considered to be airborne solid matter with a diameter of less than 1 µm.
Fugitive dust emissions	Dust emissions escaping from a construction site.
GHG	Greenhouse Gases
GIA	Gross Internal Area
GM	Greater Manchester
GMCA	Greater Manchester Combined Authority
GP	General Practitioner
Groundwater	Water that accumulates in the pore spaces and cracks in the rocks beneath the earth's surface.
Groundwater Source Protection Zone	A defined area within which groundwater is extracted for potable water supply. The area is defined by the Environment Agency on the basis of the length of time taken for groundwater to migrate from the potable source.
Gross Domestic Product (GDP)	A measure of the total economic activity occurring in the UK.
GVA	Gross Value Added
Habitat	The specific environment in which an organism lives.
HCA	Homes and Communities Agency

Heavy Duty Vehicle (HDV)	A vehicle type classification, including rigid and articulated heavy goods vehicles, plus buses and coaches, that is used by air quality dispersion models.
Hydrology	The scientific study of water in the earth/atmosphere system.
Hydrogeology	The study of geological factors relating to the Earth's water.
IAQM	Institute of Air Quality Management
IEMA	Institute of Environmental Management and Assessment
IFC	International Finance Corporation
IMD	Indices of Multiple Deprivation
Impact significance	Opinions from a relevant planning authority at an initial stage as to what are the nature and potential scale of the environmental impacts arising from the proposed development and assessing what further studies are required to establish their significance.
In-situ	In the natural, original or appropriate position.
Intrusive investigation	An investigation involving penetration into the ground and removal of soil.
IOS	International Organisation for Standardisation
Junctions9	A modular software package providing advanced roundabout, traffic signal and priority junctions modelling and analysis within a single graphical interface.
LAQM	Local air quality management
LAQM TG (22)	Local air quality management technical guidance (2022)
LCA	Life Cycle Assessment
LDV	Light duty vehicle
Level $L_{A01,T}$	The A-weighted sound pressure level exceeded for 1% of a given time interval, T, measured using the fast time weighting, F (125 m/s). Mathematically: Sound Pressure Level (dB) = $20 \log_{10} \{p(t) / P_0\}$
Light pollution	Different forms of unwanted or wasted light as identified by the Institute of Lighting Engineers, including sky glow, glare and light trespass.
Light Duty Vehicle	A vehicle type classification, including motorcycles, cars and light goods vehicles, that is used by air quality dispersion models
Limit Values / EU limit values	The maximum pollutant levels set out in the EU Daughter Directives on Air Quality. In some cases, the limit values are the same as the national air quality objective but may allow a longer period for achieving.
LinSig	Software to model traffic signals and their effect on traffic capacities and queuing.
Listed Building	A building included in a list produced by the Secretary of State for Culture, Media and Sport. It comprises buildings and other structures that are of special architectural or historic interest.
LNR	Local nature reserve
Local Nature Reserve	An area of local interest to which there is a commitment for conservation declared under the National Parks and Access to Countryside Act 1949.

Local road	Minor roads, below the category of a local distributor, which provides direct access to residential and commercial properties.
LPA	Local Planning Authority
LSOAs	Lower Super Output Areas
Max Level $L_{AFmax,T}$	The A-weighted maximum sound pressure level exceeded for a given time interval, T, measured using the fast time weighting, F (125 m/s).
MHCLG	Ministry of Housing Community and Local Government
Mitigating factor	A matter to be taken into account as a benefit to offset any perceived or demonstrable harmful impact.
Mitigation (measure)	The measures put forward to prevent, reduce and where possible, offset any adverse effects on the environment.
National air quality objectives	A series of objectives set by the Government's Expert Panel on Air Quality to be achieved either without exception or with a permitted number of exceedances within a specific timescale. For nitrogen dioxide the annual mean limit value and the annual mean objective value are set at the same concentration.
Net	After all deductions have been made.
Net zero carbon	The United Nations Framework Convention on Climate Change's Race to Zero Lexicon defines net zero carbon as, "When anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period." Net zero is achieved where emissions are first reduced in line with a 'science-based' trajectory with any residual emissions neutralised through offsets.
NHS	National Health Service
NIA	Net Internal Area
NO₂	Nitrogen dioxide
NO_x	Oxides of nitrogen
Noise	Unwanted or unexpected sound.
Non-Technical Summary (NTS)	A summary of the Environmental Statement in non-technical language providing a concise, yet comprehensive summary of the likely effects of the project on the environment.
NPPF	National Planning Policy Framework
NRMM	Non-Road Mobile Machinery
O₃	Ozone
ONS	Office for National Statistics
Operational Carbon	The carbon dioxide and equivalent global warming potential (GWP) of other gases associated with the in-use operation of the building. This usually includes carbon emissions associated with heating, hot water, cooling, ventilation, and lighting systems, as well as those associated with cooking, equipment, and lifts (i.e. both regulated and unregulated energy uses).
PHF	Peak Hour Flow
Permeability	The extent to which an environment allows a variety of access routes through it. A permeable environment is one where there is ease of movement and where people have a choice in the routes they may use.

Pluvial Flooding	Surface water flooding caused by rainwater run-off from urban and rural land with low absorbency.
PM₁₀	The fraction of particulates in air of very small size (less than 10 micrometres).
PM_{2.5}	Fine particles in the (ambient) air 2.5 micrometres or less in size.
PPG	Planning Policy Guidance
PPS	Planning Policy Statements
PV	Photovoltaics
Ramsar	The Convention on Wetlands of International Importance, called the Ramsar Convention is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. Ramsar sites are wetlands of international importance, designated under the Ramsar Convention.
Rating Level, L_{Ar,Tr}	The specific noise level plus any adjustment for any characteristic features of the noise.
(Sensitive) Receptor	A component of the natural, created or built environment such as human being, water, air, a building, or a plant that is affected by an impact.
Reference Time Interval, Tr	The specified interval over which an equivalent continuous A-weighted sound pressure level is determined.
Renewable Energy	Renewable energy technologies use natural energy sources to generate electricity and/or heating/cooling. Sources include solar, wind, wave, marine, hydro, etc.
Residual impacts	Those impacts of the development that cannot be mitigated following implementation of mitigation proposals.
RICS	Royal Institution of Chartered Surveyors
Risk assessment	An assessment of the likelihood and severity of an occurrence.
Road links	Individual sections of the road network, usually divided by junctions, used in the modelling of scenarios.
SAC	Special area of conservation
Schedule 2 development	Development project types under EIA regulations where EIA is not mandatory in all cases but may be required, depending on the size, nature and scale of the development and the potential for significant environmental effects to arise.
SCI	Statement of Community Involvement
Scoping	An initial stage in determining the nature and potential scale of environmental impacts arising as a result of a development, and an assessment of what further studies are required to establish their significance.
Scoping opinion	A written statement of the opinion of the relevant planning authority as to the information to be provided in the Environmental Statement.
Scoping report	Report submitted prior to an EIA setting out the methods and scope proposed to assess the environmental impacts of a development.
Screening opinion	A written statement of the opinion of the relevant planning authority as to whether an EIA is required of a development.

Scrub	Vegetation dominated by shrubs and woody species.
Setting	The context in which a building or area can be appreciated.
SHLAA	Strategic Housing Land Availability Assessment
Site of Special Scientific Interest (SSSI)	The best sites for wildlife and geological features in England as designated under the Wildlife and Countryside Act 1981.
SO₂	Sulphur dioxide
Sound Pressure Level (Lp)	Equal to 20 times the logarithm to the base 10 of the ratio of the root mean squared (RMS) sound pressure to the reference sound pressure. In air the reference sound pressure is 2×10^{-5} Pa.
Sound reduction index, R_w	A single-figure value of sound reduction index, derived according to procedures given in BS5821, used for rating and comparing partitions and based on the values of sound reduction index at different frequencies. R _w +C _{tr} indicates the sound reduction index adapted for a typical road traffic noise spectrum.
SWMP	Site Waste Management Plan
Special Protection Area (SPA)	An area classified under Article 4 of the EC Directive on the Conservation of Wild Birds as being of international importance to wild birds.
Specific Noise Level, LAeq,Tr	The equivalent continuous A-weighted sound pressure level at the assessment position produced by the specific noise source over a given reference time interval, where P0 = 2×10^{-5} Pa.
Statutory Consultees	Groups or bodies that, by law, must be consulted as part of the planning application process for certain types of development.
SuDS	Sustainable Drainage System
Sustainable Development	Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.
Sustainable Drainage Systems (SuDS)	Sustainable drainage systems use techniques to control surface water run-off as close to its origin as possible, before it enters a watercourse. This involves moving away from traditional piped drainage systems to engineering solutions that mimic natural drainage processes such as porous pavements.
Synergism	A condition in which two substances work together in such a way that their combined effect is greater than the sum of the two separate effects.
TA	Transport Assessment
TfGM	Transport for Greater Manchester
Threshold	A level of effect above which an assessment will be taken of whether any changes to procedures need to be made.
Threshold value	The minimum value that will produce a response or specified effect.
Topography	The natural or artificial features, level and surface form of the ground surface.

Track-out	The transport of mud and other dusty materials from a works area onto the public highway. Usually on the wheels and body work of vehicles.
UDP	Unitary Development Plan
UKETS	UK Emissions Trading System
UKGBC	UK Green Building Council
Upfront carbon	The carbon emissions associated with the extraction and processing of materials, the energy and water consumption used by the factory in producing products, transporting materials to site, and constructing the building.
UU	United Utilities
VOA	Valuation Office Agency
24 hour mean concentration	The average (mean) of the hourly pollutant concentrations measured or predicted for 24 consecutive hours in one day
µg/m3	Micrograms (one-millionth of a gram) per cubic metre of air