APPENDIX 14.1 – POLICY AND LEGILATIVE CONTEXT

Policy Context

National Planning Policy Framework (NPPF)

The NPPF sets out the planning policy for England, to help achieve sustainable development within the planning sector. The planning system has three overarching objectives, one of which (Paragraph 8c) is an environmental objective:

'To protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.'

Paragraph 105 states:

'The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.'

Paragraph 174 states:

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

[..]

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans.

[...]'

Paragraph 185 states:

'Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.'

Paragraph 186 states:

'Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.'

Paragraph 188 states:

'The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.'

Planning Practice Guidance (PPG)

The NPPF is supported by PPG , which sets out the principles on how planning can take account of the impacts of new developments on air quality.

Paragraph 001 Reference ID: 32-001-20191101 states:

'The 2008 Ambient Air Quality Directive sets legally binding limits for concentrations in outdoor air of major air pollutants that affect public health such as particulate matter (PM_{10} and $PM_{2.5}$) and nitrogen dioxide (NO_2).

The UK also has national emission reduction commitments for overall UK emissions of 5 damaging air pollutants:

- *fine particulate matter ($PM_{2.5}$);*
- *ammonia (NH_3);*
- *nitrogen oxides (NO_x);*
- *sulphur dioxide (SO_2); and*
- *non-methane volatile organic compounds (NMVOCs).*

As well as having direct effects on public health, habitats and biodiversity, these pollutants can combine in the atmosphere to form ozone, a harmful air pollutant (and potent greenhouse gas) which can be transported great distances by weather systems. Odour and dust can also be a planning concern, for example, because of the effect on local amenity.'

Paragraph 005 Reference ID: 32-005-20191101 states:

'Whether air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to have an adverse effect on air quality in areas where it is already known to be poor, particularly if it could affect the implementation of air quality strategies and action plans and/or breach legal obligations (including those relating to the conservation of habitats and species). Air quality may also be a material consideration if the proposed development would be particularly sensitive to poor air quality in its vicinity.

Where air quality is a relevant consideration the local planning authority may need to establish:

- *The 'baseline' local air quality, including what would happen to air quality in the absence of the development;*
- *whether the proposed development could significantly change air quality during the construction and operational phases (and the consequences of this for public health and biodiversity); and*

- *whether occupiers or users of the development could experience poor living conditions or health due to poor air quality.'*

Other Relevant National Planning or Development Strategies

Environmental Improvement Plan

The Environmental Improvement Plan 2023 is the first revision of the 25 year Environment Plan, and sets out how the 25 Year Environmental Plan goals, Environment Act targets, and other commitments that have been made domestically and internationally will combine to drive specific improvements in the natural environment. This is to be reviewed every five years, with the next review due in 2028.

Goal 2 – Clean Air sets out what the government has achieved since 2018, which includes publishing the Clean Air Strategy in 2019, reducing pollution from domestic burning and publishing the Transport Decarbonisation Plan , all of which aim to improve air quality.

The document sets out the following measures and interventions to be implemented in order to tackle poor air pollution:

- A legal target to reduce population exposure to $PM_{2.5}$ by 35% in 2040 compared to 2018 levels, with a new interim target to reduce by 22% by the end of January 2028.
    - Interim target - Compared to 2018, the reduction in population exposure to $PM_{2.5}$ in the most recent full calendar year must be 22% or greater.
- Legal concentration limits for a number of other key pollutants. The majority of these limits, including for sulphur dioxide and coarse particulate matter, are already met; however, nitrogen dioxide still exceeds its annual mean objective, therefore the government is working towards meeting compliance with the 40 $\mu g/m^3$ limit.
- A legal target to require a maximum annual mean concentration of 10 micrograms of $PM_{2.5}$ per cubic metre ($\mu g/m^3$) by 2040, with a new interim target of 12 $\mu g/m^3$ by the end of January 2028.
    - The highest annual mean concentration in the most recent full calendar year must not exceed 12 $\mu g/m^3$ of $PM_{2.5}$.
- Legal emission reduction targets for five damaging pollutants by 2030 relative to 2005 levels:

- Reduce emissions of nitrogen oxides by 73%.
- Reduce emissions of sulphur dioxide by 88%.
- Reduce emission of $PM_{2.5}$ by 46%.
- Reduce emissions of ammonia by 16%.
- Reduce emissions of non-methane volatile organic compounds by 39%.

These measures will be monitored through the Annual Progress Report and the Outcome Indicator Framework. These targets have been set by central government, as opposed to local authorities directly assessing $PM_{2.5}$ concentrations against these targets.

Clean Air Strategy

The Clean Air Strategy (CAS) was published in January 2019 and sets out how the government will improve air quality nationally. The document aims to tackle the issue of air quality across all parts of government and society to protect public health and the environment, and identifies what needs to be done to achieve this. The document complements the Industrial Strategy (archived), the Clean Growth Strategy and the 25 Year Environment Plan and is a key part of delivering the government's 25 Year Environmental Plan.

The document CAS has adopted international targets to reduce emissions of fine particulate matter, ammonia, nitrogen oxides, sulphur dioxide and non-methane volatile organic compounds by 2030. The document proposes tougher goals to cut public exposure to particulate matter pollution, as recommended by the World Health Organisation (WHO).

The strategy CAS not only targets the reduction of emissions, but also a reduction in exposure.

Reducing Emissions from Road Transport: Road to Zero Strategy

The Reducing Emissions From Road Transport: Road to Zero Strategy (2018) document produced by the Office for Low Emission Vehicles (OLEV), Office for Zero Emission Vehicles (OZEV) and the Department for Transport (DfT) sets out how the government aims to end the sale of new conventional petrol and diesel cars and vans by 2040, with almost every car and van having zero emissions by 2050. Furthermore, the aim of the government is to see at least 50%, and as many as 70%, of new car sales being ultra-low emission by 2030 (and up to 40% of new van sales).

A number of measures have been set out in the document which outline how the government will support this gradual transition, some of which are consumer incentives, research and development and innovation support based.

Since this document was released, the Prime Minister has announced that, as part of the Ten Point Plan for a Green Industrial Revolution (2020) , the government will end the sale of new petrol and diesel cars and vans from 2030, 10 years earlier than set out in the document above.

This ambitious plan will see road traffic-related NO_x emissions to reduce significantly over the coming decades, and likely beyond the scale of reductions forecast in the air quality tools used to assess air quality impacts.

Local Planning Policy

Barnsley Metropolitan Borough Council

Barnsley Metropolitan Borough Council's (BMBC) Local Plan was adopted in January 2019.

Policy T5 Reducing the Impact of Road Travel states:

'Developing and implementing robust, evidence-based air quality action plans to improve air quality;

Working with our sub regional partners, fleet and freight operators to improve the efficiency of vehicles and goods delivery, and reduce exhaust emissions; and

Implementing measures to ensure the current road system is used efficiently.'

Policy Poll1 Pollution Control and Protection states:

'Development will be expected to demonstrate that it is not likely to result, directly or indirectly, in an increase in air, surface water and groundwater, noise, smell, dust, vibration, light or other pollution which would unacceptably affect or cause a nuisance to the natural and built environment or to people.

We will not allow development of new housing or other environmentally sensitive development where existing air pollution, noise, smell, dust, vibration, light or other pollution levels are unacceptable and there is no reasonable prospect that these can be mitigated against.

Developers will be expected to minimise the effects of any possible pollution and provide mitigation measures where appropriate.'

Policy AQ1 Development in Air Quality Management Areas states:

'Development which impacts on areas sensitive to air pollution in air quality management areas will be expected to demonstrate that it will not have a harmful effect on the health or living conditions of any future users of the development in terms of air quality (including residents, employees, visitors and customers), taking into account any suitable and proportionate mitigation required for the development.

We will only allow residential development which impacts on areas sensitive to air pollution, where the developer provides an assessment that shows living conditions will be acceptable for future residents, subject to any required mitigation.

We will only allow development which impacts on areas sensitive to air pollution which could cause more air pollution, where the developer provides an assessment that shows there will not be a significantly harmful effect on air quality, subject to any required mitigation.

Furthermore, development which impacts on areas sensitive to air pollution due to traffic emissions will be expected to demonstrate suitable and proportionate mitigation relative to the increased traffic emissions generated by the development.'

Doncaster Council

Doncaster Council (DC) Local Plan was adopted in September 2021.

Policy 54: Pollution states:

'Development proposals that are likely to cause pollution, or be exposed to pollution, will only be permitted where it can be demonstrated that pollution can be avoided, or where mitigation measures (such as those incorporated into the design and layout of development) will minimise significantly harmful impacts to acceptable levels that protect health, environmental quality and amenity. When determining planning applications, the agent of change principle will be applied, and particular consideration will be given to:

A) an assessment of the risks to public health and the impact of cumulative effects and where necessary that the provision for mitigation against the total effects has been provided.

B) the presence of noise generating uses close to the site, and the potential noise likely to be generated by the proposed development. A Noise Assessment will be required to enable clear decision-making on any relevant planning application. Proposals will need to have regard to the standards identified in Appendix 11 to establish is the proposal is acceptable in noise impact terms.

C)the impact on national air quality; especially but not limited to Air Quality Management Areas, areas potentially close to the EU limit value, other sensitive areas and the aims and objectives of the Air Quality Action Plan. An Air Quality Assessment will be required to enable clear decision making on any relevant planning application.

D) any adverse effects on the quantity, quality and ecology features of water bodies and groundwater resources, including contamination to Source Protection Zones.

E) the impact of artificial lighting. Artificial lighting has the potential to cause unacceptable light pollution in the form of sky-glow, glare or intrusion onto other property and land. Development proposals should ensure that adequate and reasonable controls to protect dwellings and other sensitive property, the rural night-sky, observatories, road-users, and designated sites for conservation of biodiversity and protected species are included within the proposals.'

Legislative Context

European Legislation

As per the withdrawal act, the following EU legislation, relating to air quality, has been retained in UK law.

European air quality legislation is consolidated under Directive 2008/50/EC, which came into force on 11th June 2008. This Directive consolidates previous legislation which was designed to deal with specific pollutants in a consistent manner and provides new air quality objectives for fine particulates. The consolidated Directives include:

- Directive 1999/30/EC – the First Air Quality "Daughter" Directive – sets ambient air limit values for nitrogen dioxide (NO_2) and oxides of nitrogen (NO_X), sulphur dioxide, lead and particulate matter (PM);
- Directive 2000/69/EC – the Second Air Quality "Daughter" Directive – sets ambient air limit values for benzene and carbon monoxide; and,
- Directive 2002/3/EC – the Third Air Quality "Daughter" Directive – seeks to establish long-term objectives, target values, an alert threshold and an information threshold for concentrations of ozone in ambient air.

The fourth daughter Directive was not included within the consolidation and is described as:

- Directive 2004/107/EC – sets health-based limits on polycyclic aromatic hydrocarbons, cadmium, arsenic, nickel and mercury, for which there is a requirement to reduce exposure to as low as reasonably achievable.

UK Legislation

The Air Quality Standards Regulations, (Amendments 2016) seek to simplify the air quality regulation and provide a new transposition of the Air Quality Framework Directive, First, Second and Third Daughter Directives but also transpose the Fourth Daughter Directive within the UK. The Air Quality Limit Values are transposed into the updated Regulations as Air Quality Standards, with attainment dates in line with the European Directives. Statutory Instrument SI 2010 No. 1001, Part 7 Regulation 31 extends powers, under Section 85(5) of the Environment Act (1995), for the Secretary of State to give directions to Local Authorities (LAs) for the implementation of these Directives.

The UK Air Quality Strategy (AQS) is the method for implementation of the air quality limit values in England, Scotland, Wales and Northern Ireland and provides a framework for improving air quality and protecting human health from the impacts of air pollution. The Air Quality Strategy has since been updated and includes a range of actions, for both local authorities and the UK government, to improve air quality across the UK. Examples of actions set out in the Air Quality Strategy include tighter emissions standards for vehicles and machinery, greater use of low-emission vehicles, and new rules on burning solid fuels, as well as local action to support the delivery of the recently implemented $PM_{2.5}$ targets.

For each nominated pollutant, the AQS sets clear, measurable, outdoor air quality standards and target dates by which these must be achieved; the combined standard and target date is referred to as the Air Quality Objective (AQO) for that pollutant. Adopted national standards are based on the recommendations of the Expert Panel on Air Quality Standards and have been translated into a set of Statutory Objectives within the Air Quality (England) Regulations (2000) SI 928, and subsequent amendments, along with European Commission Directive Limits and World Health Organisation Guidelines.

The AQS sets out national health-based standards and objectives for nine key air pollutants to protect human health and ecosystems. These pollutants are benzene, 1-3 butadiene, carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, sulphur dioxide and polycyclic aromatic hydrocarbons.

The AQOs for pollutants included within the Air Quality Strategy are set out in the Air Quality Standards (Amendment) Regulations 2016, and are presented in Table 14.1.1. They are managed through the Local Air Quality Management (LAQM) regime.

Table 14.1.1: Air Quality Standards (AQO) (England)

Pollutants	**Air Quality Standards**	
	Concentration	**Measured as**
Nitrogen Dioxide (NO_2)	200 µg/m^3	1-hour mean not to be exceeded more than 18 times per year.
	40 µg/m^3	Annual mean.
Particulate Matter (PM_{10})	50 µg/m^3	24-hour mean not to be exceeded more than 35 times per year.
	40 µg/m^3	Annual mean.
Particulate Matter ($PM_{2.5}$)	20 µg/m^3	Annual mean – Indicative Stage 2 limit value post 2020. 15% reduction in background to be achieved between 2010 and 2020 at Urban Background sites.
	12 µg/m^3	Target to be achieved by 2028.
	10 µg/m^3	Target to be achieved by 2040.

Within the context of this assessment, the annual mean objectives are those against which residential receptors will be assessed and the short term objectives apply to all receptor locations, both residential and non residential.

Further to the air quality standards set out above, the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 came into force in England on 30th January 2023 and set out two fine particulate matter targets to be achieved by 2040. These are:

- The annual mean concentration target is that by the end of 31st December 2040 the annual mean level of $PM_{2.5}$ in ambient air must be equal to or less than 10 µg/m^3; and

- The population exposure reduction target is that there is at least a 35% reduction in population exposure by the end of 31st December 2040 ("the target date"), as compared with the average population exposure in the three-year period from 1st January 2016 to 31st December 2018.

To note, these central government targets primarily focus on tackling emissions, rather than requiring local authorities to assess concentrations against these new $PM_{2.5}$ targets.

Environmental Acts

Part IV of the Environment Act 1995 requires local authorities to review and assess the air quality within their boundaries. As a result, the Air Quality Strategy was adopted in 1997, with national health-based standards and objectives set out for the, then, nine key air pollutants.

Part IV of the Environment Act 2021 amends both the Environment Act 1995 and the Clean Air Act 1993. It builds on the foundations provided by Part IV of the Environment Act 1995 and strengthens the local air quality management framework. The act allows the Secretary of State to make provisions for, about or connect with the recall of relevant products that do not meet relevant environmental standards.

The government has resisted calls for the adoption of the recently updated World Health Organisation (WHO) air quality guidelines, specifically targeting particulate matter pollution. The act does introduce a duty on the government to bring forward at least two air quality targets by October 2022 for consultation that will be set in secondary legislation, which, after a delay , has now been introduced in secondary legislation. The first aim of the legislation is to reduce the annual average level of fine particulate matter (PM2.5) in ambient air. The second aim is to set a long-term target (set a minimum of 15 years in the future), which the government says, '*will encourage long-term investment and provide certainty for businesses and other stakeholders.'*

World Health Organisation Guidelines

The WHO guidelines were updated in September 2021, and are a set of evidence-based recommendations of limit values for specific air pollutants developed to help countries achieve air quality that protects public health. They are significantly lower than the current levels legislated AQO (as set out in Table 14.1). The WHO guideline levels are set out in Table 14.2.

Table 14.1.2: WHO Air Quality Guidelines

Pollutants	**Air Quality Guidelines**	
	Concentration	**Measured as**
Nitrogen Dioxide (NO_2)	25 µg/m^3	24-hour mean (99th percentile)
	10 µg/m^3	Annual mean
Particulate Matter (PM_{10})	45 µg/m^3	24-hour mean (99^{th} percentile)
	15 µg/m^3	Annual mean
Particulate Matter ($PM_{2.5}$)	15 µg/m^3	24-hour mean (99th percentile)
	5 µg/m^3	Annual mean

The Committee on the Medical Effects of Air Pollutants (COMEAP) has concluded the following:

> *'The WHO's revised AQGs for pollutants in outdoor air are suitable as long-term targets to inform policy development. We stress that the AQG values should not be regarded as thresholds below which there are no impacts on health - the current evidence has not identified thresholds for effect at the population level, meaning that even low concentrations of pollutants are likely to be associated with adverse effects on health. Therefore, continued reductions, even where concentrations are below the AQGs, are also likely to be beneficial to health.'*

This assessment has considered the current legislation, and therefore the AQO set out in Table 14.1.2 have been used to inform and assess the likely effects of the Development against concentrations at the modelled receptors chosen in this assessment.