



Ashflame Properties Ltd

Land East of Calne Road, Lyneham

Air Quality Assessment

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RSK GENERAL NOTES

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Client: Ashflame Properties Ltd

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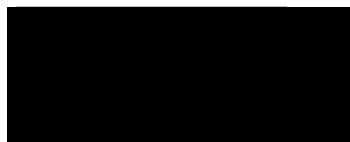
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Author Niranjchan Ramanathan
Air Quality Consultant

Technical reviewer

Phoebe Chan
Senior Air Quality Consultant

Signature



Signature



Date: 28th November 2025

Date:

28th November 2025

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Group Ltd.

Abbreviations

AADT	Annual Average Daily Traffic
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQS	Air Quality Standard
Defra	Department for Environment, Food and Rural Affairs
DMP	Dust Management Plan
EC	European Commission
EPUK	Environmental Protection UK
EU	European Union
HDV	Heavy Duty Vehicle
IAQM	Institute of Air Quality Management
LAQM	Local Air Quality Management
LDV	Light Duty Vehicle
NPPF	National Planning Policy Framework
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen
PM _{2.5}	Particulate matter of size fraction approximating to <2.5mm diameter
PM ₁₀	Particulate matter of size fraction approximating to <10mm diameter
RSK	RSK Environment Limited
WC	Wiltshire Council

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1 INTRODUCTION

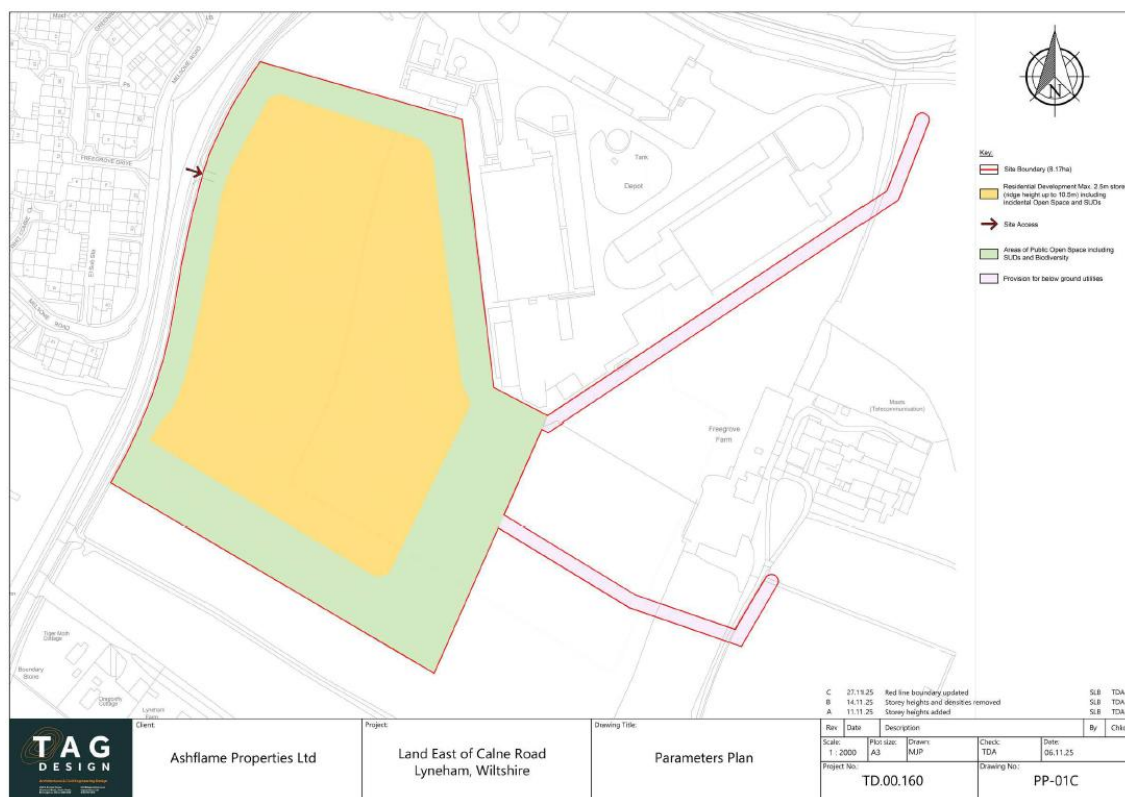
1.1 Background

RSK Environment Ltd (RSK) was commissioned to undertake an air quality assessment of the potential air quality impacts of up to 200 residential dwellings proposed for land east of Calne Road, Lyneham. An outline planning application (with all matters reserved except for access) for up to 200 residential development (Use Class C3), provision of public open space, and associated infrastructure on land east of the A3102, Lyneham. The site is located off the A3102 and measures approximately 8.76 ha. The proposed parameter plan is shown in Figure 1.1.

The site is located within the administrative area of Wiltshire Council (WC) and is approximately centred at 402041,177720. The site is bounded by commercial buildings to the north and south, and by the A3102 to the east. Currently, WC has eight declared Air Quality Management Areas (AQMAs). The proposed development is not located within any of the AQMAs. The closest AQMA (Calne AQMA) is located approximately 6km south of the proposed development site.

The following report presents the findings of an assessment of relevant policy, existing/baseline air quality conditions and qualitative consideration of potential air quality impacts during both the construction and operational phase of the proposed development. The potential impacts on local air quality have been considered and, where appropriate, mitigation measures have been recommended.

Figure 1.1: Proposed Parameter Plan



2 LEGISLATION, PLANNING POLICY & GUIDANCE

2.1 Key Legislation

2.1.1 Air Quality Strategy

UK air quality policy is published under the umbrella of the Environment Act 1995, Part IV and specifically Section 80, the National Air Quality Strategy. The latest Air Quality Strategy for England, Scotland, Wales and Northern Ireland – Working Together for Clean Air, published in July 2007 sets air quality standards and objectives for ten key air pollutants to be achieved between 2003 and 2020. It furthermore describes the role of local authorities in carrying out their duties under the Environment Act 1995 (i.e. the Local Air Quality Management (LAQM) regime).

The latest 2023 air quality strategy: Air quality Strategy: framework for local authority delivery, which supersedes the 2007 air quality strategy (in England only), retains the majority of the 2007 strategy but further sets out the actions that Defra expects local authorities to take in support of their long-term air quality goals, including the new PM_{2.5} targets.

2.1.2 The Clean Air Strategy 2019

The Clean Air Strategy 2019 sets out ways that the UK government will seek to tackle major sources of pollution. This latest strategy aims to have a more joined-up approach, outlining actions the Government plans to take to reduce emissions from transport, homes, agriculture and industry.

2.1.3 Air Quality Standards

The air quality standards (AQSs) in the United Kingdom are derived from European Commission (EC) directives and are adopted into English law via the Air Quality (England) Regulations 2000 and Air Quality (England) Amendment Regulations 2002. EU Directives 2008/50/EC and 2004/107/EC set limits values and was translated into UK law in 2010 via the Air Quality Standards Regulations 2010. The relevant¹ AQS for England and Wales to protect human health are summarised in Table 2.1.

Table 2.1: Air Quality Standards (AQSs) Relevant to the Proposed Development

Substance	Averaging period	Exceedances allowed per year	Ground level concentration limit (µg/m ³)
Nitrogen dioxide (NO ₂)	1 calendar year	-	40
	1 hour	18	200
Fine particles (PM ₁₀)	1 calendar year	-	40

¹ Relevance, in this case, is defined by the scope of the assessment.

Substance	Averaging period	Exceedances allowed per year	Ground level concentration limit ($\mu\text{g}/\text{m}^3$)
	24 hours	35	50
Fine particles ($\text{PM}_{2.5}$)	1 calendar year	-	20

2.1.4 The Environment Act, 1995

These objectives are to be used in the review and assessment of air quality by local authorities under Section 82 of the Environment Act (1995). If exceedances are measured or predicted through the review and assessment process, the local authority must declare an Air Quality Management Area (AQMA) under Section 83 of the Act, and produce an Air Quality Action Plan (AQAP) to outline how air quality is to be improved.

2.1.5 The Environment Act, 2021

The Environment Act (2021) amends the Environment Act (1995) to reinforce the local air quality management (LAQM) framework, in order to encourage cooperation at the local level and broaden the range of organisations that play a role in improving local air quality. Part 1 of The Environment Act requires targets to be set for fine particulate matter $\text{PM}_{2.5}$, and these were introduced in The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023, as follows:

- $\text{PM}_{2.5}$ concentration interim target, annual mean of $12\mu\text{g}/\text{m}^3$ by 2028;
- $\text{PM}_{2.5}$ exposure reduction interim target of 22% reduction compared to 2018 by 2028;
- $\text{PM}_{2.5}$ concentration binding target of annual mean of $10\mu\text{g}/\text{m}^3$ by 2040;
- $\text{PM}_{2.5}$ exposure reduction binding target of 35% reduction compared to 2018 by 2040.

2.2 Planning Policy

The land use planning process is a key means of improving air quality, particularly in the long term, through the strategic location and design of new developments. Any air quality concern that relates to land use and its development can, depending on the details of the proposed development, be a material consideration in the determination of planning applications.

2.2.1 National Planning Policy Framework

In February 2025, the revised National Planning Policy Framework (NPPF) was published, superseding the previous December 2024 NPPF with immediate effect. The NPPF includes a presumption in favour of sustainable development.

Section 15 of the NPPF deals with Conserving and Enhancing the Natural Environment, and states that the intention is that the planning system should prevent “*new and existing development from contributing to or 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.”

With specific regard to air quality, paragraph 187 of the NPPF states that:

“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....”

Furthermore, paragraph 199 of the NPPF states that: *“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.”*

2.2.2 Wiltshire Core Strategy (Adopted January 2015)

Core Policy 55 Air Quality

Development proposals, which by virtue of their scale, nature or location are likely to exacerbate existing areas of poor air quality, will need to demonstrate that measures can be taken to effectively mitigate emission levels in order to protect public health, environmental quality and amenity. Mitigation measures should demonstrate how they will make a positive contribution to the aims of the Air Quality Strategy for Wiltshire and where relevant, the Wiltshire Air Quality Action Plan. Mitigation may include:

- i. landscaping, bunding or separation to increase distance from highways and junctions*
- ii. possible traffic management or highway improvements to be agreed with the local authority*
- iii. abatement technology and incorporating site layout/separation and other conditions in site planning*
- iv. traffic routing, site management, site layout and phasing*
- v. where appropriate, contributions will be sought toward the mitigation of the impact a development may have on levels of air pollutants.*

2.3 Best Practice Guidance Documents

2.3.1 Guidance on the Assessment of Dust from Demolition and Construction

The Institute of Air Quality Management (IAQM) published a guidance document in 2014 and revised in 2024 (January 2024 v2.2 Stoaling et al.) on the assessment of construction phase impacts (herein the 'IAQM construction dust guidance'). The guidance was produced to provide advice to developers, consultants and environmental health officers on how to assess the impacts arising from construction activities. The emphasis of the methodology is on classifying sites according to the risk of impacts (in terms of dust nuisance, PM₁₀ impacts on public exposure and impact upon sensitive ecological receptors) and to identify mitigation measure appropriate to the level of risk identified.

2.3.2 Local Air Quality Management Review and Assessment Technical Guidance

The Department for Environment, Food and Rural Affairs (Defra) has published technical guidance for use by local authorities in their air quality review and assessment work. This guidance, referred to in this document as the Local Air Quality Management Technical Guidance (Defra, 2022) ('LAQM TG.22')

2.3.3 Land-Use Planning & Development Control: Planning for Air Quality

Environmental Protection UK's (EPUK) and the IAQM jointly published a revised version of the guidance note 'Land-Use Planning & Development Control: Planning for Air Quality' in 2017 (herein the 'EPUK-IAQM guidance') to facilitate consideration of air quality within local development control processes. It provides a framework for air quality considerations, promoting a consistent approach to the treatment of air quality issues within development control decisions.

The guidance includes methods for screening the requirement for an air quality assessment, the undertaking of an air quality assessment and assessing the significance of effects. The guidance note is widely accepted as an appropriate reference method for this purpose.

2.3.4 Interim Planning Guidance on the consideration of the Environment Act PM_{2.5} targets in planning decisions (2024)

Defra is developing guidance for applicants and Planning Authorities in England to demonstrate that they have appropriately considered the PM_{2.5} targets when making planning applications and planning decisions.

The following questions are designed to be used as prompts to support the interim process, but applicants are welcome to consider measures in addition to those listed below:

1. How has exposure to PM_{2.5} been considered when selecting the development site?

Applicants are advised to consider the following in their application:

- Site proximity to people (particularly large populations and/or vulnerable groups, e.g. schools, hospitals, care homes, areas of deprivation) and the impact of the development on these,
- Site proximity to pollution sources and the impact of these on users of the development,
- Exposure and emissions during both construction and in-use.

2. What actions and/or mitigations have been considered to reduce PM_{2.5} exposure for development users and nearby receptors (houses, hospitals, schools etc.) and to reduce emissions of PM_{2.5} and its precursors?

Applicants are advised to explain (with evidence where possible) why each measure was implemented. Or, if no mitigation measures have been implemented, why this was not proposed. Actions can refer to, but are not limited to, the following:

- Site layout,
- The development's design,
- Technology used in the construction or installed for use in the development,
- Construction and future use of the development.

2.3.5 Wiltshire Council Residential Design Guide: Supplementary Planning Guidance (Adopted November 2005)

C17 - C23 & C27 - conservation areas and listed buildings

- *Redevelopment or new development within a conservation area may require a conservation area statement, particularly in circumstances where demolition is proposed and conservation area consent is also required.*
- *There is a presumption against allowing conservation area consent for demolition where there is no suitable proposal for replacement or redevelopment being proposed.*
- *Development schemes should seek to retain buildings or features of architectural historic interest within the conservation areas, where possible.*

2.3.6 Wiltshire Council Air Quality Strategy for Wiltshire 2019-2024

This strategy is supported by the local air quality management framework, the National Air Quality Strategy, the EU Air Quality Directive and the Public Health Outcomes Framework. This strategy supports the Wiltshire Council Business Plan, the Joint Strategic Needs Assessment and wider strategies including; Local Transport Plan 3, Wiltshire Core Strategy, Climate Change Adaptation, Minerals and Waste Core Strategy and the Health and Wellbeing Strategy. It seeks to maintain progress with the improvement of air quality across all communities in Wiltshire.

2.3.7 Wiltshire Air Quality Supplementary Planning Document (SPD)

This new SPD was approved at Wiltshire Council's Full Council meeting on 21 October 2025. The SPD aims to improve air quality through the planning and development control process. It provides guidance to developers on how to assess and mitigate potential air

quality impacts from developments, as well as information required in the air quality assessments.

3 ASSESSMENT SCOPE

3.1 Overall Approach

The approach taken for assessing the potential air quality impacts of the proposed development site may be summarised as follows:

- Baseline characterisation of local air quality;
- Qualitative impact assessment of the construction phase of the development using the 2024 IAQM guidance;
- Qualitative assessment of air quality impacts during the operational phase of the proposed development using the 2017 EPUK-IAQM guidance;
- Recommendation of mitigation measures, where appropriate, to ensure any adverse effects on air quality are minimised; and
- Identification of residual impacts from the proposed development.

3.2 Baseline Characterisation

Existing or baseline air quality refers to the concentrations of relevant substances that are already present in ambient air. These substances are emitted by various sources, including road traffic, industrial, domestic, agricultural and natural sources.

A desk-based study has been undertaken including a review of monitoring data publicly available from WC website and estimated background data from the LAQM Support website maintained by Defra. Background concentrations have been mapped by Defra at a grid resolution of 1x1km for the whole of the UK. Consideration has also been given to potential sources of air pollution and any AQMAs in the vicinity of the site.

3.3 Construction Phase Assessment

3.3.1 Construction Dust and Particulate Matter

Construction works for the proposed development have the potential to lead to the release of fugitive dust and particulate matter. An assessment of the likely significant effects of construction phase dust and particulate matter at sensitive receptors has therefore been undertaken following the IAQM's construction dust guidance.

Three separate dust impacts were considered:

- Disamenity to dust soiling;
- The risk of health effects due to an increase in exposure to PM₁₀; and
- Harm to ecological receptors.

In order to assess the potential impacts of construction, activities are divided into three types:

- Earthworks;
- Construction; and
- Trackout².

The risk of dust and PM₁₀ arising to cause disamenity and/or health or ecological impacts was based on an assessment of likely emissions magnitude and the sensitivity of the surrounding environment. The risk category may be different for each of the four 'construction' activities.

Appendix A sets out the construction dust assessment methodology in detail as per IAQM guidance.

The Magic Map application available online by Defra was used to identify statutory ecological receptors near the proposed development site area.

3.3.2 Emissions to Air from Construction Traffic and Plant

Exhaust emissions from construction phase vehicles and plant may have an impact on local air quality adjacent to the routes used by these vehicles to access the proposed development site and in the vicinity of the proposed development site itself. Detailed information on the number of vehicles and plant associated with the construction phase is not available at this stage. Therefore, a qualitative impact assessment of vehicles and plant associated with the construction phase was undertaken using professional judgement and considering the following factors:

- The size and type of site works occurring;
- The potential number and type of construction traffic and plant required; and
- The number and proximity of sensitive receptors to the proposed development sites and along the likely construction vehicle routes.

3.4 Operational Phase Impact Assessment

3.4.1 Emissions to Air from Operational Phase Traffic

Once occupied, the proposed development will generate traffic on the surrounding road network. The emissions to air associated with this traffic have the potential to impact on nearby sensitive receptors. The EPUK-IAQM 2017 guidance provides indicative criteria for when an air quality assessment is required, if none of the criteria are exceeded, it is considered unlikely that there will be any significant impacts on air quality during the operational phase. A simple screening level assessment against these criteria has been undertaken in **Section 5.2** of this report.

² Trackout is defined as the transport of dust and dirt from the construction / demolition sites onto public road network, where it may be deposited and then re-suspended by vehicles using the network.

3.4.2 Emissions to Air from Operational Phase Combustion Plant

It is understood that no significant combustion sources such as combined heat and power (CHP) plant or biomass boilers are proposed as part of the scheme. Energy required for heating and hot water are proposed to be supplied by air source heat pumps (ASHPs). Therefore, this report has not considered emission related to energy generation any further.

3.4.3 Exposure of Future Occupants to Air Pollution

The potential exposure of future users of the proposed development has been considered by reviewing the baseline conditions (Section 4) and the locations of sensitive receptors within the proposed development, as well as considering the EPUK-IAQM guidance.

4 BASELINE AIR QUALITY CHARACTERISATION

4.1 Local Emission Sources and Key Air Pollutants

The application site is located in an area where the main source of air pollution is likely to be roads therefore, the principal pollutants relevant to this assessment are considered to be NO₂, PM₁₀ and PM_{2.5}, generally regarded as the most significant air pollutants released by vehicular combustion processes or subsequently generated by vehicle emissions in the atmosphere through chemical reactions. Concentrations of these pollutants are more likely to exceed the relevant air quality objectives in urban areas and therefore are generally considered to have a higher risk of resulting in human health impacts.

4.2 Presence of AQMAs

As directed by the Environment Act 2021, local authorities are required to review and assess air quality with respect to the standards and objectives for the pollutants specified in the Government's National Air Quality Strategy (2007). Local Authorities are required to undertake annual reporting of the concentrations of defined pollutants in their area.

Where objectives are not predicted to be met, local authorities must declare an AQMA. In addition, local authorities are required to produce an AQAP, which outlines measures aimed at improving air quality within the designated AQMA.

The site is located within the administrative area of Wiltshire Council (WC). WC has eight declared Air Quality Management Areas (AQMAs). The proposed development is not located within any of the AQMAs. The closest AQMA (Calne AQMA) is located approximately 6km south of the proposed development site.

4.3 Local Authority Air Quality Baseline Monitoring Data

According to WC's 2025 Air Quality Annual Status Reports, in 2024 monitoring was undertaken at a total of 3 automatic monitoring sites. WC undertook non- automatic (i.e. passive) monitoring of NO₂ at 64 sites during 2024.

There were two NO₂ diffusion tubes and no automatic monitoring stations within 7km of the proposed development site. The monitoring data from this site is reproduced in Table 4.1 below. There was no exceedance of the annual mean NO₂ AQS during 2020 to 2024.

Table 4.1: Annual Mean NO₂ Concentrations at the Diffusion Tube Location within 7km of the Proposed Development Site

Site ID	Site Type	Approx. Distance from Site (km)	Annual Mean NO ₂ Concentration (µg/m ³)				
			2020	2021	2022	2023	2024
16	Roadside	7.0	19.5	20.9	19.9	16.7	15.7
17	Roadside	7.0	-	32.9	31.1	27.6	26.0
AQS			40 µg/m³				

4.4 LAQM Background Data

Estimated background air quality data are available from the LAQM Support website operated by Defra. The website provides estimated annual average background concentrations of NO₂, PM₁₀ and PM_{2.5} on a 1 km² grid basis.

Table 4.2 reproduces estimated annual average background NO₂, PM₁₀ and PM_{2.5} concentrations at the proposed development site for 2025-2027. No exceedances of the annual average AQSs for NO₂, PM₁₀ or PM_{2.5} have been predicted. As background concentrations are predicted to fall with time, background concentrations in future years would not be expected to exceed their respective annual mean standards.

Table 4.2: Defra LAQM Estimated Background Annual Average NO₂, PM₁₀ and PM_{2.5} Concentrations at the Proposed Development Site (from 2021 base map)

Assessment Year	Estimated Annual Average Pollutant Concentrations Derived from the LAQM Support Website		
	Annual Average NO ₂ (µg/m ³)	Annual Average PM ₁₀ (µg/m ³)	Annual Average PM _{2.5} (µg/m ³)
2025	5.1	11.8	6.5
2026	5.0	11.7	6.5
2027	4.8	11.6	6.4
AQS	40	40	20

Note: Presented concentrations for 1 km² grid centred on 402500, 177500; approximate centre of development site is. 402041,177720.

4.5 Background Air Quality at the Proposed Site

Based on the local monitoring data and estimated background concentrations from Defra the annual mean NO₂, PM₁₀ and PM_{2.5} air quality objectives, and the and the PM_{2.5} interim target for 2028 and target for 2040 are considered likely to be met at the site.

The EPUK-IAQM 2017 guidance indicates that the annual mean PM₁₀ concentrations tend to be greater than ~32µg/m³ for an exceedance of the daily mean PM10 AQS to be likely. LAQM TG.22 indicates that the annual mean NO₂ concentrations tend to be greater

than $60\mu\text{g}/\text{m}^3$ for an exceedance of the hourly mean NO_2 AQS to be likely. Based on the monitoring data available and the estimated background concentrations of NO_2 and PM_{10} , it is considered unlikely that short-term NO_2 and PM_{10} AQSs would be exceeded at or in close proximity to the site.

Overall, exceedances of any of the relevant AQSs are not anticipated at the development site. Concentrations of pollutants are expected to further reduce (improve) in future years a result of local, national and international actions, reducing exposure in future years.

5 ASSESSMENT OF IMPACTS

5.1 Construction Phase

Atmospheric emissions from construction activities will depend on a combination of the potential for emissions (the type of activity and prevailing conditions) and the effectiveness of control measures. In general terms, there are two sources of emissions that will need to be controlled to minimise the potential for adverse environmental effects:

- Exhaust emissions from site plant, equipment and vehicles; and,
- Fugitive dust emissions from site activities.

5.1.1 Fugitive Dust Emissions

Fugitive dust emissions arising from construction activities are likely to be variable in nature and will depend upon the type and extent of the activity, soil type and moisture, road surface conditions and weather conditions. Periods of dry weather combined with higher than average wind speeds have the potential to generate more dust.

Construction activities that are considered likely to be the most significant potential sources of fugitive dust emissions at the proposed development site are:

- Earthworks comprising of levelling, construction of foundations, haulage, tipping, stockpiling, landscaping and tree removal;
- Construction aggregate usage, due to the transport, unloading, storage and use of dry and dusty materials (such as cement and sand);
- Movement of heavy site vehicles on dry or untreated haul routes; and,
- Movement of vehicles over surfaces where muddy materials have been transferred off-site (for example, on to public highways).

Fugitive dust and emissions arising from construction activities is mainly of a particle size greater than the PM₁₀ fraction (that which can potentially impact upon human health); however it is noted that construction activities may contribute to local PM₁₀ concentrations. Appropriate dust control measures can be highly effective for controlling emissions from potentially dust generating activities identified above, and adverse effects can be greatly reduced or eliminated. For a conservative assessment, the potential impacts considered below are based on a pre-mitigation scenario.

5.1.2 Potential Dust Emission Magnitude

With reference to the IAQM 2024 criteria outlined in **Appendix A**, the estimation of dust emission magnitudes for earthworks, construction and trackout activities are presented in Table 5.1. Where details are not available professional judgement has been used where appropriate. No demolition is proposed as part of the proposed development, hence the assessment for demolition is not included.

Table 5.1: Summary of Dust Emission Magnitudes (Before Mitigation)

Activity	IAQM Criteria	Dust Emission Magnitude
Earthworks	- Total area where earthworks will take place 18,000-110,000m² - Soil type on site is predominately mudstones - Number of earthmoving equipment assumed to be 5-10 - Height of stockpiled material 3-6m - Timing of works will be all year around	Medium
Construction	- Total building volume will be 12,000-75,000 m³ - Potential for on-site sandblasting - It is assumed there will be some potentially dusty materials onsite	Medium
Trackout	- The average number of heavy vehicles in/out of the site 20-50 per day - Extent of unpaved road to be <50m, the majority of site is already paved road	Medium

5.1.3 Sensitivity of the Area

As per the IAQM Guidance, the sensitivity of the area takes into account a number of factors, including:

- The sensitivity of individual receptors in the area;
- The proximity and number of those receptors;
- For the human health assessment, the local background annual mean PM₁₀ concentration (taken from the mapped estimates in Table 4.2); and,
- Site specific factors, such as whether there are natural shelters, such as trees, to reduce the risk of wind-blown dust.

Consideration is given to human and ecological receptors, where present, from the impact of the construction site boundary and routes along which Heavy Duty Vehicles (HDVs) may facilitate trackout.

Construction and trackout 'buffers' were used to identify the sensitivity of the area. Figures 5.1 and 5.2 show maps indicating the earthworks/construction and trackout buffers, respectively, for identifying the sensitivity of the area and Table 5.2 presents the determined sensitivity of the area with the factors itemised which have helped to define this. This development is located within an active construction site, currently there are sensitive residential receptor located in west and northeast of the site boundary.

Earthworks and construction activities are relevant up to 250m from the proposed development site boundary whereas trackout activities are only considered relevant up to 50m from the edge of the road. Therefore, only 20m and 50m buffers are considered for trackout activities. The site access for construction traffic is from Calne Road.

The Defra MAGIC Maps website indicates that no ecological receptor is located within 50m (IAQM screening criteria) of the site boundary. Impacts of ecological receptors are considered not applicable.

Table 5.2: Sensitivity of the Area

Potential Impact		Sensitivity of the Surrounding Area		
		Earthworks	Construction	Trackout
Dust soiling	Receptor sensitivity	High	High	High
	Number of receptors	10-100	10-100	1-10
	Distance from the source	<50m	<50m	<50m
	Sensitivity of the area	Medium	Medium	Low
Human health	Receptor sensitivity	High	High	High
	Annual mean PM ₁₀ concentration	<24 µg/m ³	<24 µg/m ³	<24 µg/m ³
	Number of receptors	10-100	10-100	1-10
	Distance from the source	<50m	<50m	<50m
	Sensitivity of the area	Low	Low	Low

5.1.4 Risk of Impacts

The dust emission magnitude summarised in Table 5.1 has been combined with the sensitivity of the area in Table 5.2 to determine the risk of impacts of construction activities before mitigation; these have been evaluated based on risk categories of each activity in **Appendix A**.

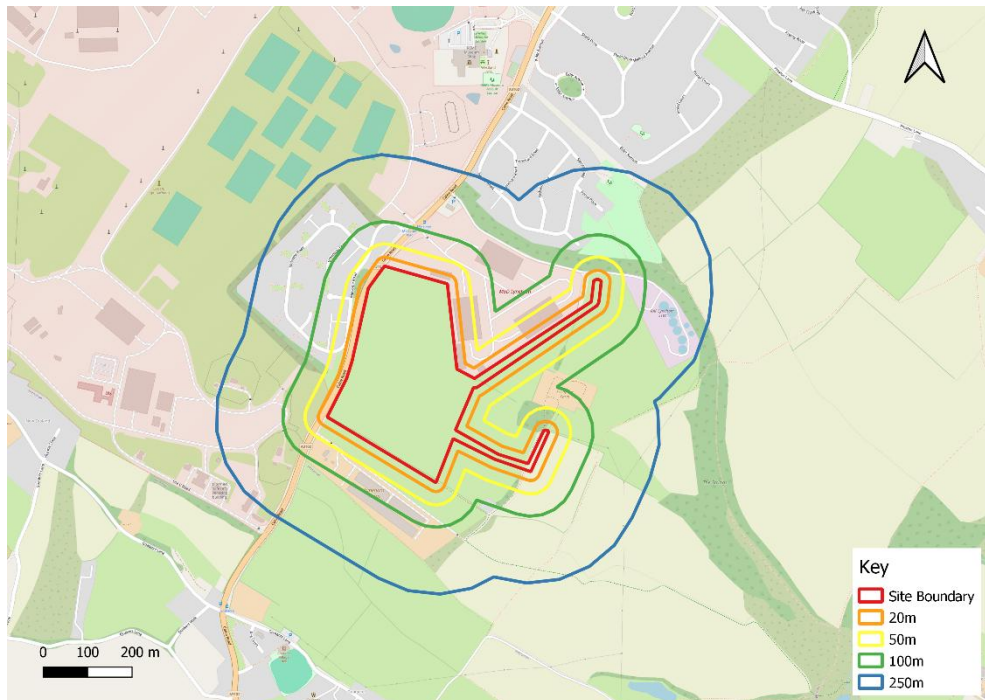
The risk of dust impacts from construction activities is identified as medium risk as shown in Table 5.3.

Site specific mitigation measures to reduce construction phase impacts are defined based on this assessment in **Section 6**.

Table 5.3: Summary of the Dust Risk from Construction Activities

Potential Impact	Earthworks	Construction	Trackout
Dust soiling	Medium Risk	Medium Risk	Low Risk
Human health	Low Risk	Low Risk	Low Risk

Figure 5.1: Earthworks/Construction Activities Buffer Map



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Figure 5.2 Trackout Activities Buffer Map



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5.1.5 Exhaust Emissions from Construction Plant and Vehicles

The operation of vehicles and equipment powered by internal combustion engines results in the emission of exhaust gases containing pollutants including NO_x, PM₁₀, PM_{2.5}, volatile organic compounds, and carbon monoxide. The quantities emitted depend on factors such as engine type, service history, pattern of usage and fuel composition.

Construction traffic will likely comprise of haulage vehicles and vehicles used for workers' trips to and from the application site. The greatest impact on air quality due to emission from construction phase vehicles will be in areas adjacent to the application site access and nearby road network. The total is estimated that that there will be 20-50 HDV outward movements per day, which is considered unlikely to cause a significant impact on local air quality, in accordance with the IAQM guidance.

The operation of site equipment and machinery/plant during the construction phase will result in emissions to the atmosphere of exhaust gases, but with suitable controls and site management such emissions are unlikely to be significant (as per guidance within LAQM TG(22)).

5.2 Operational Phase

5.2.1 Emissions to Air from Operational Phase Traffic

The principal operational phase air quality impact is likely to be associated with traffic emissions as a result of any changes in traffic flows or flow composition the development may bring. The EPUK-IAQM 2017 guidance provides indicative criteria to determine when an air quality assessment is likely to be required. Table 5.4 presents a comparison of the relevant EPUK-IAQM screening criteria with traffic and other information on the proposed development.

The forecast Light Duty Vehicle (LDV) and Heavy Duty Vehicle (HDV) trip generations from the development are 80 and 13 respectively. However, these are for between the hours of 0700 and 1900. Outside of these hours, trips associated with these vehicles tend to be very limited if there are any at all for residential developments. Therefore, the operational phase development traffic is not anticipated to cause an increase of more than 100 AADT for HDVs or 500 AADT for LDVs, and none of the other EPUK-IAQM criteria are exceeded. It is considered unlikely that the proposed development will have a significant impact on local air quality.

Table 5.4: Screening Criteria from EPUK-IAQM Guidance and Comparison with the Proposed Development Operational Phase

EPUK-IAQM Screening Criteria	Comparison of proposed development to screening criteria
A change of Light Duty Vehicles (LDVs) of: - More than 500 Annual Average Daily Traffic (AADT) not within an AQMA - More than 100 AADT within an AQMA	Criterion not exceeded: The forecast LDV trip generations from the proposed development is 80.
A change of Heavy Duty Vehicles (HDVs) of: - More than 100 AADT not within an AQMA - More than 25 AADT within an AQMA	Criterion not exceeded: The forecast HDV trip generations from the proposed development is 13.
Road realignment, where the change is 5m or more and the road is within an AQMA.	Criterion not exceeded: No road realignment is likely.
Introduction of a new junction or the removal of an existing junction near to relevant receptors. This applies to junctions that cause traffic to significantly change vehicle accelerate/ decelerate, e.g. traffic lights, or roundabouts.	Criterion not exceeded: no new junction proposed.
Introduction or change of a bus station, where bus flows will change by: - more than 25 AADT within or adjacent to an AQMA - more than 100 AADT elsewhere.	Criterion not exceeded: No introduction or change to existing bus station and no expected change in bus flows is likely.
Have an underground car park with extraction system, where the ventilation extract for the car park will be within 20m of a relevant receptor. Coupled with the car park having more than 100 movements per day (total in and out).	Criterion not exceeded: Car parking will be outdoors.
Have one or more substantial combustion processes, where there is a risk of impacts at relevant receptors.	Criterion not exceeded: It is understood that substantial combustion processes are unlikely.

5.2.2 Exposure of Future Development Users to Air Pollution

The potential exposure of future users of the proposed development to poor air quality has been considered by undertaking a qualitative review of the baseline conditions (Section 4) and the locations of sensitive receptors within the proposed development. Therefore, the baseline condition indicates that users are not exposed to poor air quality.

5.3 PM_{2.5} Targets

When considering the new PM_{2.5} targets set out in the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023, as referenced in section 2.1.4, the following has been taken into account:

Baseline Air Quality at the Site: As explained in the section 4 above, based on the local monitoring data and estimated background concentrations from Defra, the annual mean NO₂, PM₁₀ and PM_{2.5} air quality objectives are considered unlikely to be exceeded at the site. Overall, exceedances of any of the relevant AQs (long-term and short-term) are not anticipated, and air quality is considered likely to be good at the proposed development site.

Site proximity to pollution sources and the impact of these on users of the development: No significant combustion sources such as combined heat and power (CHP) plant or biomass boilers are proposed as part of the scheme. Energy required for heating and hot water are proposed to be supplied by ASHPs. The application site is located in an area where the main source of air pollution is likely to be vehicle emissions on the surrounding roads, i.e. no significant sources of industrial emissions.

Site proximity to people (particularly large populations and/or vulnerable groups, e.g. schools, hospitals, care homes, areas of deprivation) and the impact of the development on these: Construction activities are relevant up to 250m from the proposed development site boundary whereas trackout activities are only considered relevant up to 50m from the edge of the road, as per the IAQM guidance. The construction dust risk assessment has been undertaken accordingly considering the sensitive receptors in the vicinity of the proposed development to assess the dust soiling and health impacts of PM₁₀ and PM_{2.5} (refer Section 5.1). As such, a suitable mitigation will be undertaken to reduce the exposure to PM_{2.5}. Furthermore, as detailed above, there will be no significant combustion sources are proposed as part of the scheme.

Exposure and emissions during both construction and in-use: The exposure to PM_{2.5} has been considered when selecting the development site. This involves considering the following:

As mentioned above, considering the existing air quality (review of local monitoring data and Defra background), construction dust risk assessment and qualitative screening assessment for the operational phase, it is considered that the existing and proposed receptors are not expected to be exposed to the poor air quality including elevated PM_{2.5} levels.

Furthermore, the site is not near any large emitters and does not have its own combustion source. When considering the baseline (already described), air quality exposure to future site users has been considered.

6 MITIGATION MEASURES & RESIDUAL IMPACTS

6.1 Construction Phase Mitigation

The dust emitting activities outlined in **Section 5.1** can be effectively controlled by appropriate dust control measures and any adverse effects can be greatly reduced or eliminated.

Prior to commencement of construction activities, it is anticipated that a Construction Environmental Management Plan (CEMP), which can be secured via condition, for the construction phase will be agreed with the local authority to ensure that the potential for adverse environmental effects on local receptors is minimised. The following mitigation measures may be applied as part of good practice, and applicable to a '**Medium Risk**' development. Desirable measures are displayed in *italics*.

Communications

- Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.
- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary.
- Display the head or regional office contact information.

Dust Management

- Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The level of detail will depend on the risk, and should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the site. The DMP may include monitoring of dust deposition, dust flux, real time PM₁₀ continuous monitoring and/or visual inspections.

Site Management

- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.
- Make the complaints log available to the local authority when asked.
- Record any exceptional incidents that cause dust and/or air emissions, either on or off the site, and the action taken to resolve the situation in the log book.

Monitoring

- *Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked.*
- Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked.
- Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- Agree dust deposition, dust flux, or real-time PM₁₀ continuous monitoring locations with the Local Authority. Where possible commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction.

Preparing and Maintaining the Site

- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.
- Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
- Avoid site runoff of water or mud.
- Keep site fencing, barriers and scaffolding clean using wet methods.
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.
- Cover, seed or fence stockpiles to prevent wind whipping.

Operating vehicle/machinery and sustainable travel

- Ensure all vehicles switch off engines when stationary - no idling vehicles.
- Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.
- *Impose and signpost a maximum-speed-limit of 15mph on surfaced and 10mph on unsurfaced haul routes and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).*
- *Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing)*

Operations

- Only use cutting, grinding, or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-portable water where possible and appropriate.
- Use enclosed chutes, conveyors and covered skips.
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

Waste management

- Avoid bonfires and burning of waste materials.

Specific to Earthworks

- *Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable*
- *Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable*
- *Only remove the cover in small areas during work and not all at once*

Specific to Construction

- *Avoid scabbling (roughening of concrete surfaces) if possible.*
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- *Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery*
- *For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust.*

Specific to Trackout

- *Use water-assisted dust sweeper(s) on the access, to remove, as necessary, any material tracked out of the site.*
- *Avoid dry sweeping of large areas.*
- *Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.*

- *Record all inspections of haul routes and any subsequent action in the site log book.*
- *Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).*

6.2 Operational Phase Mitigation

The operational phase development traffic is not anticipated to cause an increase of more than 100 AADT for HDVs or 500 AADT for LDVs, and none of the other EPUK-IAQM criteria are exceeded. It is considered unlikely that the proposed development will have a significant impact on local air quality in the absence of mitigation. Moreover, based on monitoring data and predicted background concentrations, future users of the proposed development are not expected to be exposed to poor air quality. No specific mitigation measures are considered to be required.

6.3 Residual Impacts

With the implementation of the proposed construction phase mitigation measures (detailed in **Section 6.1**), the residual impacts are considered to be **negligible**.

7 CONCLUSIONS

A qualitative air quality assessment for the proposed Land East of Calne Road has been prepared with reference to existing air quality in the area and relevant air quality legislation, policy and guidance.

The construction phase works may have the potential to impact on dust nuisance and local air quality, and this was assessed in accordance with the IAQM guidance. The potential risk of construction phase impacts, prior to mitigation, was predicted to be a maximum of 'medium risk'. Mitigation measures are recommended to reduce the risk of dust and particulate matter being generated and re-suspended. With implementation of the appropriate measures, no significant impacts are anticipated during the construction phase.

The forecast Light Duty Vehicle (LDV) and Heavy Duty Vehicle (HDV) trip generations from the development are 80 and 13 respectively. However, these are for between the hours of 0700 and 1900. Outside of these hours, trips associated with these vehicles tend to be very limited if there are any at all for residential developments. Therefore, operational phase development traffic is not anticipated to cause an increase of more than 500 AADT for LDVs or 100 AADT for HDVs, and none of the other EPUK-IAQM criteria are exceeded. It is considered unlikely that the proposed development will have a significant impact on local air quality.

Furthermore, a review of baseline conditions found that the proposed development would not introduce additional sensitive receptors into an area of known poor air quality.

Therefore, the overall air quality impact of the development is considered to be 'not significant'.

Based on the results of the assessment, it is judged that with appropriate mitigation, the proposed development complies with relevant national and local planning policies and that there are no air quality constraints.

8 REFERENCES

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APPENDIX A CONSTRUCTION DUST ASSESSMENT METHODOLOGY

To assess the potential impacts, construction activities are divided into demolition, earthworks, construction and trackout. The descriptors included in this section are based upon the IAQM guidance. The assessment follows the steps recommended in the guidance.

Step 1 and Step 2 methods from the IAQM guidance are described in this Appendix to assign dust risk categories for each of the construction activities.

Step 1: Screen the requirement for assessment

The first step is to screen out the requirement for a construction dust assessment, this is usually a somewhat conservative level of screening. An assessment is usually required where there is:

- a 'human receptor' within:
 - 250m of the boundary of the site; or
 - 50m of the route used by construction vehicles on the public highway, up to 250m from the site entrance(s).
- an 'ecological receptor':
 - 50m of the boundary of the site; or
 - 50m of the route(s) used by construction vehicles on the public highway, up to 250m from the site entrance(s).

Step 2A: Defining the Potential Dust Emission Magnitude

Demolition

The dust emission magnitude category for demolition is varied for each site in terms of timing, building type, duration and scale. Examples of the potential dust emission classes are provided in the guidance as follows:

- **Large:** Total building volume >75,000m³, potentially dusty construction material (e.g. concrete), on-site crushing and screening, demolition activities >12m above ground level;
- **Medium:** Total building volume 12,000m³ – 75,000m³, potentially dusty construction material, demolition activities 6m – 12m above ground level; and
- **Small:** Total building volume <12,000m³, construction material with low potential for dust release (e.g. metal cladding or timber), demolition activities <6m above ground, demolition during wetter months.

Earthworks

The dust emission magnitude category for earthworks is varied for each site in terms of timing, geology, topography and duration. Examples of the potential dust emission classes are provided in the guidance as follows:

- **Large:** Total site area >110,000m², potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >6m in height;

- **Medium:** Total site area 18,000 – 110,000m², moderately dusty soil type (e.g. silt), 5 – 10 heavy earth moving vehicles active at any one time, formation of bunds 3 – 6m in height; and
- **Small:** Total site area <18,000m², soil type with large grain size (e.g. sand), <3 heavy earth moving vehicles active at any one time, formation of bunds <4m in height.

Construction

The dust emission magnitude category for construction is varied for each site in terms of timing, building type, duration, and scale. Examples of the potential dust emissions classes are provided in the guidance as follows:

- **Large:** Total building volume >75,000m³, on site concrete batching, sandblasting;
- **Medium:** Total building volume 12,000 – 75,000m³, potentially dusty construction material (e.g. concrete), on site concrete batching; and
- **Small:** Total building volume <12,000m³, construction material with low potential for dust release (e.g. metal cladding or timber).

Trackout

Factors which determine the dust emission magnitude class of trackout activities are vehicle size, vehicle speed, vehicle number, geology and duration. Examples of the potential dust emissions classes are provided in the guidance as follows:

- **Large:** >50 HDV (>3.5t) outward movements in any one day, potentially dusty surface material (e.g. high clay content), unpaved road length >100m;
- **Medium:** 20 – 50 HDV (>3.5t) outward movements in any one day, moderately dusty surface material (e.g. high clay content), unpaved road length 50 – 100m; and
- **Small:** <20 HDV (>3.5t) outward movements in any one day, surface material with low potential for dust release, unpaved road length <50m.

Step 2B: Defining the Sensitivity of the Area

The sensitivity of the area is defined for dust soiling, human health and ecosystems. The sensitivity of the area takes into account the following factors:

- The specific sensitivities of receptors in the area;
- The proximity and number of those receptors;
- In the case of PM₁₀, the local background concentration; and
- Site-specific factors, such as whether there are natural shelters such as trees, to reduce the risk of wind-blown dust.

Table A1 has been used to define the sensitivity of different types of receptors to dust soiling, health effects and ecological effects.

Table A1: Sensitivity of the Area Surrounding the Site

Sensitivity of Area	Dust Soiling	Human Receptors	Ecological Receptors
High	- Users can reasonably expect enjoyment of a high level of amenity. - The appearance, aesthetics or value of their property would be diminished by soiling. - The people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land. - Examples include dwellings, museums and other culturally important collections, medium and long term car parks and car showrooms.	- Locations where members of the public are exposed over a time period relevant to the air quality objective for PM₁₀ (in the case of the 24-hour objectives, a relevant location would be one where individuals may be exposed for eight hours or more in a day) - Examples include residential properties, hospitals, schools and residential care homes should also be considered as having equal sensitivity to residential areas for the purposes of this assessment.	- Locations with an international or national designation <i>and</i> the designated features may be affected by dust soiling. - Locations where there is a community of a particularly dust sensitive species such as vascular species included in the Red Data List For Great Britain. - Examples include a Special Area of Conservation (SAC) designated for acid heathlands or a local site designated for lichens adjacent to the demolition of a large site containing concrete (alkali) buildings.
Medium	- Users would expect to enjoy a reasonable level of amenity, but would not reasonably expect to enjoy the same level of amenity as in their home. - The appearance, aesthetics or value of their property could be diminished by soiling. - The people or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land. - Examples include parks and places of work.	- Locations where the people exposed are workers and exposure is over a time period relevant to the air quality objective for PM₁₀ (in the case of the 24-hour objectives, a relevant location would be one where individuals may be exposed for eight hours or more in a day). - Examples include office and shop workers, but will generally not include workers occupationally exposed to PM₁₀, as protection is covered by Health and Safety at Work legislation.	- Locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown. - Locations with a national designation where the features may be affected by dust deposition. - Example is a Site of Special Scientific Interest (SSSI) with dust sensitive features.

Sensitivity of Area	Dust Soiling	Human Receptors	Ecological Receptors
Low	- The enjoyment of amenity would not reasonably be expected. - Property would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling. - There is transient exposure, where the people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land. - Examples include playing fields, farmland (unless commercially-sensitive horticultural), footpaths, short term car parks and roads.	- Locations where human exposure is transient. - Indicative examples include public footpaths, playing fields, parks and shopping streets.	- Locations with a local designation where the features may be affected by dust deposition. - Example is a local Nature Reserve with dust sensitive features.

Based on the sensitivities assigned of the different types of receptors surrounding the site and numbers of receptors within certain distances of the site, a sensitivity classification for the area can be defined for each. Tables A2 to A4 indicate the method used to determine the sensitivity of the area for dust soiling, human health and ecological impacts, respectively.

For trackout, as per the IAQM construction dust guidance, it is only considered necessary to consider trackout impacts up to 50m from the edge of the road.

Table A2: Sensitivity of the area to dust soiling effects on people and property

Receptor Sensitivity	Number of Receptors	Distances from the Source (m)			
		<20	<50	<100	<250
High	>100	High	High	Medium	Low
	10-100	High	Medium	Low	Low
	1-10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

Table A3: Sensitivity of the area to Human Health Impacts

Receptor Sensitivity	Annual Mean PM ₁₀ Conc.	Number of Receptors	Distances from the Source (m)			
			<20	<50	<100	<250
High	>32µg/m ³	>100	High	High	High	Medium
		10-100	High	High	Medium	Low
		1-10	High	Medium	Low	Low
		>100	High	High	Medium	Low

Receptor Sensitivity	Annual Mean PM ₁₀ Conc.	Number of Receptors	Distances from the Source (m)			
			<20	<50	<100	<250
	28-32µg/m ³	10-100	High	Medium	Low	Low
		1-10	High	Medium	Low	Low
	24-28µg/m ³	>100	High	Medium	Low	Low
		10-100	High	Medium	Low	Low
		1-10	Medium	Low	Low	Low
	<24 µg/m ³	>100	Medium	Low	Low	Low
		10-100	Low	Low	Low	Low
		1-10	Low	Low	Low	Low
	Medium	>32µg/m ³	>10	High	Medium	Low
1-10			Medium	Low	Low	Low
28-32µg/m ³		>10	Medium	Low	Low	Low
		1-10	Low	Low	Low	Low
24-28µg/m ³		>10	Low	Low	Low	Low
		1-10	Low	Low	Low	Low
<24 µg/m ³		>10	Low	Low	Low	Low
		1-10	Low	Low	Low	Low
Low		-	>1	Low	Low	Low

Table A4: Sensitivity of the area to Ecological Impacts

Receptor Sensitivity	Distances from the Source (m)	
	<20	<50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

Step 2C: Defining the Risk of Impacts

The final step is to use both the dust emission magnitude classification with the sensitivity of the area, to determine a potential risk of impacts for each construction activity, before the application of mitigation. Tables A5 to A7 indicate the method used to assign the level of risk for each construction activity.

Table A5: Risk of Dust Impacts from Demolition

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Medium Risk
Medium	High Risk	Medium Risk	Low Risk
Low	Medium Risk	Low Risk	Negligible

Table A6: Risk of Dust Impacts from Earthworks/Construction

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table A7: Risk of Dust Impacts from Trackout

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible