

Former Spurr House, Pole Lane, Unsworth

Dust Management Plan

Watson Construction Ltd

Job No: 1043881
Doc ref: FSH-CDL-XX-XX-T-AQ-40201
Revision: P01
Revision date: 21 November 2024

Project title	Former Spurr House, Pole Lane, Unsworth	Job number
Report title	Dust Management Plan	1043881

Document revision history

Revision ref	Issue date	Purpose of issue / description of revision
P01	21 November 2024	Issue for comment

Document validation (latest issue)

21/11/2024	21/11/2024	21/11/2024
X A.Trevis Principal author Signed by: Annie Trevis	X G.Hodgkiss Checked by Signed by: Glyn Hodgkiss	X G.Hodgkiss Verified by Signed by: Glyn Hodgkiss

Contents

1.0	Introduction	2	5.4	Location of Monitors	20
1.1	Proposed Development	2	5.5	Recording of Site Data	21
1.2	Air Quality Assessment	2	5.6	Maintenance and Calibration of Monitors	21
1.3	Legislation, Policy and Guidance	2	5.7	Visual Inspections	21
1.4	Consultation With Bury Council	2	5.8	Site Records	22
1.5	Capability	3	5.9	Health and Safety	22
2.0	Site Setting	5	Appendix A – Relevant Legislation, Policy and Guidance		24
2.1	Site Location	5	Appendix B – IAQM Construction Assessment Methodology		27
2.2	Site Access	6	Appendix C – Site Record Sheets		32
2.3	Sensitive Receptors	6	Appendix D – Health and Safety		35
3.0	Dust Risk Assessment	10	Appendix E – Key Personnel		41
3.1	Overview	10			
3.2	Demolition and Construction Phase Impacts	10			
4.0	Mitigation Measures	16			
4.1	Overview	16			
4.2	Communications	16			
4.3	Site Management	16			
4.4	Monitoring	16			
4.5	Preparing and Maintaining the Site	17			
4.6	Operating vehicle/machinery and sustainable travel	17			
4.7	Operations	17			
4.8	Waste Management	17			
4.9	Demolition	17			
4.10	Construction	18			
4.11	Trackout	18			
4.12	Carbon Management	18			
5.0	Site Monitoring	20			
5.1	Agreed Scope of Work	20			
5.2	Continuous Dust Monitoring	20			
5.3	Monitoring Weather Conditions	20			

1.0

Introduction

1.0 Introduction

1.1 Proposed Development

Proposals are for the redevelopment of the Former Spurr House into two residential apartment blocks. The design requires the demolition of the existing on-site buildings.

The planning application comprises:

- 15 x 1B2P apartments (50sqm each)
- 45 x 2B4P apartments (70sqm each)
- 62 parking spaces

1.2 Air Quality Assessment

Cundall have prepared an Air Quality Assessment Report to support a planning application for the proposed residential development¹. This included a construction dust assessment. The findings of this assessment have been reported in Section 3.0 of this Air Quality Dust Management Plan (AQDMP).

1.3 Legislation, Policy and Guidance

Key legislation, planning policy and guidance of reference to this AQDMP are listed in Appendix A.

The UK Air Quality Objectives (AQOs) which apply to this AQDMP are shown in Table 1-1. Long-term (annual mean) objectives are based on the chronic effect of pollutants on human health or the natural environment and short-term (1-hour, 24-hour mean) objectives relate to the acute way pollutants affect human health or the natural environment.

Pollutant	Averaging Period	Objective Threshold ($\mu\text{g}/\text{m}^3$)
Particulate Matter (PM ₁₀)	Annual mean	40
	24-hour mean	50 Not to be exceeded more than 35 times per year (equivalent to the 90.4 th percentile of 24-hour mean values)
Fine Particulate Matter (PM _{2.5})	Annual mean	20

Table 1-1: National Air Quality Objectives

1.4 Consultation With Bury Council

Liaison with Bury Council Environmental Health team will be required to discuss and agree the scope of the continuous monitoring programme for airborne particulate matter during demolition and construction. The Environmental Health Officer (EHO) at Bury Council will need to be consulted to determine acceptance of the scope of work as detailed here.

¹ Cundall (2024) Air Quality Assessment, Former Spurr House, Pole Lane, Unsworth, Ref: FSH-CDL-XX-XX-T-AQ-40200, Revision P01, 14 November 2024

1.5 Capability

Provision of this AQDMP and any subsequent work will be carried out by Cundall's air quality team, who are all Members or Associate Members of the Institute of Air Quality Management (IAQM). The work will be managed and overseen by team members who are also professionally chartered. Information on these key personnel is provided in Appendix E and CVs are available on request.

2.0

Site Setting

2.0 Site Setting

2.1 Site Location

The Site is situated at Pole Lane, Unsworth, Bury.

The Site covers an area of approximately 6700 square metres (0.67 hectares) and currently comprises Spurr House.

The surrounding land use can be summarised as follows:

- Residential properties to the north and west.
- Unsworth Academy to the northeast.
- Cricket & Tennis Club to the south.
- The M66 approximately 120m to the east.

The location of the development site is illustrated in Figure 2-1. Additional context is provided by the aerial image (Figure 2-2).

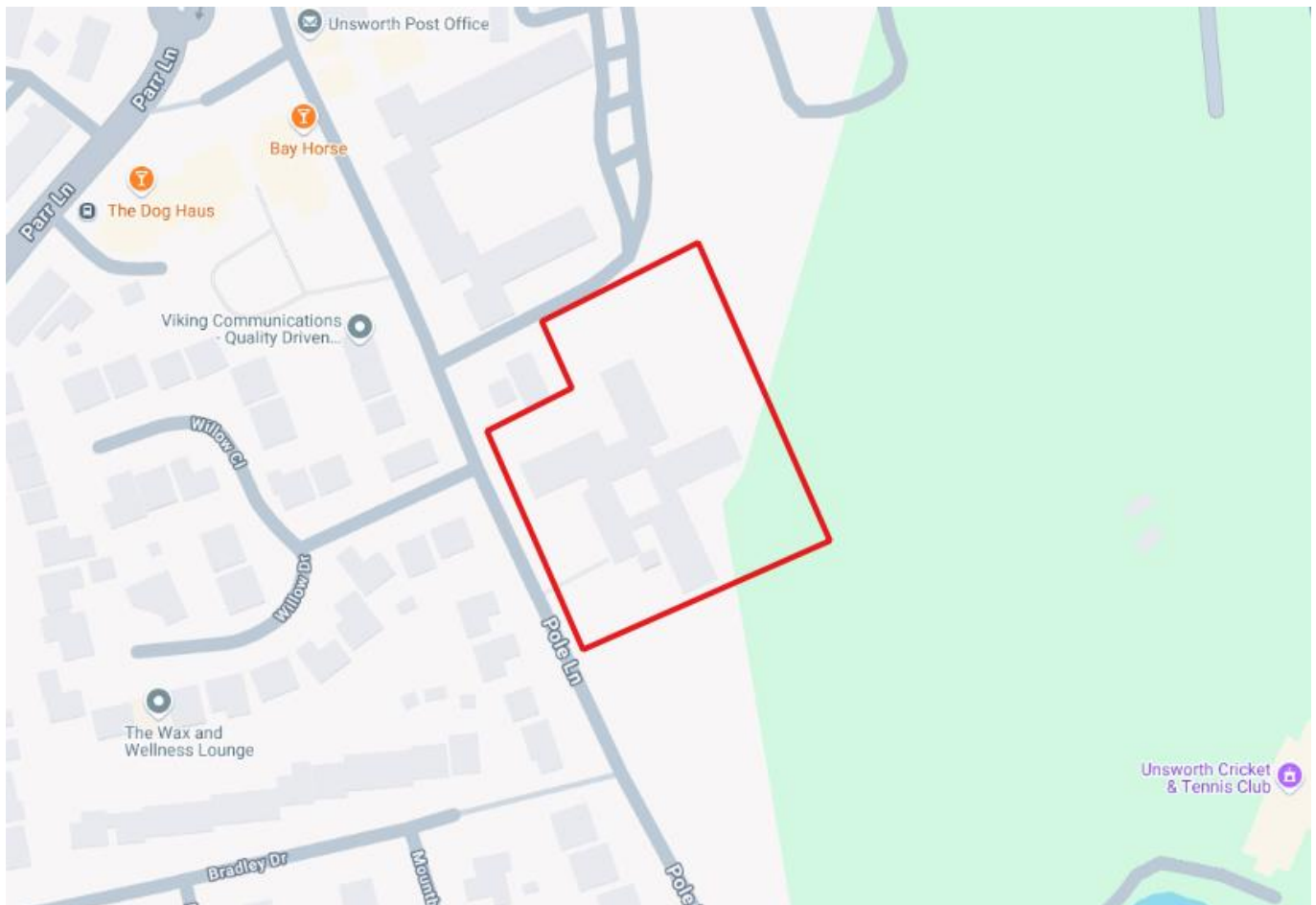


Figure 2-1: Location of the Development Site (Courtesy of Google Maps)



Figure 2-2: Aerial Image (Courtesy of Google Maps)

The Site is not located within an Air Quality Management Area (AQMA), with the nearest approximately 120 m to the east (Bury AQMA, which covers the M66).

2.2 Site Access

It is understood that construction traffic will use Parr Lane followed by Pole Lane to access and egress the site.

2.3 Sensitive Receptors

Sensitive receptors near the development were identified with reference to mapping data provided by Ordnance Survey. Receptors are illustrated in Figure 2-3 and include receptors within 20m of the red line boundary.



Figure 2-3: Sensitive Receptors

The Site is located within a suburban area. There are residential properties to the north and west, Unsworth Academy to the north-east, and the Cricket and Tennis Club to the south. There is therefore the potential for sensitive receptors to be impacted by the construction and operation of the Proposed Development.

Defra MAGIC mapping² has been reviewed to determine the presence of any sensitive ecological sites³. There are no designated ecological receptors with 500 m of the Site boundary. Hollins Vale, a local nature reserve, is located approximately 850 m north of the Proposed Development, as illustrated in Figure 2-4.

² Department for Environment, Food and Rural Affairs (Defra) (2019). MAGIC <https://magic.defra.gov.uk/MagicMap.aspx>

³ Typical ecological receptors of significance include Special Conservation Areas (SCAs), Special Protection Areas (SPAs), Sites of Special Scientific Interest (SSSIs), RAMSAR sites, Local Nature Reserves with dust sensitive features.



Figure 2-4: Sensitive Ecological Sites

3.0

Dust Risk Assessment

3.0 Dust Risk Assessment

3.1 Overview

The development proposals comprise the following activities:

- Demolition activities (existing on-site buildings)
- Construction of 15 x 1B2P apartments (50sqm each) and 45 x 2B4P apartments (70sqm each)
- 62 parking spaces

Machinery used during demolition and construction can generate new sources of emissions, as well as traffic movements to/from the site and the works themselves. When assessing the effect of dust emissions generated during construction works, receptors include those nearest to the construction boundary of the site in each direction. These receptors have the potential to experience effects of greater magnitude due to emissions of dust generated by the works, when compared with more distant receptors.

Without appropriate mitigation controls in place, there is the potential for adverse effects to occur during to the construction of the Proposed Development. The implementation of best practice mitigation controls can ensure any potential adverse effects would be not significant.

The impact of anticipated construction activities has been assessed in accordance with IAQM guidance⁴. The construction phase assessment considers the anticipated physical activities occurring on-site that are likely to result in the generation of dust which gives rise to impacts on dust soiling and human health, especially through the generation of PM₁₀ and PM_{2.5}.

The assessment involves the identification of whether each phase of on-site activity (demolition, earthworks, construction, and trackout) represents a low, medium, or high risk of causing a significant effect and then identifies suitable mitigation measures for the relevant level of risk assigned. Details of the IAQM construction impact assessment procedure⁴ are presented in Appendix B.

3.2 Demolition and Construction Phase Impacts

3.2.1 Need for a Detailed Assessment

An assessment was undertaken as there are 'human receptors' within 250 m of the boundary of the site; and 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the site entrance(s).

3.2.2 Dust Emission Magnitude

The dust emission magnitude is based on the scale of the anticipated work and classified as Table 3-1 below. Information listed below has been provided by the project team.

Stage	Project Information	Highest Potential Dust Emission Magnitude
Demolition	• Existing demolition volume <12,000 m³ (8,400 m³) • Potentially dusty construction material includes bricks and blocks. • On-site crushing and screening will take place. • Demolition activities <6 m above ground level (2.5-5 m) • Demolition will take place between January and March 2025	Medium
Earthworks	• Site area is <18,000 m² (6,725 m²) • Moderately dusty soil type (gravel, clay)	Small

⁴ Institute of Air Quality Management (IAQM) (2024) Guidance on the Assessment of Dust from Demolition and Construction (Version 2.2)
<https://iaqm.co.uk/wp-content/uploads/2013/02/Construction-Dust-Guidance-Jan-2024.pdf>

Stage	Project Information	Highest Potential Dust Emission Magnitude
	- Number of heavy earth-moving vehicles active at any one time will be <5. - Formation of bunds <3 m in height	
Construction	- Total building volume is 12,000 m³ - 75,000 m³ (13,750 m³) - Potentially dusty construction materials (concrete and brick)	Medium
Trackout	<20 HDV (>3.5 tonnes) outward movements in any one day - Moderately dusty surface material (gravel, clay) - Unpaved road length will be <50 m	Small

Table 3-1: Determination of the potential dust emission magnitude

The highest dust emission magnitude is likely to be medium.

3.2.3 Sensitivity of the Area

The surrounding area has a significant density of sensitive receptors, which have wide range of sensitivities to dust soiling and health effects. The numbers of these receptors likely to be affected by demolition, earthworks and construction activities during the construction phase has been assessed. The analysis involved counting receptors within each of the distance bands from the site boundary (20, 50, 100 and 250m), as illustrated in Figure 3-1. The analysis of sensitive receptors within each distance band is presented in Table 3-2.

Sensitive receptors are also susceptible to dust soiling and health effects resulting from construction vehicle trackout. It is understood that construction traffic will use Parr Lane followed by Pole Lane to access and egress the site. A 250 m distance band has been applied accounting for sensitive receptors 50m from the construction traffic route (Figure 3-2). The analysis of sensitive receptors within each distance band is presented in Table 3-2.

Defra MAGIC mapping² has been reviewed to determine the presence of any sensitive ecological sites. There are no designated ecological receptors sensitive to dust within 500 m of the site boundary and therefore the sensitivity of the area to ecological receptors is not applicable.

Potential Impact	Sensitivity of the Area		
	Description	During Demolition, Earthworks and Construction	During Trackout
Dust Soiling	Receptor sensitivity	High	High
	Number of receptors and distance from source	10-100 residential properties 20 m from the site boundary	10-100 residential properties 20 m from the trackout route
	Sensitivity of the Area	High	High
Human Health	Receptor sensitivity	High	High
	Annual mean PM ₁₀ concentration	<24 µg/m ³	<24 µg/m ³
	Number of receptors and distance from source	10-100 residential properties 20 m from the site boundary	10-100 residential properties 20 m from the trackout route
	Sensitivity of the Area	Low	Low
Ecological	Receptor sensitivity	N/A	N/A
	Number of receptors and distance from source	N/A	N/A
	Sensitivity of the Area	N/A	N/A

Table 3-2: Sensitivity of the Area Summary



Figure 3-1: Construction Dust Buffer Zones (courtesy of Google Satellite)

There are 10-100 residential properties 20 m from the Proposed Development boundary. The sensitivity of the area to dust soiling effects on people and property from earthworks and construction activities is therefore **high**. The Defra PM₁₀ background concentration in the area of the Proposed Development is <24 µg/m³. The sensitivity of the area to human health impacts from earthworks and construction activities is therefore **low**.



Figure 3-2: Trackout Buffer Zones (courtesy of Google Satellite)

There are 10-100 residential properties 20 m from the Proposed Development trackout boundary (along roads used by construction traffic within 250 m of the site exit). The sensitivity of the area to dust soiling effects on people and property from trackout activities is therefore **high**. The Defra PM₁₀ background concentration in the area of the Proposed Development is <24 µg/m³. The sensitivity of the area to human health impacts for trackout activities is therefore **low**.

3.2.4 Risk of Impact

The dust emission magnitudes have been combined with the sensitivity of the area to determine the overall risk of dust impacts with no mitigation applied. The risk of impacts for dust soiling and human health for each construction activity are summarised in Table 3-3.

Potential Impact (Sensitivity of the Area)	Dust Risk (Dust Emission Category)				Overall Risk
	Demolition (Medium)	Earthworks (Small)	Construction (Medium)	Trackout (Small)	
Dust Soiling (High)	Medium	Low	Medium	Low	Medium
Human Health (Low)	Low	Negligible	Low	Negligible	Low
Overall Risk	Medium	Low	Medium	Low	Medium

Table 3-3: Risk of Impacts

The assessment has demonstrated that the risk of dust soiling without any mitigation is low for earthworks and trackout and medium for demolition and construction.

The risk of adverse human health effects of PM₁₀ without any mitigation is low for demolition and construction and negligible for earthworks and trackout.

The overall risk of unmitigated impacts is **low** for earthworks and trackout and **medium** for demolition and construction.

4.0

Mitigation Measures

4.0 Mitigation Measures

4.1 Overview

A construction dust impact assessment has been undertaken in accordance with Institute of Air Quality Management (IAQM) guidance (Section 3.0). It was concluded that without appropriate mitigation measures, **low** risks were posed by earthworks and trackout and medium risks were posed by demolition and construction. During construction, receptors within 250 m of the construction boundary could be susceptible to dust effects. However, with appropriate best practice mitigation measures implemented the construction effects of the Proposed Development would be reduced to negligible. The mitigation measures are outlined below and are based on the IAQM guidance⁴ (all “highly recommended” measures are presented, with “desirable” measures shown in *italics*). and compliance with legislation such as non-road mobile machinery (NRMM) regulations¹⁴. Additional detail has been provided for carbon management.

4.2 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. This may be the environment manager/engineer or the site manager.
- Display the head or regional office contact information.
- Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, to be approved by Bury Council.

4.3 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 site and the action taken to resolve the situation in the logbook.

4.4 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. This should include regular dust soiling checks of surfaces such as street furniture, cars and windowsills within 100m of site boundary, with cleaning to be provided if necessary.*
- Carry out regular site inspections to monitor compliance with the Dust Management Plan, 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.
- If required, agree dust deposition, dust flux, or real time PM₁₀ continuous monitoring locations with Bury Council.
- If required, commence baseline monitoring at least three months before work commences on site.
- Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction⁵.

⁵ Institute of Air Quality Management (IAQM) (2018) Guidance on Monitoring in the Vicinity of Demolition and Construction Sites, October 2018,(Version 1.1), https://iaqm.co.uk/text/guidance/guidance_monitoring_dust_2018.pdf

4.5 Preparing and Maintaining the Site

- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as 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.
- Cover, seed or fence stockpiles to prevent wind whipping.

4.6 Operating vehicle/machinery and sustainable travel

- All on-site non road mobile machinery (NRMM) will need to adhere to the emissions standards of Non-Road Mobile Machinery (NRMM) Type-Approval and Emission of Gaseous and Particulate Pollutants Regulations 2018⁶.
- Ensure all vehicles switch off engines when stationary – no idling vehicles where practicable.
- 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 15 mph on surfaced and 10 mph on unsurfaced haul roads 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).*

4.7 Operations

- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques, such as water sprays or local extraction.
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non potable water where possible and appropriate.
- Use enclosed chutes and conveyors and covered skips.
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use the 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.

4.8 Waste Management

- Avoid bonfires and burning of waste materials.

4.9 Demolition

- *Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).*

⁶ HMSO (2018) The Non-Road Mobile Machinery Type-Approval and Emission of Gaseous and Particulate Pollutants Regulations 2018, UK Statutory Instruments, 2018 No. 764, <https://www.legislation.gov.uk/ukSI/2018/764/made>

- Ensure effective water suppression is used during demolition operations. Hand-held sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground.
- Avoid explosive blasting, using appropriate manual or mechanical alternatives.
- Bag and remove any biological debris or damp down such material before demolition.

4.10 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.*

4.11 Trackout

- *Regularly use water-assisted dust sweeper(s) on the access and local roads, to remove, as soon as practicable any material tracked out of the site.*
- *Avoid dry sweeping of large areas.*
- *Ensure vehicles entering and leaving the site are covered to prevent escape of materials during transport.*
- *Record all inspections of haul routes and any subsequent action in a site logbook.*
- *Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).*

4.12 Carbon Management

- Production of carbon management plans where applicable, including an outlined approach for the monitoring and reporting of site activities that contribute to carbon emissions.
- Identify measures to reduce carbon emissions and energy use during the construction phase.
- Identify renewable/low emission sources of energy.
- Ensure construction plant procurement considers energy efficiency and carbon reduction.

5.0

Site Monitoring

5.0 Site Monitoring

5.1 Agreed Scope of Work

As the overall risk of unmitigated impacts from dust-generating activities is **medium** for demolition and construction and **low** for earthworks and trackout, in accordance with IAQM, site monitoring may be required.

The objective for monitoring airborne particulate matter during the demolition and construction phase is to ensure that the dust mitigation measures as outlined in Section 4.0 are effective in suppressing any particles or dust generated by the activities on site. Where the monitoring indicates higher levels than those above action levels, further mitigation would be put in place to ensure that the trigger level i.e., limit) is not breached. This will protect the local environment and sensitive receptors from exposure to dust nuisance or elevated level of PM₁₀.

The dust monitoring would need to be carried out in accordance with the latest available guidance.

The scope of works would need to be outlined and agreed with Bury Council, including the following:

- The **sensitive receptors** identified (there are several surrounding the site, including a primary school).
- **Number of monitoring equipment units** (automatic samplers) required.
- The **monitoring locations**, taking into account possible locations for unforeseen future sensitive receptors (typically one monitor upwind and one downwind).
- **Duration** (typically 3 months prior to on-site works and then continuously throughout the demolition and construction period).
- **The action and trigger levels** for PM₁₀ levels.
- **Content and frequency of monitoring reports** (typically quarterly).

5.2 Continuous Dust Monitoring

Appropriate real-time continuous dust monitors will need to be selected for monitoring PM₁₀ concentrations during the baseline, demolition and construction periods. These will be MCERTs accredited. If additional parameters require monitoring following consultation with Bury Council, suitable automatic monitors with the appropriate capabilities will be selected.

5.3 Monitoring Weather Conditions

One of the monitoring sites will need to be equipped with an anemometer to measure wind speed and direction. Other parameters monitored will usually include temperature, humidity, atmospheric pressure and precipitation.

During the construction period, the site manager will be responsible for a site diary. Any adverse weather conditions that require amendment, relocation or cessations of site operations must be recorded in the site diary, along with any additional mitigation measures required to control dust as a result of the weather conditions. Visible observations of adverse weather conditions will be useful information to supplement the meteorological monitoring.

5.4 Location of Monitors

An initial site visit may be undertaken to understand the layout of the site, to identify sensitive receptors and to finalise suitable sampling locations for the monitoring equipment. Selected locations are based on security, the availability of access to mains power supply⁷ and suitable mounting locations, and for the baseline monitoring, existing building configuration. Monitoring locations are also typically chosen to represent upwind and downwind, with respect to the prevailing winds.

⁷ In the absence of availability of mains power, suitable monitors that can run off solar power and associated solar panels could be provided.

Once site works commence, consideration will be made regarding the most suitable location for the monitors. Hoarding around the site perimeter is expected to be used to mount the monitors during the demolition and construction works period.

5.5 Recording of Site Data

5.5.1 Remote Logging of Data

An automatic remote logging system would be set up, such that all data monitored on-site can be accessed in real-time. Airborne particulate matter concentration data will be collected on a regular basis (e.g., once every five minutes) throughout the whole monitoring period. The live and historic data would be accessed remotely via the internet.

The alert and action levels for PM₁₀ (anticipated to be 190g/m³ over a 15-minute mean as per a study by Kings College London) will be set up. Once an exceedance is detected, a text and/or e-mail alert (to be confirmed), will be sent to all appropriate people on the designated contact list (e.g., site manager, Cundall staff, the Bury Council). This will provide notification of the incident, thereby enabling appropriate remedial action to be taken in a timely and efficient manner.

5.5.2 Reporting

A short technical report in a letter format will be produced after the completion of the baseline monitoring, summarising the monitoring programme, data captured, and whether or not there are any exceedance of relevant threshold objectives.

A monitoring report in electronic format will be issued at agreed intervals during the whole construction period.

The report will summarise the following:

- Location of monitoring equipment
- General activities and visual dust observation during the period.
- Monitoring results from the automatic monitors, analysed as appropriate.
- General wind direction and wind speed during the period, and specifically during any exceedances that may have occurred.
- Date and time of any exceedance of the trigger action level with the 15-minute mean PM₁₀ concentration, and the associated activities during that time if information is available.
- Any mitigation measures implemented by the client.

5.6 Maintenance and Calibration of Monitors

The equipment will be serviced, calibrated and maintained in accordance with the manufacturer's recommendations before installation on site.

Should any maintenance be required during the monitoring period, a short period of down-time will occur during the servicing period, but this should not compromise the integrity of the monitoring programme.

The quality of the monitoring data gathered will go through the quality assurance/quality control procedures as set out by Defra.

5.7 Visual Inspections

In addition to continuous monitoring of dust, construction sites are required to undertake visual assessments for dust. Any significant observations should be recorded in a site diary.

5.8 Site Records

A template for a daily record sheet to be used during the demolition and construction period is included in Appendix C. Observations relating to dust are to be included in the daily site records.

A template for a complaint log is also listed in Appendix C and should be used to record any complaints and the measures taken to resolve them.

5.9 Health and Safety

All site visits would be undertaken by staff familiar with the monitoring set-up. A safe and task specific risk assessment, safe plan of action and emergency contact information are included in Appendix D. This is based on existing baseline conditions and will need to be updated to inform health and safety during demolition and construction works.

A separate Risk Assessment Method Statement (RAMS) will be produced and will refer to site-specific health and safety. A review and familiarisation of the RAMS will be undertaken before attending site by both staff members. This includes information on the necessary Health and Safety clothing and measures to be taken. It will be necessary to update the Safe Plan of Action whenever there is a change of task, hazards or work conditions.

Appendices

Appendix A – Relevant Legislation, Policy and Guidance

Key Legislation

Key air quality legislation is summarised in Table A-1.

Legislation	Description
EU Ambient Air Quality Directive 2008/50/EC ⁸	Establishes the requirements of Member States in terms of improvements required to air quality. Sets standards for a variety of pollutants for human-health and the environment.
The Air Quality Standards Regulations 2010 ⁹	Transposes formalised EU Limit Values set out in directive 2008/50/EC to UK law. An Amendment was published in 2016 ¹⁰
Clean Air Strategy 2019 ¹¹	Defra published a Clean Air Strategy in January 2019, setting out a wide range of actions for UK Government to reduce pollutant emissions and improve air quality. The actions are grouped into four main emission sources: Transport, Domestic, Farming and Industry The Clean Air Strategy sets out the case for action and demonstrates the government's determination to improve air quality. In some cases, the goals are even more ambitious than EU requirements to reduce people's exposure to toxic pollutants like nitrogen oxides, ammonia, particulate matter, non-methane volatile organic compounds and sulphur dioxide.
Environment Act 1995, Part IV ¹² , amended by the Environment Act 2021 ¹⁵ .	Defines the requirements for Local Air Quality Management (LAQM).
Environment Protection Act 1990, amended by the Pollution Prevention and Control Act 1999 ¹³ and the Environment Act 2021 ¹⁵ .	Part III provides statutory nuisance provisions for nuisance dust. Nuisance complaints about dust would need to be investigated by the Local Authority. In practice, dust deposition is generally managed appropriately by suitable on-site practices and mitigation, avoiding the determination of statutory nuisance and/or prosecution or enforcement notices.
The Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018 ¹⁴	Developers and contractors are required to meet compliance with the emission standards for Non-Road Mobile Machinery (NRMM). The Regulations exercise of the powers conferred by section 2(2) of, and paragraph 1A of Schedule 2 to, the European Communities Act 1972 in relation to the type, description, construction or equipment of vehicles.
Environment Act, 2021 ¹⁵ .	The Act makes provision about targets, plans and policies with the focus of improving the natural environment. This includes air quality, as well as water, nature and biodiversity, regulation of chemicals, waste and resource efficiency and recall of products failing to meet environmental standards. The Act introduces a duty on government to bring forward at least two air quality targets by October 2022 for consultation. These are to be to reduce the annual average level of fine

⁸ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

⁹ HMSO (2010). Statutory Instrument 2010 No. 1001, The Air Quality Standards Regulations 2010, London: HMSO

¹⁰ HMSO (2016). Statutory Instrument 2016 No. 1184, Environmental Protection, England, The Air Quality Standards (Amendment) Regulations 2016, London: HMSO, <https://www.legislation.gov.uk/uksi/2016/1184/contents/made>

¹¹ Department for Environment Food and Rural Affairs (Defra) (2019) Clean Air Strategy 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf

¹² Environment Act 1995, Chapter 25, Part IV Air Quality

¹³ Environmental Protection Act 1990, Chapter 43, Part III Statutory Nuisances and Clean Air <https://www.legislation.gov.uk/ukpga/1990/43/part/III>

¹⁴ HMSO (2018) The Non-Road Mobile Machinery Type-Approval and Emission of Gaseous and Particulate Pollutants Regulations 2018, UK Statutory Instruments, 2018 No. 764, <https://www.legislation.gov.uk/uksi/2018/764/made>

¹⁵ HMSO (2021) Environment Act 2021, November 2021, <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

Legislation	Description
	particulate matter (PM_{2.5}) and to set a long-term (minimum of 15 year) target for its reduction. The 2021 Act amends the Environment Act 1995 Part IV by seeking to strength local air quality a management (LAQM) through greater cooperation at local level and broadening the range of organisations that play a role in improving air quality. Responsibility for tackling air pollution is to be shared between designated local authorities, all tiers of local government and neighbouring authorities. The environment secretary will be required to review the Air Quality Strategy at least every five years and publish annual progress reports to parliament. The 2021 Act amends the Clean Air Act 1993 to give local authorities more power to reduce pollution in smoke control areas by replacing the criminal offence of emitting smoke from a chimney in a smoke control area with a civil penalty regime, seeking to enable simpler, quicker and more proportionate enforcement at local level. It also amends the Environmental Protection Act 1990 by extending the system of statutory nuisance to private dwellings in smoke control areas, which could result in abatement notice and issuing fines for criminal offence of breaches. The 2021 Act introduces new powers for the government to compel vehicle manufacturers to recall vehicles and non-road machinery that fails to meet legal binding standards.
Environmental Improvement Plan, 2023 ¹⁶	The Environmental Improvement Plan (EIP23) highlights that air quality continues to be the biggest environmental risk to human health and a source of harm to the natural environment. The document makes provision about targets and plans with the focus of improving the environmental quality. This includes reducing emissions in the home, driving effective local action through local authorities, maintaining and improving regulatory framework for industrial emissions, supporting farmers to cut the impact of agriculture on air quality and reducing emissions from cars and other forms of transport. Ten environmental goals were set in the 25 Year Environmental Plan. The second goal is clean air and the EIP23 seeks to address this further through the following targets and commitments: ▪ In 2040 reduce population exposure of fine particulate matter (PM_{2.5}) by 35% compared to 2018 levels (with an interim target of a 22% reduction by January 2028) ▪ Work towards meeting compliance with a 40 µg/m³ limit for nitrogen dioxide (NO₂) ▪ Maximum annual mean 10 µg/m³ for PM_{2.5} (with an interim target of 12 µg/m³ by January 2028) ▪ 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%. Progress towards delivering the EIP23 will be monitored through Annual Progress Reports and the Outcome Indicator Framework. This framework contains 66 indicators, six which are relevant to clean air.

Table A-1: Key Legislation

Planning policy and guidance of relevance to air quality impacts associated with demolition and construction is summarised in Table A-2.

¹⁶ HM Government (2023) Environmental Improvement Plan 2023, <https://www.gov.uk/government/publications/environmental-improvement-plan>

Policy / Guidance	Description
IAQM Guidance on the Assessment of Dust from Demolition and Construction (2024) ¹⁷	The document provides guidance for developers, their consultants and environmental health practitioners on how to undertake a construction impact assessment (including demolition and earthworks). The guidance provides a method for assigning a magnitude of risk (high, medium or low) and identifies appropriate mitigation measures.

Table A-2: Key Policy and Guidance

¹⁷ Institute of Air Quality Management (IAQM) (2024) Guidance on the Assessment of Dust from Demolition and Construction (Version 2.2)
<https://iaqm.co.uk/wp-content/uploads/2013/02/Construction-Dust-Guidance-Jan-2024.pdf>

Appendix B – IAQM Construction Assessment Methodology

Screening (Step 1)

As 'human receptors' were identified within 250 m of the boundary of the site; and within 50 m of the route(s) to be used by construction vehicles on the public highway, up to 250 m from the site entrance, a detailed risk assessment was undertaken.

Dust Emission (Step 2A)

The potential dust emission magnitude for different activities have been defined based on the criteria listed in Table B-1.

Stage	Description	Large	Medium	Small
Demolition	Definitions for demolition are:	1. Total building volume >75,000 m ³ 2. Potentially dusty construction material (e.g. concrete) 3. On-site crushing and screening 4. Demolition activities >12 m above ground level	5. Total building volume 12,000 m ³ – 75,000 m ³ 6. Potentially dusty construction material (e.g. concrete) 7. Demolition activities 6 – 12 m above ground level	8. Total building volume <12,000 m ³ 9. Construction material with low potential for dust release (e.g. metal cladding or timber) 10. Demolition activities <6 m above ground, demolition during wetter months
Earthworks	Earthworks will primarily involve excavating material, haulage, tipping, and stockpiling. This may also involve levelling the site and landscaping.	11. Total site area >110,000 m ² 12. Potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size) 13. >10 heavy earth moving vehicles active at any one-time formation of bunds >6 m in height	14. Total site area 18,000 m ² – 110,000 m ² 15. Moderately dusty soil type (e.g. silt) 16. 5-10 heavy earth moving vehicles active at any one-time formation of bunds 3 m – 6 m in height	17. Total site area <18,000 m ² 18. Soil type with large grain size (e.g. sand) 19. <5 heavy earth moving vehicles active at any one-time formation of bunds <3 m in height
Construction	The key issues when determining the potential dust emission magnitude during the construction phase include the size of the building(s) / infrastructure, method of construction, construction materials, and duration of build	20. Total building volume >75,000 m ³ 21. On-site concrete batching and sandblasting	22. Total building volume 12,000 m ³ – 75,000 m ³ 23. Potentially dusty construction material (e.g. concrete) 24. On-site concrete batching	25. Total building volume <12,000 m ³ 26. Construction material with low potential for dust release (e.g. metal cladding or timber)

Stage	Description	Large	Medium	Small
Trackout	Factors which determine the dust emission magnitude are vehicle size, vehicle speed, vehicle numbers, geology, and duration. As with all other potential sources, professional judgement must be applied when classifying trackout into one of the dust emission magnitude categories.	27. >50 HDV (>3.5 tonnes) outward movements in any one day 28. Potentially dusty surface material (e.g. high clay content) 29. Unpaved road length >100 m	30. 20-50 HDV (>3.5 tonnes) outward movements in any one day 31. Moderately dusty surface material (e.g. high clay content) 32. Unpaved road length 50 m – 100 m	33. <20 HDV (>3.5 tonnes) outward movements in any one day 34. Surface material with low potential for dust release 35. Unpaved road length <50 m

Table B-1: Potential Dust Emission Magnitude Criteria

Sensitivity of the Area (Step 2B)

The sensitivity of the area takes account of several factors:

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

Table B-2 provides guidance on the sensitivity of different types of receptor.

Description	High Sensitivity Receptor	Medium Sensitivity Receptor	Low Sensitivity Receptor
Sensitivities of People to Dust Soiling Effects	1. Users can reasonably expect enjoyment of a high level of amenity. 2. The appearance, aesthetics, or value of their property would be diminished by soiling. 3. 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 4. Indicative examples include dwellings, museums, and other culturally important collections, medium, and long-term car parks, and car showrooms	5. Users would expect a to enjoy a reasonable level of amenity but would not reasonably expect a to enjoy the same level of amenity as in their home. 6. The appearance, aesthetics, or value of their property could be diminished by soiling. 7. The people or property wouldn't reasonably be expected a to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land. 8. Indicative examples include parks and places of work	9. The enjoyment of amenity would not reasonably be expected; or 10. Property would not reasonably be expected a to be diminished in appearance, aesthetics, or value by soiling. 11. 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. 12. Indicative examples include playing fields, farmland (unless commercially-sensitive horticultural), footpaths, short-term car parks, and roads

Description	High Sensitivity Receptor	Medium Sensitivity Receptor	Low Sensitivity Receptor
Sensitivities of People to the Health Effects of PM₁₀	13. 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) 14. Indicative 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	15. Locations where the people exposed are workers d, 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). 16. Indicative 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	17. Locations where human exposure is transient. 18. Indicative examples include public footpaths, playing fields, parks, and shopping streets
Sensitivities of Receptors to Ecological Effects	19. Locations with an international or national designation and the designated features may be affected by dust soiling. 20. 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 21. Indicative examples include a Special Area of Conservation designated for acid heathlands or a local site designated for lichens adjacent to the demolition of a large site containing concrete (alkali) buildings	22. Locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown. 23. Locations with a National designation where the features may be affected by dust deposition. 24. Indicative example is a Site of Special Scientific Interest with dust sensitive features	25. Locations with a local designation where the features may be affected by dust deposition. 26. Indicative example is a local Nature Reserve with dust sensitive features

Table B-2: Sensitivities of People to Dust Soiling Effects, Health Effects of PM₁₀, and Sensitivities of Receptors to Ecological Effects

Full details of the sensitivities of receptors are provided in the IAQM Guidance document.

Table B-3, Table B-4, and Table B-5 show how the sensitivity of the area has been determined for dust soiling, human-health, and ecosystem impacts respectively.

These tables take account of several factors which may influence the sensitivity of the area. The highest level of sensitivity from each table has been recorded.

Receptor Sensitivity	Number of Receptors	Distance 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 B-3: Sensitivity of the Area to Dust Soiling Effects on People and Property

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

Table B-4: Sensitivity of the Area to Human-Health Impacts

Sensitivity of Area	Distance from the Source (m)	
	<20	<50
High	High	Medium
Medium	Medium	Low

Sensitivity of Area	Distance from the Source (m)	
	<20	<50
Low	Low	Low

Table B-5: Sensitivity of the Area to Ecological Impact

The highest level of sensitivity from each table has been recorded. Professional judgement has been used to determine alternative sensitivity categories with consideration of additional factors, such as any pre-existing screening between the source and the receptors, the season during which the works will take place, and duration of the potential impact.

Risk of Impact Definition

The dust emission magnitude (Step 2A) was combined with the sensitivity of the area (Step 2B) to determine the risk of impact with no mitigation applied. Tables B-6 to B-9 provide the method of assigning the level of risk of each activity and used to determine the level of site-specific mitigation.

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 B-6 Risk of Impact – Demolition

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 B-7: Risk of Impact – Earthworks

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 B-8: Risk of Impact – 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 B-9: Risk of Impact – Trackout

Appendix C – Site Record Sheets

Daily Record Sheet

Date and set and end times of site work			
Weather conditions	Wind direction/ speed		
	Weather (sunny, dry, rainy, overcast etc)		
On-site operations			
	Start time	Visible dust	actions

Complaint Log

Date and time of Incident		Weather conditions at incident time			
Date and time of Complaint					
Name of complainant:		Address		Contact details	
Complaint:					
Signature of complainant					
Details of investigation:					
Actions taken:					
Any future actions required?					
Person logging this complaint					
Signature of site manager:					

Appendix D – Health and Safety

Emergency Contact

Should your mobile phone have no network coverage you are still able to contact the emergency services by dialling 112 on your mobile phone. This number is programmed into every sim card and allows calls made to this number to be prioritised across all mobile phone networks. In simple terms once 112 is dialled your phone will search each and every network in order to connect to the emergency services.

The Process

To initiate the call, dial 112.

Stand with your back to the wind. This blocks the wind and assists the operator to hear your voice and you to hear the operator.

Allow the phone to try and connect for 1 minute.

If your first attempted is unsuccessful rotate by 180° and call again, (waiting 1 minute for the call to connect).

If both attempts fail you can text a message to 112 providing you have pre-registered.

To pre-register

Send a text containing the word REGISTER to 112.

You will then receive a text back.

Read this text carefully then reply YES. This confirms registration.

To Text the Emergency Services

Write a text stating: Who you are, Where you are, What the incident is and the number of people injured.

Wait for 3 minutes to receive a text back.

If NO reply try resending the txt.

Should both calls and texts fail to go through keep trying until you are successful.

If the result of an incident requires more than first aid treatment, dial 999 or 112.

Hospital

The nearest Accident and Emergency Department / Minor Injuries Unit / “first aid” injuries (in an emergency 999):

Name: Fairfield Hospital, Rochdale Old Road, Bury, Lancashire, BL9 7TD Tel 0161 624 0420

Task / Activity	Hazard	Degree of Risk			Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	Y/N
Call in procedure	Working on site	2	4	8	The site visit will be undertaken by two members of staff, to establish and install at the exact monitoring locations. The use of a buddy system, mobile phones and measures in this RAMS.	1	4	4	N
Driving	Driving related accident.	2	5	10	Adhere to the driving at work policy. Ensure that adequate rest breaks are taken to avoid driver fatigue. No off-road driving to be undertaken unless trained to do so. Park vehicles at appropriate safe locations – use lay-bys where possible and if not available select a location where good visibility in both directions.	1	5	5	N

Task / Activity	Hazard	Degree of Risk			Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	
Installing monitoring equipment	Assaulted by the public/ Approached by objectionable members of the public.	1	3	3	Always address public politely and retreat to car and leave area if you feel threatened. Carry a charged mobile phone at all times and check signal is adequate. If threatened, report via verbal reporting chain as soon as practical. If immediate risk of harm is perceived, equipment should be abandoned. If there is any further risk the employee should call for help or alert office buddy using mobile phone.	1	3	3	N
Installing monitoring equipment	Working near busy roads, car parks, site vehicles/plant.	3	5	15	Activity that requires care and diligence. Suitable Hi-Viz clothing is mandatory when outside your vehicle and at kerb or roadside locations. When crossing roads observe the rules of the Highway Code. Observe site rules, e.g. stick to designated walkways and use the thumbs up rule. Never approach moving vehicles unless explicitly authorised to do so.	1	5	5	N

Task / Activity	Hazard	Degree of Risk			Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	
Installing monitoring equipment	Manual handling, resulting in injury.	3	3	9	Minimise need for manual handling through use of vehicles/trolleys etc to avoid carrying equipment long distances. Do not carry excessively heavy loads. Stop and think, plan the lift. Do you need to lift the load and do you need help. Can the load be lifted in an alternative way. Wear appropriate PPE gloves, safety footwear.	2	3	6	N
Installing monitoring equipment	Slips, trips and falls on uneven/slippery ground or ground obstructed by plant roots.	3	3	9	Use designated walking routes where possible. Wear sturdy, flat soled boots with ankle protectors where ground is uneven or wet. Take care when walking across the site.	1	3	3	N

Task / Activity	Hazard	Degree of Risk			Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	
Installing monitoring equipment	Working at height.	3	3	9	Only a lockable A-Frame step ladder is used. Use ladder on an even surface, to avoid tipping. Keep three limbs secure on the ladder/street furniture and do not overreach. Do not use the top step of the ladder. Only use ladder when two members of staff present. During the two-person initial site set up visit, one member of the team will foot the bottom of the ladder and three points of contact on the ladder/or street furniture will be used at all times.	1	3	3	N
Installing monitoring equipment	Damage fingers when setting up ladder.	2	2	4	Take care when opening and closing A-Frame Ladder to avoid trapping fingers. Ensure ladder is locked into position before use. Using lightweight cut resistant gloves when holding ladder / setting up.	1	2	4	N

Task / Activity	Hazard	Degree of Risk			Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	
Unforeseen hazards	e.g., fire, flooding, discarded needles, missing manhole covers, animals.	2	3	6	Note local fire detection, alarm, escape procedures, and assembly point(s). Movement on foot should be at walking pace, paying attention to footpaths and pavements. Any hazards noted should be recorded and if necessary, brought to the attention of the local authority. A mobile phone and first aid kit should be carried at all times. If there is a serious accident contact the emergency services immediately – dial 999.	1	3	3	N

Appendix E – Key Personnel

We propose to utilise the skills of the following key personnel on this project for whom detailed CVs can be provided on request;



Glyn Hodgkiss

Associate
Consultant

Glyn is an Associate Consultant in Cundall's Air Quality Team. He has 30 years' experience working in the environmental field and has specialised in Air Quality for over 15 years. He is a Chartered Environmentalist and Member of the Institute of Air Quality Management.

Working in both the private and public sectors, Glyn has gained extensive experience in monitoring and modelling air quality. His role in Local Government included air quality action planning, working with developers to minimise air quality impacts of new development, working on regional planning policy initiatives and on the delivery of government funded air quality improvement programs. He has also worked in private sector consultancy on the delivery of multiple air quality assessments ranging from small, single source dispersion modelling studies through to complex multi-source assessments and major road and infrastructure projects. This work has provided valuable support in the design, planning, construction and operation of new developments.

Glyn has a pedigree in collaborative working, bringing together the expertise of Cundall alongside other consultants and stakeholders to promote smooth project progression from inception to conclusion.



Jenny Carrington

Associate
Consultant

Jenny Carrington is a Chartered Scientist (CSci) and Associate Air Quality Consultant for Cundall.

Jenny has sixteen years' experience working in the environmental sector for a range of both public and private clients.

She is responsible for undertaking air quality assessments and is fully conversant with atmospheric dispersion modelling through the use of ADMS software as part of more detailed air quality assessments. She also has responsibility for managing air quality monitoring programs.

In her role as an environmental specialist Jenny has worked on a range of multi-disciplinary projects often fulfilling the role of project manager in coordinating third parties to enable a successful completion of the project.

She is experienced in producing air quality chapters for Environmental Statements for a range of different developments and has previously reviewed Environmental Statement's on behalf of Local Authorities.

She has previously spent time working in Environmental Health at a Local Authority, as well as two other private consultancies.



Annie Trevis

Senior
Consultant

Annie is a Senior Consultant in Cundall's Air Quality Team. She has 6 years' experience working in Air Quality and has previously worked in one other private consultancy. She is a Member of the Institution of Environmental Sciences and the Institute of Air Quality Management.

She is experienced in undertaking air quality assessments for a range of developments in numerous sectors, including air quality chapters for Environmental Impact Assessments. She is also fully conversant with atmospheric dispersion modelling through the use of ADMS and AERMOD software as part of more detailed air quality assessments.

She has completed air quality and dust management plans for a variety of developments.

She has undertaken and been the project manager for numerous dust and air quality monitoring programs for a wide range of projects across the UK, Denmark and Germany.

Cundall Johnston & Partners LLP

Fourways House 57 Hilton St Manchester M1 2EJ
Tel: +44 (0)161 244 5660

Asia Australia Europe MENA UK and Ireland
www.cundall.com

