



FORMER JOHN LEWIS DEPOT, LETCOMBE STREET, READING
(ALSO KNOWN AS JLP MILL LANE)

AIR QUALITY MITIGATION PLAN

AUGUST 2024

Former John Lewis Depot, Letcombe Street.

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Project:	Former John Lewis Depot, Letcombe Street
Client:	John Lewis Partnership BTR Ltd.
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Air Quality Mitigation Plan.

Audit sheet.

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01	14/03/2024	Second Draft	OP	AD	AD
02	28/03/2024	Third Draft	AJ	AD	AD
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05	20/05/2024	Third Issue	AJ	OP	OP

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1. Introduction.

Hoare Lea have been commissioned by John Lewis Partnership BTR Ltd. to undertake an Air Quality Mitigation plan to support the planning application for the proposed residential development at Letcombe Street, Reading, RG1 2HN (the 'Application Site').

This accompanies the Air Quality Assessment (ref: 08278-HRL-XX-XX-RP-AQ-10001.pdf) submitted as part of the planning application.

The proposals comprise the demolition of the existing building and redevelopment of the site comprising erection of a new building for up to 215 build to rent residential dwellings (Use Class C3) together with flexible commercial / community space (Use Class E/F1/F2), residents' facilities, landscaping, public realm, amenity space, cycle parking and disabled car parking (the 'Proposed Development').

In line with the adopted Reading Borough Local Plan (2019)¹, this Mitigation Plan outlines the measures required to prevent air quality impacts as a result of the Proposed Development. The Air Quality Assessment details the impacts on air quality anticipated from the construction and operation of the Proposed Development.

The assessment of the construction phase impacts determined there to be a high risk of dust impacts. Through good practice and implementation of appropriate mitigation measures as described below, it is expected that the release of dust would be effectively controlled and mitigated, with resulting impacts considered to be 'not significant'.

The results of the operational phase traffic screening assessment indicated that as the Application Site was a former collection depot for John Lewis, there will be a net reduction in traffic associated with the Proposed Development. The impact of the operational road traffic is therefore considered to be not significant, however mitigation measures have been set out which will contribute to an improvement of air quality at the Application Site.

2. Construction Phase.

2.1 Construction Phase Mitigation Measures.

To mitigate the potential impacts during the construction phase it is recommended that mitigation measures as detailed in the Institute of Air Quality Management (IAQM) construction guidance² are implemented. These mitigation measures have been selected for the Proposed Development and are based upon the dust risk level determined within the Air Quality Assessment.

It is recommended that Reading Borough Council (RBC) approve a Dust Management Plan (DMP) as part of the Construction Management Plan (CMP) prior to works commencing on site, and that this is implemented using an appropriately worded planning condition. Table 1 below details the measures that should be incorporated in the DMP.

Table 1: Mitigation Measures

Issue	Mitigation Measure
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.
Dust Management Plan	Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The DMP may include monitoring of dust deposition, dust flux, real-time PM ₁₀ 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.

¹ Reading Borough Council (2019) Reading Borough Local Plan, -[online] (Last accessed: 01/02/2024), Available at: https://images.reading.gov.uk/2019/12/Local_Plan_Adopted_November_2019.pdf

² Institute of Air Quality Management (2024) Guidance on the Assessment of Dust from Demolition and Construction, -[online] (Last accessed: 01/02/2024), Available at: <https://iaqm.co.uk/wp-content/uploads/2013/02/Construction-Dust-Guidance-Jan-2024.pdf>

Issue	Mitigation Measure
	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 log book.
	Hold regular liaison meetings with other high risk construction sites within 500 m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/deliveries which might be using the same strategic road network routes.
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 check of surfaces such as street furniture, cars, window sills within 100 m of the site boundary, with cleaning to be provided if necessary.
	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 PM ₁₀ continuous monitoring locations with the Local Authority. Where possible, commence baseline monitoring at least three months before work commences on site or, if it is a large site, before work on a phase commences.
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 cover as described below.
	Cover, seed or fence stockpiles to prevent wind whipping.
Operating vehicles/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 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds

Issue	Mitigation Measure
	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 applicable).
	Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.
	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-potable water where possible and appropriate.
	Use enclosed chutes and conveyors and covered skips.
	Minimize 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.
Demolition	Soft strip inside building before demolition.
	Ensure effective water suppression is used during demolition activities. 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.
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.
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.

Issue	Mitigation Measure
	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 powder materials, ensure bags are sealed after use and stored appropriately to prevent dust.
Trackout	Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being in continuous use.
	Avoid dry sweeping of large areas.
	Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
	Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.
	Record all inspections of haul routes and any subsequent action in a site log book.
	Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.
	Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).
	Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.
	Access gates to be located at least 10 m from receptors where possible.

Potential dust effects during the construction phase are considered to be temporary and short term in nature. The impacts are determined to be temporary as they will only potentially occur throughout the construction phase and short-term because these will only arise at particular times when certain activities and meteorological conditions combine to create the predicted level of magnitude.

2.2 Construction Phase Road Traffic Emissions.

Potential air quality impacts associated with construction phase road traffic emissions were assessed within the AQA. Information on traffic movements anticipated during construction works was unavailable for the completion of the AQA. However, based on experience of similar scale projects, the development quantum is not anticipated to result in a significant increase in movements above the criteria outlined in the EPUK and IAQM planning guidance. Therefore, the predicted impact on air quality predicted to result in an 'insignificant' effect.

As such, additional road vehicle trips during the construction phase of the Proposed Development can be considered to have insignificant effects on air quality. Therefore, mitigation measures are not considered to be required.

2.3 Construction Phase NRMM Emissions.

In accordance with Part 4 of the IAQM construction guidance, all Non-Road Mobile Machinery (NRMM) would need to adhere to the emissions standards for NO₂ and PM₁₀ set out for NRMM. As described in the AQA, at this stage, all NRMM is expected to meet this standard.

It is therefore considered the likely effects of construction plant on local air quality would be insignificant. Therefore, mitigation measures are not considered to be required.

3. Operational Phase.

3.1 Building Emissions.

The energy strategy for the Proposed Development was assessed within the AQA. As there are no combustion sources during normal operation no mitigation measures for building emissions are required.

3.2 Road Traffic Emissions.

Potential air quality impacts associated with operational phase development were assessed within the AQA. The Proposed Development will be largely car free which will lead to a reduction in trips on the local road network. This is an embedded design measure that will contribute towards an improvement in air quality relative to the existing use of the Application Site.

Additionally, the Proposed Development features the following measures that are anticipated to lead to a benefit for air quality:

- Cycle storage facilities in line with the RBC Local Plan requirements;
- Consideration of a car club scheme to encourage residents to travel sustainably, therefore reducing road traffic emissions;
- Improved permeability of the Application Site for pedestrians and cyclists to encourage active travel, thereby improving air quality;
- Provision of promotional materials to encourage residents to opt for walking or cycling over private vehicle use; and
- Appointment of a Travel Plan Coordinator (TPC) who will be responsible for implementing the measures set out above and promoting sustainable transportation to residents.

Details of this are outlined in the Travel Plan produced by the appointed transport consultants, Glanville Group.

3.3 Site Suitability.

The suitability of the Application Site for proposed residential use has been assessed within the AQA. It showed that no mitigation is required for on-site air quality concentrations.