



Notting Hill Genesis

ASHLEY ROAD SITES, TOTTENHAM HALE

Air Quality and Dust Management Plan





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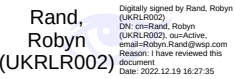
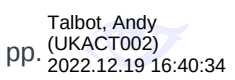
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1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1. This Air Quality and Dust Management Plan (AQDMP) has been produced by WSP to discharge pre-commencement planning condition 26, for the proposed development of Cannon Factory and Ashley House (HGY/2016/4165), and pre-commencement planning condition 10, for the proposed development of Ashley Park (HGY/2019/0108) on Ashley Road, London N17 9LJ.
- 1.1.2. Pre-commencement condition 26 states:
- “Prior to the commencement of the development and Air Quality and Dust Management Plan (AQDMP), detailing the management of demolition and construction dust, shall be submitted in writing to and for approval by the Local Planning Authority. The AQDMP shall be in accordance with the GLA SPG Dust and Emissions Control and include an updated Dust Risk Assessment in substantial accordance with the Dust Risk Assessment dated December 2016. The plan shall be implemented as approved and maintained for the duration of the construction phase of the development.”*
- 1.1.3. Pre-commencement condition 10 states:
- “No works shall be carried out on the site until a detailed Air Quality and Dust Management Plan (AQDMP), detailing the management of demolition and construction dust and including a Dust Risk Assessment, has been submitted and approved in writing by the Local Planning Authority. The plan shall be in accordance with the Greater London Authority’s Dust and Emissions Control Supplementary Planning Guidance document (July 2014) and include a Dust Risk Assessment.*
- 1.1.4. Impacts on local air quality are likely to occur during the construction stage due to:
- Dust and particulate matter (PM₁₀ and PM_{2.5}) from demolition and construction activities; and
 - Emissions of nitrogen oxide (NO_x), PM₁₀ and PM_{2.5} from plant, non-road mobile machinery (NRMM) and construction traffic.
- 1.1.5. Due to the proximity of both plots, as well as the fact that they are being constructed by the same developer, this AQDMP sets out the proposed approach to managing air quality pollutant and dust emissions arising from construction stage activities at both the Cannon Factory and Ashley House and Ashley Park sites, hereafter referred to altogether as the ‘Proposed Development’ or ‘Site’. Demolition and construction activities are expected to commence in quarter one of 2023 with completion expected in quarter two of 2026.
- 1.1.6. In 2016 the Greater London Authority (GLA) released Supplementary Planning Guidance (SPG) on the Control of Dust and Emissions from Construction and Demolition¹. The GLA’s SPG requires a

¹ Greater London Authority (2014) *The Control of Dust and Emissions During Construction and Demolition: Supplementary Planning Guidance* [online]. Available at: <https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/london-plan-guidance-and-spgs/control-dust-and> [Accessed October 2022].

dusk risk assessment to be undertaken following the methodology published in the Institute of Air Quality Management (IAQM) guidance on the assessment of dust from demolition and construction². This guidance outlines a risk assessment approach for construction dust assessments and helps determine the mitigation measures that need to be applied.

- 1.1.7. This report describes the potential risk of dust impacts associated with construction activities required as part of the Proposed Development. The risk assessment then informs the mitigation and air quality monitoring strategy to be implemented. This report should be read in conjunction with the Construction Management Plan issued by Hill³.

1.2 APPROVAL AND CONTINUOUS REVIEW

- 1.2.1. Once submitted and approved by the Environmental Health Officer (EHO) from the London Borough of Haringey (LBH), the details will be fully implemented, permanently retained and maintained during the entire construction stage of the development.
- 1.2.2. The continuing effectiveness of this AQDMP should be reviewed in consultation with Site management every six months from initial implementation. Reviews will consider the compliance records, complaints history, monitoring records and the introduction of new sensitive receptors on neighbouring land.
- 1.2.3. Reviews of the AQDMP will also be undertaken in the event of continued exceedances of the dust risk criteria after mitigation measures have been established. The plan will be amended as necessary, including any changes to the monitoring methods and control measures.
- 1.2.4. Following initial review, the AQDMP will also be reviewed and updated in the following circumstances:
- As instructed by the Project Manager;
 - As additional contractors are appointed; and
 - Following changes to the scope of the site works that may change the emissions of air quality pollutants and/or dust leading to an adverse impact on local air quality.
- 1.2.5. The roles and responsibilities of those accountable for air quality during demolition and construction are set out in section 3.2 of this report and any revisions to the AQDMP will be agreed in writing with EHO at LBH.
- 1.2.6. A glossary of terms used in this report is provided in **Appendix A**.

² IAQM (2016) *Guidance on the assessment of dust from demolition and construction Version 1.1* [online]. Available at: <https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf> [Accessed October 2022].

³ Hill (2022) *Ashley House & Cannon Factory Construction Management Plan*.

1.3 SITE LOCATION AND SURROUNDING AREA

- 1.3.1. The Site lies within the administrative boundary of LBH, London's Ultra Low Emission Zone (ULEZ)⁴ and the Upper Lea Valley Opportunity Area⁵. **Figure B-1** in **Appendix B** shows the location of the Site which is off Ashley Road in Tottenham Hale. It is bordered to the north by Down Lane Park and Burdock Road. Further north is the Harris Academy Tottenham. The eastern Site boundary is adjacent to the A1055 Watermead Way beyond which is the Tottenham Hale to Northumberland Park railway line. To the south of the Site is the A503 Hale Road and to the west is Park View Road.
- 1.3.2. The Site currently consists of two buildings split between Cannon Factory and Ashley House, east and west of Ashley Road respectively; the road which the buildings can be accessed from.

1.4 BASELINE CONDITIONS

LBH AIR QUALITY REVIEW AND ASSESSMENT

- 1.4.1. In 2001, the LBH declared a borough-wide Haringey Air Quality Management Area (AQMA) due to exceedances of both the hourly and annual mean nitrogen dioxide (NO₂) Air Quality Strategy⁶ (AQS) objective and the daily and annual mean PM₁₀ AQS objective⁷.
- 1.4.2. In 2019 the LBH published its Air Quality Action Plan (AQAP)⁸. The AQAP outlines a number of actions that the council will deliver to improve air quality within its administrative area between 2019 and 2024. These actions include, but are not limited to, the following:
- Ensuring emissions from demolition and construction are minimised;
 - Providing infrastructure to support walking and cycling;
 - Ensuring enforcement of NRMM air quality policies; and
 - Supporting Airtext, promotion and dissemination of high pollution alert services.

BACKGROUND AIR QUALITY

- 1.4.3. The Department for Environment, Food and Rural Affairs' (Defra) website provides background concentrations of those pollutants included within the AQS. These are mapped at a grid resolution of 1x1km for the whole of the UK. Estimated concentrations are available for all years between 2018

⁴ Transport for London (2022) *ULEZ: Where and when* [online]. Available at: <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/ulez-where-and-when?intcmp=52227#on-this-page-1> [Accessed December 2022].

⁵ Mayor of London (2022) *Opportunity Areas* [online]. Available at: <https://www.london.gov.uk/programmes-strategies/planning/implementing-london-plan/opportunity-areas> [Accessed December 2022].

⁶ Defra (2007) *The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Volume 1)* [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69336/pb12654-air-quality-strategy-vol1-070712.pdf [Accessed November 2022].

⁷ Defra (2022) *AQMAs Declared by London Borough of Haringey* [online]. Available at: https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=339 [Accessed November 2022].

⁸ LBH (2019) *Air Quality Action Plan 2019-2024* [online]. Available at: https://www.haringey.gov.uk/sites/haringeygovuk/files/haringey_final_aqap_2019-24_signed.pdf [Accessed November 2022].

and 2030. The maps assume that background concentrations will improve (i.e. reduce) over time, in line with the predicted reduction in vehicle emissions and emissions from other sources.

- 1.4.4. **Table 1-1** shows the background NO₂, PM₁₀ and PM_{2.5} concentrations for 2022 for the area encompassing the Site, all are well below the relevant AQS objectives (given in the table).

Table 1-1 – 2022 Defra background concentrations (µg/m³)

Grid Square (centred on OS Grid Reference, m)	Annual mean concentration (µg/m ³)		
	NO ₂	PM ₁₀	PM _{2.5}
534500, 189500	21.6	17.9	11.7
AQS objective	40	40	20 ⁹

⁹ The National Archives (2020) *The Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020 – Statutory Instrument No. 1313* [online]. Available at: <https://www.legislation.gov.uk/uksi/2020/1313/regulation/2/made> [Accessed November 2022].

2 DUST RISK ASSESSMENT

2.1 METHODOLOGY

- 2.1.1. Dust comprises particles typically in the size range 1-75 micrometres (μm) in aerodynamic diameter and is created through the action of crushing and abrasive forces on materials. The larger dust particles fall out of the atmosphere quickly after initial release and therefore tend to be deposited near the source of emission. Dust therefore, is unlikely to cause long-term or widespread changes to local air quality; however, its deposition on property and cars can cause 'soiling' and discolouration. This may result in complaints of nuisance through amenity loss or perceived damage caused, which is usually temporary.
- 2.1.2. The smaller particles of dust (less than $10\mu\text{m}$ in aerodynamic diameter) are known as particulate matter (PM_{10}) and represent only a small proportion of total dust released; this includes a finer fraction, known as $\text{PM}_{2.5}$ (with an aerodynamic diameter less than $2.5\mu\text{m}$). As these particles are at the smaller end of the size range of dust particles, they remain suspended in the atmosphere for a longer period of time than the larger dust particles. They can therefore be transported by wind over a wider area. PM_{10} and $\text{PM}_{2.5}$ are small enough to be drawn into the lungs during breathing, which in sensitive members of the public could have a potential impact on health.
- 2.1.3. An assessment of the likely significant impacts on local air quality due to the generation and dispersion of dust and PM_{10} during the construction phase has been undertaken with reference to: the GLA's SPG; the available information for this phase of the Proposed Development provided by the Client and Project Team; and professional judgement.
- 2.1.4. As previously stated in section 1 of this report, the GLA's SPG requires a dust risk assessment to be undertaken following the methodology published in the IAQM Construction Dust Guidance, which assesses the risk of potential dust and PM_{10} impacts from the following four sources: demolition; earthworks; general construction activities and trackout. It takes into account the nature and scale of the activities undertaken for each source and the sensitivity of the area to an increase in dust and PM_{10} levels to assign a level of risk. Risks are described in terms of there being a low, medium or high risk of dust impacts. Once the level of risk has been ascertained, then site specific mitigation proportionate to the level of risk is identified, and the significance of residual effects determined. A summary of the IAQM Construction Dust Guidance assessment methodology is provided in **Appendix C**.

SELECTION OF SENSITIVE RECEPTORS

- 2.1.5. Sensitive locations are places where the public or sensitive ecological habitats may be exposed to pollutants resulting from activities associated with the Proposed Development. These will include locations sensitive to an increase in dust deposition and PM_{10} exposure as a result of on-site construction activities, locations sensitive to exposure to gaseous pollutants emitted from the exhausts of construction and operational traffic associated with the Proposed Development.
- 2.1.6. According to the IAQM Construction Dust Guidance an assessment is undertaken where there are:
- 'human receptors' within 350m of the site boundary, or
 - 'human receptors' within 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s); and/or
 - 'ecological receptors' within 50m of the site boundary, or

- 'ecological receptors within 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s).

- 2.1.7. It is within these distances that the impacts of dust soiling and increased particulate matter in the ambient air will have the greatest impact on local air quality at sensitive receptors (see **Figure B-2** in **Appendix B**).
- 2.1.8. A review of the Multi-Agency Graphical Information for the Countryside (MAGIC) website¹⁰ showed that there are no designated ecological receptors within 50m of the Site boundary. Neither are there any designated ecological receptors within 50m of roads used for construction traffic. Ecological receptors are therefore not considered further within this assessment.

SIGNIFICANCE CRITERIA

- 2.1.9. The IAQM Construction Dust Guidance assessment methodology recommends that significance criteria is only assigned to the identified risk of dust impacts occurring from a construction activity with appropriate mitigation measures in place. For almost all construction activities, the application of effective mitigation should prevent any significant effects occurring to sensitive receptors and therefore the residual effect will normally be negligible.

2.2 ASSESSMENT OF CONSTRUCTION IMPACTS

DUST AND PM₁₀ ARISING FROM ON-SITE ACTIVITIES

- 2.2.1. Construction activities that have the potential to generate and/or re-suspend dust and PM₁₀, include:
- Site clearance and preparation including demolition activities;
 - Preparation of temporary access/egress to the Site;
 - Earthworks;
 - Materials handling, storage, stockpiling, spillage and disposal;
 - Movement of vehicles and construction traffic within the Site (including excavators and dumper trucks);
 - Exhaust emissions from site plant;
 - Construction of buildings and areas of hardstanding;
 - Internal and external finishing and refurbishment; and
 - Site landscaping after completion.
- 2.2.2. For some potential release sources, for example exposed soil produced from significant earthwork activities, in the absence of dust control mitigation measures dust generation has the potential to occur 24 hours per day over the period during which such activities are to take place. The majority of the releases are likely to occur during the 'working week' which Hill's Construction Management Plan details as between the hours of 08:00 and 18:00 on weekdays and between 08:00 and 13:00 on Saturdays. No works will be carried out on Sundays and Bank Holidays. Where works are

¹⁰ Defra (2022) *MAGIC* [online]. Available at: <https://magic.defra.gov.uk/MagicMap.aspx> [Accessed November 2022].

required to be undertaken outside of these hours (excluding emergencies), these will be subject to prior agreement with the LBH.

- 2.2.3. As stated in Section 1 of this report, it is expected that the construction phase (including demolition) of the Proposed Development will commence in quarter one of 2023 and will be completed by quarter two of 2026.

ASSESSMENT OF POTENTIAL DUST EMISSION MAGNITUDE

- 2.2.4. The IAQM Construction Dust Guidance assessment methodology has been used to determine the potential dust emission magnitude for the following four different dust and PM₁₀ sources: demolition; earthworks; construction; and trackout. The findings of the assessment are presented below.

Demolition

- 2.2.5. The total volume of buildings to be demolished on site is 20,000m³, with potentially dusty construction material, e.g., concrete. Demolition activities will occur less than 20m above ground level and on-site crushing and screening is anticipated and described within the Construction Management Plan issued by Hill. Therefore, the potential dust emission magnitude is considered to be large for demolition activities.

Earthworks

- 2.2.6. The total area of the Site is more than 10,000m², the soil type is a mix of clay and silt and therefore potentially dusty. The total material that will be moved is estimated to be less than 20,000 tonnes. It is also estimated that 5 to 10 heavy earth moving vehicles will be active at any one time. Therefore, the potential dust emission magnitude is considered to be large for earthwork activities

Construction

- 2.2.7. The total volume of buildings to be constructed on the Site will be more than 100,000m³ with potentially dusty construction materials being used. There will be no on-site concrete batching and sand blasting activities. Therefore, the potential dust emission magnitude is considered to be large for construction activities.

Trackout

- 2.2.8. It is understood that there will be 10 to 50 heavy-duty vehicle (HDV) (>3.5t) outward movements in any one day travelling on potentially dusty surface materials. The length of unpaved roads within Site will be less than 50m. Therefore, the potential dust emission magnitude is considered to be large for trackout.
- 2.2.9. **Table 2-1** provides a summary of the potential dust emission magnitude determined for each construction activity considered.

Table 2-1 – Potential dust emission magnitude

Activity	Dust Emission Magnitude
Demolition	Large
Earthworks	Large
Construction activities	Large

Activity	Dust Emission Magnitude
Trackout	Large

ASSESSMENT OF THE SENSITIVITY OF THE STUDY AREA

- 2.2.10. A wind rose generated using 2019 meteorological data obtained from the London City Airport meteorological observation station is provided in **Appendix D**. This shows that the prevailing wind direction is from the southwest, with a smaller proportion of winds from the east and northwest. Therefore, receptors located to the northeast, west and southeast of the Site are more likely to be affected by dust and particulate matter emitted and re-suspended during the construction stage of the Proposed Development.
- 2.2.11. Under low wind speed conditions, it is likely that the majority of dust would be deposited in the area immediately surrounding the source. **Figure B-2** in **Appendix B** shows that the northern Site boundary is adjacent to Burdock Road. North of Burdock Road is Down Lane Park and the Lee Valley Technopark, beyond which is Harris Academy which is a 'high' sensitivity receptor.
- 2.2.12. The eastern Site boundary is adjacent to the A1055 Watermead Way, Berol House and the Berol Quarter residential-led redevelopment site. Further to the east is the Network Rail Tottenham Maintenance Delivery Unit and the railway line that runs north to south between Northumberland Park and Tottenham Hale stations. Also, within 350m of the eastern Site boundary are several sensitive residential properties, including student accommodation, on Lebus Street, Daneland Walk, Waterside Way and Mill Mead Road along with Tottenham Hale Medical Practice and Shakira's Tiney Nursery.
- 2.2.13. **Figure B-2** in **Appendix B** also shows that the southern of the Site boundary is adjacent to residential properties on Hale Road. The area further south is made up of a mixture of commercial and residential properties as well as Welbourne Children's Centre and Welbourne Primary School.
- 2.2.14. Finally, the west of the Site is bounded by Down Lane Park Playground, Living Under One Sun Community Hub and the Pavilion Pre-School. Also to the west are numerous residential properties.
- 2.2.15. **Figure B-2** in **Appendix B** shows there are more than 100 highly sensitive receptors within 20m of the Site boundary.
- 2.2.16. As given in **Table 1-1**, the background PM₁₀ concentration for 2022 is 17.9µg/m³. Therefore, the sensitivity of the surrounding area to human health impacts and dust soiling is medium and high, respectively.
- 2.2.17. According to the Construction Logistics Plan issued by WSP¹¹, construction vehicles are expected to egress the Site onto Ashley Road using a dedicated vehicle entrance. Construction vehicles will then join the A1055 Watermead Way and travel north.

¹¹ WSP (2022) *Cannon Factory, Ashley House, and Ashley Park Detailed Construction Logistics Plan*. London: WSP.

- 2.2.18. Within 50m of the route that construction vehicles are expected to take there is Harris Academy and Bright Gems Nursery. Also within 50m of the construction vehicle routes are residential properties along and off Ashley Road and Watermead Way. Consequently, the sensitivity of the area to human health impacts and dust soiling specifically from trackout is medium and high, respectively.
- 2.2.19. Taking the above into account and following the IAQM Construction Dust Guidance assessment methodology, the sensitivity of the area to changes in dust and PM₁₀ concentrations has been derived for each of the construction activities considered. The results are shown in **Table 2-2**.

Table 2-2 – Sensitivity of the surrounding area

Potential Impact	Sensitivity of the surrounding area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	High	High	High	High
Human Health	Medium	Medium	Medium	Medium

RISK OF IMPACTS

- 2.2.20. The predicted dust emission magnitude has been combined with the sensitivity of the area to determine the risk of impacts during the construction stage, prior to mitigation.
- 2.2.21. **Table 2-3** below provides a summary of the risk of dust impacts for the Proposed Development. The risk category identified for each construction activity has been used to determine the level of mitigation required.

Table 2-3 – Summary dust risk table to define site specific mitigation

Potential Impact	Risk			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	High Risk	High Risk	High Risk	High Risk
Human Health	High Risk	Medium Risk	Medium Risk	Medium Risk

- 2.2.22. In accordance with the GLA's SPG, the overall dust risk rating of the Proposed Development has been classified as **high risk**.

3 AIR QUALITY DUST MANAGEMENT PLAN

3.1 DUST, PM₁₀ AND NO_x EMISSIONS MITIGATION MEASURES

- 3.1.1. Best practice mitigation measures are set out in the GLA's SPG for controlling dust, PM₁₀ and NO_x emissions from construction sites.
- 3.1.2. Commensurate with the dust risk assessment presented in section 2.2, the proposed mitigation measures set out in **Table 3-1** consider both the high risk of dust soiling and affects to human health posed by the site, if unmitigated. Specific details on the roles and responsibilities of Site personnel, the Site layout and training and are included in sections 3.2 to 3.4 of this report.

Table 3-1 – Proposed site-specific dust, PM₁₀ and NO_x emissions mitigation measures

Mitigation measure	Implemented on site
Site Management	
Develop and implement a stakeholder communications plan that includes community engagement before work commences on site	✓
Develop and implement a Dust Management Plan.	✓
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.	✓
Record and respond to all dust and air quality pollutant emissions complaints. Identify the causes and 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.	✓
Hold regular liaison meetings with other high risk construction sites within 500m of the Site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised.	✓
Preparing and maintaining the site	
Plan Site layout: machinery and dust causing activities should be located away from receptors.	✓
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.	✓

Mitigation measure	Implemented on site
Remove materials that have the potential to produce dust from Site as soon as possible, unless being reused on Site.	✓
Cover, seed, or fence stockpiles to prevent wind whipping.	✓
Measures specific to demolition	
A soft strip inside buildings will be completed before demolition is undertaken. Retain walls and windows in the rest of the building to provide screening against dust.	✓
Ensure effective water suppression is used during demolition operations.	✓
Avoid explosive blasting, using appropriate manual or mechanical alternatives.	✓
Bag and remove any biological debris or damp down such material before demolition.	✓
Waste Management	
Waste will be reused and recycled where possible to reduce dust from waste materials.	✓
Waste materials will be removed from the Site on average 3 times per week.	✓
Bonfires and burning of waste materials will be prohibited.	✓
Measures 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 powder materials, ensure bags are sealed after use and stored appropriately to prevent dust.	✓
Measures specific to earthworks	
Earthworks and exposed areas/soil stockpiles will be covered or fenced to prevent wind whipping and will be re-vegetated to stabilize surfaces, as soon as practicable.	✓
Hessian, mulches or tackifiers will be used where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.	✓

Mitigation measure	Implemented on site
Secure covers will only be removed in small areas during work and not all at once.	✓
Measures specific to trackout	
Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the Site.	✓
Ensure vehicles entering and leaving the Site are securely covered to prevent escape of materials during transport.	✓
Avoid dry sweeping of large areas.	✓
Inspect 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 logbook.	✓
Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems 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 10m from receptors where possible. Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site.	✓
Site PM₁₀ and dust 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 window sills within 100m of the Site boundary, with cleaning to be provided if necessary. The Site Manager will complete a daily dust inspection report form and review weekly any issues raised about the overall effectiveness of the on-site dust control and off-site monitoring measures. A sample daily dust inspection report form can be found in Appendix E .	✓
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 a	✓

Mitigation measure	Implemented on site
large site, before work on a phase commences. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction.	
Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and the action taken to resolve the situation is recorded in the logbook.	✓
Operating on-road vehicles, sustainable travel, and NRMM	
Ensure all on-road vehicles comply with the requirements of the London ULEZ and the London NRMM standards, where applicable (see section 3.7 for further details).	✓
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 roads and work areas.	✓
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).	✓
Only use cutting, grinding or sawing equipment fitted or in conjunction with sustainable 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 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.	✓

3.2 ROLES AND RESPONSIBILITIES

- 3.2.1. The AQDMP is a living document, and the monitoring procedures, responsibilities and compliance actions will be updated as appropriate. It is the responsibility of the Site Manager, or their designated deputy, to be aware of its contents, as well as to provide relevant training to staff and ensure that procedures are being implemented to achieve compliance with this AQDMP. All staff will

therefore be responsible for minimising any dust emissions from the Site during the demolition and construction period.

3.2.2. During the hours of Site operation, the Site will be supervised by at least one member of staff who is suitably trained and conversant with the requirements of the AQDMP with respect to:

- Operational controls and environmental monitoring;
- Site maintenance (site inspection checklist);
- Record keeping; and
- Emergency action plans.

3.2.3. The Project Manager will have overall responsibility for air quality during the construction and demolition period and may delegate responsibilities to others. The Project Manager's contact information is as follows:

Louis Dzimati
Project Manager
07512 725767
LouisDzimati@hill.co.uk

3.2.4. The appropriate resources will be supplied to cover the requirements of this AQDMP and ensure that these are communicated effectively and acted upon in an appropriate manner. Key roles and responsibilities relating to air quality are detailed in **Table 3-2**.

Table 3-2 – Key roles and responsibilities relating to air quality

Role	Responsibilities
Project Manager and Site Manager	Ensure that the mitigation and monitoring requirements laid out in the AQDMP are carried out during works on site.
	Ensure that staff are aware of the requirements of the AQDMP and have access to the document. Regular training of staff should be implemented.
	Undertake and record dust inspections of the site as required by the AQDMP.
	Ensure that site documentation (including method statements and risk assessments) includes dust mitigation.
	Act on complaints and dust alerts as detailed in the AQDMP.
	Maintain up-to-date site log of air quality events and complaints.
	Investigate the cause of air quality events and apply additional mitigation as required.
	Act as the key point of contact for queries and complaints regarding air quality emissions from site.
All site personnel	Carry out the works in line with the AQDMP requirements.
	Report observations of dust events or deviations from the AQDMP procedures.
	Attend environmental management training.

3.3 CONSTRUCTION SITE AND EQUIPMENT LAYOUT

- 3.3.1. According to the Construction Management Plan issued by Hill, prior to the commencement of demolition or construction works on-site, solid timber hoarding will be erected on all Site boundaries where existing fencing is not already in place. Scaffolding will be fitted with Monarflex to enclose all areas thus containing any dust and PM₁₀ arising during demolition. As demolition activities progress, the scaffolding will be removed.
- 3.3.2. The Site layout will ensure that the dust generating activities and machinery will be located away as far as practically possible from off-site sensitive receptors such as schools, residential dwellings, care homes and medical facilities.

3.4 TRAINING

- 3.4.1. Procedures and practices relating to air quality and dust control will be incorporated into the site and employee inductions. Toolbox talks will be delivered to all Site operatives weekly to ensure that all aspects of the AQDMP are understood and put into practice.
- 3.4.2. A management plan will be implemented alongside this AQDMP to ensure operatives are aware of the consequences of not following this plan and know how to respond to any potential incidents.

3.5 COMMUNITY ENGAGEMENT AND COMPLAINTS PROCEDURE

ENGAGEMENT WITH THE COMMUNITY

- 3.5.1. As outlined above, best practice mitigation measures will be implemented to minimise the impacts associated with demolition and construction and maintain a good relationship with local residents, neighbours and other external stakeholders.
- 3.5.2. It is understood from the Construction Management plan that by adhering to the Code of Practice within the Considerate Constructors Scheme, the responsible person will ensure that everyone affected by the construction activities will be advised prior to the commencement of the works. Neighbours will be informed of site activities that could give rise to dust and PM₁₀.
- 3.5.3. Liaison with any local residents will be completed by and co-ordinated through the Site Manager. The Construction Management Plan describes how the construction phase has the following activities intended to provide information to community stakeholders:
- Where existing local newspapers and community letters are in place the contractor will contribute content.
 - Social media platforms, such as LinkedIn, Instagram and Vlogs, will be used to promote key milestones and community engagement events.
 - A quarterly digital/paper newsletter will be issued to provide project updates.
 - Direct mail will be used to notify stakeholders of important project updates.
 - Flyers, brochures and posters will be used to provide updates on works.
 - Volunteer support will be provided at seasonal events, community-led events and career fairs.
- 3.5.4. Furthermore, the Site Manager or designated deputy will liaise with selected local residents to establish the monitoring programme as and where appropriate. The data resulting from the monitoring programme will be made available to community stakeholders on request.

COMPLAINTS PROCEDURE

- 3.5.5. In the event that any complaints are received, either from members of the public directly or via the regulating authority, an investigation will be started on the day of receipt. The findings will be communicated to the regulating authority within two working days of receipt of the complaint.
- 3.5.6. The complaints procedure involves the following tasks:
- Undertake a visual monitoring inspection and identify the activities that were being carried out immediately prior to receipt of the complaint, or the period identified in the complaint.
 - Review the control and mitigation measures in place and determine that they are functioning as they should.
 - Identify further actions that can be taken to reduce the emissions of dust resulting from the activity and update the AQDMP.
 - Report the findings to the Site Team and regulating authority, and implement any appropriate further mitigation measures.
 - Contact the complainant and advise them of the mitigation response. This may include an in person visit to discuss the issue and identify any other ongoing issues.
 - Record the details of the complaint, including the complainant's details, action taken and meteorological conditions in the Site Logbook.
- 3.5.7. All details will be retained for the duration of the works and will be presented to LBH upon request.
- 3.5.8. The complaints reporting process will be the responsibility of the Site Manager. This will include collating information about any complaints using the Dust Complaints Form in **Appendix F**, conducting investigations and monthly reporting to the EHO at LBH.
- 3.5.9. A complaints register will be maintained on-site and will include the complainant's personal details (name, address, telephone number) and the date the complaint was registered.
- 3.5.10. The register will include the following information on the complaint:
- Who was responsible for the investigation;
 - Date and time of the investigation;
 - The meteorological conditions; and
 - The findings of the investigation.

3.6 MONITORING

- 3.6.1. Based on the outcome of dust risk assessment in Section 2.2 of this report, dust monitoring will be undertaken throughout the duration of the project and is adapted to each phase of the works. Monitoring data will be continually assessed to ensure any mitigation is effective to appropriate levels, for the purposes of risk management, and to inform any amendments to the programme as a result of the changing nature of activities on site or as a result of any complaints that are upheld.

VISUAL DUST MONITORING

- 3.6.2. Daily visual monitoring will be carried out by a suitable person, trained and nominated by the Site Manager. As part of the visual dust inspection the nominated person will undertake the following:
- Record all inspections of the routes around the site, the site entrance and the haul routes used on the site and any subsequent action on a dust log, to be provided by the Site Manager, at least once a day.

- Carry out site inspections to monitor compliance with dust control procedures in accordance with this document and record the results of the inspections, including if there are no incidences on site, in the environmental log at least once a day.
- Where passive or active dust monitoring is undertaken, inspect the dust monitors and review the data recorded when available.
- Increase the frequency of site inspections when activities with high potential to produce dust are being carried out, such as earthworks activities and during prolonged windy or dry conditions.
- Record any exceptional occurrences causing dust episodes on or off-site and the action taken to resolve the situation.
- Record where follow up actions were undertaken such as informing stakeholders, re-training staff, request for an updated to the DPMP or contacting the complainant if necessary.

3.6.3. An example dust log form is given in **Appendix E**.

MONITORING

3.6.4. The Construction Management Plan recommends that noise, dust and vibration will be undertaken on-site. The indicative locations of the monitoring sites are illustrated in **Figure 3-1** below and will be agreed through consultation with the LBH.

Figure 3-1 - Proposed dust monitoring locations



- 3.6.5. The IAQM Guidance on Monitoring in the Vicinity of Demolition and Construction¹² sets out recommendations for monitoring dust and particulate matter using passive and automatic instruments. The monitoring method to be applied on-site will be determined following consultation with the EHO at the LBH. The following sections summarise the potential monitoring approaches.

Passive dust monitoring

- 3.6.6. Passive dust deposition and dust flux gauges, such as sticky pad gauges, can be used in combination on-site. To assess dust propagation over the site boundary directional dust can be monitored using dust gauges comprising a 'sticky cylinder' method in which dust flux is retained on an adhesive surface for subsequent quantification. The deposited dust sampling provides data on dust deposition rates (mg/m²/day) which can be compared to nuisance guidelines and directional dust flux coverage to determine the source of the deposited dust.
- 3.6.7. The dust deposition and flux gauges are changed monthly; however, the frequency of changeovers is subject to review as the construction stage proceeds.
- 3.6.8. In the absence of statutory guidance for limit values for dust deposition, the suggested limit from the IAQM Monitoring Guidance of 200mg/m²/day would be used as an indicator of dust deposition rates likely to result in annoyance complaints.
- 3.6.9. Given that the analysis would be retrospective and cannot take into account short-term peaks in dust production or meteorological conditions that may result in annoyance complaints, it is recommended that a more conservative threshold of 150mg/m²/day should be used as a trigger to take action on-site. This should entail the review of the activities being undertaken which have the potential to produce nuisance dust, and a review the effectiveness of in-use mitigation measures.

Automatic PM₁₀ monitoring

- 3.6.10. Monitoring for PM₁₀ using real-time automatic monitors is recommended in Appendix 8 of the GLA's SPG. WSP best practice would be to recommend the use of automatic rather than passive monitors.
- 3.6.11. Accredited MCERTS compliant PM₁₀ monitors should be installed on the site boundaries prior to any Site clearance work. The installation and location of the monitors should be in accordance with the IAQM Monitoring Guidance. They should be installed a minimum of 1m above the Site hoarding and at the boundary closest to human receptors.
- 3.6.12. Continuous real-time PM₁₀ monitoring would be undertaken for the duration of the project and the data should be accessible to the Site Manager and EHO. Email alerts should also be sent to the Site Manager when specified thresholds, outlined below, are exceeded.

¹² IAQM (2018) *Guidance on Monitoring in the Vicinity of Demolition and Construction Sites Version 1.1* [online]. Available at: https://iaqm.co.uk/text/guidance/guidance_monitoring_dust_2018.pdf [Accessed October 2022].

Site Alert Level

- 3.6.13. The IAQM Monitoring Guidance recommends a trigger alert level of $190\mu\text{g}/\text{m}^3$ based on an hourly mean PM_{10} concentration. It is recommended that internal amber PM_{10} alerts are set at $150\mu\text{g}/\text{m}^3$ (hourly mean) as well. Action in the event an alert occurs is as follows:
- Amber ($150\mu\text{g}/\text{m}^3$) alert – Site Manager to review activities to identify the source. If the alert relates to a site activity, mitigation will be put in place to immediately reduce emissions
 - Red ($190\mu\text{g}/\text{m}^3$) alert – Site Manager to review activities to identify the source.
 - If the cause of alert is a site activity, mitigation will be put in place to reduce levels.
 - Where mitigation proves insufficient, then all dust generating activities will cease.
- 3.6.14. Should the site action level be exceeded; automatic alerts will be sent via email and/or text message to nominated individuals, including the Site Manager and Project Manager. The alerts will include the location and time of exceedance and the recorded PM_{10} concentration.
- 3.6.15. Within 15 minutes of receiving an email alert, the Site Manager will investigate the exceedance, undertaking a visual inspection of construction activities to ensure mitigation measures are being employed. The Site Manager will then take corrective measures if required according to the protocol detailed above. Trigger exceedances could occur due to unrelated activities e.g., Saharan dust episodes.
- 3.6.16. The cause of the exceedance will be identified, and mitigation implemented. The remedial actions taken will be recorded in the dust log form (see **Appendix E**) and will detail reasons for the exceedance. In the event of a 'red alert' exceedance or visual identification of dust incident the council will be issued the dust log form by email within 24 hours or the next working day if the event occurs at a weekend or on a bank holiday.
- 3.6.17. Once mitigation measures are implemented, site activities will continue whilst being monitored to ensure that the mitigation has been effective. The Project Manager and Site Manager will be notified of the exceedance as soon as practical, along with details of any corrective and preventative actions.

REPORTING

- 3.6.18. It is recommended that a short three-month summary is produced giving the dust monitoring results and any exceedances of alert levels. A summary of site operations together with any exceptional incidents throughout the period will also be presented, with any links between the activities and monitoring results discussed. If necessary, further recommendations for any corrective actions or improvements will be made.
- 3.6.19. The report will be developed by the Site Manager and any corrective actions implemented. The report will be retained on-site and will be available for inspection by the EHO at the LBH if required.

3.7 ON-ROAD VEHICLE AND NRMM EMISSIONS

ON-ROAD VEHICLES

- 3.7.1. Section 1.3 of this reports states that the Site is located within London's ULEZ. Consequently, all on-road vehicles will comply with the ULEZ vehicle emission standards (e.g. Petrol/Diesel Euro 6 and Euro VI) as a minimum.

- 3.7.2. The use of Ultra-Low Emission Vehicles (ULEV), e.g., electric, hybrid (electric-petrol) site vehicles is encouraged. The use of suppliers that can provide electric or hybrid vehicles where practicable is encouraged.
- 3.7.3. Wherever possible, construction site workers will use sustainable means of travel such as public transport, walking and car-sharing, consistent with the mitigation measures identified in the LBH's AQAP. Information on public transport access to site will be provided in the form of noticeboards and toolbox talks. Car-sharing for contractors will be encouraged on-site.

NRMM

- 3.7.4. By virtue of the Site's location within an Opportunity Area, all NRMM will need to comply with Stage IV NO_x and PM₁₀ Emission Standards (or the latest standard if the GLA requirements change) as stated in The Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018¹³, and its subsequent amendments, as a minimum if equal to or over 37kW.
- 3.7.5. Where compliance with Stage IV requirements is not achievable or practical, an exemption should be sought from the GLA prior to arrival of the equipment on site and the details recorded in the monthly NRMM compliance form (see **Appendix G**).
- 3.7.6. Use of NRMM will be minimised as much as possible and electric or battery-powered alternatives will be used as a preference. If NRMM under 37kW is to be used, use of the equipment will be minimised and kept as far away from sensitive receptors as is practicable.
- 3.7.7. All NRMM for engine sizes of 37kW to 560kW inclusive for the works will be registered on the NRMM register prior to the commencement of demolition works. A NRMM compliance form (see **Appendix G**) will be issued to the council monthly by e-mail.
- 3.7.8. All relevant machinery emissions information and documentation will be stored and summarised within an electronic filing system. The project will record the plant details on a spreadsheet, or similar, and the NRMM online register (<https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/non-road-mobile-machinery-register/login>) will be completed and maintained by the project administrative support and overseen by the Site Manager. The project team will co-operate with local authority inspections and provide information as required.

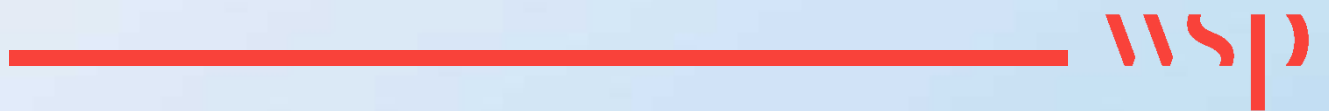
¹³ The National Archives (2018) *The Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018 – Statutory Instrument No. 764* [online]. Available at: <https://www.legislation.gov.uk/uksi/2018/764/contents/made> [Accessed November 2022].

4 SUMMARY

- 4.1.1. This AQDMP was produced to discharge pre-commencement planning condition 26, relating to the proposed development of Cannon Factory and Ashley House (HGY/2016/4165), and pre-commencement planning condition 10, relating to the proposed development of Ashley Park (HGY/2019/0108) on Ashley Road, London N17 9LJ.
- 4.1.2. A qualitative assessment of the potential impacts of construction dust emissions on local air quality was undertaken using the IAQM Construction Dust Guidance methodology. This identified that there is a high risk of impacts on local air quality due to construction activities. However, through good site practice and the implementation of suitable mitigation measure, the effect of dust and PM₁₀ releases would be significantly reduced.
- 4.1.3. This AQDMP provides a strategy to minimise the generation of dust and particulate matter and to control their release during the Project. The plan includes:
- A description of the Site and the surrounding area;
 - An assessment of the risks associated with dust and PM₁₀ emitted due to demolition and construction activities;
 - Site-specific mitigation measures and a procedure for their implementation;
 - The roles and responsibilities of construction personnel;
 - Construction Site and equipment layout;
 - Training;
 - The community engagement plan and complaints procedure for which standard reporting templates are provided;
 - A proposed dust monitoring programme; and
 - Requirements for on-road vehicles and NRMM.
- 4.1.4. The AQDMP is a living, working document. It will be available to all on-site personnel with the responsibility for managing air quality. It will be reviewed every six months following its implementation and also following any incidents on-site, changes in site operations, or if any releases of fugitive dust occur over a prolonged period, which require a change to any part of the AQDMP.
- 4.1.5. Updates will be agreed between the Project Manager, Site Manager and the EHO from the LBH.

Appendix A

GLOSSARY

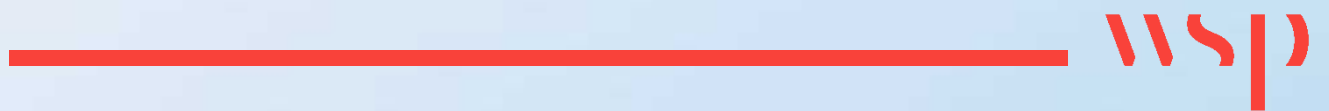


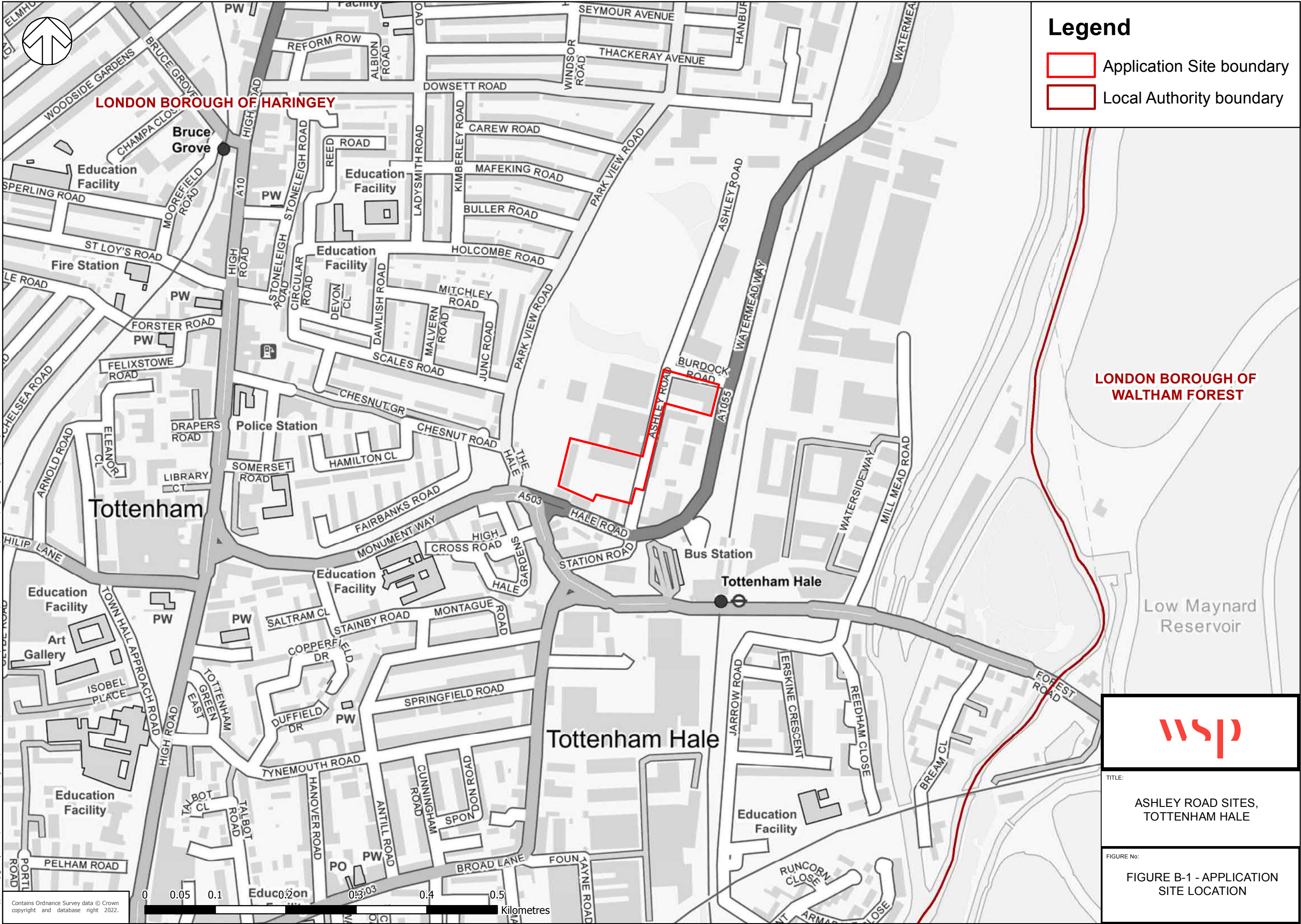
Term	Definition
Air quality objective	Policy target generally expressed as a maximum ambient concentration to be achieved, either without exception or with a permitted number of exceedances within a specific timescale (see also air quality standard).
Ambient air	Outdoor air in the troposphere, excluding workplace air.
Annual mean	The average (mean) of the concentrations measured for each pollutant for one year.
AQAP	Air Quality Action Plan
AQDMP	Air Quality and Dust Management Plan
AQMA	Air Quality Management Area.
AQS	Air Quality Strategy
CLP	Construction Logistics Plan
Defra	Department for Environment, Food and Rural Affairs
Dust	Dust comprises particles typically in the size range 1-75 micrometres (µm) in aerodynamic diameter and is created through the action of crushing and abrasive forces on materials.
Exceedance	A period of time where the concentration of a pollutant is greater than the appropriate air quality standard.
GLA	Greater London Authority
HDV	Heavy-Duty Vehicle
IAQM	Institute of Air Quality Management
LBH	London Borough of Haringey
MAGIC	Multi-Agency Geographical Information for the Countryside
NO ₂	Nitrogen dioxide.
NO _x	Nitrogen oxides.
NRMM	Non-Road Mobile Machinery
PM ₁₀	Particulate matter with an aerodynamic diameter of less than 10 micrometres.
PM _{2.5}	Particulate matter with an aerodynamic diameter of less than 2.5 micrometres.
SPG	Supplementary Planning Guidance

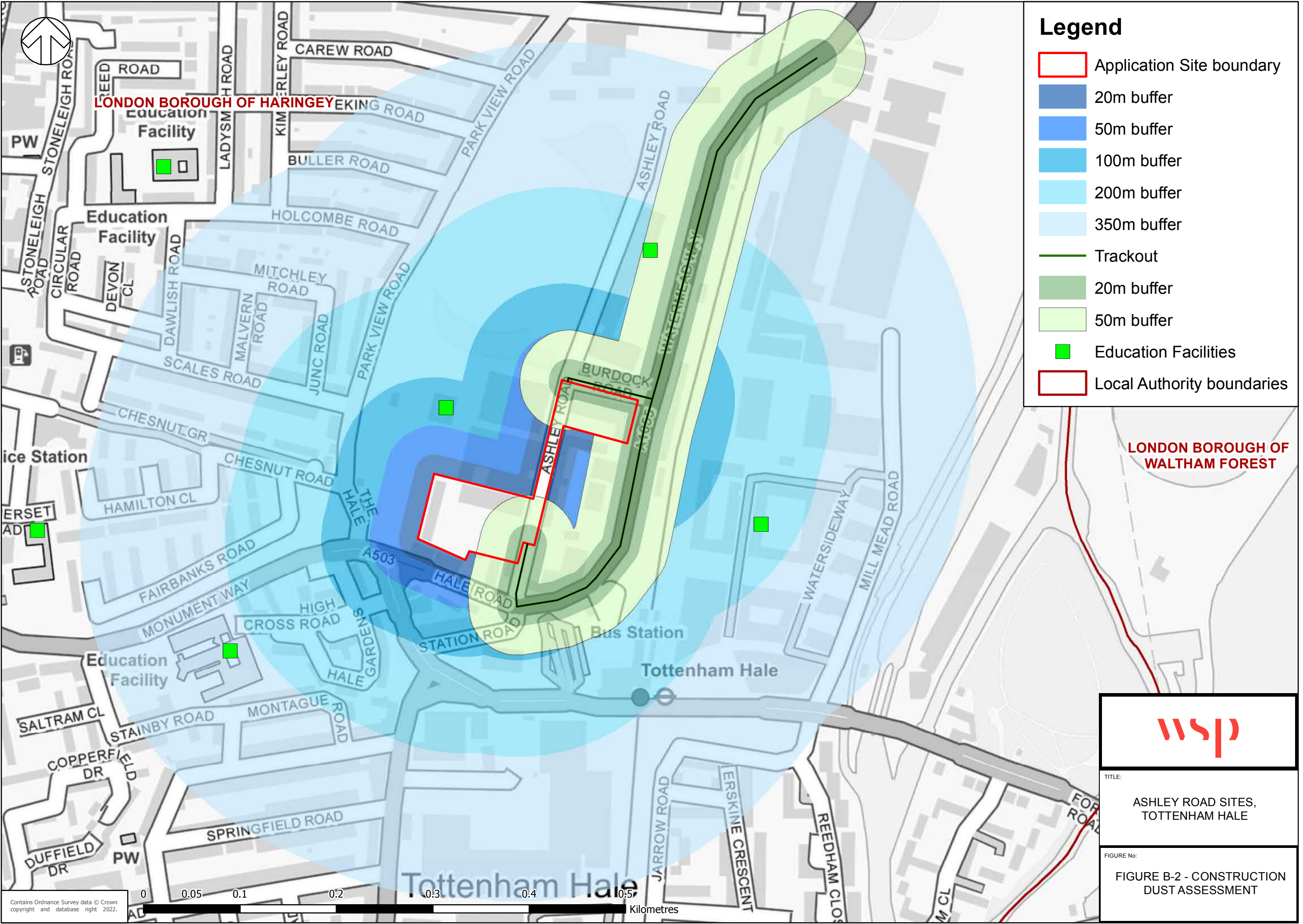
Term	Definition
Trackout	The transport of dust and dirt from the construction / demolition site onto the public road network, where it may be deposited and then re-suspended by vehicles using the network. This arises when heavy duty vehicles (HDVs) leave the construction / demolition site with dusty materials, which may then spill onto the road, and/or when HDVs transfer dust and dirt onto the road having travelled over muddy ground on site.
$\mu\text{g}/\text{m}^3$ micrograms per cubic metre	A measure of concentration in terms of mass per unit volume. A concentration of $1\mu\text{g}/\text{m}^3$ means that one cubic metre of air contains one microgram (millionth of a gram) of pollutant.

Appendix B

FIGURES

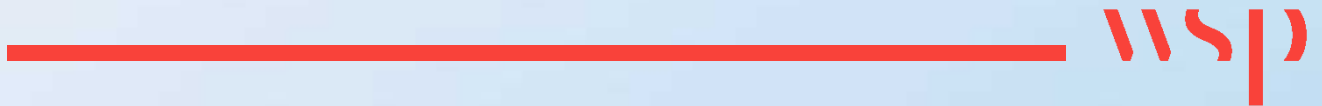






Appendix C

IAQM CONSTRUCTION DUST ASSESSMENT METHODOLOGY



STEP 1 - SCREENING THE NEED FOR A DETAILED ASSESSMENT

- 4.1.6. An assessment will normally be required where there are:
- 'Human receptors' within 350m of the site boundary; or within 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s); and/or
 - 'Ecological receptors' within 50m of the site boundary; or within 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s).
- 4.1.7. Where the need for a more detailed assessment is screened out, it can be concluded that the level of risk is "negligible".

STEP 2 - DEFINE THE POTENTIAL DUST EMISSION MAGNITUDE

- 4.1.8. The following are examples of how the potential dust emission magnitude for different activities can be defined; it should be noted that not all the criteria need to be met for a particular class. Other criteria may be used if justified in the assessment.

Table 2A: Examples of Human Receptor Sensitivity to Construction Stage Impacts

Dust Emission Magnitude	Activity
Large	Demolition >50,000m ³ building demolished, dusty material (e.g. concrete), on-site crushing/screening, demolition >20m above ground level
	Earthworks >10,000m ² site area, dusty soil type (e.g. clay), >10 earth moving vehicles active simultaneously, >8m high bunds formed, >100,000 tonnes material moved
	Construction >100,000m ³ building volume, on site concrete batching, sandblasting
	Trackout >50 HDVs out / day, dusty surface material (e.g. clay), >100m unpaved roads
Medium	Demolition 20,000 - 50,000m ³ building demolished, dusty material (e.g. concrete) 10-20m above ground level
	Earthworks 2,500 - 10,000m ² site area, moderately dusty soil (e.g. silt), 5-10 earth moving vehicles active simultaneously, 4m - 8m high bunds, 20,000 -100,000 tonnes material moved
	Construction 25,000 - 100,000m ³ building volume, dusty material e.g. concrete, on site concrete batching
	Trackout

Dust Emission Magnitude	Activity
	10 - 50 HDVs out / day, moderately dusty surface material (e.g. clay), 50 -100m unpaved roads
Small	Demolition <20,000m ³ building demolished, non-dusty material (e.g. metal cladding), <10m above ground level, work during wetter months
	Earthworks <2,500m ² site area, soil with large grain size (e.g. sand), <5 earth moving vehicles active simultaneously, <4m high bunds, <20,000 tonnes material moved, earthworks during wetter months
	Construction <25,000m ³ , non-dusty material (e.g. metal cladding or timber)
	Trackout <10 HDVs out / day, non-dusty soil, < 50m unpaved roads

STEP 2B - DEFINE THE SENSITIVITY OF THE AREA

- 4.1.9. The tables below present the IAQM assessment methodology to determine the sensitivity of the area to dust soiling, human health and ecological impacts respectively. The IAQM Construction Dust Guidance provides guidance to allow the sensitivity of individual receptors to dust soiling and health effects to assist in the assessment of the overall sensitivity of the study area.

Table 2Ba: Sensitivity of the Area to Dust Soiling Effects

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		<20	<50	<100	<350
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 2Bb: Sensitivity of the Area to Human Health Impacts

Receptor Sensitivity	Annual Mean PM ₁₀ Concentration (µg/m ³)	Number of Receptors	Distance from the Source (m)				
			<20	<50	<100	<200	<350
High	>32	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	28-32	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	24-28	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<24	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium	>32	>10	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	28-32	>10	Medium	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	24-28	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	<24	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Low	-	>1	Low	Low	Low	Low	Low

Table 2Bc: Sensitivity of the Area to Ecological Impacts

Receptor Sensitivity	Distance from the Sources (m)	
	<20	<50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

STEP 2C - DEFINE THE RISK OF IMPACTS

- 4.1.10. The dust emissions magnitude determined at Step 2A should be combined with the sensitivity of the area determined at Step 2B to determine the risk of impacts without mitigation applied. For those cases where the risk category is 'negligible' no mitigation measures beyond those required by legislation will be required.

Table 2C: Risk of Dust Impacts

Sensitivity of surrounding area	Dust Emission Magnitude		
	Large	Medium	Small
Demolition			
High	High Risk	Medium Risk	Medium Risk
Medium	High Risk	Medium Risk	Low Risk
Low	Medium Risk	Low Risk	Negligible
Earthworks and Construction			
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible
Trackout			
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Low Risk	Negligible
Low	Low Risk	Low Risk	Negligible

STEP 3 - SITE SPECIFIC MITIGATION

- 4.1.11. Having determined the risk categories for each of the four activities it is possible to determine the site-specific measures to be adopted. These measures will be related to whether the site is considered to be a low, medium or high-risk site. The IAQM Construction Dust Guidance details the mitigation measures required for high, medium and low risk sites as determined in Step 2C.

STEP 4 – DETERMINE SIGNIFICANT EFFECTS

Once the risk of dust impacts has been determined in Step 2C and the appropriate dust mitigation measures identified in Step 3, the final step is to determine whether there are significant effects arising from the construction stage. For almost all construction activities, the application of effective mitigation should prevent any significant effects occurring to sensitive receptors and therefore the residual effect will normally be negligible.

Appendix D

WIND ROSE

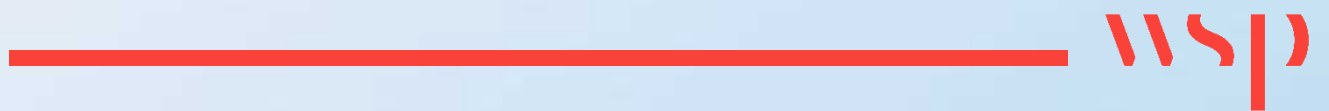
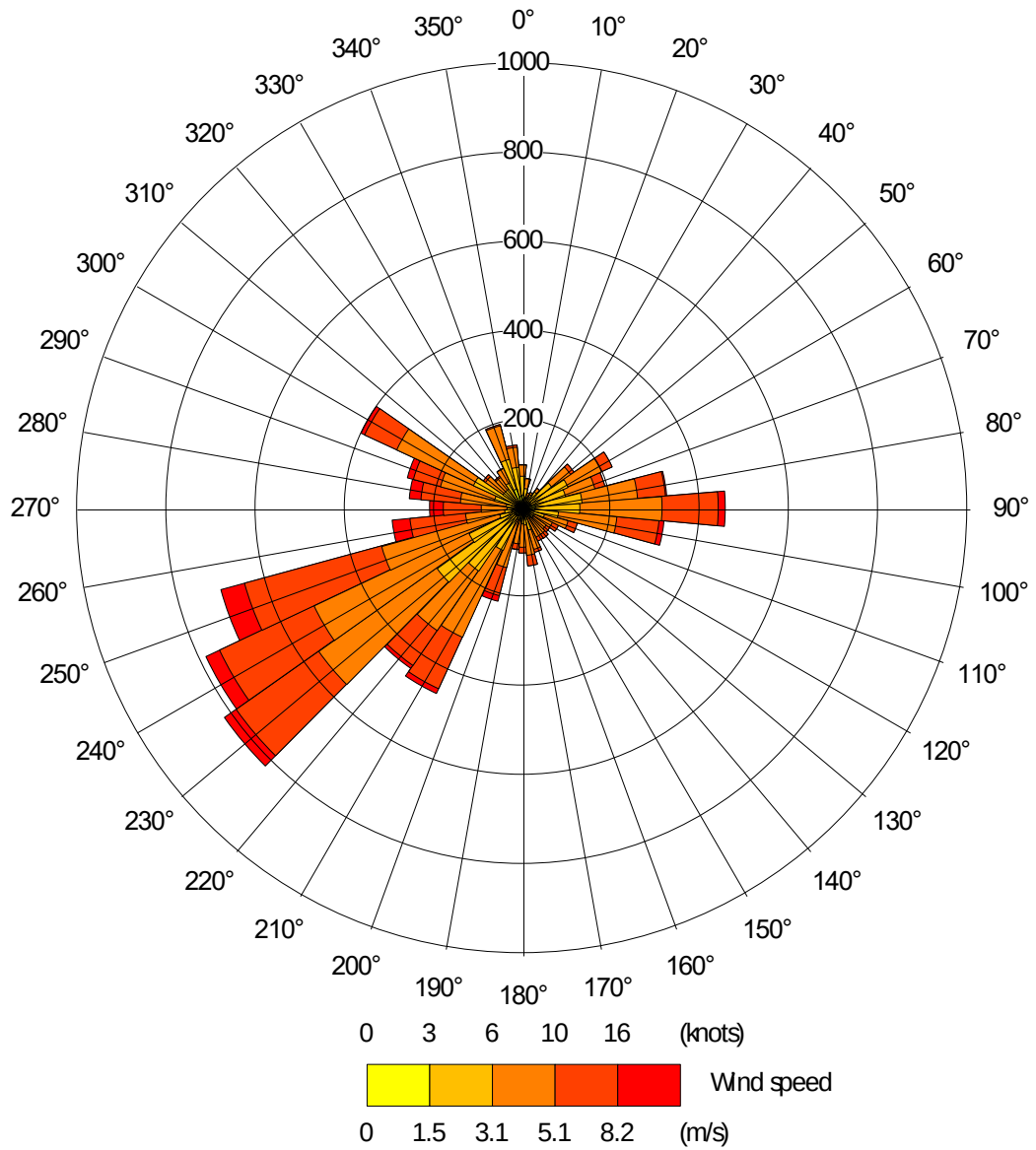
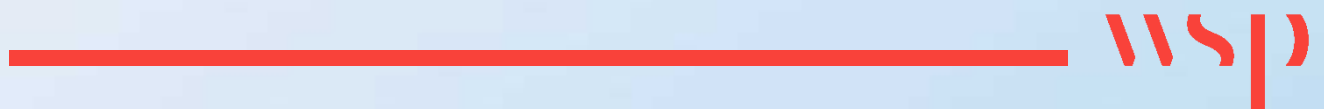


Figure D-1 - London City Airport Wind Rose (2019)



Appendix E

DUST LOG REPORT FORM



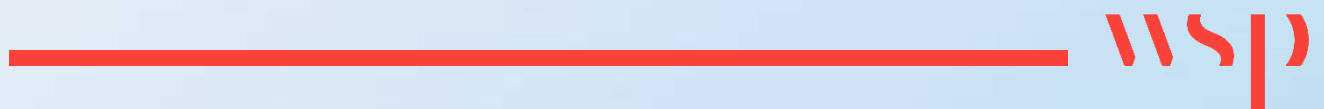
Dust Log					
Date Site Name	Weather	Dry		Wet	
	Wind Direction (from)	N	S	E	W
		NE	NW	SE	SW
	Wind Speed	Calm	Low	Moderate	High
Daily Site Activities					
<i>This section should outline the planned daily activities on the site for the day.</i>					
Incidents/Complaints/Alerts					
<i>Record details of the incident/complaint/alert, to whom and how it was reported and what time. What was the cause of the incident/complaint/alert and where did it take place? Add detail to Dust Complaint Form.</i>					
Action Undertaken					
<i>Who undertook the site inspection, at what time and was the elevated dust due to site activities or off-site activities? What was done to minimise the dust levels and was this effective?</i>					

Follow-Up Action

Where there any follow up actions undertaken such as informing stakeholders, re-training staff, request for an updated to the DPMP or contacting the complainant if necessary?

Appendix F

DUST COMPLAINTS FORM



Customer Details	
Customer Name	
Address	
Postcode	
Customer Contact Details	
Tel	
Email	
Date	
Complaint Ref Number	
Complaint Details	
Investigation Details	
Investigation carried out by	
Position	
Date & time investigation carried out	
Weather conditions	
Wind direction and speed	
Investigation findings	
Feedback given to Environment Agency and/or local authority	
Date feedback given	
Feedback given to public	
Date feedback given	

Review and Improve	
Improvements needed to prevent a reoccurrence	
Proposed date for completion of the improvements	
Actual date for completion	
If different insert reason for delay	
Does the dust management plan need to be updated	
Date that the dust management plan was updated	
Closure	
Site Manager review date	
Site Manager signature to confirm no further action required	

Appendix G

NRMM MONTHLY COMPLIANCE FORM

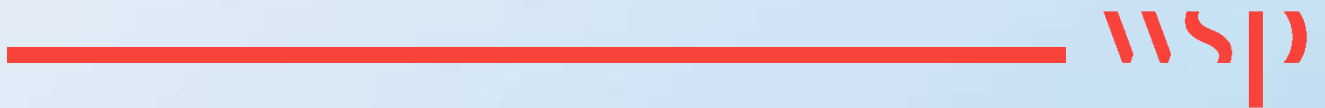




Table G-1 – NRMM Monthly Compliance Form

Contractor	Machine Type	Plant ID	kW	Engine Manufacturer	Type Approval Number	EU Stage	Retrofit Info	Date Checked	Exemption applied for	Date of Exemption Application



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