



Air Quality Assessment for a Proposed Residential Development on land at 342 Slade Lane, Manchester, M19 2BX.

Prepared for

Mr Javed Shah
342 Slade Lane
Manchester
M19 2BX.

May 2024



Contents

1. Introduction	3
Site Location and Context	3
2. Policy and Guidance	4
Planning	4
Local Situation.....	5
3. Construction Impacts on Local Air Quality.....	7
Assessment of Risk.....	7
4. Operational Phase.....	15
The Proposed Development	15
Assessment	15
5 Mitigation Measures.....	18
6 Conclusion.....	19
Figure 1 – Aerial Photograph	20
Appendix A – Construction Mitigation Measures.....	21



1. Introduction

- 1.1. Martin Environmental Solutions has been commissioned to undertake an air quality assessment to support a planning application for a residential development at 342 Slade Lane, Manchester, M19 2BX.

Site Location and Context

- 1.2. The development site is situated on the corner of Slade Lane and Monica Grove, consisting of a former garage and car sales centre the site is to be redeveloped into five, three bed residential properties. The surrounding area is predominantly residential.
- 1.3. An aerial Photograph is enclosed in Figure 1.



2. Policy and Guidance

Planning

- 2.1. The Government sets out its policy on air quality in relation to planning in the National Planning Policy Framework (NPPF). The NPPF states that planning policies should sustain compliance with and contribute towards compliance with relevant limit values or national objectives for pollutants, considering the presence of Air Quality Management Areas. The NPPF adds that planning decisions should ensure that any new development in Air Quality Management Areas is consistent with the local air quality action plan.
- 2.2. Manchester City Council, as part of the wider Greater Manchester Authority has identified guidance for developers in relation to air quality and planning and have recently published the *“Greater Manchester Air Quality Action Plan 2016-2021”* and the *“Manchester City Council Air Quality & Planning Technical Guidance, August 2022”* both documents point developers towards the Institute of Air Quality Management Guidance as a key document for undertaking air quality assessments.
- 2.3. The Institute of Air Quality Management ‘*Land-Use Planning & Development Control: Planning For Air Quality, January 2017*’ guidance document identifies the importance of air quality within the planning system and suggests a suitable approach to the consideration and evaluation of air quality within the planning process.
- 2.4. The guidance suggests a staged approach, starting with the incorporation of good design within the proposed application, moving onto recommendations on criteria to trigger an air quality assessment.
- 2.5. Stage 1 criteria for proceeding to stage 2 are:
 - Ten or more residential units or a site area of more than 0.5ha
 - More than 1000m² of floor space, or a site greater than 1haCoupled with
 - Development has more than ten parking spaces



The development will have a centralised energy facility or other centralised combustion process.

- 2.6. The next stage looks at indicative criteria for requiring an air quality assessment, Table 6.2 of the guidance. The last line of this table considers one or more substantial combustion processes. The guidance suggesting that either simple or detailed assessment is required should the development meet any of the above criteria.
- 2.7. The determination on whether a simple or detailed assessment is then determined based on the existing situation, any predicted change in the location without the potential significance of the development.

Local Situation

- 2.8. Manchester City Council have declared an Air Quality Management Area (AQMA) for the exceedance of the annual mean objective of Nitrogen Dioxide. In 2016 this was amended and amalgamated into the Greater Manchester Combined Authority AQMA. The AQMA includes several busy junctions within the area, include some along Church Lane, Harpurhey.
- 2.9. The Council also undertake a programme of Nitrogen Dioxide Diffusion tube monitoring across the borough. A review of the data confirms that there are no monitoring sites in close proximity to the development site or along the A34 Kingsway to the west, suggesting no issues at this point. The nearest locations, identified on strategic main roads and busy junctions, are along the A6, Stockport Road, some +600m from the site. Those to the north showing a slight exceedance of the national objective value of $40\mu\text{g}/\text{m}^3$ while those to the south significantly below the objective. Indicating very localised poor air quality. These include the following sites:

CAP_MANC_125 – A6 Stockport Road to the east – $51.4\mu\text{g}/\text{m}^3$

CAP_MANC_126 – A6 Stockport Road to the east – $41.1\mu\text{g}/\text{m}^3$

CAP_MANC_127 – A6 Stockport Road to the east – $27.4\mu\text{g}/\text{m}^3$

CAP_MANC_128 – A6 Stockport Road to the east – $28.0\mu\text{g}/\text{m}^3$

CAP_MANC_129 – A6 Stockport Road to the east – $33.2\mu\text{g}/\text{m}^3$



- 2.10. In, addition, the DEFRA background maps identify the background pollutant concentrations as $14.94177\mu\text{g}/\text{m}^3$ Nitrogen Dioxide and $11.82262\mu\text{g}/\text{m}^3$ PM_{10} .
- 2.11. There are no nearby continuous monitoring locations identified, and while The Manchester Greater Authorities have declared an Air Quality Management Area for all major routes throughout the region the nearest point is the Kingsway / Moseley Road roundabout junction 200m west of the site.

Dust Nuisance

- 2.12. The main requirements with respect to dust control from industrial or trade premises not regulated under the Environmental Permitting (England and Wales) Regulations (2010) and subsequent amendments is provided in Section 79 of Part III of the Environmental Protection Act (1990).
- 2.13. The Act defines nuisance as:
"any dust, steam, smell or other effluvia arising on industrial trade or business premises and being prejudicial to health or a nuisance."
- 2.13. Enforcement of the Act, with regard to nuisance, is currently under the jurisdiction of the local Environmental Health Department, whose officers are deemed to provide an independent evaluation of nuisance. If the LA is satisfied that a statutory nuisance exists, or is likely to occur or happen again, it must serve an Abatement Notice under Part III of the Environmental Protection Act (1990).
- 2.14. Via formal action the council can insist that there be no dust beyond the boundary of the works. The only defence is to show that the process to which the nuisance has been attributed and its operation are being controlled according to Best Practice Measures (BPM).

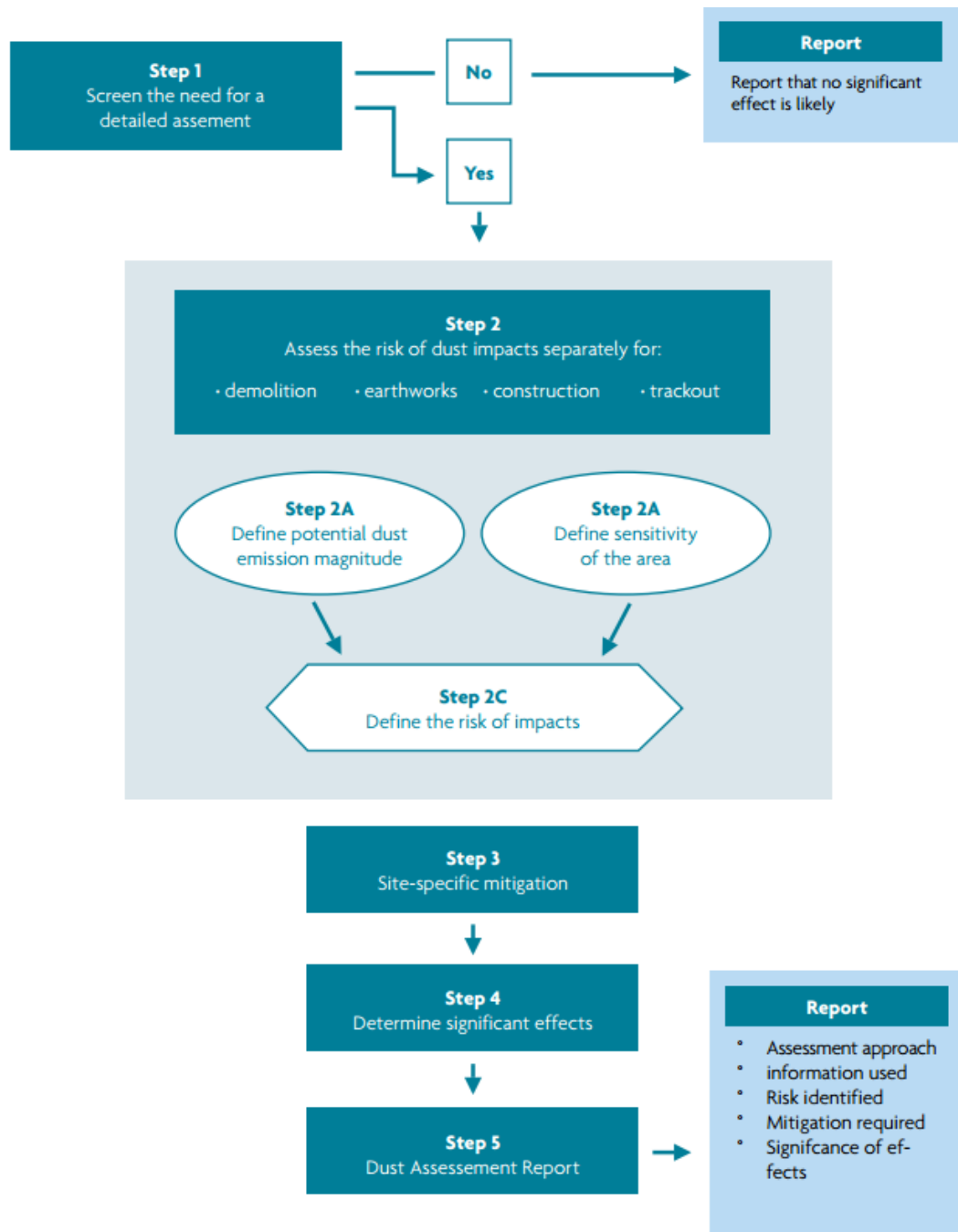


3. Construction Impacts on Local Air Quality

- 3.1. During the construction phase, there will be a number of activities undertaken which have the potential to generate and/or re-suspend dust and PM₁₀/PM_{2.5}. Such activities include site clearance and preparation, storage of materials, laying of hard surfaces and landscaping.
- 3.2. Dust comprises particles typically in the size range 10-75 micrometres in aerodynamic diameter and is created through the action of crushing and abrasive forces on materials. Due to its relatively large size dust is usually only resident in the air for a short period of time after initial release and falls out of suspension fairly quickly. Dust is therefore unlikely to cause long-term or widespread changes to the air quality of the area; however, its deposition on property and cars can cause soiling and discoloration resulting in nuisance complaints from surrounding properties.
- 3.3. Small particles of dust are known as particulate matter (PM₁₀/PM_{2.5}) and are small enough to be drawn into the lungs of people during breathing, which may have adverse reactions to sensitive members of the public. As a result of the potential impacts on health objectives for PM₁₀ have been defined in the Air Quality Strategy and Regulations.
- 3.4. There is also the potential for traffic associated with the construction activities on the site to have an effect on local pollution concentrations, in particular NO_x/NO₂ and PM₁₀ levels. The potential for construction traffic emissions to be a significant issue will be dependent on existing and likely future concentrations in the vicinity of the proposed development and the anticipated magnitude of the construction traffic.

Assessment of Risk

- 3.5. The IAQM guidance 'Guidance on the assessment of dust from demolition and construction 2024, IAQM' details a 5-stage process for assessing the impacts from the construction phase of the development, as depicted in the chart below:



3.6. The IAQM guidance considers the magnitude of potential dust emissions from four distinct activities during the construction phase. These are Demolition, Earthworks, Construction and Trackout, and the magnitude is rated as either large, medium, or small for each activity.



- 3.7. Sensitivity of the receptors is assessed based on the type of receptor, the number and distance from the site and for three different affects, dust soiling, human health impacts and ecology. In this case the receptors have been identified as having a high sensitivity, being residential & health care in nature, with the ecological receptor as low.
- 3.8. The impact of dust on receptors is considered over four distances, <20m, <50m, <100m, and <350m.

Table 2: Sensitivity of the Area to Dust Soiling Effects on People and Property ^{a b}

Receptor Sensitivity	Number of Receptors	Distance from the Source (m) ^c			
		<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

^a The sensitivity of the area should be derived for each of the four activities: demolition, construction, earthworks and trackout. See **STEP 2B, Box 6** and **Box 9**.

^b Estimate the total number of receptors within the stated distance. Only the *highest level* of area sensitivity from the table needs to be considered. For example, if there are 7 high sensitivity receptors < 20m of the source and 95 high sensitivity receptors between 20 and 50 m, then the total of number of receptors < 50 m is 102. The sensitivity of the area in this case would be high.

^c For trackout, the distances should be measured from the side of the roads used by construction traffic. Without site-specific mitigation, trackout may occur from roads up to 500 m from large sites, 200 m from medium sites and 50 m from small sites, as measured from the site exit. The impact declines with distance from the site, and it is only necessary to consider trackout impacts up to 50m from the edge of the road.

- 3.9. The following tables are used within the guidance document to assess the sensitivity of the receptors to dust soiling, human health, and ecology.

Table 3: Sensitivity of the Area to Human Health Impacts^{a b}

Receptor Sensitivity	Annual Mean PM ₁₀ concentration ^c	Number of Receptors ^d	Distance from the Source (m) ^e				
			<20	<50	<100	<200	<350
High	>32 µg/m ³ (>18 µg/m ³ in Scotland)	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	28-32 µg/m ³ (16-18 µg/m ³ in Scotland)	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	24-28 µg/m ³ (14-16 µg/m ³ in Scotland)	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<24 µg/m ³ (<14 µg/m ³ in Scotland)	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium	>32 µg/m ³ (>18 µg/m ³ in Scotland)	>10	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	28-32 µg/m ³ (16-18 µg/m ³ in Scotland)	>10	Medium	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	24-28 µg/m ³ (14-16 µg/m ³ in Scotland)	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	<24 µg/m ³ (<14 µg/m ³ in Scotland)	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Low	-	≥1	Low	Low	Low	Low	Low

Table 4: Sensitivity of the Area to Ecological Impacts^{a b}

Receptor Sensitivity	Distance from the Source (m) ^c	
	<20	<50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

^a The sensitivity of the area should be derived for each of the four activities: demolition, construction, earthworks and trackout and for each designated site. See **STEP 2B, Box 8** and **Box 9**.

^b Only the highest level of area sensitivity from the table needs to be considered.

^c For trackout, the distances should be measured from the side of the roads used by construction traffic. Without site-specific mitigation, trackout may occur from roads up to 500 m from large sites, 200 m from medium sites and 50 m from small sites, as measured from the site exit. The impact declines with distance from the site.

3.10. The guidance then considers the dust emission magnitude of the four activities and the sensitivity of the area for the four impact scenarios.



Table 6: Risk of Dust Impacts - Demolition

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

3.11. It is considered that the main source of emissions during the construction phase of dust and PM₁₀ will include:-

- Excavations and earthworks
- Use of haulage roads
- Transportation and storage of materials
- Materials handling
- Cut and processing materials
- Exhaust emissions from site off-road machinery
- Emissions from construction vehicles

3.12. The majority of releases are likely to occur during the 'working week' but there is some potential for releases to occur 24 hours a day from material storage and exposed soil unless these are suitably managed and controlled. However on this site the stockpiles of material area likely to be minimal given the constraints of the site.

3.13. Properties most likely to be exposed to any dust or PM₁₀ from the site are those residential proposed surrounding the site.

3.14. Given the current background pollutant levels and traffic flow in the area it is unlikely that the construction traffic will not have anything other than a negligible impact on the NO₂ and PM₁₀ levels at relevant receptors. Background levels from the DEFRA background maps give PM₁₀ levels at 11.82262µg/m³ for 2022 and NO₂ levels at 14.941.77µg/m³. Manchester City Council do not carry out any monitoring in the vicinity of the site. The background map levels are due to reduce in future years.



Phase 1

3.15. As identified by the IAQM guidance document the development site is located within 20m of a suitable receptor, namely the adjacent residential properties. Therefore, an assessment of the likely impact from the construction phase is required.

Phase 2

3.16. Demolition of the existing building is to be undertaken on site, as such the risk from the demolition phase is considered to be small.

3.17. For the earthwork's assessment, it is currently unknown exactly what level of earthworks will be undertaken, but it is envisaged that some earthworks will be undertaken across the majority of the site. For the assessment, the site has been placed into the small category with a site area < 18,000m².

3.18. For the construction phase the guidance indicates that the magnitude of potential dust emissions has also been identified as small, (total build volume <12,000m³). The proposed development has a 126m² gross floor area and the buildings are limited to two/three storeys.

3.19. Finally, for the potential dust emissions for 'trackout' the magnitude is small with less than 20 outward movements of HDV vehicles expected.

Table 7: Dust Emission Magnitude

Activity	Dust Emission Magnitude
Demolition	Small
Earthworks	Small
Construction	Small
Trackout	Small

3.20. The receptor sensitivity of the area has been identified as detailed below given the number of nearby residential receptors.

3.21. The residential receptors located surrounding the site, these are within 20m of the site. The background annual mean PM₁₀ levels within the area are <24µg/m³, 2023 Defra background maps indicate a level of 11.82262m³.

3.22. Based on the sensitivity tables within the guidance document for Dust Soiling, human health impacts and ecology the resulting sensitivity impacts of the development have been assessed as high for dust soiling, and low for human health and ecological sensitivity.

Table 8: Sensitivity of the surrounding area

Potential Impact	Sensitivity of the Surrounding Area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Med	Med	Med	Med
Human Health	Low	Low	Low	Low
Ecological	Low	Low	Low	Low

3.23. Based on the above information in line with the IAQM guidance the impact risk of each of the activities has been assessed with a resulting impact risk for each activity.

Table 9: Impact risk of construction phase

Potential Impact	Risk			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Med risk	Med risk	Med risk	Med risk
Human Health	Low risk	Low risk	Low risk	Low risk
Ecological	Neg risk	Neg risk	Neg risk	Neg risk

Phase 3

3.24. Given the impact risk associated with the activities it is recommended that the following site –specific mitigation measures are undertaken. These have been identified from ‘The Control of Dust and Emissions from Construction and demolition, Best Practice Guidance, London Councils 2006’ and the IAQM guidance.



- 3.25. This section details the mitigation measures identified as required to reduce the potential impact associated with the activities anticipated to take place during the construction phase of the development. If required these can be tailored once more specific information is available on the construction activities. This can be controlled by the imposition of a suitable condition on the planning permission for the proposed development.
- 3.26. Construction activities with the potential to generate emissions to the atmosphere require two levels of mitigation measures to be adopted. These are termed 'hard' and 'soft' measures. Hard measures include physical actions taken to prevent, suppress or contain emissions; soft measures include management and communication actions.
- 3.27. The most effective way to manage and prevent dust and PM₁₀ generation and re-suspension during construction is through effective control of the potential source.
- 3.28. The set of mitigation measures considered appropriate for the development of the proposed site area are detailed within Appendix A.



4. Operational Phase

The Proposed Development

- 4.1 The proposed development consists of a residential development of five properties on the site. Access will be from the north of the site via Monica Grove and east from Slade Lane.

Assessment

- 4.2 The IAQM guidance "*Land-Use Planning & Development Control: Planning For Air Quality, January 2017*" details and confirms the need to ensure development is constructed in a sustainable way adopting good design principles to help reduce emissions and contribute to better air quality.
- 4.3 As a consequence and as detailed within the Manchester City Council guidance document the development has been designed to minimise emissions and to assist future residents to do the same. All properties are to be provided with an Electric Vehicle charging point with a minimum 7KW power supply. In addition, a sustainable travel pack shall be developed for the site to encourage alternative forms of transport among the residents.
- 4.4 The IAQM guidance details a staged approach to the determination of whether an Air Quality assessment is required, chapter 6.
- 4.5 The first stage of this considers the size of the development and the potential traffic movements associated with it. If the development exceeds the stage 1 criteria, then you proceed to stage 2.



- 4.6 The stage 1 criteria are shown below, the proposed development does not exceeds these. There is therefore no need in accordance wit the guidance to proceed with the next stage.

Criteria to Proceed to Stage 2
A. If any of the following apply:
• 10 or more residential units or a site area of more than 0.5ha • more than 1,000 m² of floor space for all other uses or a site area greater than 1ha
B. Coupled with any of the following:
• the development has more than 10 parking spaces • the development will have a centralised energy facility or other centralised combustion process
Note: Consideration should still be given to the potential impacts of neighbouring sources on the site, even if an assessment of impacts of the development on the surrounding area is screened out.

4.7 However, as part of the robust review the second stage has also been considered. The second stage of the assessment looks at the impact of the development, and these are shown below. The criterion of interest with respect to this development is the increase in traffic flows that will result.

The development will:	Indicative Criteria to Proceed to an Air Quality Assessment ^a
1. Cause a significant change in Light Duty Vehicle (LDV) traffic flows on local roads with relevant receptors. (LDV = cars and small vans <3.5t gross vehicle weight).	A change of LDV flows of: - more than 100 AADT within or adjacent to an AQMA - more than 500 AADT elsewhere.
2. Cause a significant change in Heavy Duty Vehicle (HDV) flows on local roads with relevant receptors. (HDV = goods vehicles + buses >3.5t gross vehicle weight).	A change of HDV flows of: - more than 25 AADT within or adjacent to an AQMA - more than 100 AADT elsewhere.
3. Realign roads, i.e. changing the proximity of receptors to traffic lanes.	Where the change is 5m or more and the road is within an AQMA.
4. Introduce a new junction or remove an existing junction near to relevant receptors.	Applies to junctions that cause traffic to significantly change vehicle accelerate/decelerate, e.g. traffic lights, or roundabouts.
5. Introduce or change a bus station.	Where bus flows will change by: - more than 25 AADT within or adjacent to an AQMA - more than 100 AADT elsewhere.
6. Have an underground car park with extraction system.	The ventilation extract for the car park will be within 20 m of a relevant receptor. Coupled with the car park having more than 100 movements per day (total in and out).
7. Have one or more substantial combustion processes, where there is a risk of impacts at relevant receptors. NB. this includes combustion plant associated with standby emergency generators (typically associated with centralised energy centres) and shipping.	Typically, any combustion plant where the single or combined NO _x emission rate is less than 5 mg/sec ^a is unlikely to give rise to impacts, provided that the emissions are released from a vent or stack in a location and at a height that provides adequate dispersion. In situations where the emissions are released close to buildings with relevant receptors, or where the dispersion of the plume may be adversely affected by the size and/or height of adjacent buildings (including situations where the stack height is lower than the receptor) then consideration will need to be given to potential impacts at much lower emission rates. Conversely, where existing nitrogen dioxide concentrations are low, and where the dispersion conditions are favourable, a much higher emission rate may be acceptable.

4.8 As discussed, the development this for five properties and lies outside of a declared AQMA, as such the criterion to apply is the >500 LDV flow / day. This will not be reached by the occupation of 5 three bed dwellings.



- 4.9 Department of Transport traffic data indicates a flow of ~11600 vehicles in 2008 along Slade Lane¹, the Temprow traffic software suggests a growth factor of 1.0588 for the area, thus the current traffic flow is in the region of 12,300 AADT. The traffic generated by the five properties will not significant impact on this flow, and thus the overall contribution towards air quality will likewise not be significant.
- 4.10 The site is not located within a declared AQMA, although it is noted that the Greater Manchester AQMA does include junctions along Kinsway to the west and A6 to the east.
- 4.11 With no new receptors being introduced to poor air quality and less than 100 additional vehicles passing through the declared AQMA the stage 2 criterion is not exceeded, and as such no air quality assessment is required in accordance with the IAQM guidance.

5 Mitigation Measures

- 5.1 It is however still appropriate to consider possible mitigation measures and to reduce the potential impact on the local air quality. Standard mitigation measures have already been identified in the form of electric vehicle recharging points to each house and a sustainable travel pack.
- 5.2 The Sustainable travel pack providing information to the new residents on low emission, sustainable travel options including walking and cycling routes in the area and the availability of public transport. The aim to promote non-car use among the residents. Given the small size of the development a full travel plan is not justifiable.

¹ <https://roadtraffic.dft.gov.uk/manualcountpoints/944402>



6 Conclusion

- 6.1 An assessment of the impact of the proposed development on air quality has been undertaken in accordance with the Manchester City Council Air Quality guidance and the IAQM guidance documents.
- 6.2 The development does not trigger any of the IAQM criterion for requiring a detailed air quality assessment, suggesting the development will not have a material impact on local air quality.
- 6.3 A further review of current air quality levels in the area and the level of traffic both current and to be generated by the development has been undertaken, this indicates a negligible impact on traffic flows from the development and there is a negligible impact on current air quality.
- 6.4 As such the proposed development will meet the objectives of the National Planning Policy Framework in ensuring that no significant adverse impact. The development is therefore considered to be acceptable in terms of air quality impact.

Figure 1 – Aerial Photograph





Appendix A – Construction Mitigation Measures

The set of mitigation measures considered appropriate for the development of the proposed site area are as follows:

Hard Measures:

Where reasonable, appropriate, and practicable the contractor should:-

Site Management

- Plan the site layout to locate machinery and dust-causing activities away from sensitive receptors.
- Use appropriate methods, such as the erection of hoardings or other barriers around dusty operations, to mitigate the spread of dust to any sensitive receptors.
- Provide hard standing areas for vehicles and regularly inspect and clean these areas
- No burning on site
- Consider weather conditions prior to potential dusty works. For example, if there are strong winds blowing towards residential properties, works may need to be postponed until more favourable conditions return.
- Consider the provision of wheel washing facilities to prevent material being carried off site on to the public highway.
- Ensure access to a good water supply

Construction Plant and Vehicles

- Operate construction plant in accordance with the manufacturer's written recommendations
- Switch off vehicles and plant when not in use
- Direct vehicle and plant exhausts away from the ground
- Enclose or shield plant likely to generate excessive quantities of dust
- Keep movements of construction traffic on site to a minimum
- Design site access points to avoid queuing of traffic
- Avoid the use of diesel or petrol-powered generators
- Keep roads and accesses clean
- Where available use ultra-low sulphur tax-exempt fuel for all non-road mobile machinery.
- No site run-off of water

Transportation, Storage and Handling of Materials

- Employ appropriate measures, such as covering materials
- Do not overload vehicles
- Keep stockpiles and mounds away from sensitive receptors and site them taking account of the predominant wind direction
- Ensure stockpiles are set at a suitable angle to avoid material slippage
- Cover or stabilise long-term stockpiles – grass long term earth bunding
- Store fine dry material inside or under cover
- Keep the number of handling operations for materials to a minimum



- Maintain and use appropriate watering and sprinkling facilities to reduce or prevent the escape of dust from the site.

Haulage Routes

- Agree haulage routes prior to commencement of the development
- Maintain the surface of all haulage routes on site, in such a condition so as to minimise dust generation. This will be more important in the early stages of the development as haulage routes are likely to be unmade. As the development progresses it is expected that routes will become hard surfaced.
- Inspect haulage routes periodically and repair as necessary to prevent dust generation, record inspections and outcomes.
- Impose and enforce appropriate speed limits on roads for safety reasons and for the purposes of suppressing dust emissions.
- Ensure vehicles entering and leaving the site are covered

Excavation and Earthworks

- Strip topsoil as close as reasonably practicable to the period of excavation or other earthworks to avoid or minimise dust generation
- Keep drop heights from excavators to a minimum
- Use appropriate methods to avoid dust emissions such as shielding or damping sprays
- Undertake soiling, seeding, planting, or sealing of completed earthworks as soon as reasonably practicable.
- Use water suppressant where applicable

Soft Measures

- Establish a clear protocol of communication with the local residents, and the local Environmental Health Department including readily displayed contact details.
- All complaints received should be logged and fully investigated. The contractor may wish to set up a website or newsletter to keep residents informed of activities on site.
- If very dusty works are unavoidable then residents (and the local Environmental Health Department) should be given prior notice.
- Carry out daily on-site and off-site inspections to monitor dust emissions.
- Develop a Dust Management Plan including the measures outlined here along with monitoring and checks carried out to ensure dust generation is minimised.
- Record any incidents of exceptional dust generation and the actions taken to resolve them.
- Consider holding regular liaison meetings with residents if dust or other emissions generate complaints.
- Plan works to avoid or reduce dust generation.



- Provide appropriate training to staff and sub-contracts on methods to avoid dust generation.