
ARCHSTONE PROPERTIES LIMITED

AIR QUALITY MITIGATION REPORT

58 RICHMOND STREET, MANCHESTER M1 3LY

Client: Archstone Properties Limited

REPORT REF: P6196-R1-V1

Issue Date: 22nd September 2023

Document Status: Version 1



DATE ISSUED: 22nd SEPTEMBER 2023

REPORT REFERENCE P6196-R1-V1

ARCHSTONE PROPERTIES LIMITED

58 RICHMOND STREET, MANCHESTER M1 3LY

AIR QUALITY MITIGATION REPORT

REPORT VERSION CONTROL:

Document Reference	Date	Prepared by	Checked by	Authorised by
P6196-R1-V1	22/09/2023	Malcolm W Pounder BSc (Hons) PGDip CEnv MIAQM MEnvSc	P Nolan BSc (Hons) AMIEnvSc	Malcolm W Pounder BSc (Hons) PGDip CEnv MIAQM MEnvSc
				

This report has been prepared by NoiseAir Limited with all reasonable skill, care and diligence, within the terms of the contract with the client. The report is confidential to the Client and NoiseAir Limited accept no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be reproduced without the prior written approval of NoiseAir Limited.

CONTENTS

1	INTRODUCTION	4
2	LEGISLATION AND POLICY	5
3	MITIGATION	10
4	CONCLUSION	11

APPENDICES

APPENDIX A - REPORT LIMITATIONS

APPENDIX B - GLOSSARY

1 INTRODUCTION

1.1.1 By instruction from Archstone Properties Limited, NoiseAir Limited was commissioned to undertake an Air Quality Mitigation Report (AQMR) in support of a development at 58 Richmond Street, Manchester M1 3LY, herein referred to as 'the Site'.

1.1.2 Limitations of this report are outlined in **Appendix A**.

1.2 Site Location and Context

1.2.1 The Proposed Development is located at 58 Richmond Street, Manchester M1 3LY, at approximate National Grid Reference (NGR): 384295, 397805. **Figure 1** details the location of the Site.

1.2.2 The proposals comprise the redevelopment of the Site to provide a mixed-use development across five-storeys, including retail use at ground floor and residential to the upper floors.

1.2.3 Planning consent has been granted by Manchester City Council (MCC), subject to a number of conditions. This includes the following in relation to air quality:

'6): Prior to commencement of the development detailed mitigation measures to safeguard local air quality shall be submitted to and approved in writing by the City council's planning authority. Any agreed mitigation measures shall be implemented as part of the development and shoulder main in situ whilst the use or development is in operation.

Reason: To secure reduction in air pollution from traffic over the sources in order to protect existing and future residents from air pollution, pursuant to core strategy policies N16 and DM1.'

1.2.4 An AQMR has therefore been produced in order to address the Planning Condition. This is detailed in the following report.

2 LEGISLATION AND POLICY

2.1 Air Quality Legislation and Policy

2.1.1 A summary of the relevant air quality legislation and policy is provided below.

UK Air Quality Strategy

2.1.2 The government's policy on air quality within the UK is set out in the Air Quality Strategy for England, Scotland, Wales, and Northern Ireland (AQS)¹ with the latest framework for Local Authority delivery within England published in 2023². The AQS provides a framework for reducing air pollution in the UK with the aim of meeting the requirements of European Union Legislation.

2.1.3 The AQS also sets standards and objectives for nine key pollutants to protect health, vegetation, and ecosystems. These are benzene (C₆H₆), 1,3 butadiene (C₄H₆), carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), sulphur dioxide (SO₂), ozone (O₃), and polycyclic aromatic hydrocarbons (PAHs).

2.1.4 The air quality standards are levels recommended by the Expert Panel on Air Quality Standards (EPAQS) and the World Health Organization (WHO) with regards to current scientific knowledge and the effects of each pollutant on health and the environment.

2.1.5 The Air Quality Objectives (AQOs) are medium-term policy-based targets set by the Government, which take into account economic efficiency, practicability, technical feasibility and timescale. Some objectives are equal to EPAQS recommended standards or WHO guideline limits, whereas other involve a margin of tolerance, i.e., a limited number of permitted exceedances of standards over a given period.

2.1.6 **Table 1** presents the AQOs for pollutants considered within this assessment.

Table 1: National Air Quality Objectives and European Directive Limit Values for the Protection of Human Health			
Pollutant	Applies to	Objective	Measured As
NO ₂	UK	40µg/m ³	Annual mean
	UK	200µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
PM ₁₀	UK (except Scotland)	40µg/m ³	Annual mean

¹ Department for Environment, Food and Rural Affairs (Defra) and the Devolved Administrations (2007). The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Volumes 1 and 2).

² Department for Environment, Food and Rural Affairs (Defra, 2023) Policy paper Air quality strategy: framework for local authority delivery [Online] Available at: <https://www.gov.uk/government/publications/the-air-quality-strategy-for-england/air-quality-strategy-framework-for-local-authority-delivery#introduction> [Accessed 14/09/2023].

Table 1: National Air Quality Objectives and European Directive Limit Values for the Protection of Human Health			
Pollutant	Applies to	Objective	Measured As
	UK (except Scotland)	50µg/m ³ not to be exceeded more than 35 times a year	24-hour mean
PM _{2.5}	UK (except Scotland)	Interim target 12µg/m by 2028 Target of 22% reduction in population exposure by 2028 compared to 2018	Annual mean

- 2.1.7 For the pollutants considered in this assessment, there are both long-term (annual mean) and short-term standards. In the case of NO₂, the short-term standard is for a 1-hour averaging period, whereas for PM₁₀ it is a 24-hour averaging period. These periods reflect the varying impacts on health of differing exposures to pollutants, for example temporary exposure on the pavement adjacent to a busy road compared with the exposure of residential properties adjacent to a road.

Air Quality Regulations (2016)

- 2.1.8 Many of the objectives in the AQS have been made statutory in England with the Air Quality (England) Regulations 2000³ and the Air Quality (England) (Amendment) Regulations 2002⁴ for the purpose of Local Air Quality Management (LAQM).
- 2.1.9 These Regulations require that likely exceedances of the AQS objectives are assessed in relation to:
- [...] the quality of air at locations which are situated outside of buildings or other natural or man-made structures, above or below ground, and where members of the public are regularly present [...]*
- 2.1.10 The Air Quality Standards (Amendment) Regulations 2016⁵ amends the Air Quality Standards Regulations 2010 that transpose the European Union Ambient Air Quality Directive (2008/50/EC) into law in England. This Directive sets legally binding limit values for concentrations in outdoor air of major air pollutants that impact public health such as PM₁₀, PM_{2.5} and NO₂. The limit values for NO₂ and PM₁₀ are the same concentration levels as the

³ The Air Quality (England) Regulations 2000 – Statutory Instrument 2000 No.928.

⁴ The Air Quality (England) (Amendment) Regulations 2002 – Statutory Instrument 2002 No.3043.

⁵ The Air Quality Standards (Amendment) Regulations 2016 - Statutory Instrument 2016 No. 1184.

relevant AQS objectives and the limit value for PM_{2.5} is a concentration of 12µg/m³ to be achieved by 2028.

2.2 Local Planning Policy

The Manchester Local Development Framework

- 2.2.1 The Manchester Local Development Framework consists of a series of planning documents of which the Core Strategy is central. This was adopted by MCC on 11th July 2012 and provides policies which guide the determination of planning applications within the city. Review of the document indicated the following policies of relevance to this assessment:

"Policy EN 16

Air Quality

The Council will seek to improve the air quality within Manchester, and particularly within Air Quality Management Areas, located along Manchester's principal traffic routes and at Manchester Airport. Developers will be expected to take measures to minimise and mitigate the local effect of emissions from traffic generated by the development, as well as emissions created by the use of the development itself, including from Combined Heat and Power and biomass plant.

When assessing the appropriateness of locations for new development the Council will consider the effects on air quality, alongside other plan objectives. This includes cumulative effects, particularly in Air Quality Management Areas."

"Policy DM 1

Development Management

All development should have regard to the following specific issues for which more detailed guidance may be given within a supplementary planning document:

[...]

Effects on amenity, including privacy, light, noise, vibration, air quality, odours, litter, vermin, birds, road safety and traffic generation. This could also include proposals which would be sensitive to existing environmental conditions, such as noise."

Greater Manchester Air Quality Action Plan 2016-2021

- 2.2.2 The Greater Manchester Combined Authority (GMCA) - Air Quality Action Plan (AQAP)⁶ has been produced as part of their statutory duties required by the Local Air Quality Management framework. It aims to collect a meaningful set of actions and measures that will create an improvement in air quality within their jurisdiction.
- 2.2.3 The ambition of improved air quality across Greater Manchester; Low-emission behaviours to become embedded in the culture of organisations and lifestyles by 2025; and their support towards the UK Government in meeting and maintaining all EU thresholds for key air pollutants at the earliest date to reduce ill-health within Greater Manchester.

Greater Manchester Low-Emission Strategy (2016)

- 2.2.4 This Low-Emission Strategy⁷ (LES) aims to complement Greater Manchester's Climate Change Strategy that focuses on carbon emissions and their AQAP tackling air pollutants. As both problems are largely interlinked, transport being the major source of air pollution and carbon emissions, a more integrated approach is required.
- 2.2.5 This LES is therefore establishing this integrated framework which within they develop detailed action plans to reduce carbon emissions and improve air quality up until 2024.
- 2.2.6 The aims of this strategy are:

“Support the UK Government in meeting all EU thresholds for key pollutants at the earliest date; Contribute to reducing Greater Manchester's carbon footprint, in line with the Greater Manchester Climate Change Strategy and Implementation Plan; and Reduce air pollution as a contributor to ill-health in Greater Manchester.”

2.3 Air Quality & Planning Technical Guidance

- 2.3.1 The Air Quality & Planning Technical Guidance⁸, adopted by MCC in 2022, aims to provide help and advice in relation to air quality in a planning context to encourage good practice and mitigation of impacts. It outlines what is expected in relation to current guidance and policy with the aspiration that new developments achieve the highest possible standards

⁶ Greater Manchester Combined Authority: Greater Manchester Air Quality Action Plan 2016-2021. Available at <https://www.greatermanchester-ca.gov.uk/media/1272/air-quality-action-plan-2016-21.pdf> [Accessed 20/09/2023]

⁷ Greater Manchester Combined Authority: Greater Manchester Low-Emission Strategy (2016). Available at <https://www.greatermanchester-ca.gov.uk/media/1276/low-emission-strategy-dec-2016.pdf> [Accessed 20/09/2023].

⁸ Manchester City Council (2022) Air Quality & Planning Technical Guidance.

without compromising the health and well-being of people that live and work within the City of Manchester. Reference to this document was made throughout the assessment.

3 MITIGATION

3.1.1 The document provides a methodology for classification of a development and the required air quality mitigation for the associated scheme type, which follows national guidance. An Air Quality Assessment was previously undertaken by REC, covering air quality at and around the Site.

3.1.2 The following air quality mitigation measures are recommended:

- Electric Vehicle (EV) charge points and infrastructure are recommended for the following applications:
 - 1 or more residential units with any parking spaces.
 - Non-residential development with any parking spaces. EV charging recommendations:
 - Residential:
 - On-site/allocated parking: 1 EV charge point (minimum 7kW*) for each dwelling.
 - Unallocated parking: minimum 20% EV (minimum 7kW*) charge points, and cable routes for all other spaces.

4 CONCLUSION

4.1.1 NoiseAir Limited has produced an AQMR for a proposed residential development at 58 Richmond Street, Manchester M1 3LY.

4.1.2 The Air Quality Assessment undertaken by REC demonstrates the suitability of the Site for its proposed use. The below mitigation measures are recommended by the Technical Guidance:

- Electric Vehicle (EV) chargepoints and infrastructure are recommended for the following applications:
 - 1 or more residential units with any parking spaces.
 - Non-residential development with any parking spaces. EV charging recommendations:
 - Residential:
 - On-site/allocated parking: 1 EV chargepoint (minimum 7kW*) for each dwelling.
 - Unallocated parking: minimum 20% EV (minimum 7kW*) chargepoints, and cable routes for all other spaces.

4.1.3 Based on the completion of the AQMR, it is considered that the relevant Planning Condition should be discharged.

APPENDIX A - REPORT LIMITATIONS

This Report is presented to Archstone Properties Limited and may not be used or relied on by any other person or by the client in relation to any other matters not covered specifically by the scope of this report.

Notwithstanding anything to the contrary contained in the report, NoiseAir Limited is obliged to exercise reasonable skill, care and diligence in the performance of the services required by Archstone Properties Limited and NoiseAir shall not be liable except to the extent that it has failed to exercise reasonable skill, care and diligence, and this report shall be read and construed accordingly.

This report has been prepared by NoiseAir Limited. No individual is personally liable in connection with the preparation of this report. By receiving this report and acting on it, the client or any other person accepts that no individual is personally liable whether in contract, tort, for breach of statutory duty or otherwise.

The conclusions and recommendations contained in this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from who it has been requested and that such information is accurate. Information obtained by NoiseAir Limited has not been independently verified by NoiseAir Limited unless otherwise stated in the report and should be treated accordingly.

Where assessments of works or costs identified in this report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available.

Where / if estimates and projects are made within this report, are made based on reasonable assumptions as of the date of this report, such statements however by their very nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. NoiseAir Limited specifically does not guarantee or warrant any estimates or projects contained in this report.

DISCLAIMER- This report was prepared by NoiseAir Limited. The material in it contains NoiseAir Limited best judgment in light of the information available at the time of preparation of this report. Any use which a third party makes of this report, or any reliance on, or decisions based on it are the responsibility of such third parties. NoiseAir Limited accept no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

APPENDIX B - GLOSSARY

Air Quality Limit Value	Legally binding parameters defined in European Union air quality legislation that must not be exceeded. Limit values are set for individual pollutants and are a combination of a concentration value, an averaging time over which it is measured, the number of exceedences allowed per year, and a date by which it must be achieved.
Air Quality Management Area	An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives.
Air Quality Objective	The name given to the maximum ambient pollutant concentration that is not to be exceeded either without exception or within a permitted number of exceedences over a specified timescale for a pollutant outlined in the national Air Quality Strategy.
Air Quality Strategy	A national government document which contains standards, objectives and measures for improving ambient air quality.

NoiseAir Limited

Specialist acoustic and air quality engineers providing a fast, professional, cost-effective service for all types of Acoustic Consultancy services across the UK.

Over 25 years of experience in the field.

Contact us now for a free, no obligation quote or to discuss your requirements.

NOISEAIR LIMITED, THE COUNTING HOUSE, HIGH STREET,
LUTTERWORTH. LE17 4AY

TEL. 0116 272 5908

EMAIL. INFO@NOISEAIR.CO.UK

WWW.NOISEAIR.CO.UK

