



Room2 Homotel Piccadilly Manchester

Air Quality Assessment

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Comments

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Executive Summary

This Air Quality Statement has been prepared by Waterman Infrastructure & Environment on behalf of Northside (Manchester) Ltd (trading name – Lamington Group) to support a full planning application and Listed Building Consent for an aparthotel development (hereafter referred to as the 'Proposed Development') at 12-16 Manchester Piccadilly, Manchester M1 3AN (hereafter referred to as 'the Site').

The main likely effects on local air quality during construction relate to the generation of dust. A range of measures to minimise or prevent dust would be implemented throughout the construction works to ensure the effects from nuisance dust would be not significant.

It is anticipated that the effect of construction vehicles entering and egressing the Site during the construction period would also be not significant, in the context of traffic movements on the roads adjacent to the Site.

Any emissions from equipment and machinery operating on the Site during construction would be small and would not significantly affect air quality.

The car free scheme would not result in a change in Annual Average Daily Traffic of more than 100 light duty vehicle flows or 25 heavy duty vehicle flows within or adjacent to an Air Quality Management Area. The change in vehicle trips would therefore be below the Environmental Protection UK and Institute of Air Quality Management guidance criteria for Developments within an AQMA. In addition, the Development would not include a centralised combustion plant, and therefore would not give rise to any significant adverse air quality impacts.

Based on the low trip generation and absence of a centralised combustion plant, according to the EPUK / IAQM guidance, the Development is not expected to give rise to air quality impacts. As such the likely effect of the operational Development on local air quality would be not significant.

A review of the local monitoring data, and Defra background maps, indicate pollutant concentrations for users of the Development would be not significant.

1. INTRODUCTION

Overview

- 1.1. Waterman Infrastructure & Environment Limited ('Waterman') has been instructed by Lamington Group ('the Applicant') to support a full planning application for an aparthotel development (hereafter referred to as the 'Proposed Development') at 12-16 Manchester Piccadilly, Manchester M1 3AN (hereafter referred to as 'the Site').
- 1.2. The application seeks *Full planning permission for the erection of a 34 storey building (land at no. 14-16 Piccadilly) and conversion of adjacent building (no.12 Piccadilly) (basement to fourth floor) to create a aparthotel, including a ground floor café (Use Class E (b), first floor exhibition hall (Use Class F1) and a rooftop bar and restaurant (Use Class E (b)).*
- 1.3. The Site falls within the previous Manchester City Council ('MCC') which now forms part of the Greater Manchester Combined Authority (GMCA).
- 1.4. GMCA has designated an Air Quality Management Area (AQMA) for exceedances of the annual mean nitrogen dioxide (NO₂) Air Quality Strategy (AQS) Objective. The GMCA AQMA covers the 10 districts of Greater Manchester, including Arterial routes, district centres, and Manchester airport. The Site is located within this AQMA.
- 1.5. The Site is approximately 0.05 hectares (ha) in area, centred on Ordnance Survey Grid Reference 384500, 398100. The Site is bound to the north by Chatham Street; east by Piccadilly; south by Gore Street; and west by the Waldorf public house and office and commercial buildings. The area surrounding the Site is predominantly occupied by existing commercial uses, with the nearest residential receptors located approximately 50m south-west of the Site on Aytoun Street, Manchester. **Figure 1** shows the location of the Site.
- 1.6. Given that the Site is in a central location surrounded by public transport, the operational Development would be car free. As such an assessment of the operational phase traffic emissions of the Development has not been considered further in this report as the impacts are considered not significant. This approach was originally agreed with the Environmental Health Officer (EHO) at MCC in 2017 (see **Appendix A**).

Context

- 1.7. The most significant pollutant during construction relates to the creation of nuisance dust and emissions from construction vehicles and construction plant. A qualitative assessment has been undertaken based on relevant air quality guidance.
- 1.8. With regards to the operational phase, the Environmental Protection UK and Institute of Air Quality Management planning development guidance¹, (EPUK / IAQM guidance) summarised in **Appendix B**, sets out criteria for when an air quality assessment is required to accompany a planning application.
- 1.9. The EPUK / IAQM guidance states an air quality assessment is required if there is a change of:
 - more than 100 Light Duty Vehicles (LDV's) flows in Annual Average Daily Traffic (AADT) within or adjacent to an AQMA or more than 500 AADT elsewhere; or
 - more than 25 Heavy Duty Vehicles (HDV) flows AADT within or adjacent to an AQMA or more than 100 AADT elsewhere.

¹ Environmental Protection UK & Institute of Air Quality Management (2017), 'Land-Use Planning & Development Control: Planning for Air Quality', EPUK & IAQM, London

- 1.10. The Transport Statement, undertaken by Price & Myers states the Development could generate up to 451 two-way vehicle trips a day. Although this is above the criteria set out above for developments within or adjacent to an AQMA, the Transport Statement states that '*due to the high level of public transport accessibility at this site and the car free nature of the development it is expected that this rate will be less in practice*'. The Transport Statement also states as the Development will be car free, vehicle trips are expected to be limited to taxis/private hire, servicing vehicles and private pick up and drop off. It has therefore been considered that most vehicle trips associated with the Development would already be on the local road network and would not cause a significant change in LDV flows on local roads with relevant receptors.
- 1.11. In addition, the Development would be all-electric and not include a centralised combustion plant, and therefore would not give rise to any significant adverse air quality impacts.
- 1.12. The Development would be car free and with the absence of any centralised combustion plant, the Development is not expected to give rise to air quality impacts. As such the likely effect of the operational Development on the local air quality would not be significant.
- 1.13. Given the above, the purpose of the air quality assessment is to assess the potential effect of the Development on local air quality during construction and to qualitatively consider the potential air quality concentrations future users of the Development would be exposed to.

Report Structure

- 1.14. The remainder of the report is structured as follows:
- Section 2 – Legislation, Planning Policy and Guidance;
 - Section 3 – Baseline Conditions;
 - Section 4 – Construction Phase Qualitative Assessment;
 - Section 5 – Operational Development; and
 - Section 6 – Summary and Conclusions.
- 1.15. The air quality assessment is supported by:
- Appendix A: Consultation with the Environmental Health Officer and Manchester City Council
 - Appendix B: Summary of Relevant Legislation, Planning Policy and Guidance; and
 - Appendix C: Assessor Experience.

2. LEGISLATION, PLANNING POLICY & GUIDANCE

General

- 2.1. The following legislation, planning policy and guidance are considered relevant to this air quality assessment. A summary of these documents is provided in **Appendix B**:

Legislation

- EU Framework Directive 2008/50/EC, 2008²;
- Air Quality Standards Regulations, 2010³;
- The UK Air Quality Strategy, 2007⁴;
- The Environment Act 1995⁵;

Planning Policy

- National Planning Policy Framework, 2021⁶;
- Manchester City Council Core Strategy Development Plan Document, 2012⁷

Guidance

- Department for Environment, Food and Rural Affairs, Clean Air Strategy, 2019⁸;
- Improving Air Quality in the UK: Tackling Nitrogen Dioxide in our Towns and Cities. UK Air Quality Plan for Tackling Nitrogen Dioxide, 2017⁹;
- Environmental Protection UK & Institute of Air Quality Management Guidance; Land-Use Planning & Development Control: Planning for Air Quality, 2017¹⁰;
- Planning Practice Guidance: Air Quality¹¹;
- Local Air Quality Management Policy Guidance, 2016¹²;
- Institute of Air Quality Management: Guidance on the Assessment of Dust from Demolition and Construction, 2014¹³;
- Greater Manchester Air Quality Action Plan, 2016-2021¹⁴.

2 Council Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe.

3 Defra, (2010) The Air Quality Standards (England) Regulations.

4 Department of the Environment, Food and Rural Affairs (Defra), (2007). 'The Air Quality Strategy for England, Scotland, Wales & Northern Ireland'

5 Office of the Deputy Prime Minister (ODPM), 1995, 'The Environment Act' 1995.

6 Department for Communities and Local Government, 2021, 'National Planning Policy Framework'. DCLG, London.

7 Manchester City Council (2012) Manchester's Local Development Framework – Core Strategy Development Plan Document. Adopted 11th July 2012

8 Defra (2019) Clean Air Strategy, 2019

9 Defra (2017) Improving Air Quality in the UK: Tackling nitrogen dioxide in our towns and cities. Draft UK Air Quality Plan for Tackling Nitrogen Dioxide (Consultation Document)

10 Environmental Protection UK & Institute of Air Quality Management (2017), 'Land-Use Planning & Development Control: Planning for Air Quality', EPUK & IAQM, London.

11 DCLG (2014), 'Planning Practice Guidance: Air Quality (01 November 2019).

12 Defra (2016), 'Local Air Quality Management (LAQM) Policy guidance 2016 (LAQM.PG (16))', DEFRA, London

13 Institute of Air Quality Management, 2014, 'Guidance on the Assessment of dust from demolition and construction.

14 Greater Manchester Air Quality Action Plan 2016-2021, 2018

3. BASELINE CONDITIONS

Greater Manchester Combined Authority Review and Assessment Process

- 3.1. In 2001, MCC declared an AQMA for exceedances of the annual mean NO₂ AQS objective. This AQMA was revoked in 2016 and replaced with the GMCA wide AQMA. The GMCA AQMA covers the 10 districts of Greater Manchester, including Arterial routes, district centres, and Manchester airport. The Site is located within this AQMA. The Site is located within this AQMA.
- 3.2. A review of local air quality was undertaken using the GMCA 2021 Annual Status Report¹⁵. The Annual Status Report summarises that long term trends show a gradual improvement in air quality.

Greater Manchester Combined Authority Local Monitoring

- 3.3. Due to the COVID-19 pandemic, 2020 and 2021 monitoring data was not considered representative of baseline air quality conditions at and surrounding the Site. 2020 and 2021 monitoring data has therefore not been considered further. Therefore, 2019 data is considered a conservative estimate of current baseline air quality conditions.
- 3.4. GMCA currently undertakes automatic monitoring of NO₂ and PM₁₀ at three locations and additionally PM_{2.5} at Manchester Piccadilly within the authority of MCC. The nearest monitors within approximately 1km from the centre of the Site, include:
- An urban background monitor located at Manchester Piccadilly (MAN3) approximately 0.3km north-west of the Site; and
 - A kerbside monitor on Oxford Road, Manchester (MAN1) approximately 0.9km south-west of the Site.
- 3.5. The results for the Manchester Piccadilly automatic monitor are presented in **Table 1** below.

Table 1: Measured Concentrations at the Manchester Piccadilly's Urban Background monitor

Pollutant	Averaging Period	AQS Objective	2016	2017	2018	2019
NO ₂	Annual Mean (µg/m ³)	40µg/m ³	40	36	35	36
	1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	0	1	0	0
PM ₁₀	Annual Mean (µg/m ³)	40µg/m ³	20	20	21	20
	24-Hour Mean (No. of Days)	50µg/m ³ not to be exceeded more than 35 times a year	3	3	2	7
PM _{2.5}	Annual Mean (µg/m ³)	25 µg/m ³	10	8	11	12

Source: Data obtained from 2015 Annual Status Report for Greater Manchester Combined Authority and 2021 Annual Status Report for Greater Manchester Combined Authority
Exceedances of the AQS objectives shown in **bold**

- 3.6. The monitoring results in **Table 1** show the annual mean NO₂ objective of 40µg/m³ was exceeded in 2016. The NO₂ 1-hour mean objective, the PM₁₀ and PM_{2.5} objectives were met in all years, where available.
- 3.7. The results for the Manchester Oxford Road kerbside automatic monitor, are presented in **Table 2** below.

¹⁵ Greater Manchester Combined Authority, 2021, Air Quality Annual Status Report (ASR) for Greater Manchester

Table 2: Measured Concentrations at the Manchester Oxford Road Kerbside Monitor

Pollutant	Averaging Period	AQS Objective	2016	2017	2018	2019
NO ₂	Annual Mean (µg/m ³)	40µg/m ³	66	65	62	59
	1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	90	6	2	1
PM ₁₀	Annual Mean (µg/m ³)	40µg/m ³	27	27	30	26
	24-Hour Mean (No. of Days)	50µg/m ³ not to be exceeded more than 35 times a year	16	15	15	18

Source: Data obtained from 2015 Annual Status Report for Greater Manchester Combined Authority and 2021 Annual Status Report for Greater Manchester Combined Authority
Exceedances of the AQS objectives shown in **bold**

- 3.8. The monitoring results in **Table 2** show the annual mean NO₂ objective of 40µg/m³ is exceeded in all years and the 1-hour mean was exceeded in 2016 at the Manchester Oxford Road automatic monitor. The PM₁₀ objectives were met in all years.
- 3.9. The results in **Table 1** and **Table 2** show the main contribution to air quality in Manchester city centre is from roads traffic emissions. It is considered the A57 is a major contributor to monitored concentrations at the Manchester Oxford Road monitor. At locations, away from main roads air quality concentrations improve. On review of the Site and the local area (particularly given that the Site is not located on a major road) it is considered the Piccadilly automatic monitor is representative of the site characteristics rather than the Oxford Road monitor (which is influenced by the A57).
- 3.10. MCC also use NO₂ diffusion tubes to monitor air quality throughout Manchester city centre. The results for the NO₂ diffusion tubes within 1km of the centre the Site are presented in **Table 3**.

Table 3: Measured NO₂ Concentrations at GMCA Diffusion Tubes within 1km of the Site

Location	Classification	Distance to Site Centre (km)	Annual Mean NO ₂ Concentration (µg/m ³)			
			2016	2017	2018	2019
Newton Street (MAN9A/B)	Kerbside	0.2	51.9	51.1	45.8	44.9
Piccadilly Gardens (MAN59/60/61)	Urban Background	0.3	40.8	35.7	31.6	33.1
Great Ancoats Street (MAN71)	Roadside	0.6	51.2	50.4	46.1	45.3
Princess Street (MAN24)	Kerbside	0.6	45.3	44.7	40.3	40.8
Lockton Close (MAN72)	Urban Background	0.8	40.0	34.6	33.4	32.8
Oxford Street (MAN29A)	Roadside	0.8	66.2	57.7	58.8	55.4
Angel St (MAN88)	Roadside	0.9	57.8	57.9	46.8	45.2
Manchester Oxford Road (MAN82/83/84)	Roadside	0.9	60.2	56.2	54.0	52.0
Chethams School (MAN26A/B)	Urban Background	1.0	37.1	35.5	33.4	33.0

Notes: Data obtained from 2015 Annual Status Report for Greater Manchester Combined Authority and 2021 Annual Status Report for Greater Manchester Combined Authority.
Exceedances of the AQS objectives shown in **bold**

- 3.11. The results in **Table 3** show that the annual mean NO₂ AQS objective of 40µg/m³ is exceeded at all roadside and kerbside sites between 2016 and 2019. The urban background diffusion tubes meet the NO₂ AQS objective of 40µg/m³ in all years, with the exception of Piccadilly Gardens and Lockton Close recording exceedances in 2016. The closest diffusion tube to the Site, Newton Street (MAN9A/B), is above the AQS objective in all years, however, the results show a year-on-year decline at the Newton Street diffusion tube since 2016.
- 3.12. As discussed above, the results in **Table 3** show the main contribution to air quality in the Manchester city centre is from roads traffic emissions. At monitoring locations, away from main roads air quality concentrations improve.
- 3.13. In addition to the urban background monitoring undertaken by MCC, background concentrations of NO_x, NO₂, PM₁₀ and PM_{2.5} are available from the Defra Air Quality Archive for 1 x 1km grid squares for assessment years between 2018 and 2030. **Table 4** presents the Defra background concentrations for the year 2019 for the grid square the Site is located within (384500, 398500).

Table 4: Defra Background Maps in 2019 and for the Grid Square of the Site

Pollutant	AQS Objective	2019 Annual Mean Concentration ($\mu\text{g}/\text{m}^3$)
NO _x	-	47.0
NO ₂	40 $\mu\text{g}/\text{m}^3$	29.3
PM ₁₀	40 $\mu\text{g}/\text{m}^3$	13.6
PM _{2.5}	25 $\mu\text{g}/\text{m}^3$	8.8

Data Source: <http://uk-air.defra.gov.uk>

3.14. The data in **Table 4** shows that all pollutants are below the respective AQS objectives.

4. CONSTRUCTION PHASE

Correspondence with Manchester City Council

- 4.1. Consultation with the EHO at MCC was originally undertaken to agree the approach to the assessment (see **Appendix A**). This air quality assessment has been undertaken as per this agreed approach.

Assessment Methodology

Dust Emissions

- 4.2. The assessment of the effects from the construction activities in relation to dust has been based on the IAQM's Guidance on the Assessment of Dust from Demolition and Construction, 2014¹⁶ (IAQM Construction guidance) and the following:
- Consideration of planned construction activities and their phasing; and
 - A review of the location (and distance) of sensitive uses surrounding the Site.
- 4.3. Following the IAQM Construction guidance, construction works were divided into the following four distinct activities
- Demolition – any activity involved in the removal of an existing building;
 - Earthworks – the excavation, haulage, tipping and stockpiling of material, but may also involve levelling the site and landscaping;
 - Construction – any activity involved with the provision of a new structure; and
 - Trackout – the movement of vehicles from unpaved ground on a site, where they can accumulate mud and dirt, onto the public road network where the dust might be deposited.
- 4.4. IAQM's construction dust guidance considers the effects of dust, as follows:
- Annoyance due to dust soiling;
 - Potential effects on human health due to significant increase in exposure to PM₁₀; and
 - Harm to ecological receptors.
- 4.5. A summary of the four-step process, which was undertaken for the dust of construction activities as set out in the IAQM's construction dust guidance, is presented in **Table 5**.

Table 5: Summary of the IAQM Construction guidance for Undertaking a Construction Dust Assessment

Step	Description
1 Screen the Need for a Detailed Assessment	Simple distance-based criteria are used to determine the requirement for a detailed dust assessment. An assessment will normally be required where there are 'human receptors' within 350m of the boundary of the site and / or within 50m of the route(s) used by construction vehicles on public highway, up to 500m from the site entrance or 'ecological receptors' within 50m of the boundary of the site and/or within 50m of the route(s) used by construction vehicles on public highway, up to 500m from the site entrance.

¹⁶ Institute of Air Quality Management, 2014, 'Guidance on the Assessment of dust from demolition and construction.

Step	Description
2	<p>Assess the Risk of Dust Effects</p> <p>The risk of dust arising in sufficient quantities to cause annoyance and/or health or ecological effects should be determined using three risk categories: low, medium and high based on the following factors:</p> <ul style="list-style-type: none"> the scale and nature of the works, which determines the risk of dust arising (i.e. the magnitude of potential dust emissions) classed as small, medium or large; and the sensitivity of the area to dust effects, considered separately for ecological and human receptors (i.e. the potential for effects) defined as low, medium or high.
3	<p>Site Specific Mitigation</p> <p>Determine the site-specific measures to be adopted at the site based on the risk categories determined in Step 2 for the four activities. For the cases where the risk is 'negligible' no mitigation measures beyond those required by legislation are required. Where a local authority has issued guidance on measures to be adopted these should be taken into account.</p>
4	<p>Determine Significant Effects</p> <p>Following Steps 2 and 3, the significance of the potential dust effects should be determined, using professional judgement, taking into account the factors that define the sensitivity of the surrounding area and the overall pattern of potential risks.</p>

Construction Vehicle and Construction Plant Exhaust Emissions

- 4.6. The IAQM Construction guidance states:

"Experience of assessing the exhaust emissions from on-site plant (also known as non-road mobile machinery or NRMM) and site traffic suggests that they are unlikely to make a significant effect on local air quality, and in the vast majority of cases they will not need to be quantitatively assessed. For site plant and on-site traffic, consideration should be given to the number of plant/vehicles and their operating hours and locations to assess whether a significant effect is likely to occur. For site traffic on the public highway, if it cannot be scoped out, then it should be assessed using the same methodology and significance criteria as operational traffic impacts".

- 4.7. Given the size of the Site (approximately 0.05ha) and the estimated number of construction related Heavy Duty Vehicles (HDV) movements (considered as a worst-case to be between 10 to 50 HDV's per day), in accordance with IAQM's Construction Dust Guidance, it is considered that a quantitative assessment of the exhaust emissions from construction plant and traffic is not required, and a qualitative assessment is appropriate.

Determining Significance of Effects

Dust Emissions

- 4.8. The potential impacts of construction activities on local air quality were based on professional judgement and with reference to the criteria set out in IAQM's construction dust guidance. Appropriate mitigation that would be implemented to minimise any adverse impacts on air quality have also been considered. Details of the assessors' experience and competence to undertake the dust assessment is provided in **Appendix C**.

- 4.9. The assessment of the risk of dust impacts arising from the likely construction activities, as identified by the IAQM's construction dust guidance, is based on the magnitude of potential dust emissions and the sensitivity of the area. The risk category matrix for construction activity types, taken from the IAQM Construction guidance, are presented in **Table 6 to Table 9**.

Table 6: Risk Category from Demolition Activities

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

Table 7: Risk Category from Earthworks Activities

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

Table 8: Risk Category from Construction Activities

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

Table 9: Risk Category from Trackout Activities

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

- 4.10. The risk category determined for each construction activity type is used to define the appropriate mitigation measures that should be applied.

Nuisance Dust

- 4.11. Construction activities of the Development have the potential to affect local air quality through Demolition, Earthworks, Construction and Trackout activities, as described above. There are no ecological receptors located within proximity to the Site and along routes used by construction – ecological effects have therefore not been considered further.
- 4.12. As discussed in **Section 1: Introduction**, the Site is in a predominately commercial area. The nearest high sensitivities receptors are residential receptors located on Aytoun Street, approximately 50m south-west of the Site boundary.
- 4.13. The location of the Site and the construction phase assessment bands are presented in **Figure 1**.
- 4.14. As there are existing receptors within 350m of the boundary of the Site and within 50m of the routes that would be used by construction vehicles on the public highway, it is therefore considered that a detailed assessment is required to determine the likely dust effects, as recommended by the IAQM Construction guidance on construction dust. Results of this assessment are provided for each main activity (Demolition, Earthworks, Construction and Trackout) below.
- 4.15. The sensitivity of the area to each main activity has been assessed based on the number and distance of the nearest sensitive receptors to the activity, and the sensitivity of these receptors to dust soiling and human health.

Demolition

- 4.16. It is estimated the total volume of building to be demolished would be less than 20,000m³. Based on the size of the Site and considering the criteria in step 2A of the IAQM Construction guidance the potential dust emissions during demolition activities would be of **small** magnitude.

Earthworks

- 4.17. The Site area is approximately 0.05 hectares (ha), or 500m². Based on this and considering the criteria in step 2A of the IAQM Construction guidance, the potential dust emissions during earthworks activities could be of **small** magnitude.

Construction

- 4.18. The total volume of buildings to be constructed would be below 25,000m³. Based on the criteria in step 2A of the IAQM Construction guidance, the potential dust emissions during construction activities would be of **small** magnitude.

Trackout

- 4.19. It is estimated the number of HDV trips leaving the Site would be between 10 and 50 HDV outward movements in any one day. Based on this and considering the criteria in step 2A of the IAQM Construction guidance, the potential for dust emissions due to trackout activities would be of **medium** magnitude.

Sensitivity of the Area

- 4.20. The sensitivity of the area to each main activity has been assessed based on the number and distance of the nearest sensitive receptors to the activity, and the sensitivity of these receptors to dust soiling and human health.

Sensitivities of People to Dust Soiling Effects

- 4.21. There are estimated to be between 10 and 100 high sensitive receptors within 50m of the Site boundary. On this basis (as set out in Table 2 of the IAQM Construction guidance) the sensitivity of the area to dust soiling is **medium**.

Sensitivities of People to the Health Effects of PM₁₀

- 4.22. The 2019 Defra background map annual mean PM₁₀ concentration 13.6µg/m³. This is below the annual mean AQS objective for PM₁₀ of 40µg/m³. There are between 10 and 100 high sensitivity receptors within 50m of the Site boundary. On this basis (as set out in Table 3 of the IAQM Construction guidance) The sensitivity of the area to human health is **low**.

Sensitivities of Receptors to Ecological Effects

- 4.23. The Site does not lie within or close to any sites designated at European, National, or local level based on ecological importance. The sensitivity of the area to ecological impacts is therefore considered to be **low** and has not been considered further.

Dust Risk Summary

- 4.24. The dust risk categories, based on the potential magnitude of dust emissions and the sensitivity of the area to dust, are presented in **Table 10**.

Table 10: Summary of Risk

Receptor Sensitivity	Sensitivity of the Surrounding Area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Low Risk	Low Risk	Low Risk	Low Risk
Human Health	Negligible	Negligible	Negligible	Low Risk

- 4.25. The Site is considered **low risk** to dust soiling impacts during construction, consequently, mitigation would be required to ensure that adverse impacts be minimised, reduced and, where possible, eliminated.

Construction Vehicle and Construction Plant Exhaust Emissions

- 4.26. It is estimated that the number of construction HDVs trips would, as a worst-case, be between 10 to 50 HDV's per day. Emissions from construction traffic would therefore be relatively small compared to existing road traffic emissions, which include 3,056 daily vehicles (including 0.8% HDVs) on Aytoun Street in 2016¹⁷. Considering the current traffic movements around the Site, the likely effect of construction vehicles entering and egressing the Site on air quality would be **not significant** during the construction period.

¹⁷ <http://www.dft.gov.uk/traffic-counts/index.php>

- 4.27. Any emissions from plant operating on the Site would be very small in comparison to the emissions from traffic movements on the roads adjacent to the Site. It is therefore considered that even in the absence of mitigation, their likely effect on local air quality would be **not significant**.

Construction Mitigation Measures and Residual Effects

Dust Emissions

- 4.28. A range of environmental management controls would be implemented, in line with best practice. The controls, with reference to the IAQM Construction guidance relating to Low Risk sites, should include:
- removal of materials that have potential to produce dust, where possible;
 - enclosure of material stockpiles at all times and damping down of dusty materials during dry weather;
 - provision of appropriate hoarding and / or fencing to reduce dust dispersion and restrict public access;
 - maintenance of Site fencing, barriers and scaffolding clean using wet methods;
 - control of cutting or grinding of materials on the Site and avoidance of scabbling;
 - dust generating machinery e.g. disk cutters to be fitted with vacuums;
 - appropriate handling and storage of materials, especially stockpiled materials;
 - restricting drop heights onto lorries and other equipment;
 - fitting equipment with dust control measures such as water sprays, wherever possible;
 - using a wheel wash, avoiding of unnecessary idling of engines and routing of Site vehicles as far from sensitive properties as possible;
 - ensuring bulk cement and other fine powder materials are delivered in enclosed tankers and stored silos with suitable emission control systems to prevent escape of material and overfilling during delivery;
 - using gas powered generators rather than diesel if possible and ensuring that all plant and vehicles are well maintained so that exhaust emissions do not breach statutory emission limits;
 - switching off all plant when not in use;
 - not allowing fires on the Site; and
 - ensuring that a road sweeper is available to clean mud and other debris from hard-standing, roads and footpaths.
- 4.29. Such measures are routinely and successfully applied to major construction projects throughout the UK and are proven to reduce significantly the potential for adverse nuisance dust effects associated with the various stages of construction work. It is considered that with these measures the residual effects would remain **not significant**.

Construction Vehicle and Construction Plant Exhaust Emissions

- 4.30. All construction traffic logistics would be agreed with MCC. Consideration would also be given to the avoidance, or limited use, of traffic routes in proximity to sensitive uses and the avoidance, or

limited use, of roads during peak hours, where practicable. The likely residual effect of construction vehicles entering and egressing the Site to air quality would be **not significant**.

- 4.31. Even in the absence of mitigation, the likely effect of any emissions from plant operation on the Site would be **not significant**. This would therefore remain the likely residual effect.

5. OPERATIONAL DEVELOPMENT

Effects of the Development on Local Air Quality

- 5.1. The Transport Statement, undertaken by Price & Myers states the Development could generate up to 451 two-way vehicle trips a day. Although this is above the criteria set out above for developments within or adjacent to an AQMA, the Transport Statement states that '*due to the high level of public transport accessibility at this site and the car free nature of the development it is expected that this rate will be less in practice*'. The Transport Statement also states as the Development will be car free, vehicle trips are expected to be limited to taxis/private hire, servicing vehicles and private pick up and drop off. It has therefore been considered that most vehicle trips associated with the Development would already be on the local road network and would not cause a significant change in LDV flows on local roads with relevant receptors. Additionally, the Development would not include any centralised combustion plant or other sources that would generate significant pollutant emissions.
- 5.2. Based on the above, the Development is not expected to give rise to significant air quality impacts. As such the likely effect of the operational Development on local air quality would be **not significant**.

Mitigation Measures

- 5.3. Despite the Development not having a significant effect on local air quality, measures have been included as part of the Development, which are likely to have a benefit to air quality. **Table 11** presents the inherent design measures likely to benefit air quality.

Table 11: Summary of Mitigation Measures included as part of the Development

Phase	Mitigation Measures
Inherent – Measures included in the design of the Development	Hotel rooms would not be located on the ground floor - away from road traffic sources
	No car parking spaces provided
Operational Development	Provision and monitoring of Travel Plan
	Provision and monitoring of Waste Management and Servicing Strategy report

Predicted Future Exposure

- 5.4. In accordance with LAQM.TG(22)¹⁸ only the short term AQS Objectives apply for users of the hotel. Research¹⁹ undertaken in support of LAQM.TG(22) has indicated that the 1-hour mean AQS objective for NO₂ is unlikely to be exceeded at a location where the annual-mean NO₂ concentration is less than 60µg/m³.
- 5.5. The MAN3 Piccadilly urban background monitor is located 0.3km north-west of the Site and is considered most representative of annual mean NO₂, PM₁₀ and PM_{2.5} concentrations the Site could be exposed to. The monitored concentrations at the MAN3 Piccadilly automatic monitor were below respective AQS objectives for all pollutants in 2019.

¹⁸ Defra, 2022, Local Air Quality Management Technical Guidance, August 2022

¹⁹ AEA, 'Analysis of the relationship between annual-mean nitrogen dioxide concentration and exceedances of the 1-hour mean AQS Objective', 2008.

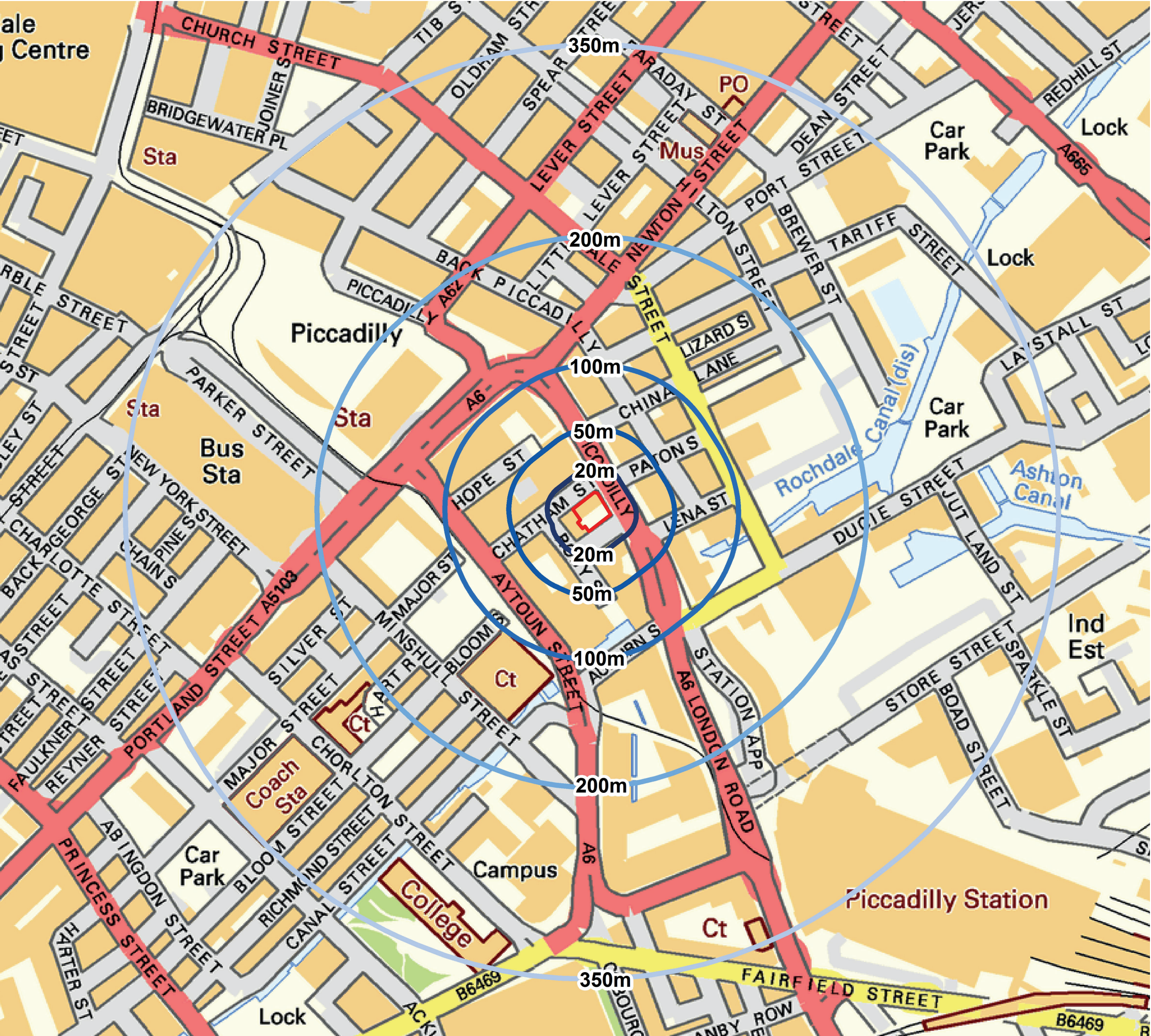
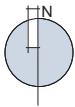
- 5.6. As shown in **Table 1**, monitored NO₂ and PM₁₀ concentrations at the Manchester Piccadilly automatic monitor (located 0.3km north-west of the Site) are below the 1-hour NO₂ and the 24-hour PM₁₀ AQS objective. This automatic monitor is the closest monitor to the Site and is representative of air quality concentrations at the Site. In addition, the results from the nearest diffusion tubes to the Site (within 1km to the Site) all show monitored annual mean NO₂ concentrations are below 60µg/m³ in 2019, and therefore considered to be below 1-hour AQS objective for NO₂.
- 5.7. Based on the results from the nearest monitoring to the Site it is considered that the short term AQS objective for NO₂ and PM₁₀ are likely to be met for future users of the hotel. In addition, all hotel rooms would be located above ground floor and therefore would be further away from direct tailpipe emissions. The introduction of hotel users to the Site is therefore considered **not significant**.

6. SUMMARY AND CONCLUSIONS

- 6.1. A qualitative assessment of dust effects during the construction phase has been carried out using the IAQM guidance.
- 6.2. The main likely effects on local air quality during construction relates to nuisance dust. A range of mitigation measures to minimise or prevent dust emissions would be implemented through the construction works, this would ensure that the effects would be **not significant** at all receptor locations.
- 6.3. It is anticipated that the effect of construction vehicles entering and egressing the Site during the construction period would also be **not significant**, in the context of traffic movements on the roads adjacent to the Site.
- 6.4. Any emissions from construction plant operating on the Site would be very small in comparison to the emissions from traffic movements on the roads adjacent to the Site. It is therefore considered that the likely effect on local air quality would be **not significant**.
- 6.5. Given the Site's central location surrounded by public transport, the operational Development would be car free. Additionally, the Development would not include any centralised combustion plant. The Development would therefore not give rise to any significant adverse air quality impacts. Based on the above, the Development is not expected to give rise to significant air quality impacts. As such the likely effect of the operational Development on local air quality would be **not significant**.
- 6.6. A review of GMCA monitoring data indicates that NO₂, PM₁₀ and PM_{2.5} concentrations would be suitable for future users of the Development. The effect of local air quality on future users of the Development would be **not significant**.

FIGURES

Figure 1: Site Plan and Construction Phase Assessment Bands



Project Details	WIE12183-100: Toyoko Inn Manchester
Figure Title	Figure 1: Site Plan and Construction Phase Assessment Bands
Figure Ref	WIE12183-100_GR_AQ_1A
Date	August 2017
File Location	\\s-Incs\wiel\projects\wie12183\100\graphics\laq\issued figures

APPENDICES

Appendix A Manchester City Council Correspondence

From: [REDACTED]
Sent: 17 August 2017 15:29
To: [REDACTED]
Subject: Re: Toyoko Inn, Chatham Street Manchester Qualitative Air Quality Assessment

Hi [REDACTED]

Your methodology is fine. I would also include details of how fugitive dust emissions will be controlled and monitored during any preparation works and construction

Kind regards

[REDACTED]

[REDACTED]

Neighbourhood Officer - Environmental Protection

Citywide Support Team - Environmental Health

Growth and Neighbourhoods

Manchester City Council

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Website: www.manchester.gov.uk

On 15 August 2017 at 10:05, [REDACTED] wrote:

Good morning [REDACTED],

Sorry to chase, but have you had an opportunity to read my proposed methodology for the Toyoko Inn hotel on Chatham Street?

Many thanks

■

From: ■
Sent: 09 August 2017 11:03
To: ■ >
Subject: Toyoko Inn, Chatham Street Manchester Qualitative Air Quality Assessment
Importance: High

Good afternoon ■,

Waterman have been instructed to undertake an air quality assessment to accompany the planning application for the proposed redevelopment of Toyoko Inn, on Chatham Street, Manchester (centred on National Grid Reference (NGR) 384582, 398142) and would like to agree with Manchester City Council the scope and methodology for the assessment.

The transport consultants have said there would not be any increase in traffic flows as a result of the Development. Additionally the Development is seeking an outline application, and at this stage there is no detail on the proposed energy centre, this would be secured by a condition at a later date.

In accordance with [LAQM.TG\(16\)](#) only the short term AQS Objectives apply for users of the hotel. Research undertaken in support of [LAQM.TG\(16\)](#) has indicated that the 1 hour mean AQS objective for NO₂ is unlikely to be exceeded at a roadside location where the annual-mean NO₂ concentration is less than 60µg/m³. As the nearest monitors to the Site (Newton Street, Piccadilly Gardens, Great Ancoats Street and Princess Street) are all below 60µg/m³ in 2015 and 2016, we therefore propose to undertake a qualitative air quality assessment inclusive of a baseline review of existing air quality conditions.

I would welcome your thoughts on whether a qualitative assessment would be acceptable?

I look forward to hearing from you.

Kind regards

■

[Andy Fowler](#)

Consultant

Waterman Infrastructure & Environment Ltd

Pickfords Wharf | Clink Street | London SE1 9DG

t [REDACTED]

www.watermangroup.com | [LinkedIn](#) | [Twitter](#)

 Please consider the environment before printing this e-mail. Thank you!

From: [REDACTED]

Sent: 15 August 2017 15:02

To: [REDACTED]

Subject: RE: Toyoko Inn, Chatham Street AQ Assessment Proposals

Hi [REDACTED]

Thanks for getting back to me so promptly.

I will make sure we reference particulates as well as NO₂.

Thanks again

[REDACTED]

From: [REDACTED]

Sent: 15 August 2017 11:12

To: [REDACTED]

Subject: Re: Toyoko Inn, Chatham Street AQ Assessment Proposals

Hi [REDACTED].

I have just noticed that you do not mention particulates in the proposals, the assessment needs to include these too and not just NO₂.

Kind Regards

[REDACTED]

[REDACTED]

Neighbourhood Officer - Environmental Protection

Citywide Support - Environmental Health

The Neighbourhoods Service

Growth and Neighbourhoods

Manchester City Council

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

On 15 August 2017 at 11:06, [REDACTED] l.miller@manchester.gov.uk:

Good morning [REDACTED],

I have read through your proposals for the Air Quality Assessment for the above and agree with the approach being taken.

I look forward to seeing the response in due course.

Kind Regards

[REDACTED]

[REDACTED]

Neighbourhood Officer - Environmental Protection

Citywide Support - Environmental Health

The Neighbourhoods Service

Growth and Neighbourhoods

Manchester City Council

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Please consider the environment before printing an e-mail

From: [REDACTED]

Sent: 15 August 2017 15:02

To: [REDACTED]

Subject: RE: Toyoko Inn, Chatham Street AQ Assessment Proposals

Hi [REDACTED],

Thanks for getting back to me so promptly.

I will make sure we reference particulates as well as NO₂.

Thanks again

[REDACTED]

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To: [REDACTED]
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[REDACTED]

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Citywide Support - Environmental Health

The Neighbourhoods Service

Growth and Neighbourhoods

Manchester City Council

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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Sent: 15 August 2017 10:05

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Subject: RE: Toyoko Inn, Chatham Street Manchester Qualitative Air Quality Assessment

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Many thanks

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I would welcome your thoughts on whether a qualitative assessment would be acceptable?

I look forward to hearing from you.

Kind regards

[Redacted]

[Redacted]

Consultant

Waterman Infrastructure & Environment Ltd

[Redacted]

[Redacted]

www.watermangroup.com | [LinkedIn](#) | [Twitter](#)

P Please consider the environment before printing this e-mail. Thank you!

Appendix B Summary of Relevant Legislation, Planning Policy and Guidance

Legislation

EU Framework Directive 2008/50/EC, 2008

Air pollutants at high concentrations can have adverse effects on the health of humans and ecosystems. European Union (EU) legislation on air quality forms the basis for UK legislation and policy on air quality.

The EU Framework Directive 2008/50/EC²⁰ on ambient air quality assessment and management came into force in May 2008 and was implemented by Member States, including the UK, by June 2010. The Directive aims to protect human health and the environment by avoiding, reducing or preventing harmful concentrations of air pollutants.

Air Quality Standards Regulations, 2010

The Air Quality Standards Regulations²¹ implement Limit Values prescribed by the EU Framework Directive 2008/50/EC. The Limit Values are legally binding and the Secretary of State, on behalf of the UK Government, is responsible for their implementation.

The UK Air Quality Strategy, 2007

The current UK Air Quality Strategy (UK AQS) was published in July 2007²² and sets out the objectives for local planning authorities (LPA) in undertaking their Local Air Quality Management (LAQM) duties. The UK AQS objectives of air pollutants relevant to this assessment are summarised in Table A1.

Table A1: Summary of Relevant UK AQS Objectives

Pollutant	Objective		Date by which Objective to be Met
	Concentration	Measured as	
Nitrogen Dioxide (NO ₂)	200µg/m ³	1 hour mean not to be exceeded more than 18 times per year	31/12/2005
	40µg/m ³	Annual Mean	31/12/2005
Particulate Matter (PM ₁₀) ^(a)	50µg/m ³	24 hour mean not to be exceeded more than 35 times per year	31/12/2004
	40µg/m ³	Annual Mean	31/12/2004
Particulate Matter (PM _{2.5}) ^(b)	Target of 15% reduction in concentrations at urban background locations	Annual Mean	Between 2010 and 2020
	25µg/m ³	Annual Mean	01/01/2020

Note: (a) Particulate matter with a mean aerodynamic diameter less than 10 microns (or micrometres – µm)

(b) Particulate matter with a mean aerodynamic diameter less than 2.5 microns

²⁰ Council Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe.

²¹ Defra, (2010) The Air Quality Standards (England) Regulations.

²² Department of the Environment, Food and Rural Affairs (Defra), (2007). 'The Air Quality Strategy for England, Scotland, Wales & Northern Ireland'.

Further to Table A1, the European Union (EU) also sets Limit Values for NO₂, PM₁₀ and PM_{2.5}²³, which have been adopted by the UK²⁴. The Limit Value for NO₂ is the same numerical level as the AQS objective but the target date differs. Achievement of these values is a national obligation rather than a local obligation. In the UK, only monitoring and modelling carried out by Defra and Central Government meets the specification required to assess compliance with the Limit Values. Further, Defra and other central government agencies do not recognise local authority monitoring or local modelling studies when determining the likelihood of the Limit Values being exceeded. As such the Limit Values have not been considered further in the Air Quality Assessment.

The Environment Act, 1995

In a parallel process, the Environment Act 1995²⁵ required the preparation of a national air quality strategy setting health-based air quality objectives for specified pollutants and outlining measures to be taken by LPAs in relation to meeting these objectives (the LAQM system).

Part IV of the Environment Act 1995 provides a system of LAQM under which LPAs are required to review and assess the future quality of the air in their area by way of a staged process. Should this process suggest that any of the AQS objectives will not be met by the target dates, the LPA must consider the declaration of an Air Quality Management Area (AQMA) and the subsequent preparation of an Air Quality Action Plan (AQAP) to improve the air quality in that area in pursuit of the AQS objectives.

Planning Policy

National Planning Policy

National Planning Policy Framework, 2021

The National Planning Policy Framework (NPPF)²⁶, published in July 2021 sets out the Government's planning policies for England and how these should be applied.

Paragraph 105 states *"The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making"*.

Paragraph 174 states *"Planning policies and decisions should contribute to and enhance the natural and local environment by: ... preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans"*.

Paragraph 185 states *"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development"*.

²³ Council Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe.

²⁴ Defra, (2010) The Air Quality Standards (England) Regulations.

²⁵ Office of the Deputy Prime Minister (ODPM), 1995, 'The Environment Act' 1995.

²⁶ Department for Communities and Local Government, 2021, 'National Planning Policy Framework'. DCLG, London.

Paragraph 186 states “Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan”.

Local Planning Policy

Manchester City Council Core Strategy Development Plan Document, 2012

The MCC Core Strategy²⁷ sets out the long term strategic policies for Manchester's future development. Policy EN 16 'Air Quality' states:

“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 impact 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 impacts on air quality, alongside other plan objectives. This includes cumulative impacts, particularly in Air Quality Management Areas.”

Guidance

Department for Environment, Food and Rural Affairs, Clean Air Strategy, 2019

Published in January 2019 the Clean Air Strategy²⁸ sets out a coherent framework and national action to improve air quality throughout the UK.

The Strategy is underpinned by new national powers to control major sources of air pollution, in line with the risk they pose to public health and the environment, plus new local powers to act in areas with an air pollution problem. The Strategy also supports the creation of Clean Air Zones to lower emissions from all sources of air pollution, backed up with clear enforcement mechanisms.

Improving Air Quality in the UK: Tackling Nitrogen Dioxide in our Towns and Cities. UK Air Quality Plan for Tackling Nitrogen Dioxide, 2017

The UK Government was required by the High Court to release an Air Quality Plan to meet the NO₂ Limit Value in the shortest timescale as possible. This document was adopted on 26 July 2017²⁹.

The plan focuses on reducing concentrations of NO_x and NO₂ around road vehicle emissions within the shortest possible time. With the principal aims to:

a. reduce emissions of NO_x from the current road vehicle fleet in problem locations now; and

²⁷ Manchester City Council (2012) Manchester's Local Development Framework – Core Strategy Development Plan Document. Adopted 11th July 2012

²⁸ Defra (2019) Clean Air Strategy, 2019

²⁹ Defra (2017) Improving Air Quality in the UK: Tackling nitrogen dioxide in our towns and cities. Draft UK Air Quality Plan for Tackling Nitrogen Dioxide (Consultation Document)

b. accelerate road vehicle fleet turnover to cleaner vehicles to ensure that the problem remains addressed and does not move to other locations.

The other aims include reducing background concentrations of NO_x from:

- Other forms of transport such as rail, aviation and shipping;
- Industry and non-road mobile machinery; and
- Buildings, both commercial and domestic, and other stationary sources.

The document provided additional measures to reduce NO_x and NO₂ concentrations in the UK, such measures include:

- Mandate local authorities to implement Clean Air Zones within the shortest possible time;
- Consultation on proposal for a Clean Air Zone Framework for Wales;
- Consultation on a draft National Low Emission Framework for Scotland;
- Commitment to establishing a Low Emission Zone for Scotland by 2018;
- Tackling air pollution on the English Road network;
- New real driving emissions requirement to address real world NO_x emissions;
- Additional funding to accelerate uptake of hydrogen vehicles and infrastructure;
- Additional funding to accelerate the uptake of electric taxis;
- Further investment in retrofitting alongside additional support of low emission buses and taxis;
- Regulatory changes to support the take up of alternatively fuelled light commercial vehicles;
- Exploring the appropriate tax treatment for diesel vehicles;
- Call for evidence on updating the existing HGV Road User Levy;
- Call for evidence on use of red diesel;
- Ensure wider environmental performance is apparent to consumers when purchasing cars;
- Updating Government procurement policy;
- New emissions standards for non-road mobile machinery;
- New measures to tackle NO_x emissions from Medium Combustion Plants; and,
- New measures to tackle NO_x emissions from generators.

The above measures do not provide any actions which are relevant to the operation or design of the Development.

A High Court ruling³⁰ on 21st February 2018, stated the UK Governments air quality improvement plan adopted on 31 July 2017 was unlawful as *'it does not contain measures sufficient to ensure substantive compliance with the 2008 Directive and the English Regulations'*. The UK Government *'must ensure steps are taken to achieve compliance as soon as possible, by the quickest route possible and by a means that makes that outcome likely'*.

The judgement stated that the UK Government must produce a supplementary plan, setting out requirements for feasibility studies to be undertaken in 33 Local Authority Areas. Birmingham was directed to complete a Full Business Case explaining how the City Council would deliver regulatory compliance and in what timeframe. The City Council identified that a Class D Clean Air Zone (CAZ) with additional measures would be required to deliver compliance in the shortest time possible. The

³⁰ <https://www.judiciary.gov.uk/judgments/the-queen-on-the-application-of-clientearth-no-3-claimant-v-secretary-of-state-for-environment-food-and-rural-affairs-and-others/>

CAZ plan was approved by the UK Government in March 2019 and is due to be launched in June 2021.

Environmental Protection UK & Institute of Air Quality Management Guidance; Land-Use Planning & Development Control: Planning for Air Quality, 2017

Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) Land-Use Planning & Development Control: Planning for Air Quality Guidance³¹ provides a framework for air quality considerations within local development control processes, promoting a consistent approach to the treatment of air quality issues.

The guidance explains how development proposals can adopt good design principles to reduce emissions and contribute to better air quality. The guidance also provides a method for screening the need for an air quality assessment and a consistent approach for describing the impacts at individual receptors.

The EPUK / IAQM guidance, advises that:

"In arriving at a decision about a specific proposed development the local planning authority is required to achieve a balance between economic, social and environmental considerations. For this reason, appropriate consideration of issues such as air quality, noise and visual amenity is necessary. In terms of air quality, particular attention should be paid to:

- *Compliance with national air quality objectives and of EU Limit Values;*
- *Whether the development will materially affect any air quality action plan or strategy;*
- *The overall degradation (or improvement) in local air quality; or*
- *Whether the development will introduce new public exposure into an area of existing poor air quality".*

Planning Practice Guidance: Air Quality, 2019

The Government's online Planning Practice Guidance (PPG) states that all development plans can influence air quality in several ways including the development proposals, location and any provision made for sustainable transport. Consideration of air quality issues at the plan-making stage can ensure a strategic approach to air quality and help secure net improvements in overall air quality where possible.

Whether air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to have an adverse effect on air quality in areas where it is already known to be poor, particularly if it could affect the implementation of air quality strategies and action plans and/or breach legal obligations (including those relating to the conservation of habitats and species). Air quality may also be a material consideration if the proposed development would be particularly sensitive to poor air quality in its vicinity.

Where air quality is a relevant consideration the local planning authority may need to establish:

- the 'baseline' local air quality, including what would happen to air quality in the absence of the development;
- whether the proposed development could significantly change air quality during the construction and operational phases (and the consequences of this for public health and biodiversity); and

³¹ Environmental Protection UK & Institute of Air Quality Management (2017), 'Land-Use Planning & Development Control: Planning for Air Quality', EPUK & IAQM, London.

- whether occupiers or users of the development could experience poor living conditions or health due to poor air quality.

Local Air Quality Management Policy Guidance, 2022

The Local Air Quality Management Policy Guidance LAQM.PG(22) provides guidance to improve local air quality using available levers, including planning, public health and transport responsibilities. LAQM.PG(22) describes how power stations, motor vehicles, industrial and domestic combustion processes all contribute to local air pollution. Transport initiatives are set out to illustrate how transport measures may bring improvements in air quality.

Institute of Air Quality Management: Guidance on the Assessment of Dust from Demolition and Construction, 2016

The IAQM Construction Dust Guidance³² provides guidance to consultants and Environmental Health Officers on how to assess air quality impacts from construction related activities. The guidance provides a risk-based approach based on the potential dust emission magnitude of the site (small, medium or large) and the sensitivity of the area to dust impacts. The importance of professional judgement is noted throughout the guidance. The guidance recommends that once the risk class of the site has been identified, the appropriate level of mitigation measures are implemented to ensure that the construction activities have no significant impacts.

Greater Manchester Air Quality Action Plan, 2016-2021

The GMCA Air Quality Action Plan (AQAP)³³ covers the whole of Greater Manchester and details measures that will be taken across the area and summarises how the AQAP will be evaluated. The primary objectives of this AQAP is to improve air quality across Greater Manchester and to embed low-emission behaviours by 2025, whilst supporting the UK Government in meeting all EU thresholds for key air pollutants at the earliest date to reduce ill-health in Greater Manchester.

Key priority areas have been identified in the AQAP, which are generally locations near to major roads and heavily trafficked areas in Manchester city centre, and other major urban centres across the other nine districts, where air quality is poor and where people live. The AQAP sets three key performance indicators have been defined to help categorise improvement actions, these are:

- Reduce traffic;
- Increase efficiency; and
- Improve fleet.

To ensure that these proposed actions are successfully implemented, policies and interventions were identified and separated into the following broad subjects;

- Development Management and Planning Regulation;
- Freight and Heavy Goods Vehicles;
- Buses;
- Cycles;
- Travel Choices;

³² Institute of Air Quality Management, 2016, 'Guidance on the Assessment of dust from demolition and construction v1.1.

³³ The Greater Manchester Air Quality Action Plan, 2016-2021

- Cars; and
- Information and Resources.

Appendix C Assessor Experience

Name: Ben Squire

Years of Experience: <1

Qualifications:

- A Level Geography A
- A Level Biology B
- A Level History B
- BSc (Hons) Environmental Management (ongoing)

Ben Squire is an Environmental Practitioner Apprentice currently assisting the Air Quality team.

Name: Andy Fowler

Years of Experience: 11

Qualifications:

- CEnv
- BSc (Hons)
- Member of the IAQM
- Full Member of the Institution of Environmental Sciences (IES)

Andy has been responsible for the technical delivery of a wide range of air quality projects for a variety of clients in both the public and private sector. These projects include consideration of emissions from both transportation and industrial sources, through both monitoring and modelling, and therefore he has an in depth understanding of the regulatory requirements for these sources and the published technical guidance for their assessment.

Our vision

“Engineering a better environment for people and the planet”

Our mission

“To solve complex problems for the benefit of clients, communities and the climate”

Our values

People orientated

Individually and collectively, people are our business.
We strive to create environments for everyone to flourish and thrive.

Flexible

Pragmatic by nature and dedicated to getting the job done to the highest possible standard.

Professional

Operating at pace with integrity to deliver technical and robust solutions.

Environmentally aware

We understand our responsibility to the environment, it shapes our decision making and informs our practice.

Innovative

Our forensic questioning provides the ability to deliver appropriate innovations at every stage on every project.

Relationship focused

We value individuality and the benefits of working collaboratively to achieve positive outcomes for all.

