

Odour Assessment

14 Lockett Street
Manchester
M8 8EE

July 2025

1. Executive Summary

1.1 This **Odour Assessment** has been prepared to support a planning application for the proposed **change of use** of the existing one-storey warehouse at **14 Lockett Street, Manchester**, into a food production facility. The purpose of the assessment is to determine the potential for odour generation, its likely impact on local receptors, and recommend appropriate mitigation measures.

1.2 The proposed development is located within a predominantly commercial and light industrial area. As such, the area is considered to be of relatively low sensitivity to odour.

1.3 This report provides a comprehensive evaluation of the potential for odour generation and its impact on existing receptors. The assessment has been undertaken in accordance with guidance from the Institute of Air Quality Management (IAQM), the Environment Agency's H4 Odour Management document, and relevant planning policy.

1.4 The assessment includes a **FIDOL (Frequency, Intensity, Duration, Offensiveness and Location)** analysis and a site odour survey. The findings conclude that, with appropriate mitigation and operational controls, the proposed development will not give rise to unacceptable odour impacts.

1.5 This assessment is carried out in accordance with the relevant local and national policy guidance.

2. Introduction

2.1 This report has been commissioned to assess the odour implications associated with the proposed conversion of an existing single-storey warehouse into a food production facility at **14 Lockett Street, Manchester, M8 8EE.**

2.2 The site is located within a predominantly commercial and industrial setting in the Strangeways area of Manchester, and the building is currently vacant. The proposed development involves the internal reconfiguration of the premises to facilitate food preparation, cooking, and packaging operations. The nature of the activities, while small-scale, involves the use of commercial kitchen equipment and therefore has the potential to give rise to food-related odours.

2.3 In accordance with national and local planning policy, applicants are required to demonstrate that proposed developments will not give rise to unacceptable levels of pollution, including odour, which could result in nuisance to neighbouring occupiers or detract from the amenity of the area. This is particularly important in relation to food premises, which are recognised as potential odour-generating uses.

2.4 A site visit and contextual review were undertaken to inform the assessment. While the scale of the proposed operations is relatively modest, it is acknowledged that even low-level odour emissions can cause concern in certain circumstances if not properly controlled. The findings and conclusions set out herein are therefore intended to provide reassurance that odour will be effectively managed as part of the development's operational procedures.

2.5 The assessment has been undertaken with reference to recognised industry best practice, including:

- Environment Agency's H4 Odour Management Guidance,
- Institute of Air Quality Management (IAQM) "Guidance on the Assessment of Odour for Planning" (2018),
- Manchester City Council's Local Plan policies,
- The National Planning Policy Framework (NPPF).

2.6 The site and the surroundings are shown in **Figure 1** and **Figure 2**.



Fig. 1 Site and surroundings Plan



Fig. 2 Site and surroundings views

3. Project Description and Context

3.1 The development site comprises a single-storey unit, previously used for wholesale storage and distribution. The unit has a floor area of approximately 150 square metres and is accessed via Lockett Street.

3.2 The proposal seeks to change the use of the building to a food production facility specialising in preparation and packaging of pre-cooked meals and baked goods. No major structural works or external alterations are proposed.

3.3 The site lies within a commercial zone of Strangeways, Manchester, approximately 250 metres from the River Irwell. The topography gently slopes towards the south-west. The wider area contains mixed uses, including light industrial premises, warehouses, and vehicle depots. Residential dwellings are located approximately 120 metres away to the north-east.

3.4 Due to the nature of food production activities, potential odour sources include cooking processes, ventilation and extraction systems, food waste storage, and cleaning chemicals.

3.4 The site location plan is shown in **Figure 3**.

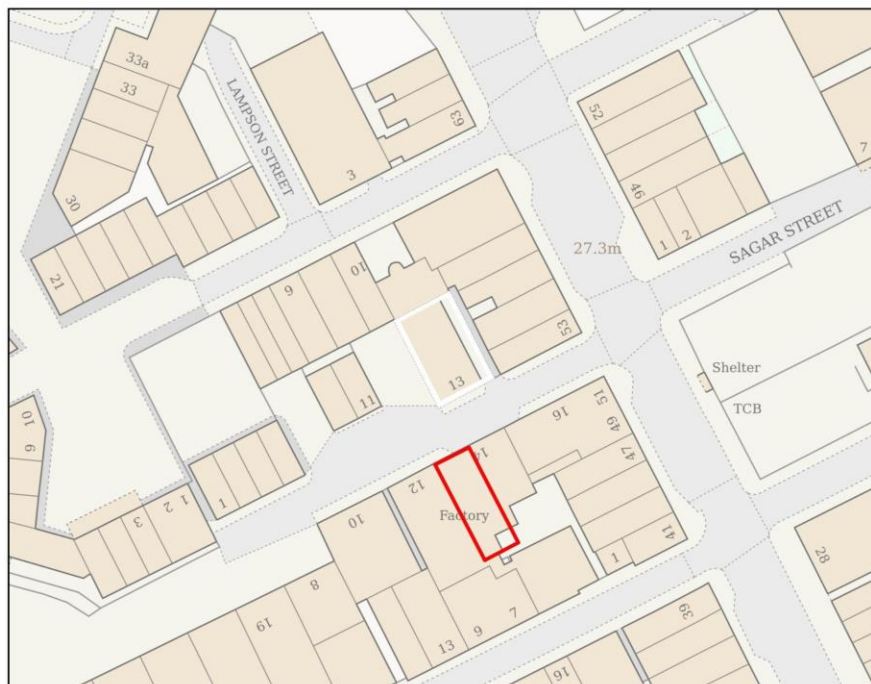


Fig. 3 Site Location Plan

4. Planning Legislation, Policy and Guidance

4.1 This assessment has been conducted in line with the following relevant documents:

National Planning Policy Framework (NPPF, 2021) – which requires developments to prevent new or existing developments from being put at unacceptable risk from pollution, including odour.

Manchester City Council Core Strategy (Adopted 2012) – particularly Policy EN19 (Air Quality), which states that development should not lead to a deterioration of air quality (including odorous emissions).

Environment Agency H4 Odour Management Guidance (2011) – outlining expectations for odour control and management from commercial facilities.

Institute of Air Quality Management (IAQM) “Guidance on the Assessment of Odour for Planning” (Version 1.1, 2018) – the standard for odour assessments in planning contexts.

4.2 The proposed development does not fall within a type requiring an Environmental Permit. However, the applicant is expected to demonstrate that the development will not have an unacceptable impact on local amenity.

5. Methodology (Including FIDOL and Sniff Test)

5.1 The odour impact assessment has been undertaken using a combination of desk-based analysis, site visits, meteorological review, and qualitative field odour (sniff) surveys.

5.2 The **FIDOL factors** have been used to characterise the potential for odour impact further expressed in **Appendix A**:

- **Frequency:** Cooking is expected to occur on weekdays and Saturday daytimes in two production cycles daily.
- **Intensity:** Odours are expected to range from mild to moderate, dependent on product type (baked goods, pre-cooked meals).
- **Duration:** Episodic; linked to specific production times, typically not exceeding 60 minutes per event.
- **Offensiveness:** Mild; general food odours are not inherently offensive.
- **Location:** Commercial/light industrial context; low sensitivity overall.

5.3 The **Sniff Test (Field Odour Survey)** methodology followed IAQM's qualitative method:

- Conducted by a trained assessor.
- Five-point odour intensity scale used.
- Surveys took place both at the site boundary and at off-site sensitive receptors.
- Weather conditions and wind direction were recorded during the survey.

6. Site Survey and Observations

6.1 Site Survey – 7 May 2025

- Time: 12:30–13:30 UTC
- Weather: Warm (~18°C), dry, south-westerly wind (~3 m/s).
- Survey Notes: Wind direction favourable for potential odour dispersal toward the northeast.

Observations:

- No unusual odour observed on site.
- Due to prevailing wind direction, the residential area to the north was not surveyed during this visit, as it was considered not at risk during the time of assessment.
- No odour detected during walkover.

6.2 The weekly summary is shown in the following Figure 4.

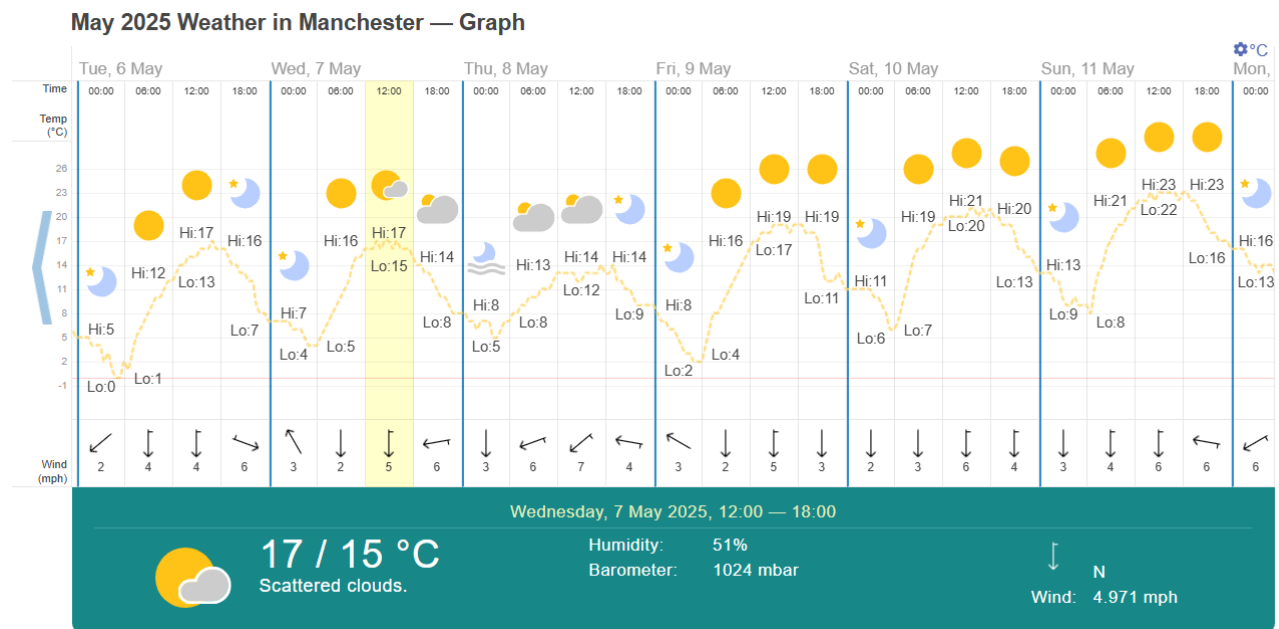


Fig. 4 Weekly Weather Summary from 7th May to 11th May 2025

6.3 The typical wind direction on 7th May 2025 was from predominantly moved from NE/ENE towards SW/WSW as shown in Appendix B and Figure 5 below.

	Conditions			Comfort				
Time	Temp	Weather	Wind	Humidity	Barometer	Visibility		
11:50	22 °C	Clear.	5 mph	44%	1017 mbar	N/A		
12:20	23 °C	Clear.	5 mph	41%	1017 mbar	N/A		
12:50	23 °C	Passing clouds.	6 mph	41%	1017 mbar	N/A		
13:20	24 °C	Clear.	8 mph	36%	1016 mbar	N/A		
13:50	24 °C	Clear.	8 mph	39%	1016 mbar	N/A		
14:20	24 °C	Clear.	6 mph	36%	1016 mbar	N/A		
14:50	25 °C	Clear.	7 mph	32%	1015 mbar	N/A		
15:20	24 °C	Clear.	8 mph	34%	1015 mbar	N/A		
15:50	25 °C	Clear.	5 mph	34%	1015 mbar	N/A		
16:20	25 °C	Clear.	3 mph	34%	1015 mbar	N/A		
16:50	23 °C	Clear.	13 mph	41%	1015 mbar	N/A		
17:20	23 °C	Clear.	12 mph	44%	1015 mbar	N/A		
17:50	23 °C	Clear.	10 mph	41%	1014 mbar	N/A		
18:20	22 °C	Clear.	12 mph	44%	1014 mbar	N/A		

Fig. 5 Daily Weather Summary for 7th May 2025

6.4 Sniff Test Summary

Location	Intensity (0–5)	Description
Front of Site (Lockett Street)	0	No odour detected
Side Alley	1	Very faint commercial odour
Rear Courtyard	1	Faint surrounding odour
Burton Road (residential)	0	No odour detected
Albert Village Community Primary School	0	No odour detected

- **Frequency:** None observed during survey periods.
- **Intensity:** All readings 0 - 1 (no or very faint odours).
- **Duration:** N/A - no continuous odours present.
- **Offensiveness:** None observed.
- **Location Sensitivity:** Low to medium; no immediate residential properties.

7. Assessment and Results

7.1 Source – Pathway – Receptor (SPR) Framework from Sniff Test

Source	Pathway	Receptor	Sensitivity	Risk
Cooking (oven/fryer)	Extract duct to atmosphere	Commercial neighbours	Low	Low
Food waste storage	Open bins, spills	Street or side alley	Low	Low
Cleaning materials	Evaporation or spills	Staff only	Low	Negligible

7.2 Assessment Results Overview

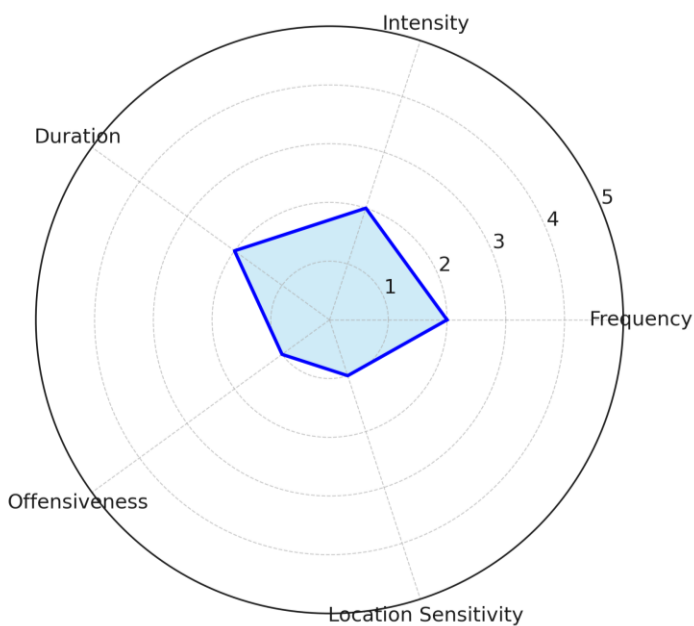


Fig. 6 FIDOL assessment values for 14 Lockett Street

The Radar chart summaries as -

- **Frequency:** 2 – Occasional odour events during specific operations
- **Intensity:** 2 – Low to moderate odour strength
- **Duration:** 2 – Typically short-lived
- **Offensiveness:** 1 – Mild, non-offensive odour types
- **Location Sensitivity:** 1 – Low-sensitivity commercial area

7.3 Summary

- Based on the site visit, sniff testing, and desk assessment, the potential for off-site odour impact is low.
- No off-site odours were noted, including at residential and sensitive receptors.
- Proposed use aligns with the existing character of the area and will not introduce incompatible emissions.

7.4 Findings

- The proposed facility is located in a predominantly commercial and light industrial area.
- The nearest sensitive receptors (residential properties) are over 100 meters away.
- Using the **FIDOL** methodology (Frequency, Intensity, Duration, Offensiveness, and Location), the potential for odour impacts is considered low to moderate.
- A detailed Odour Management Plan (**OMP**) and operational controls will ensure that any odour emissions remain within acceptable limits.

8. Assessment Uncertainties

8.1 Odour perception is subjective and can vary between individuals. The sniff test is a qualitative tool and should be considered alongside other assessment components.

8.2 Meteorological conditions vary throughout the year. While site visits were representative of normal operating conditions, they may not capture peak summer temperatures or rare stagnation events.

8.3 Details of specific food products and volumes were not available at the time of assessment. The risk characterisation assumes small to medium-scale food preparation without open-flame grilling or deep-fat frying.

9. Proposed Mitigation Methods

9.1 To ensure that odour emissions remain acceptable and compliant with policy, the following measures are proposed, also depicted on plan in **Figure 7**:

Mechanical Ventilation:

- Extraction fitted with carbon filters or electrostatic precipitators.
- Stack height sufficient to promote upward dispersion.

Waste Management:

- Food waste stored in sealed containers.
- Daily waste removal by licensed contractor.

Cleaning Protocols:

- Routine cleaning of ducts and filters.
- Grease management system as required.

Monitoring and Management:

- Implement an Odour Management Plan (OMP).
- Complaints log maintained; response protocol established.

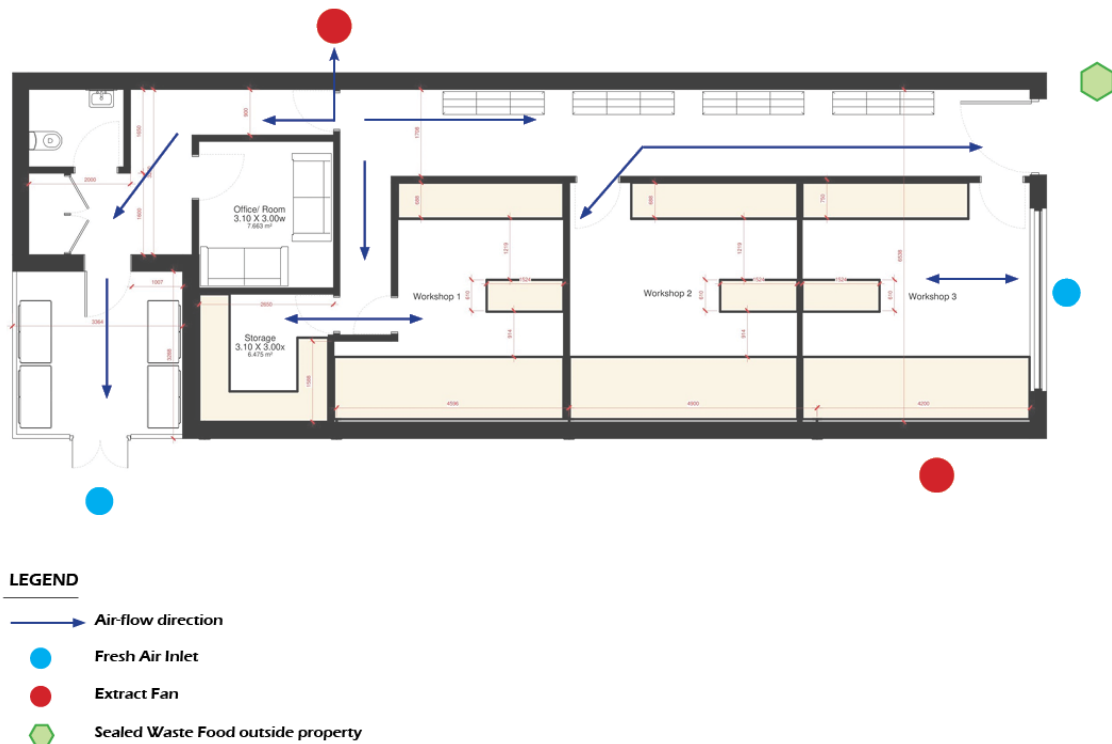


Fig. 7 Proposed mitigation methods (Odour Management Plan) depicted in the plan by author

10. Conclusion

10.1 This odour assessment has identified the likely sources of odour associated with the proposed **change of use** of **14 Lockett Street** to a **food production facility**.

10.2 Based on field surveys, receptor distances, site setting, and mitigation proposals, the risk of significant odour nuisance is considered **low**.

10.3 The development is appropriate for its context and, subject to implementation of the proposed control measures, will not result in an adverse impact on local amenity.

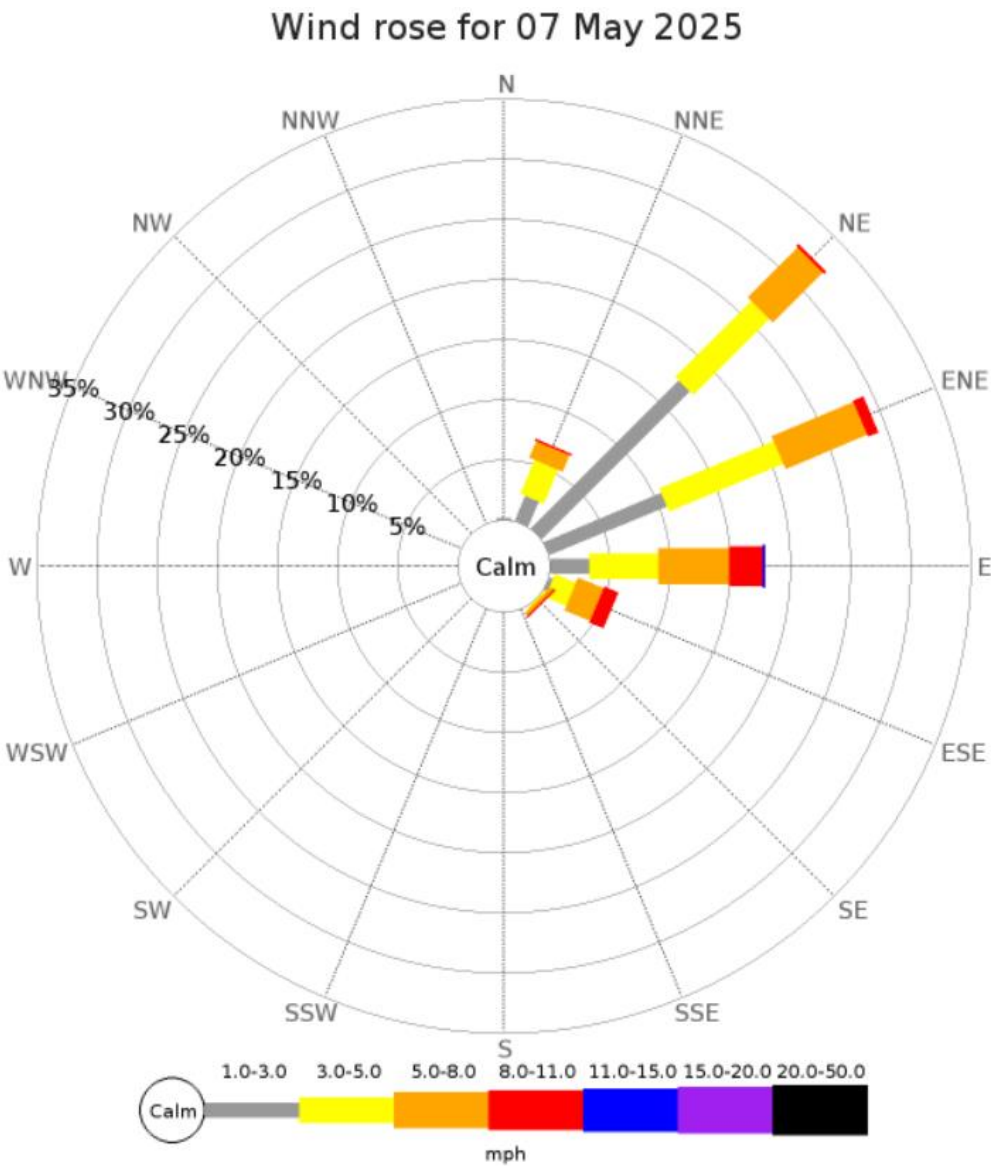
10.4 The development therefore complies with relevant planning policies and is recommended for approval with the inclusion of a condition requiring an Odour Management Plan prior to occupation.

Appendix

Appendix A - IAQM FIDOL Matrix Template

FIDOL Factor	Assessment	Details
Frequency (<i>How often is the odour likely to be detected?</i>)	e.g. Low / Moderate / High	Describe occurrence rate: e.g. "Occasional odour events expected during specific operations (e.g., ventilation exhausts during peak usage)"
Intensity (<i>How strong is the odour?</i>)	e.g. Weak / Moderate / Strong	Specify perceived odour strength, e.g.: "Odour likely to be of moderate intensity near source, reducing with distance."
Duration (<i>How long will the odour last?</i>)	e.g. Short / Intermittent / Prolonged	E.g.: "Short-term odours during limited operational periods (e.g., equipment maintenance or ventilation cycles)."
Offensiveness (<i>How unpleasant or offensive is the odour?</i>)	e.g. Low / Moderate / High	E.g.: "Mild industrial/chemical odour expected; generally considered low offensiveness."
Location (<i>Sensitivity of surrounding area & receptors</i>)	e.g. Low / Moderate / High	E.g.: "Located in light industrial area with limited sensitive receptors nearby; low to moderate sensitivity."

Appendix B – Wind rose Map for 14 Lockett Street



Appendix C - IAQM FIDOL Assessment Methodology

The IAQM Guidance on the Assessment of Odour for planning methodology is summarized as -

Table A2: Risk of odour exposure (impact) at the specific receptor location based on IAQM (2018)

		Source Odour Potential		
		Small	Medium	Large
Pathway Effectiveness	Highly Effective Pathway	Low Risk	Medium Risk	High Risk
	Moderately Effective Pathway	Negligible Risk	Low Risk	Medium Risk
	Ineffective Pathway	Negligible Risk	Negligible Risk	Low Risk

Table A3: Likely magnitude of odour effect at the specific receptor location based on IAQM (2018)

Risk of Odour Exposure	Receptor Sensitivity		
	Low	Medium	High
High Risk of Odour Exposure	Slight Adverse Effect	Moderate Adverse Effect	Substantial Adverse Effect
Medium Risk of Odour Exposure	Negligible Effect	Slight Adverse Effect	Moderate Adverse Effect
Low Risk of Odour Exposure	Negligible Effect	Negligible Effect	Slight Adverse Effect
Negligible Risk of Odour Exposure	Negligible Effect	Negligible Effect	Negligible Effect