

12 CLARENCE PLACE, NEWPORT

EMAQ+ KITCHEN ODOUR ASSESSMENT

JUNE 2026



AIR – ODOUR - CLIMATE

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Client	Reference	Author	QC	QA	Date
Balamurugan Singaravel	COGAN_P1143O_A1	AC	KC	KC	01/06/2026

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Contact Details

Contact	Address	Email	Telephone
Dr Austin Cogan Cogan Environmental Consulting Limited	Orchard House, Knapp Road, Thornbury, South Gloucestershire, United Kingdom, BS35 2HQ	austin@cogan-ec.com	07881824629

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Executive Summary

The odour associated with proposed commercial at 12 Clarence Place in Newport has been assessed.

Odour associated with the commercial kitchen has been assessed using the risk assessment approach set out in the EMAQ+ guidance. This identified a very high impact risk from unabated odours, and a very high level of odour control would be appropriate.

Odour mitigation measures for the Proposed Development have been described. This includes an extract canopy, baffle (grease) filters, particle filtration, carbon filtration, and ESP extraction. The restaurant will also have in place suitable cleaning and maintenance regimes.

It is suggested that this level of mitigation would likely be suitable for the restaurant to ensure the living conditions of neighbouring receptors are acceptable. However, additional abatement measures are provided for guidance should any odour issues later arise.

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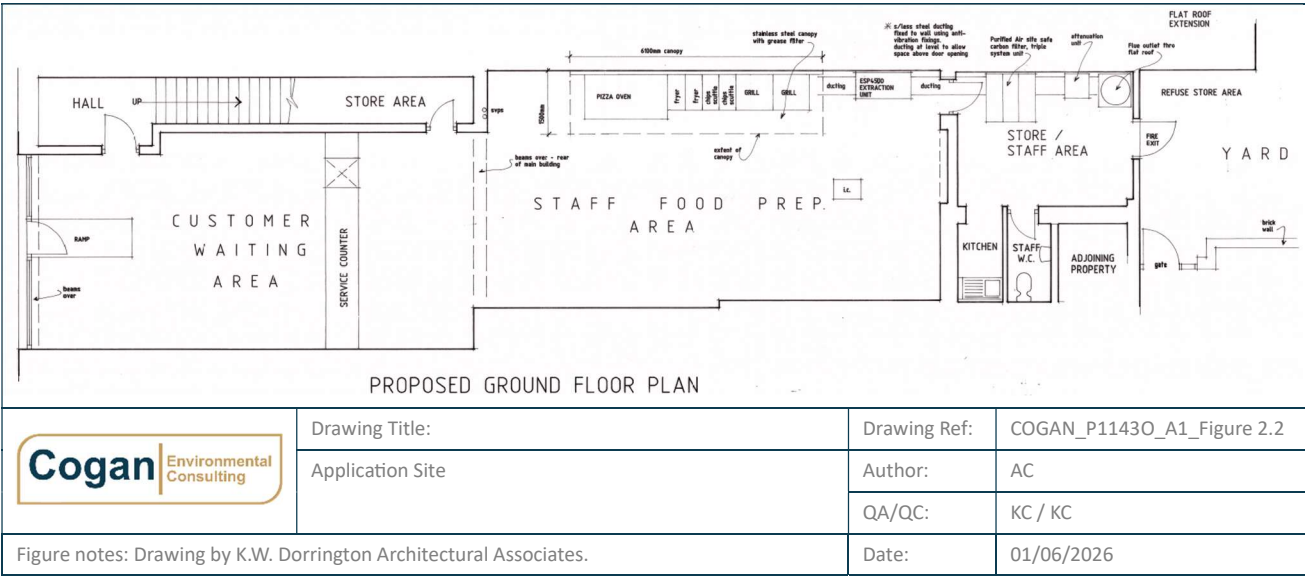
1 Introduction

- 1.1 Cogan Environmental Consulting Limited has been commissioned to produce an odour assessment for the planning application for a fast food restaurant with under 20 seats at 12 Clarence Place, Newport, NP19 0AE (herein called the 'Proposed Development').

2 Application

- 2.1 The Proposed Development involves the change of use from retail shop to hot food takeaway and installation of an extraction flue pipe. The hot food takeaway is proposed to include a commercial kitchen and fewer than 20 seats at the restaurant. The kitchen will include one pizza oven, one peri peri grill, two Henny Penny 4-head pressure fryers, and one open fryer. All these machines will be electrically powered; no solid, liquid or gas fuels will be used. The proposed ground floor plan is shown in Figure 2.1.

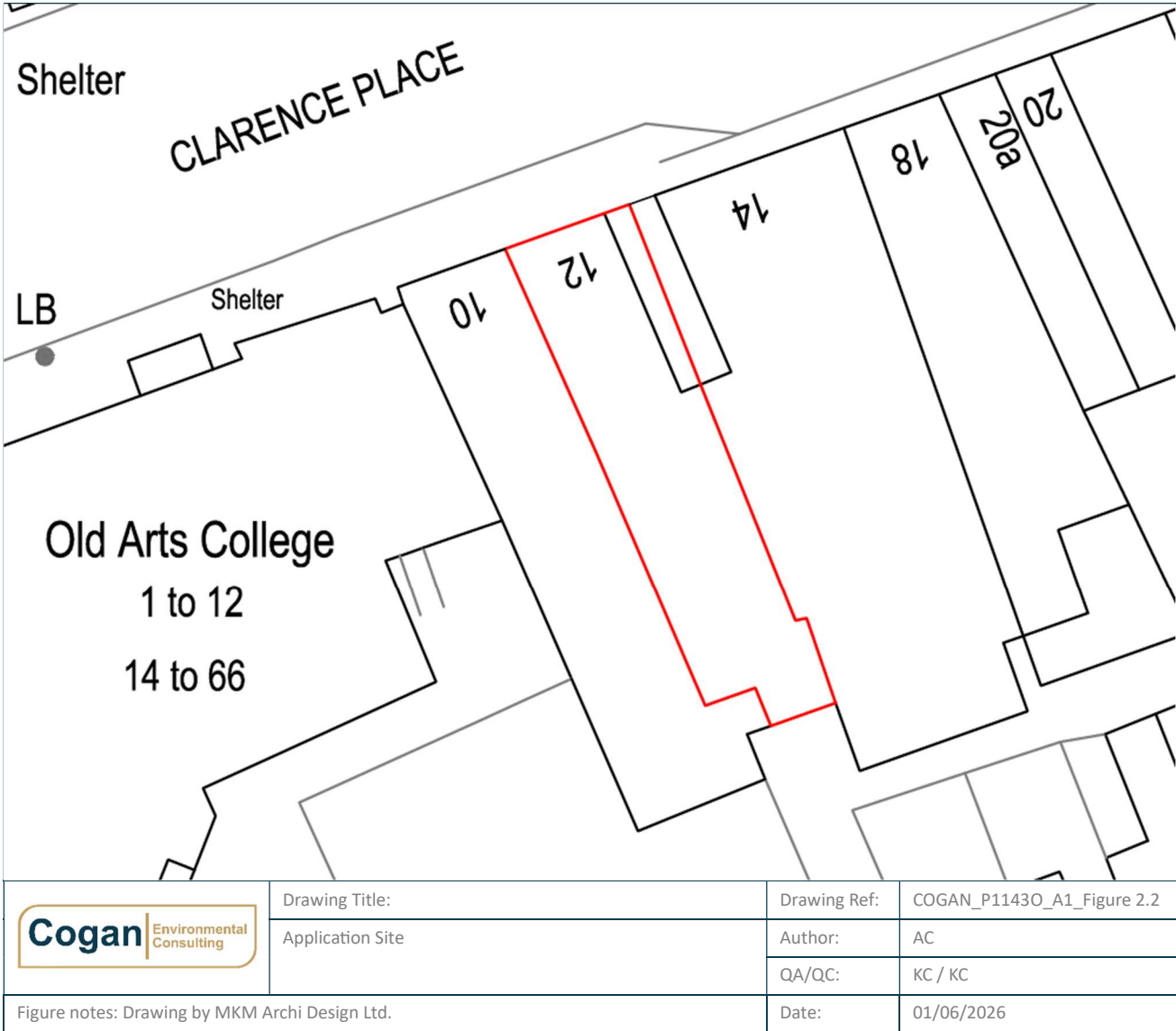
Figure 2.1: Proposed Ground Floor Plan



- 2.2 The application site is located along Clarence Place, within Newport. The existing site comprises a retail shop at ground floor level and residential use above (first and second floors). The site is surrounded by similar

retail/residential properties to the east, south and west. To the north is a vehicle repair shop (Kwik-Fit) and a multi-storey carpark with retail at ground level. The location of the application site is shown in Figure 2.2.

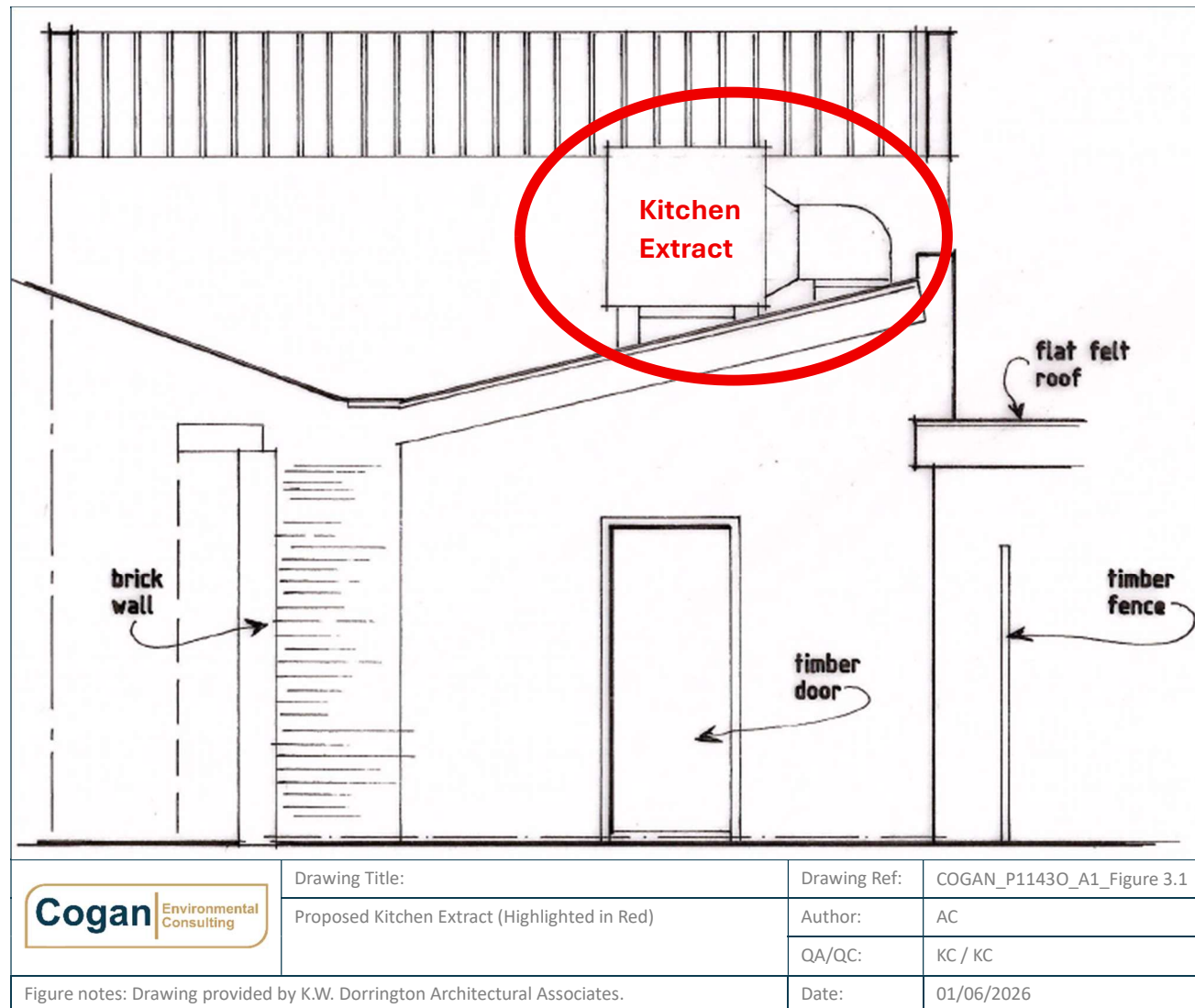
Figure 2.2: Application Site



3 Odour Source

- 3.1 The Proposed Development will introduce a commercial kitchen which may release cooking odours via the kitchen extraction equipment. There may also be limited odours fugitively released via the restaurant entrance door and rear fire exit door when opened.
- 3.2 The Proposed Development proposes to have a kitchen extraction system that exhausts the odorous air out of a flue pipe above the kitchen roof. The louvre is shown in Figure 3.1.

Figure 3.1: Proposed Kitchen Extract (Highlighted in Red)



4 Legislation, Policy and Guidance

- 4.1 All relevant legislation, policies, and guidance have been reviewed and their information used in the production of this assessment. The key sources of information relevant to this assessment are set out below; the full details of which can be found in Technical Appendix - Annex 3: Legislation, Policy, and Guidance.

Table 4.1: Key Relevant Legislation

Scale	Legislation
National	- The Environment (Air Quality and Soundscapes) (Wales) 2024 - The Building Regulations 2010 - The Environment Act 1995 - Environment (Wales) Act 2016 - Planning (Wales) Act 2015 - Well-being of Future Generations (Wales) Act 2015 - The Food Safety (General Food Hygiene) Regulations 1995 - The Noise and Statutory Nuisance Act 1993

- The Workplace (Health, Safety and Welfare) Regulations 1992
- Environmental Protection Act 1990
- The Town and Country Planning Act 1990
- Health and Safety at Work etc. Act 1974

Table 4.2: Key Relevant Policies

Scale	Policy
National	- Planning Policy Wales – Edition 12 (Feb 2024) - TAN 11: Air Quality, Noise and Soundscape: draft 2022 - Future Wales: The National Plan 2040 - Clean Air Plan for Wales – Healthy Air, Healthy Wales 2020 – The Clean Air Plan for Wales - Prosperity for all: the National Strategy 2017
Regional	Future Wales: The National Plan 204016 (The South East)
Local	- Newport Local Development Plan 2011-26 - Newport Local Development Plan Draft vision, Issues and Objectives

Table 4.3: Key Relevant Guidance

Scale	Policy
National	- Defra Guidance, Nuisance smells: how councils deal with complaints - IAQM Guidance on the Assessment of Odour for Planning - EMAQ+ Control of Odour and Noise from Commercial Kitchen Exhaust Systems - Environment Agency's Science Report - HSE Ventilation in catering kitchens - BESA Kitchen Ventilation Systems DW/172 guidance

5 Assessment Scope

- 5.1 The previous application for a commercial kitchen at the site (application reference: 24/1048) was refused on two grounds, one of which refers to odour:

"2. The extraction equipment, by reason of its proximity to neighbouring sensitive receptors, will have a significant adverse impact upon interests of acknowledged importance, namely living conditions and noise and odour effects. No information has been provided to mitigate this objection. This is contrary to policies GP2 and GP7 of the Newport Local Development Plan 2011 - 2026 (Adopted January 2015)".

- 5.2 The consultation response from the Environmental Health Officer at Newport City Council stated:

"We approach extraction system design on the Low/Medium/High/Very high odour emitting categories. The Environmental Protection team would support a recommendation of refusal. The kitchen extraction system odour risk assessment is rated as HIGH, with a Very high cooking grease loading, with close proximity of residential property bedroom windows to the extraction flue of ~20metres. There is a reasonable likelihood of adverse odour impact from the extraction equipment, due to the close proximity. No information has been submitted to assess the potential noise emission level from the proposed extraction equipment plant noise. The

standard requirement for plant noise installations would be a rating level of 5dBA below existing background level.”

5.3 The assessment of odour effects and mitigation has been conducted following the EMAQ+ guidance on the ‘Control of Odour and Noise from Commercial Kitchen Exhaust Systems’²³, which aligns with the approach set out by the Environmental Health Officer. The scope focuses on the determination of appropriate control and abatement measures to address the potential concern of adverse odour impacts upon the living conditions of neighbouring sensitive receptors.

5.4 There are currently no statutory standards in the UK covering the release or subsequent effects of odours, nor any statutory assessment criteria for quantifying odours. In the absence of formal criteria, the impacts have been investigated following the approach set out above and using professional judgement.

5.5 Odour impacts will only occur where there is odour exposure, i.e. where there is an odour emission source, a pathway for odour to travel through the air, and the presence of sensitive receptors (people) to detect the odour. The scale of the impact is determined by parameters collectively known as the FIDOL factors. These are:

- Frequency – how often odours are produced. This usually depends on the operational use of the property.
- Intensity – the perceived magnitude (strength) of the odour. This is normally expressed qualitatively using terms such as faint or strong.
- Duration – the length of time that odours are present and whether they are continuous or sporadic.
- Offensiveness – a judgement of the unpleasantness of odours. This is normally described using the Hedonic tone rating system, where positive scores are pleasant and negative numbers unpleasant.
- Location – the sensitivity of exposure at a certain location and the relevance of weather conditions.

5.6 The assessment utilises the EMAQ+ guidance to identify and characterise the sources of odour and to determine the potential odour impacts. These utilise the FIDOL factors to derive an overall risk that depends on the probability of there being odour exposure together with the likely consequence if it were to transpire, taking more detailed account of factors such as meteorology.

6 Assessment Approach

6.1 The approach to each assessment element is explained in the relevant annex of the Technical Appendix. The methodologies used follow those set out in relevant guidance (see Table 4.3) and utilise professional judgement. The professional competence of the author is set out in Technical Appendix - Annex 2: Professional Competence.

6.2 Although odours are subjective and some members of the public may find certain types of odours offensive, assessments of odour are considered in relation to the average person.

6.3 There are currently no statutory standards in the UK covering the release or subsequent impacts of odours, nor any formal assessment criteria for quantifying odours. In the absence of formal criteria, the significance of the impacts has been judged based on the professional experience and taking account of the EMAQ+ guidance.

7 Characterisation of Odours

7.1 In assessing the impacts of odours, it is important to first consider the characteristics of the odours, considering the FIDOL factors for each source. A review of these is set out in Table 7.1.

7.2 The pleasantness of odours is described by hedonic scores, for which a range of pleasant and unpleasant odours are set out in the Environment Agency’s science report reviewing odour character and thresholds. The EMAQ+ guidance²³ also sets out odour and grease characteristics arising from a range of commercial kitchens.

Table 7.1: Odour source characterisation

FIDOL	Review of characteristics
Frequency	The odours are likely to be released within the operational hours of the restaurant, during the cooking preparation for mealtimes. The restaurant is proposed to operate 11am to midnight Monday to Sunday.
Intensity	During operation, a range of foods will be cooked within the kitchen, including mainly pizza, peri peri chicken, and burgers (which involve a high level of frying). It should be noted that these will all be cooked using electrically powered appliances. The EMAQ+ guidance also sets out odour characteristics for various catering establishments. Those that may be considered most relevant are: • Pizza restaurant gas or electric cooking – Moderate odour potential, Moderate grease content, Low smoke content • Kebab houses – High odour potential, High grease content, Very High smoke content • Fried chicken – Very High odour potential, Very High grease content, Moderate smoke content • Fast food/burger – Very High odour potential, Very High grease content, Moderate smoke content Overall, the intensity of unabated odour is expected to be very strong.
Duration	While the restaurant may be continuously operational during the opening hours (11am to midnight), this accounts of 54% of the time. However, odour will likely be mainly generated during lunch and dinner/evening, with limited cooking outside these periods.
Offensiveness	The hedonic score for odours from the kitchen will depend on what is cooked and are likely to comprise of a large range of potential cooking odours. At worst, there may be smoky or oily/fatty odours, which have scores of -1.53 and -1.41, respectively, which are slightly unpleasant. There may be a range of fairly neutral odours, such as garlic, onion, pepper, potato, mushrooms, etc. However, most likely there will be pleasant odours, such as cooked meat (score of 2.34). Unabated odours (which contain high levels of smoke/oil/fat) would likely be unpleasant. However, with control and abatement applied, these unpleasant odours will largely be removed, and the residual odour is likely to most often smell neutral/pleasant.
Location	The extraction system will exhaust the odorous air out of a flue pipe above the kitchen roof level. There is sensitive exposure in the surrounding buildings.

8 Assessment of Unabated Odour Impacts

EMAQ+ Risk Assessment

- 8.1 The risk of kitchen odour effects of the Proposed Development has been assessed using the EMAQ+ risk assessment approach. See Annex 4: EMAQ+ Risk Assessment Methodology in the Technical Appendix for details of the assessment approach.
- 8.2 The risk assessment uses a scoring system based on dispersion, proximity of receptors, size of kitchen and type of cooking. These aspects are scored individually and then summed to determine the odour impact risk. The scores and odour impact risks for each of the sources are set out in Table 8.1, and are based upon unabated odours.
- 8.3 The assessment has identified a very high impact risk for unabated odours, for which a very high level of odour control is identified.

Table 8.1: Odour significance scoring for the odour source from the Proposed Development

Criteria	Description	Score	Reason
Dispersion	Poor	15	Not low level but below eaves
Proximity of receptors	Close	10	Closest sensitive receptor less than 20 m from kitchen discharge
Size of kitchen	Medium	3	The kitchen is proposed to serve 75 meals per day
Cooking type (odour and grease loading)	Very high	10	The kitchen will cook mainly pizza, peri peri chicken, and burgers (which involve a high level of frying)
Odour impact risk	Very High impact risk Very high level of odour control required	38	Score more than 35
Table Notes: a. 'cover' is assumed as an adult portion size, therefore several small child portions will equate to one adult portion.			

9 Mitigation Measures

Mitigation Proposed

- 9.1 Details of the proposed odour control and abatement measures included in the design of the Proposed Development have been provided by Inox Metal Works Ltd. Odour from the Proposed Development will be mitigated using the following:
- Stainless steel canopy with baffle grease filter;
 - G4 Pleated Paper Panel Filter;
 - ESP 4500 extraction unit (electrostatic precipitator);

- Purified air site safe carbon filter, triple system unit;
- Air extracted and released above the roof of the staff/store area.

- 9.2 The extract canopy includes baffle (grease/particle) filters which will help to reduce unpleasant odours. The EMAQ+ guidance explains that baffle filters have a typical efficiency of 65-80%. The restaurant will maintain the filters in accordance with manufacturer instructions.
- 9.3 The G4 pleated paper panel filter will help reduce particles being released, thereby reducing odours. The particle filter will also act as a pre-filter, ensuring higher efficiency for other abatement. The EMAQ+ guidance explains that G4 panel filters have a typical efficiency of up to 50%. The restaurant will maintain the filters in accordance with manufacturer instructions, with filters being changed every two weeks.
- 9.4 The ESP will be used to separate solid and liquid particles from the exhaust air, removing them electrostatically onto collecting plates. It will therefore reduce odours particles and vapours prior to release. The EMAQ+ guidance explains that ESPs have a typical efficiencies of 98%. The restaurant will maintain the ESP system in accordance with manufacturer instructions. This will include cleaning the system and emptying the sump every four weeks.
- 9.5 The carbon filter will also help reduce odours being released, thereby reducing odours. The specification of carbon filters depends on the residence time (how long the air takes to pass through the filter) that is appropriate for the kitchen. The purified air site safe carbon filter (triple system unit) is stated by the manufacturer to remove up to 95% of odorous particles. The restaurant will maintain the filter in accordance with manufacturer instructions.
- 9.6 The air intake for the kitchen extract system is via the extract canopy. This will create a negative pressure inside the building helping to avoid odours fugitively escaping through doors. The restaurant will use the canopy in accordance with the manufacturer instructions, as well as adhering to Building Regulations¹, The Workplace (Health, Safety and Welfare) Regulations 1992¹¹, and The Health and Safety at Work etc. Act 1974¹³.
- 9.7 The kitchen extract system will be cleaned annually in accordance with BESA TR19².

Further Abatement

- 9.8 While the proposed mitigation is suitable for the kitchen, it is useful to consider what additional mitigation could be incorporated should any odour nuisance complaints occur in the future.
- 9.9 The panel filter could be replaced with a HEPA filter which could increase the particle filtration efficiency from 50% to up to 99%.

¹ HM Government (2021). The Building Regulations 2010, Ventilation, Approved Document F, Volume 2: Buildings other than dwellings, Requirement F1: Means of Ventilation, Regulations: 39 and 44.

² BESA (2019). TR19® Internal Cleanliness Of Ventilation Systems: A Guide To Good Practice, ISBN: 978-1-7391873-1-6

- 9.10 Should odour problems still occur, then further abatement may include UV-C/ozone units and/or odour neutralising and counteracting agents.
- 9.11 If necessary, another alternative measure could be to have external ducting up to 1 m above roof level of the residential use, discharging odorous air away from nearby sensitive receptors. This would likely require planning consent for external ducting as well as permission to route ducting up the façade of the residential properties above.

10 Conclusion

- 10.1 The odour effects and mitigation associated with the Proposed Development at 12 Clarence Place in Newport have been assessed.
- 10.2 Odour associated with the Proposed Development has been assessed using the risk assessment approach set out in the EMAQ+ guidance. This identified a very high impact risk from unabated odours, and a very high level of odour control would be appropriate.
- 10.3 Odour mitigation measures for the Proposed Development have been described. This includes an extract canopy, baffle (grease) filters, particle filtration, carbon filtration, and ESP extraction. The restaurant will also have in place suitable cleaning and maintenance regimes.
- 10.4 It is suggested that this level of mitigation would likely be suitable for the restaurant to ensure the living conditions of neighbouring receptors are acceptable. However, additional abatement measures are provided for guidance should any odour issues later arise.

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Annex 1: Glossary

Table 11.1: Glossary of terms used in the assessment

Term	Meaning
BESA	Building Engineering Services Association, a professional body for building service engineers which has published guidance on kitchen ventilation.
Defra	Department for Environment, Food & Rural Affairs, England's regulator for improving and protecting the environment.
EMAQ+	The EMAQ+ training programme was developed by the Chartered Institute of Environmental Health (CIEH), in conjunction with Ricardo, to assist local authorities and industry with the emissions related issues and includes a series of publications, which includes odour guidance on commercial kitchens.
FIDOL	A series of factors to describe odour characteristics (Frequency, Intensity, Duration, Offensiveness, and Location).
HSE	Health and Safety Executive, Britain's national regulator for workplace health and safety, which has published guidance on kitchen ventilation.
IAQM	Institute of Air Quality Management, a professional body for odour practitioners which has published guidance on assessing odours.

Annex 2: Professional Competence



Dr Austin Cogan

MPhys (Hons) PhD CEnv MIAQM MEnvSc ASAg

Director & Practice Manager

07881824629

austin@cogan-ec.com

Austin is Director and Practice Manager at Cogan Environmental Consulting Limited. He is a Chartered Environmentalist with over 17 years' experience in environmental sciences, covering indoor and outdoor air quality, odour, dust, bioaerosols, greenhouse gases and climate change. He was a committee member of The Council of Property Search Organisations and has developed a number of guidance documents in the industry.

He is currently co-chair of the Institute of Air Quality Management's odour working group, developing updated odour guidance for planning in the UK. Recently, he was also a reviewer of the International Handbook on the Assessment of Odour Exposure by using Dispersion Modelling.

Throughout his career, he has been involved in over 1,000 projects across the UK and abroad, focusing on supporting planning applications and environmental permit applications. His expertise covers a diverse range of sectors, including residential, student, commercial, retail, leisure, community, education, healthcare, distribution, and hospitality developments, industrial, waste, agricultural, power generation, and utility projects, and defence, aviation, and infrastructure schemes. These have included technical reviews for both indoor and outdoor air quality assessments, and climate change assessments for aviation, as well as the provision of expert witness services for air quality and odour.

He has a long history of supporting local authorities with local air quality concerns, including Clean Air Zones, Local Plans, Air Quality Management Areas, Air Quality Action Plans, and feasibility studies involving microsimulation modelling. Austin has also been involved in multiple projects for JNCC, EA, GLA, National Highways and NGOs, undertaking research and development activities. He is an experienced business manager, having managed multiple high-profile projects as well as operating multiple environmental businesses, where he previously led the development of licensed meteorological data which is widely used by the industry.

Austin is also an international expert in the field of climate change, having monitored greenhouse gases globally. He pioneered research in satellite observations and instrument design at the UK's Space Research Centre, where he was involved in software and algorithm development, instrumentation design, data analysis and collaboration with many international bodies, including NASA, JAXA, CNES and ESA. He has produced numerous scientific papers and presented at conferences both nationally and internationally.



Katya Cogan

MBChB BSc (Hons) AMIAQM AMEnvSc

Senior Consultant

07938761385

katya@cogan-ec.com

Katya is a Senior Consultant at Cogan Environmental Consulting Limited. She has over 6 years' experience in environmental sciences, covering indoor and outdoor air quality, odour, dust, bioaerosols, greenhouse gases and climate change. She completed BSc Medical Biochemistry at the University of Leicester and continued her studies at the University of Warwick to complete a MBChB Medicine, working as a Doctor in the Southwest Deanery afterwards. Her focus has subsequently involved sales and business development, and most recently environmental sciences.

Throughout her career, she has been involved in a diverse range of projects for planning applications, environmental permit applications, including management, and nuisance assessments, as well as monitoring for COSHH, indoor air quality support for BREEAM, WELL, DREAM, HQM and several research projects. Her experience covers residential, student, commercial, retail, leisure, community, education, healthcare, distribution, and hospitality developments, industrial, waste, agricultural, mineral, power generation, and utility projects, and defence and infrastructure schemes.

She has supported multiple local authorities with LAQM duties, including Local Plans, Air Quality Management Areas, Air Quality Action Plans, and Annual Status Reports. Katya has also been involved in multiple projects for JNCC, EA, and NGOs, undertaking research and development activities. She is an experienced sales and business development manager, having taken on several commercial management roles including indoor air quality business development, the sale of monitoring and diagnostic instruments as well as meteorological data.

Annex 3: Legislation, Policy, and Guidance

11.1 The national, regional, and local policies, strategies, legislation and guidance relevant to this assessment are set out in the tables below.

Legislation

Table 11.2: Relevant Legislation

Legislation	Relevant Information
The Environment (Air Quality and Soundscapes) (Wales) 2024 ³	The Environment (Air Quality and Soundscapes) (Wales) 2024 became law on 14 th Feb 2024.
The Building Regulations 2010 ⁴	These Regulations revoke and replace the Building Regulations 2000 and consolidate all subsequent amendments to those Regulations with minor amendments. It states that: <i>“Building work must be carried out so that it complies with the applicable requirements set out in Parts A to P of Schedule 1 and in complying with such requirements there must be no failure to comply with any other such requirements (regulation 4). The requirements in Schedule 1 relate to...ventilation (Part F)...”.</i> and <i>“The Building Act 1984 gives the Secretary of State power to approve and issue documents containing practical guidance with respect to the requirements contained in these Regulations. The following publications, originally approved for the purposes of the 2000 Regulations, are approved for the purposes of these Regulations... Approved Document F – Ventilation: 2010 edition.”</i> Section 39. - (2) also states: “The person carrying out the work shall not later than five days after the work has been completed give sufficient information to the owner about the building’s ventilation system and its maintenance requirements so that the ventilation system can be operated in such a manner as to provide adequate means of ventilation”.
The Environment Act 1995 ⁵	Schedule 12 of The Environment Act sets out Schedule 2A to the Environmental Protection Act 1990 and regarding odour states the objective of: <i>“Ensuring that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment and, in particular, without—</i> <i>(a) risk to water, air, soil, plants or animals;</i> <i>causing nuisance through noise or odours...”</i>
Environment (Wales) Act 2016 ⁶	The Environment (Wales) Act 2016 sets out the sustainable management of natural resources in Wales, including a management framework that is based on evidence published in The State of Natural Resources Report (Natural Resources Wales, 2016) and delivered through the Natural Resources Policy (Welsh Government, 2017). The Natural Resources Policy sets out the challenges and opportunities for managing Wales’s natural resources sustainably, including reducing air pollution levels. This states that a mix of actions will be needed to address pollution from traffic and other sources and will require taking practical steps to improve air quality across Wales, not just in the most polluted hotspots.
Planning (Wales) Act 2015 ⁷	The Planning (Wales) Act 2015 puts in place legislation for the planning provision in Wales, in particular for sustainable developments.

Well-being of Future Generations (Wales) Act 2015 ⁸	The Well-being of Future Generations (Wales) Act 2015 places seven well-being goals into law, requires public bodies to apply the sustainable development principle in a number of ways. This has led to the establishment of average population exposure to nitrogen dioxide being one of the Welsh Government’s national indicators used to measures progress towards well-being goals. Consequently, regulations made under the WFG Act require public services boards to consider air quality when carrying out their statutory assessments of local well-being under the Act.
The Food Safety (General Food Hygiene) Regulations 1995 ⁹	The relevant sections of the Food Safety (General Food Hygiene) Regulations 1995 require that: • there must be suitable and sufficient means of either natural or mechanical ventilation; • mechanical air flow from a contaminated area to a clean area must be avoided; and • ventilation systems must be so constructed as to enable filters and other parts requiring cleaning or replacement to be readily accessible.
The Noise and Statutory Nuisance Act 1993 ¹⁰	<i>The Noise and Statutory Nuisance Act 1993 amends Part III of the Environment Protection Act 1990 but does not affect the definition of statutory nuisance relating to noise and odour, but allows local authorities to be able to prevent statutory nuisance occurring via conditions in planning permission.</i>
The Workplace (Health, Safety and Welfare) Regulations 1992 ¹¹	The Workplace (Health, Safety and Welfare) Regulations 1992 requires that: “an effective and suitable provision shall be made to ensure that every enclosed workplace is ventilated by a sufficient quantity of fresh or purified air”.
Environmental Protection Act 1990 ¹²	Part III of The Environmental Protection Act 1990 sets out what constitutes a statutory nuisance and local authority duties to investigate complaints and require remedial measures. It states: <i>“...the following matters constitute “statutory nuisances...”</i> <i>(b) smoke emitted from premises so as to be prejudicial to health or a nuisance;</i> <i>(c) fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;</i> <i>(d) any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance...”.</i>
The Town and Country Planning Act 1990	The Town and Country Planning Act 1990 sets out the regulatory framework for land use planning within which local authorities need to operate and additionally Planning Policy Statement 23, (PPS23) Planning and Pollution Control advises local authorities that they should take account of the impacts that a new development will have on the quality of air, including odour. Town and Country Planning legislation requires new build commercial kitchens (as well as most other new developments) to obtain planning permission. In addition, premises will require planning permission for a change in use as defined under the Town and Country Planning (Use Classes) Order and where significant structural changes are to take place. In relation to noise and odour, the local authority will consider whether sufficient measures for their control are included in the design, and subsequently planning permission may be granted with conditions. For commercial kitchens these are likely to include measures to ensure that noise and odour are managed to avoid detriment to the amenity.
Health and Safety at Work etc. Act 1974 ¹³	Odour-related health and safety concerns from workplaces is controlled under the Government’s Health and Safety at Work etc Act. It is the employer’s duty to ensure employees and members of the public are not exposed to unacceptable odour due to work related activities.

³ Welsh Parliament (2024). Available at: [https://business.senedd.wales/mglssueHistoryHome.aspx?lId=40984#:~:text=BillStageAct-,The%20Environment%20\(Air%20Quality%20and%20Soundscapes\)%20\(Wales\)%20Act,of%20Public%20Bills%20and%20Acts.&text=The%20following%20table%20sets%20out,Bill's%20passage%20through%20the%20Senedd.](https://business.senedd.wales/mglssueHistoryHome.aspx?lId=40984#:~:text=BillStageAct-,The%20Environment%20(Air%20Quality%20and%20Soundscapes)%20(Wales)%20Act,of%20Public%20Bills%20and%20Acts.&text=The%20following%20table%20sets%20out,Bill's%20passage%20through%20the%20Senedd.)

⁴ HMSO (2010). 2010 No. 2214, Building and Buildings, England and Wales, The Building Regulations 2010.

⁵ HMSO (1995). The Environment Act 1995.

⁶ Welsh Government (2016). Environment (Wales) Act.

⁷ Welsh Government (2015)

⁸ Welsh Government (2015). Well-being of Future Generations (Wales) Act.

⁹ HMSO (1995). Statutory Instruments, 1995 No. 1763, FOOD, The Food Safety (General Food Hygiene) Regulations 1995.

¹⁰ HMSO (1993). Noise and Statutory Nuisance Act 1993.

¹¹ HMSO (1992). Statutory Instruments, 1992 No.3004, Health and Safety, The Workplace (Health, Safety and Welfare) Regulations 1992.

¹² HMSO (1990). Environmental Protection Action 1990.

¹³ HMSO (1974). Health and Safety at Work etc. Act 1974.

National Policy

Table 11.3: Relevant National Policies

Policy	Relevant Information
Planning Policy Wales – Edition 12 (Feb 2024) ¹⁴	Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. PPW, the TANs, Mineral TANs (MTANs) and policy clarification letters comprise national planning policy. When referring to air quality, it states that: <i>“..In proposing new development, planning authorities and developers must, therefore:</i> <i>• address any implication arising as a result of its association with, or location within, air quality management areas, noise action planning priority areas or areas where there are sensitive receptors;</i> <i>• not create areas of poor air quality or inappropriate soundscape; and</i> <i>seek to incorporate measures which reduce overall exposure to air and noise pollution and create appropriate soundscapes...”</i>
TAN 11: Air Quality, Noise and Soundscape: draft 2022 ¹⁵	Tan 11: Air Quality, Noise and Soundscape: draft policy, is a technical advisory note meant for use in conjunction with Planning Policy Wales. It sets out general expectations and requirements for developers, designers, consultants and planning authorities regarding airborne pollution and odour. It provides advice on how the planning system can be used to minimise impact of pollution sources without placing unreasonable restrictions on development. It outlines some of the main considerations which local planning authorities should take into account in drawing up development plan policies and when determining planning applications for development which will either generate air pollution or be exposed to existing air pollution sources, or odour sources.
Future Wales: The National Plan 2040 ¹⁶	This policy was created in 2021 and emphasises the importance of the importance of access to clean natural resources for a prosperous Wales. It also emphasises the importance of strategic and spatial planning to create a positive impact on publica health, air quality and well-being. - Policy 10 – International Connectivity: <i>“Taking an integrated approach is also key to ensuring new development provides the critical mass of people needed to help fund and sustain infrastructure and services, as well as ensuring average levels of airborne pollution continue to be reduced”.</i> - Policy 11 – National Connectivity: <i>“Strategic Road Network – Invest in road improvements to reduce journey times, deliver a safer and more resilient road network, and improve air and noise quality”.</i> - Policy 12 – Regional Connectivity: <i>“The Welsh Government will support and invest in improving regional connectivity. In urban areas, to support sustainable growth and regeneration, our priorities are improving and integrating active travel and public transport. In rural areas our priorities are supporting the uptake of ultra-low emission vehicles and diversifying and sustaining local bus services. The Welsh Government will work with Transport for Wales, local authorities, operators and partners to deliver the following measures to improve regional connectivity:</i> <i>○ Active Travel – Prioritising walking and cycling for all local travel. We will support the implementation of the Active Travel Act to create comprehensive networks of local walking and cycling routes that connect places that people need to get to for everyday purposes.</i> <i>○ Bus – Improve the legislative framework for how local bus services are planned and delivered. We will invest in the development of integrated regional and local bus networks to increase modal share of bus travel and improve access by bus to a wider range of trip destinations.</i> <i>○ Metros – Develop the South East Metro, South West Metro and North Wales Metro. We will create new integrated transport systems that provide faster, more frequent and joined-up services using trains, buses and light rail.</i>

	<i>○ Ultra-Low Emission Vehicles – Support the roll-out of suitable fuelling infrastructure to facilitate the adoption of ultra-low emission vehicles, particularly in rural areas.</i> <i>○ Planning authorities must plan the growth and regeneration of the National and Regional Growth Areas to maximise opportunities arising from the investment in public transport, including identifying opportunities for higher density, mixed-use and car-free development around metro stations.</i> <i>○ Active travel must be an essential and integral component of all new developments, large and small. Planning authorities must integrate site allocations, new development and infrastructure with active travel networks and, where appropriate, ensure new development contributes towards their expansion and improvement.</i> <i>○ Planning authorities must act to reduce levels of car parking in urban areas, including supporting car-free developments in accessible locations and developments with car parking spaces that allow them to be converted to other uses over time. Where car parking is provided for new non-residential development, planning authorities should seek a minimum of 10% of car parking spaces to have electric vehicle charging points.”</i> - Policy 18 – Renewable and Low Carbon Energy Developments of National Significance: <i>“.. 7. there are no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance...”</i>
Clean Air Plan for Wales – Healthy Air, Healthy Wales 2020 ¹⁷ – The Clean Air Plan for Wales	This policy explains how air quality policy aligns with wider Welsh Government policy and the priorities and principles applied in delivering the plan.
Prosperity for all: the National Strategy 2017 ¹⁸	In 2017 the Welsh Government published ‘Prosperity for All: the national strategy’ which sets out a cross-government commitment to reducing emissions and delivering vital improvements in air quality through planning, infrastructure, regulation, and health communication measures.

Regional Policy

Table 11.4: Relevant Local Policies

Policy	Relevant Information
Future Wales: The National Plan 2040 ¹⁶ (The South East)	<i>This policy emphasises the importance of the importance of access to clean natural resources for a prosperous Wales. It also emphasises the importance of strategic and spatial planning in this region to create a positive impact on publica health, air quality and well-being.</i>

Local Policy

Table 11.5: Relevant Local Policies

Policy	Relevant Information
Newport Local Development Plan 2011-26 ¹⁹	The adopted local development plan sets out the policy and spatial requirements for Newport. It includes a number of objectives and policies that refer to air quality, which are given below. <u>Objective 9 – Health and Well-being</u> <i>“To provide an environment that is safe and encourages healthy lifestyle choices and promotes well-being. Many of the factors that contribute to health and well-being have some basis in the planning system, which can therefore contribute to their achievement. These include locating development near safe, accessible and sustainable travel routes; attention to air quality issues; designing out crime; and enhancing access to green spaces and the wider natural environment.”</i> <u>GP2 General Development Principles – General Amenity</u> <i>“DEVELOPMENT WILL BE PERMITTED WHERE, AS APPLICABLE:</i>

¹⁴ Welsh Government (2024). Planning Policy Wales, Edition 12, Feb 2024
¹⁵ Welsh Government (2022) TAN 11: Air Quality, Noise and Soundscape Draft Policy
¹⁶ Welsh Government (2021) Future Wales: The National Plan 2040
¹⁷Welsh Government (2020). The Clean Air Plan for Wales: Health Air, Healthy Wales

¹⁸ Welsh Government (2017). Prosperity for all: the national strategy, Welsh Government.
¹⁹ Newport City Council (2015). Newport Local Development Plan 2011-26, Adopted Plan, January 2015.

	i) THERE WILL NOT BE A SIGNIFICANT ADVERSE EFFECT ON LOCAL AMENITY, INCLUDING IN TERMS OF NOISE, DISTURBANCE, PRIVACY, OVERBEARING, LIGHT, ODOURS AND AIR QUALITY;” <u>GP7 General Development Principles – Environmental Protection and Public Health</u> “DEVELOPMENT WILL NOT BE PERMITTED WHICH WOULD CAUSE OR RESULT IN UNACCEPTABLE HARM TO HEALTH BECAUSE OF LAND CONTAMINATION, DUST, INSTABILITY OR SUBSIDENCE, AIR, HEAT, NOISE OR LIGHT POLLUTION, FLOODING, WATER POLLUTION, OR ANY OTHER IDENTIFIED RISK TO ENVIRONMENT, LOCAL AMENITY OR PUBLIC HEALTH AND SAFETY.”
Newport Local Development Plan Draft vision, Issues and Objectives ²⁰	Newport City Council is preparing a Replacement Local Development Plan to cover the period 2021-2036 and when adopted this will replace the current Local Development Plan. The Council have produced a draft vision document setting out the Council’s aspirations for Newport over the new plan period.

National Guidance

Table 11.6: Relevant National Guidance

Guidance	Relevant Information
Defra Guidance, Nuisance smells: how councils deal with complaints ²¹	The Government has published guidance on how to investigate and establish the existence of a statutory nuisance. This guidance states: <i>“Councils must look into complaints about smells from industrial, trade and business premises that could be a ‘statutory nuisance’ (covered by the Environmental Protection Act 1990).</i> <i>For the smell to count as a statutory nuisance it must do one of the following:</i> <i>unreasonably and substantially interfere with the use or enjoyment of a home or other premises</i> <i>injure health or be likely to injure health</i> <i>If they agree that a statutory nuisance is happening, has happened or will happen in the future, councils must serve an abatement notice. This requires whoever’s responsible to stop or restrict the smell. The notice will usually be served on the person responsible but can also be served on the owner or occupier of the premises”.</i>
IAQM Guidance on the Assessment of Odour for Planning ²²	The Institute of Air Quality Management (IAQM) have produced ‘guidance on the assessment of odour for planning’. This is the latest odour guidance published in the UK and is the only UK odour guidance which contains a method for estimating the significance of potential odour impacts for planning applications.
EMAQ+ Control of Odour and Noise from Commercial Kitchen Exhaust Systems ²³	The EMAQ+ guidance on the ‘Control of Odour and Noise from Commercial Kitchen Exhaust Systems’ set out an odour risk assessment methodology. This uses a scoring system based on dispersion, proximity of receptors, size of kitchen and type of cooking. The overall score is used to determine the likely odour risk and level of odour control that is appropriate for commercial kitchens.
Environment Agency’s Science Report ²⁴	The unpleasantness of odours is rated by hedonic tones, for which different types of odours are given scores. Hedonic scores for a range of pleasant and unpleasant odours are set out in the Environment Agency’s science report reviewing odour character and thresholds.
HSE Ventilation in catering kitchens ²⁵	Directly related to commercial kitchens, the Health and Safety Executive (HSE) have produced a reference sheet with the title ‘ <i>Ventilation of kitchens in catering establishments</i> ’. This provides guidance on how to assess the adequacy of any existing ventilation equipment, and the ventilation requirements for new build kitchens.
BESA Kitchen Ventilation Systems DW/172 guidance ²⁶	The Building Engineering Services Association (BESA) Kitchen Ventilation Systems DW/172 guidance provides practical information for the design, specification and improvement of ventilation systems for commercial kitchens.

²⁰ Newport City Council (2022). Newport Local Development Plan Draft vision, Issues and Objectives, January 2022.

²¹ Defra (2015). Guidance, Nuisance smells: how councils deal with complaints. Available at: <https://www.gov.uk/guidance/nuisance-smells-how-councils-deal-with-complaints>

²² IAQM (2018). Guidance on the assessment of odour for planning.

²³ EMAQ+ (2022). Control of Odour and Noise from Commercial Kitchen Exhaust Systems, Update to the 2004 report prepared by NETCEN for the Department for Environment, Food and Rural Affairs, 2nd EMAQ Edition.

²⁴ Environment Agency (2007). Review of odour character and thresholds, Science Report: SC030170/SR2.

²⁵ HSE (2017). Ventilation in catering kitchens, HSE information sheet, Catering Information Sheet No 10.

²⁶ BESA (2018). Building Engineering Services Association Specification for: Kitchen Ventilation Systems DW/172, Second Edition 2018.

Annex 4: EMAQ+ Risk Assessment Methodology

- 11.2 The EMAQ+ guidance²³ has been used to estimate the likely odour potential, grease content and smoke content for the types of foods produced by each commercial kitchen. These are each rated as Low, Medium, High, or Very High, depending on each type of food, and refer to unabated emissions.
- 11.3 The assessment follows the assessment methodology set out in the EMAQ+ guidance²³. This provides an approach to estimate the risk of impacts, taking account of the potential odours, the likely abatement and several other key FIDOL factors. These factors include dispersion, proximity of receptors, size of kitchen and type of cooking. These aspects are scored individually, as set out in Table 11.7, and then summed to determine the impact risk and level of odour control, as set out in Table 11.8.

Table 11.7: Odour significance scoring matrix

Criteria	Description	Score	Details
Dispersion	Very poor	20	Low level discharge, discharge into courtyard or restriction on stack
	Poor	15	Not low level but below eaves, or discharge at below 10 m/s
	Moderate	10	Discharging 1 m above eaves at 10 – 15 m/s
	Good	5	Discharging 1 m above ridge at 15 m/s
Proximity of receptors	Close	10	Closest sensitive receptor less than 20 m from kitchen discharge
	Medium	5	Closest sensitive receptor between 20 and 100 m from kitchen discharge
	Far	1	Closest sensitive receptor more than 100 m from kitchen discharge
Size of kitchen	Large	5	More than 100 covers or large sized take away
	Medium	3	Between 30 and 100 covers or medium sized take away
	Small	1	Less than 30 covers or small sized take away
Cooking type (odour and grease loading)	Very high	10	Pub (high level of fried food), fried chicken, burgers or fish and chips. Turkish, Middle Eastern or any premises cooking with solid fuel
	High	7	Vietnamese, Thai, Indian, Japanese, Chinese, steakhouse
	Medium	4	Cantonese, Italian, French, Pizza (gas fired)
	Low	1	Most pubs (no fried food, mainly reheating and sandwiches etc), Tea rooms

Table 11.8: Odour impact risk and control requirement

Significance score	Impact risk	Odour control requirement
Less than 20	Low to Medium	Low level odour control
20 to 35	High	High level odour control
More than 35	Very High	Very high level odour control



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AIR QUALITY	ODOUR	CLIMATE
Air Quality Assessments for Planning and EIAs Feasibility Risk Assessments Air Quality Neutral Assessments Air Quality Positive Statements Air Quality Monitoring Surveys Planning Condition Support Ventilation Strategies Emission Mitigation Statements Damage Cost Assessments Air Quality Dust Management Plans (AQDMP) Dust Monitoring Expert Witness Services Technical Review Services LAQM Technical Support and Clean Air Zones Air Emissions Risk Assessments (Environmental Permitting) Infrastructure Assessments Indoor Air Quality Support (BREEAM, UKNCR, WELL, DREAM) COSHH Surveys (Air, Fumes, Dust, Bioaerosols)	Odour Assessments for Planning Nuisance Complaint Support Commercial Kitchen Risk Assessments Environmental Permitting Support Odour Management and Control Public Sector Services Expert Witness Services Technical Review Services Qualitative Desktop Assessments Field Odour Surveys (‘Sniff-Tests’) Odour Dispersion Modelling Odour Monitoring / Sampling Kitchen Risk Assessments Council, Regulator and Consultee Liaison Odour Abatement Advice Odour Management Plans	Greenhouse Gas Calculations and Assessments for Planning Greenhouse Gas ES Chapters Greenhouse Gas Monitoring Surveys H1 Calculations for Environmental Permitting UK ETS Advice Resilience and Adaptation ES Chapters Embodied Carbon Emission Assessments Climate Management Plans Expert Witness Services Technical Review Services Net Zero Carbon Assessments for Planning Net Zero Plans for Planning Business Carbon Footprints Business Net Zero Assessments Business Net Zero Plans Business Climate Risk Assessments Business Climate Adaptation Plans
GENERAL ENVIRONMENTAL		
Construction Environmental Management Plans (CEMP) Environmental Permitting Applications and Management Meteorological Monitoring Surveys and Data Provision		

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austin@cogan-ec.com