Odour and Flue Assessment
Planning Application January 2021

Site: 306 Kilburn High Road, London NW6 2DB
Proposal: Change of use of retail (E use class) into restaurant (E use class) including installation of extraction flue system to rear, new shop front and sign

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Site details:

The property is located on Kilburn High Road in the western edge of Camden Council. Set within a predominant area of residential dwellings but along a parade of mixed commercial uses. The properties along Kilburn High Road vary in design, typical two to three storey buildings with a commercial unit on the ground floor and residential on upper floors. The architecture and construction of buildings within the neighbourhood are from the early to mid 20th century. The site faces West with Kilburn High Road running North to South. Nearby areas include Cricklewood and Brent Cross to the North and West Hamstead to the South.

The application premises is four storeys in height with the ground floor currently vacant retail unit (A1 use) and the upper floors as residential with private access from the side.

Proposal:

This statement is in support of an application for the change of use of the existing vacant retail unit (E use class) into restaurant (E use class). The proposal would provide internal seating area for patrons to enjoy hot cooked food, especially for shoppers, whilst also providing a new food outlet service for the local community. The proposal intends to also provide much needed economic boost to the existing business by providing a new restaurant within the parade with seating thereby attracting patrons from the local community and businesses.

The new restaurant would in turn also provide the employment of extra staff from the community. In addition, as a result of the recent Covid-19 pandemic the government has introduced new planning guidance and polices which place the use class of A1 units into the same class as A3 under the Town and Country Planning (use classes) (amendment) (England) Regulation 2020 (SI 2020 no 757).

The new proposed restaurant would incorporate acoustic insulation, reducing sound by 36-46 decibels, between the extraction flue system and the ceiling separating the unit with the above residential unit. Anti-vibration mounts would also suppress any noise from the system reaching nearby receptors (please see Annex). The motor of the extraction system would be incorporated within the rear section of unit which is not located directly underneath the residential unit and include extra acoustic insulation. The proposed use would include the cooking of freshly made pizza which as a by-product would not cause strong smells nor excessive smoke and with additional use of filtration, minimum of 0.5 second dwell time plus extra carbon filters, should thereby prevent any form of smell disturbance to neighbouring properties. The extraction flue system would exit to the rear yard and away from doors/windows of the residential units on the upper floors. The exit level of the extraction system is at a similar level as the take-away at the next unit along the parade.

Planning Policy:

National Planning Policy Framework (July 2018)

The NPPF was reissued in July 2018 and sets out the Government's planning policies for England and is a material consideration in planning decisions. This edition replaced the original NPPF from March 2012. The document covers a wide variety of planning matters, providing advice to LPAs on plan making and decision making (development management).

Running centrally throughout the NPPF is a presumption in favour of sustainable development which ties together economic, social and environmental objectives. For decision making, Paragraph 11 states that this means approving development that accords with an up to date development plan whilst, where no up to date development plan is in place, granting permission unless there is a clear reason for refusing development or the adverse impacts outweigh the benefits.

Paragraph 85 notes that “planning policies and decisions should support the role that town centres play at the heart of local communities, by taking a positive approach to their growth, management and adaptation.” It continues that LPAs should “promote... vitality and viability...by allowing them [town centres] to grow and diversify in a way that can respond to rapid changes in the retail and leisure industries, allows a suitable mix of uses.”

The NPPF asserts that planning should not act as an impediment to sustainable growth and states that "significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development."

Development Plan
Section 38(6) of the Planning and Compulsory Purchase Act 2004 notes that:
“[I]f regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise.”

London Plan (March 2016)
The London Plan provides a high level planning policy position for forward planning and decision- making by LPAs within London. The most pertinent planning policies are identified below.
Policy 2.15 (Town Centres) indicates, amongst other matters, that the Mayor will support the recognition of town centres as the main foci beyond the Central Activities Zone (“CAZ”) for commercial development to improve competitive choice of goods and services;
Policy 4.1 (Developing London’s Economy) details the need to promote and enable the continued development of a strong, sustainable and increasingly diverse economy;
Policy 4.7 (Retail and
Town Centre Development) identifies the Mayor’s support for strong town centres; and

Policy 4.8 (Supporting a Successful and Diverse Retail Sector and Related Facilities and Services) again identifies the Mayor's support for strong town centres. It encourages a proactive approach to planning for retailing and related facilities and services.
Policy 7.4 Local Character

Policy 7.6 Architecture
Policy 7.15 Reducing noise and enhancing soundscapes

Policies G1, CC1, D1, A1, A4 and TC1, TC2, TC4 and TC5 of the London Borough of Camden Local Plan

Odour Assessment

This report sets out an odour risk assessment for a proposed restaurant and take-away development. The report describes the methodology and findings of the odour risk assessment, and identifies the level of odour abatement that will be required to minimise the risk of odour impacts resulting from the operation of the proposed restaurant.

Defra's Guidance on the 'Control of Odour and Noise from Commercial Kitchen Exhaust Systems' (Defra, 2005) contains an assessment procedure for identifying the potential risk of odour impacts from commercial kitchen operations. The results of this risk assessment can be used to determine a suitable level of odour abatement to be installed into a commercial kitchen.

The risk assessment for odours is split into the following four parts:
· dispersion;
· proximity to receptors;
· size of kitchen; and
· cooking type and grease loading.

Each part is given a risk rating score and the total risk rating denotes the level of odour abatement which is likely to be required to prevent the kitchen from causing odour nuisance impacts. The following sections of this report outline each part of the risk assessment in relation to the proposed restaurant and take-away.

Dispersion

The risk rating for dispersion relates to the conditions under which kitchen extraction emissions are discharged. The relevant risk ratings described in the guidance are shown below. The risk score is shown in parentheses.
· VERY POOR (20) – Low level discharge, discharge into courtyard, or restriction on stack;
· POOR (15) – Discharge not low level, but below eaves, or discharge rate below 10 m/s;· MODERATE (10) – Discharging 1 m above eaves at a rate of 10-15 m/s;
· GOOD (5) – Discharging 1 m above ridge at a rate of 15 m/s or more.

The risk rating for dispersion is judged to be Very Poor. Emissions will be emitted to atmosphere via a low level discharge located at rear.

Proximity to Receptors

The risk rating for proximity to receptors relates to the distance between the point of discharge of kitchen emissions and the nearest sensitive receptor locations. Sensitive receptor locations may
be residential properties, commercial premises or frequently used public open spaces. The relevant risk ratings described in the guidance are shown below. The risk score is shown in parentheses. For the purpose of this assessment, it is assumed that the proposed development has been built and is operational.

· CLOSE (10) – Closest sensitive receptor is less than 20 m from kitchen discharge;
· MEDIUM (5) – Closest sensitive receptor is between 20 and 100 m from kitchen discharge;
· FAR (1) – Closest sensitive receptor is more than 100 m from kitchen discharge.

The risk rating for the proximity to residential properties is judged to be Medium; there are residential properties situated between 20 m and 100m on the upper floors of the proposed extract flue.

Size of Kitchen

The risk rating for size of kitchen relates to the volume of food prepared by the kitchen and is described in terms of the capacity of the restaurant or take-away. The relevant risk ratings described in the guidance are shown below. The risk score is shown in parentheses.

· LARGE (5) – More than 100 covers or a large-sized take-away;
· MEDIUM (3) – Between 30 and 100 covers or a medium-sized take-away;
· SMALL (1) – Less than 30 covers or a small take-away.

The proposed restaurant will cater for more take-away and small number of covers for seating. The restaurant is thus judged to be Small in terms of the size of the kitchen

Cooking Type and Grease Loading

The risk rating for cooking type and grease loading relates to the type of cooking methods employed in the kitchen and the type of food prepared. The relevant risk ratings described in the guidance are shown below. The risk score is shown in parentheses.

· VERY HIGH (10) – Pubs (those serving a high level of fried food), fried chicken, burgers or fish and chips;
· HIGH (7) – Kebab, Vietnamese, Thai or Indian;
· MEDIUM (4) – Cantonese, Japanese or Chinese;
· LOW (1) – Most pubs, Italian, French, Pizza or Steakhouse.

The proposed kitchen will produce Italian Pizza, and thus is judged to be LOW in terms of grease loading in the cooking emissions.

Risk Assessment Summary

The odour risk assessment summary is shown in Table 1 for the proposed restaurant & take-away.

Table 1: Restaurant and Take-Away Kitchen Odour Risk Assessment Summary

Criteria	Risk Rating	Risk Score[1]	Description	Comments
Dispersion	Very Poor	20	Low level discharge	Due to the nature of the site the only feasible discharge locations at the rear
Proximity to Receptors	Medium	5	Closest sensitive receptor is between 20 and 100 m from kitchen discharge	The upper floor residential units are some distance from the proposed discharge location
Size of Kitchen	Small	1	less than 30 covers and take-away	Most orders will be take-away and small number of covers seated
Cooking Type and Grease Loading	Low	1	Italian pizza	very minimum amount of smell will produced
TOTAL RATING	High	27	A high level of odour abatement required.	

TOTAL RATING High 27 A high level of odour abatement required.

[1] Total Risk Score of <20 = Low to Medium Risk, 20 to 35 = High Risk; and >35 = Very High Risk.

The overall odour risk rating of the delivery outlet is ‘High’, and is on the lower end of the scale for this classification. This denotes that it would require a high level of odour control to eliminate the risk of odour impacts for nearby residential properties.

Recommended Odour Abatement System

This section of the report briefly outlines the odour control measures that would need to be installed on the kitchen extract system at the restaurant to provide optimal odour abatement and minimise the risk of odour impacts at surrounding properties.

The odour control measures suggested are those recommended within Defra’s guidance on odours from commercial kitchens (Defra, 2005) for kitchens with a ‘High’ odour risk assessment score.

The guidance outlines that abatement systems that offer a high level of odour control may include:

“1. Fine filtration or electrostatic precipitation (ESP) followed by carbon filtration (carbon filters
rated with a 0.2-0.4 second residence time).
2. Fine filtration or ESP followed by UV ozone system to achieve the same level of control as 1.”

Odour Abatement System

In accordance with the recommended odour abatement systems identified above, and following discussions with the client, the following odour abatement system has been identified as the most effective and feasible option that will be installed at the proposed restaurant. It is judged that the system identified will offer a suitable level of odour abatement and reduce potential odour impacts at nearby sensitive locations as much as practicable.

It should be noted that the odour abatement system to be installed should be specified and designed by a suitably qualified contractor. It is imperative that, following commissioning, the system manufacturer/supplier provides comprehensive information regarding the maintenance of the system to ensure that optimal odour abatement performance is maintained during the restaurant's operation. It is also recommended that odour abatement efficiency testing is undertaken on the system following commissioning.

Proposed Odour Abatement System

In accordance with the recommendations, an odour abatement system has been designed for the kitchen extraction systems to achieve a 'high level' of odour control. A Pleated Panel Filter will be used for initial grease and particle removal, followed by two INTROzone Ozone Systems and finally Filtration Activated Carbon Panels for final odour removal. The proposed odour abatement system and flue design adheres to the recommendations of the odour risk assessment and meets the requirements of the Defra guidance on the control of odour and noise from commercial kitchen exhaust systems (Defra, 2005) for an odour abatement system achieving a 'high level' of odour control.

Appendix