1.0 INTRODUCTION

1.1 The purpose of the odour impact assessment is to determine the extent to which odour emanating from the extract flues from the existing sites, which replicate the ovens, odour control systems and ventilation at typical Roosters Piri Piri restaurant (Roosters), is likely to result in nuisance occurring at any residential properties in the vicinity of similar restaurants.

1.2 The assessments can then be utilised to determine the acceptability with respect to odour emanating from new Roosters restaurants and whether detailed odour assessments may be required at 61 High Street Camden.

1.3 The proposed extract system at any new restaurants would be at least of the standard of the current systems although naturally as time progresses the industry standard improves. Based on the opening hours of the current restaurants which have been reviewed they are unlikely to be open before 12pm or after 11pm; albeit on case by case basis this does vary.

2.0 NATURE AND EFFECT OF ODOUR

2.1 This odour review relates to the operation of Roosters restaurants and the potential odour impacts on any sensitive receptors in close proximity to any proposed new locations.

2.2. Odour is perceived by our brains in response to chemicals present in the air we breathe. Odour is the effect that those chemicals have upon us. Humans have sensitive senses of smell and they can detect odour even when chemicals are present in very low concentrations. Most odours are a mixture of many chemicals that interact to produce what we detect as an odour. Odour-free air contains no odorous chemicals whilst fresh air is usually perceived as being air that contains no chemicals or contaminants that could cause harm, or air that smells “clean”.

2.3 Fresh air may contain some odour, but these odours will usually be pleasant in character such as the smell of freshly mown grass or sea spray. Different life experiences and natural variation in the population can result in different sensations and emotional responses by individuals to the same odorous compounds. Because the response to odour is synthesised in our brains, other senses such as sight and taste, and even our upbringing, can influence our perception of odour and whether we find it acceptable, objectionable or offensive.

3.0 ODOUR ASSESSMENT GUIDANCE

3.1 The Department for Environment Food and Rural Affairs (DEFRA) published guidance in 2005 on the control of odours from kitchens. Although the guidance has been deemed out-of-date and withdrawn, it provides information on best practice techniques for the minimisation of odour and noise nuisance from kitchen extraction flues. Therefore this has guided the assessment as to whether the residents of nearby properties would be affected and therefore whether the odour from a Roosters restaurant would be acceptable or not.

3.2 Odours from cooking are contained both within the solid, liquid and gaseous material which is extracted by the kitchen canopy, and these different phases generally require different abatement techniques to reduce levels of odour to those levels which are acceptable to those in the vicinity.

3.3 There are four interlinked characteristics of odour, namely:

- Hedonic tone – how pleasant or unpleasant a smell may be;
- Quality/characteristic – which is a description of the smell, which can identify the source of odour;
- Concentration – usually expressed in terms of odour units per cubic metre, which also impacts somewhat on the hedonic tone; and
- Intensity – measures between faint and strong and is not directly comparable to concentration.

3.4 Interactions between different odours can also occur and this is where the nature of cooking is important. It is also important to appreciate that people can become desensitised to an odour, meaning that the staff of Roosters may become unaware of any odour, whilst nearby residents in the community would be far less desensitised.

3.5 There are several factors that influence the magnitude of odour, these include:

- Size of the cooking facility – which influences both the intensity and volume of air to be filtered;
- Type of food prepared – which affects the characteristic of the chemicals within the extraction system; and
- Type of cooking appliances used – which has a direct impact on the levels of fat, water droplets and temperature within the extraction system.

3.6 The DEFRA guidance includes two tables (Table 2.2 and Table 2.3) that specifies the odour and grease concentration for different types of restaurants and the grease and moisture content for different cooking appliances respectively. Whilst there are no explicitly exact parallels to the way that Roosters prepare their food these have been used as a guide for the impact assessment.

4.0 ODOUR IMPACT ASSESSMENT

4.1 Information on premises:

- The number of covers is 20, with the number of meals prepared each day unknown at the present time but expected to be within the 30-100 range.
- The method of cooking is steam grilling and frying of chips.
- The type of meal served is Peri Peri Chicken.
- The proposed hours of operation are 11am to 11pm.

4.2 The kitchen extract canopy will contain the first line of odour control. The objective of the canopy is to provide a comfortable environment at a suitable temperature, within comfortable moisture level and importantly at a safe noise level that permits communication within the kitchen.

4.3 In terms of canopy types the guidance sets the required extraction rates based upon the canopy types and levels of use. The maximum requirement is for a single island canopy operating at heavy duty. This requires an extraction rate of over 0.85cu.m/s. Drawing RPP/001 details the proposed extraction at 1.8cu.m/s, far in excess of this requirement. The canopy will be wall mounted and therefore comfortably exceeds the maximum requirement of 0.54cu.m/s. The make-up air is filtered prior to entering the kitchen through two G4 Bag Filters.

4.4 The air is then suitably filtered through the kitchen supply fan, GDB 560/4/4 T120. Which for up to 120 deg. C airflow temperatures are robust and powerful boxed centrifugal fans that offer high performance of up to 3.111cu.m/s. Suitable for all applications especially where high performance combined with up to 120 deg C is required and such as for commercial kitchen extract.

4.5 The use of the extraction will fall within the moderate use category, 6-12 hours per day. Therefore a suitable maintenance plan would be a cleaning period of at least every six months. If this were to increase above twelve hours per day then a rota of maintenance every three months would be appropriate.

4.6 The extract canopy will cover the entire cooking area. The type of cuisine including the cooking methods are not explicitly included within the guidance. The Roosters methodology of cooking is to focus on a healthy product with steam grilled chicken at the heart of the menu. This creates far less grease and odour than the more conventional fried chicken referenced at Table 2.1 of the guidance. The method of cooking is therefore considered to give rise to an odour description similar to French or Italian cuisine, which has both a moderate odour and grease content.

4.7 The cooking appliances used are similar in character to steam ovens, which has a light smoke and grease loading, but a heavy moisture content. The menu does include chips and there is inclusion of a deep-fat fryer for this purpose, which has medium grease and smoke loading and medium moisture content.

4.8 The extraction discharges at 12-15m/s, which is a high velocity. The flu discharges vertically at the rear of the premises as shown on drawing RPP/002.

4.9 The extraction system has been designed to comply with the relevant Building Control legislation and in accordance with DW172 for Kitchen Ventilation Systems, as attached at Appendix A.

4.10 The DEFRA guidance provides a means of risk assessing the impact of a proposed restaurant and existing uses (Appendix B). Using the information provided at 4.1 the following is concluded:

- Dispersion - Moderate - 1m above eaves 10
- Proximity of Receptors - Close - <10m from discharge 10
- Size of Kitchen - Medium - 30 - 100 covers 3
- Type of Cooking - Low 1 T = 24

4.11 The combined score provides a high impact risk, however, based upon the generic performance of Roosters restaurants the proposed extraction system it is considered to be more than adequate to ensure that the presence of odour is not considered to adversely impact upon the character of the area or nearby residents.

5.0 CONCLUSION

5.1 The Odour Impact Assessment concludes that whilst the impact risk would fall within the high category, the significance score is at the lower end of the score range 20-35.

5.2 The installation of suitable equipment as detailed above and on the submitted plans indicate that there would be more than adequate mitigation in regards to odour to overcome the risk of impacting negatively upon nearby residents.

5.3 It is concluded that provided a suitable maintenance programme of at least every six months is followed then the performance of the extraction would retain a high level of performance and therefore would require no further mitigation than proposed.