From: John.Griffiths
Sent: 07 January 2025 13:22
To: Planning
Subject: Your Ref: DC/24/1014; RE: Clarence House, High Street, Henfield, BN5 9DA
Attachments: Odour RA DC-24-1014 (07-01-25).pdf; Ventilation Planning Guidance.pdf

Categories: Consultations

Dear Planning,

I write further to the above consultation and respond on behalf of HDC Environmental Health & Licensing Commercial team. The Application seeks the installation of a garden kitchen served by a wood-fired oven to compliment the existing food business and therefore will require effective odour control to treat exhausted air.

All consideration made in relation to appropriate kitchen extract-ventilation in terms of odour and noise is made with reference to NETCEN/EMAQ+ guidance document titled 'Control of Odour and Noise from Commercial Kitchen Exhaust Systems' (2018), which will be referred to as 'the Guidance'.

The premises is located in the primarily commercial heart of Henfield on its High Street, although domestic properties are sited surrounding the location of the proposed kitchen, being as close as 20 metres at upper floor levels on the High Street premises themselves; 40 metres to the south at Hawthorn House; and 50 metres to the west on Craggits Lane.

Application of the Appendix 3 risk assessment for odour in the Guidance indicates that a 'High level' of odour control will be appropriate, suggesting an effective system would include fine filtration or ESP following by activated carbon filtration rated with at least 0.2 to 0.4 second residence- or 'dwell time', or a system offering equivalent control. It is noted that the proposed design does not meet this standard, lacking any active odour abatement techniques and a copy of this assessment is attached for the applicant's reference.

To this end, this Service OBJECTS to the Application due to the potential of solid-fuel and cooking odours causing a loss of amenity to neighbouring domestic properties and the design should be modified to incorporate effective odour control.

However, this Service see no fundamental reason why appropriate control cannot be incorporated in the design and therefore recommends that the external kitchen should only be open for trade during the hours of 08:00am to 18:00pm Saturday to Friday inclusive, and 08:00am to 17:00pm on Sundays and Bank Holidays. These should be secured by Condition, should the Application be Permitted.

In addition, given that there are domestic properties located close to the site, this Service makes the following recommendations for Conditions to minimise disturbance during the undertaking of works at the premises, should the Application be Permitted:

<u>Demolition and/or Construction Phase</u>

a) Suitable assessments should be made to identify any asbestos contained within the development site and controls put in place to ensure safe removal and disposal where necessary.

b) A licensed waste removal contractor should remove all clearance debris and construction waste from site.

c) No burning of materials should take place on site.

d) Hours of construction activities (including deliveries and dispatch) should be limited to 08.00 – 18.00 Monday until Friday, 09.00 – 13.00 Saturdays and no activity on Sundays or Bank Holidays.

If there is anything in this email that you do not understand, or if you have any other questions or queries, please do not hesitate to contact this Service or myself directly.

Kind regards.

John Griffiths
Area Environmental Health Officer

[redacted]

Horsham District Council
50 YEARS

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DM REF:	DC/24/1014
DATE:	07/01/2025
EH&L:	JG

Risk Assessment for Oil, Grease, Smoke & Odour from Commercial Kitchens

In 2018 the withdrawn guidance issued by the Department for Environment, Food and Rural Affairs titled 'Guidance of Odour and Noise from Commercial Kitchen Exhaust Systems' was replaced with industry-lead update of the same name. While the majority of the document mirrored what had been issued previously, the new guidance included additional consideration and a revised risk assessment for odour impact from proposed installations utilising cooking techniques and methods not previously covered.

Below is the Risk Assessment table which is used nationally by Development and Environmental Health team to assess the expected impact of food business on the amenity of neighbouring domestic and sensitive properties. The completed assessment must be read in conjunction with the full NETCEN/EMAQ+ Guidance document, particularly page vi of the preface, as well as the additional Horsham DC guidance document 'Information Required to Support a Planning Application for Commercial Kitchen Ventilation Systems'.

Appendix 3 Risk Assessment

Criteria and Condition	*Description of Circumstances*	*Score*
Dispersion	*Efficiency of the stack design to naturally dilute odour molecules before they reach sensitive receptors*	
Very Poor	Low level discharge into courtyard or restriction on stack	~~20~~
Poor	Not low level, but below eves or discharge at below 10m/s	**15**
Moderate	Discharging 1 metre above eves at 10-15m/s	~~10~~
Good	Discharging 1 metre above ridge at 15m/s	~~5~~
Proximity of Receptors	*Sensitive receptors are potentially subject to a greater impact the closer they are*	
Close	Closest sensitive receptor less than 20 metres from extract discharge	~~10~~
Medium	Closest sensitive receptor between 20 and 100 metres from extract discharge	**5**
Far	Closest sensitive receptor more than 100 metres from extract discharge	~~1~~
Size of Kitchen	*A larger kitchen will increase the amount of odour molecules requiring control*	
Large	More than 100 covers or large sized takeaway	~~5~~
Medium	Between 30 and 100 covers for medium sized takeaway	**3**
Small	Less than 30 covers or small sized takeaway	~~1~~
Cooking Type	*Some cuisines pose a greater potential for odour disturbance, particularly those high in grease*	
Very High	Pubs with high level of fried food; fired chicken; burgers; fish & chips; Turkish or kebabs; Middle Eastern; or any premises cooking with solid fuel.	**10**
High	Vietnamese; Thai; Indian; Japanese; Chinese cuisines	~~7~~
Medium	Cantonese; Italian; French; Pizza from gas-fired ovens	~~4~~
Low	Most pubs (no fried food, mainly reheating and sandwiches, etc); Tea rooms	~~1~~

Score Range	*Impact Risk*	*Odour Control Required*	**Total Score**
~~Less than 20~~	~~Low to Medium~~	~~Low level odour control~~	**33**
20 to 35	High	High level odour control	
~~More than 35~~	~~Very High~~	~~Very high level odour control~~	

Executive Summary from the Guidance

Objectives for Odour Control

- For new premises or premises covered by planning conditions restricting the impact of odour the system shall be designed to prevent harm to the amenity.
- For existing premises not covered by planning conditions restricting the impact of odour, the system shall be designed to avoid statutory nuisance and shall comply with the principles of Best Practical Means.
- The design of a control system should recognise that there are two phases of the contamination in a kitchen exhaust: Particulate (grease, smoke, hydrocarbons/VOC) and Gaseous (odour). The particulate phase needs to be removed prior to dealing with the gaseous phase.

To achieve these objective the odour control system shall include an adequate level of:

1. Particulate and odour control; and
2. Stack dispersion.

The overall performance of the odour abatement system will represent a balance of 1 and 2.

Discharge stack

The discharge stack shall:

1. Discharge the extracted air not less than 1 m above the roof ridge of any building within 15 metres of the vent serving the commercial kitchen. Additional odour control measures may still be required depending on the cooking type and frequency
2. If 1 cannot be complied with for planning reasons, then the extracted air shall be discharged not less than 1 m above the roof eaves or dormer window of the building housing the commercial kitchen. Additional odour control measures may be required. A higher level of odour control measures than those required in Part 1 above may be required.
3. If 1 or 2 cannot be complied with for planning reasons, then a higher level of odour control measures than those required in Part 1 or 2 above may be required.

Odour arrestment plant performance (relation to *Impact Risk* taken from the Assessment)

~~*Low to medium level control may include:*~~

1. ~~Fine filtration or ESP following by carbon filtration (carbon filters rated with a 0.1 second residence time).~~
2. ~~Fine filtration followed by counteractant/neutralising system to achieve the same level of control as 1.~~

High level odour control may include:

1. Fine filtration or 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.

~~*Very high level odour control may include:*~~

1. ~~Fine filtration or ESP followed by carbon filtration (carbon filters rated with a 0.4 –0.8 second residence time).~~
2. ~~Fine filtration or ESP followed by carbon filtration and by counteractant/neutralising system to achieve the same level of control as 1.~~
3. ~~Fine filtration or ESP followed by UV ozone system to achieve the same level of control as 1.~~
4. ~~Fine filtration or ESP followed by wet scrubbing to achieve the same level of control as 1.~~

In some instances, where very high levels of control are required, combinations or sacrificial levels of filtrations may be employed.

Maintenance must be carried out to ensure these performance levels are always achieved.

Additional matters

The above relates to odour control only and additional consideration to the acoustic impact of an installation will also likely be required. Please see the Guidance for more information.

INFORMATION REQUIRED TO SUPPORT A PLANNING APPLICATION FOR COMMERCIAL KITCHEN VENTILATION SYSTEMS

Horsham District Council

This guidance contains details the information that should be submitted for approval by the Local Authority before any ventilation plant is installed. The details required have been taken from 'Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems' published by Defra in January 2005

The aim of any ventilation/extraction system is to ensure that no nuisance, disturbance or loss of amenity is caused to nearby properties by any odours, fumes, food droplets or noise. Additionally, the visual appearance of the flue may be important, and the flue itself may in fact require separate planning permission. Enquiries regarding this matter should be made to the Planning Department on 01403 215187.

A suitably qualified and experienced person with specialist knowledge of ventilation schemes should undertake the design and installation of a ventilation system. Designing and installing appropriate ventilation systems may involve considerable expense.

In circumstances where the end user of the premises is unknown, or where the specific type of food to be cooked is unknown, the installation should be designed to achieve the highest level of odour control in order to cater for the worst case scenario.

There are many different types of odour abatement available (carbon filters, electrostatic precipitation, high dilution and high velocity extraction), and not all types are suitable for all cooking methods. In each case, grease filters must be installed. Please note that any reference to minimum standards within this document is for guidance only and more stringent controls may be deemed appropriate.

To enable the Horsham District Council to assess the suitability of the ventilation scheme, the following information must, where applicable, be provided:

1. Information on premises- The following information should be supplied:

- The number of meals to be served per day;
- The method(s) of preparation and cooking;
- The types of meal served, e.g. fish and chips, Chinese food, Indian food, pizzas or Italian dishes, etc; and
- Proposed hours of operation of the business and any ventilation plant.

2. Plans and drawings- Provide a scaled plan showing the internal arrangement of the premises and the dimensions/location of the ventilation system. The plan must contain external elevations of the buildings showing the dimensions; route; and exhaust characteristics (i.e. appearance) of the ductwork in relation to the building.

The location of **all** filters and the fan must be clearly marked. Where the location of a filter is shown the type must be clearly identified and cross-referenced to the detailed product specification.

3. Pre-filters- A copy of the manufacturer's product data sheet should be supplied clearly showing:

- Manufacturer's name;
- Filter name and product code;
- Dimensions of the pre-filter; and
- Nature of the filter media.
- Manufacturer's recommendations on the frequency and type of maintenance of the pre-filter having regard to the conditions that it will be used under.

4. Electrostatic precipitators (where proposed)- A copy of the manufacturer's product data sheet should be supplied clearly showing:

- Manufacturer's name;
- ESP name and product code;
- Dimensions of the ESP; and
- Flow rate rating.

Manufacturer's recommendation on the frequency and type of maintenance of the ESP having regard to the conditions that it will be used under.

5. Carbon Filters (where proposed)- The details and type of carbon filter units should be identified. A copy of the manufacturer's product data sheet should be supplied that clearly shows:

- Manufacturer's name;
- Filter name and product code;

- Dimensions of the filter panel; and
- The total number of filter panels in the filter bed.

The following information should also be included:

- The nature of the carbon (including product type);
- The frequency of replacement of the carbon units having regard to the conditions that it will be used under. Assumptions to this calculation must be clearly stated, including the frequency and duration of use. Manufacturers should provide recommendations on the frequency/type of maintenance required;
- Total volume of carbon expressed in cubic metres;
- Total mass of carbon expressed in kilograms;
- Total surface area of the panels exposed to the exhausted air; and
- Dwell time of the gases in the filter compartment and the control setting at which this is achieved. The assumptions to this calculation must be clearly stated, and should include the air change rate for the setting quoted.

6. Odour counteractant or neutralising system (where proposed)- The details and type of counteractant or neutralising system should be identified. A copy of the manufacturer's product data sheet should be supplied that clearly shows:

- Manufacturer's name;
- Name of delivery system and product code;
- Counteractant or neutralising chemical to be used;
- COSHH data sheets for chemical to be used; and
- Anticipated counteractant or neutralising delivery rate.

7. Cooker hood- The following information on the characteristics of the cooker hood should be suppliedthat clearly shows the:

- Length that the cooker hood overhangs the appliances;
- Face velocity at the cooker hood, expressed in metres per second; and
- Dimensions of the opening of the cooker hood.

8. System Operation- In addition to the specification of the components the following must be provided about the system:

- Extract rate (expressed as m3/s) at the proposed rate of extract;
- Dwell time of the gases in the carbon filtration zone;
- Volume of the kitchen; and
- Efflux velocity

Note: The system performance is dependant upon the extract rate of the air. Where the rate can be adjusted by the use of dampers or a variable speed fan, then the conditions under which the extract rate can be achieved must be described.

9. Flue Design- The height and velocity of the final discharge are the two important factors. Generally, the greater the flue height, the better the dispersion and dilution of odours. The discharge of air should be at a minimum height of 1m above the roof ridge, especially if there are buildings nearby that may affect odour dispersion and dilution. Where this is not possible (e.g. because of ownership or structural constraints), additional techniques will be required in order to reduce odours, such as an increase in efflux velocity and additional filters, etc. The final discharge should be vertically upwards, unimpeded by flue terminals. The number of bends in the ducting should be minimised and the ducting should have a smooth internal surface.

10. Noise- Data on the noise produced by the system as a whole should be provided including:

- Sound Power Levels or sound pressure levels at given distances (the assumptions to this calculation must be clearly stated);
- An octave band analysis of the noise produced by the system should also be provided, where possible;
- Hours of operation of the ventilation system (where this differs from the hours of opening).

11. Maintenance- A schedule of maintenance must be provided including details for:

- Cleaning of washable grease filters;
- Frequency of inspection and replacement of all filters (grease, pre-, and carbon filters where proposed);
- Inspection and servicing of fans; and
- If schedule is not based on manufacturer's instructions include the reasons why.

12. Additional notes for guidance- The air inlets must not permit pests to enter the kitchen. Fly screens are an example of how this can be achieved.

Sufficient air must be permitted into the premises to replace air extracted. The method for supplying this make-up air should be detailed. The route of the air into the kitchen must not result in its contamination, for example passage through a toilet. Separate provision must be made for ventilation of a toilet.

There must be sufficient access points to permit adequate cleaning of all the ductwork.

Abbreviations: Defra (Department for Environment, Food and Rural Affairs); ESP (Electrostatic precipitators); m3/s (Cubic Metre per Second); COSHH (Control of Substances Hazardous to Health)