From: Robert Flanagan [redacted]
Sent: 02 November 2026 12:58
To: Halima.Chowdhury[redacted]
Subject: RE: URGENT: DC/26/1286; RE: 42 High Street, Storrington

Dear Halima,

We have sought clarification on Environmental Health comments and provide the following:

Thank you for your further consultation response regarding the commercial kitchen extraction system.
We note that Environmental Health considers the proposed arrangement of graded particulate filtration followed by activated carbon filtration satisfactory, notwithstanding the existing horizontal discharge arrangement.
In response to the additional information requested, please find below the proposed filtration specification, calculated carbon residence time and cleaning and maintenance schedule.

1. **Proposed Filtration System**

The proposed system will incorporate a commercial **Discarb activated carbon filtration system supplied by The Filter Business**, with particulate pre-filtration to reduce contamination of the carbon media.
The proposed arrangement comprises:

- Extractor to 90° bend: 809 mm.
- Bend to particulate filter: 330 mm.
- Particulate filter housing: 600 × 400 mm.
- Connecting ductwork between filters: 300 mm.
- Activated carbon filter housing: 600 × 400 × 400 mm.
- Carbon media: Activated carbon specified for commercial kitchen odour removal.

2. Activated Carbon Residence Time

The preliminary design is based on an assumed extraction airflow of **750 m^3/hour (0.2083 m^3/second)**.
The proposed effective activated carbon bed volume is approximately **72 litres (0.072 m^3)**.
The theoretical residence time is therefore:
Residence time = Carbon volume ÷ Airflow
0.072 ÷ 0.2083 = 0.346 seconds
The anticipated residence time is therefore approximately **0.35 seconds**, based on the preliminary design assumptions.
The final manufactured Discarb filter configuration will be selected to provide suitable odour-control performance, with the effective carbon volume, actual residence time and pressure losses confirmed in the manufacturer's technical specification.

3. Cleaning and Maintenance Schedule
The following maintenance schedule will be implemented:

Component	Maintenance	Frequency
Washable grease filters	Remove and clean	Daily
Particulate filters	Inspect and replace as necessary	Weekly inspection
Activated carbon filters	Inspect accessible components and assess performance; replace in accordance with manufacturer's recommendations	Monthly inspection
Extraction fan	Operational inspection	Monthly
Extraction fan	Professional servicing	Every 6 months
Extraction ductwork	Inspect and clean as required	Quarterly inspection
Complete system	General operational and maintenance review	Every 6 months

Where manufacturer recommendations require more frequent maintenance, these will take precedence.
A maintenance log will be retained on site, recording inspections, cleaning, servicing and filter replacements.

4. Conclusion
The proposed filtration arrangement incorporates particulate and activated carbon treatment to minimise cooking-related odour emissions from the existing extraction system.
The preliminary design provides a calculated theoretical carbon residence time of approximately **0.346 seconds**, subject to verification against the final manufactured filter configuration and actual operating airflow.
The maintenance schedule above will be implemented throughout the operational life of the system.

We note Environmental Health's recommendation that these arrangements, together with the previously requested demolition and construction-phase measures, be secured by appropriate planning conditions. We would not that there is no demolition expected to take place as this is a retrospective planning application.

Kind Regards

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