Proposal: Discharge of conditions 14b (Fumes verification)

The supply and extract ventilation to the kitchen, associated catering and servery areas ensure a comfortable, odour free and safe environment. Negative air pressure is maintained, relative to the adjacent areas, to prevent the egress of odours. Kitchen extract canopies have been installed as per the original stage 4 drawing and can identified on the as built mechanical plan appended to this document. Please also find attached details of the baffle filters installed within these canopies that have been provided. They are designed to capture grease within the air being extracted and act as a fire barrier to prevent cooking flames entering the plenum and ductwork.

The Air handling units (AHUs) have been designed and installed with extract filters and are designed to manage odour in commercial kitchens and other areas. These units remove odours, high CO2, high humidity, or contaminated air, which can be replenished by fresh air through natural displacement or other mechanical ventilation systems. The extract air is filtered within the AHU using bag filters and these are crucial for maintaining a clean and healthy environment by preventing the spread of odour and other contaminants Please also find appended to a technical specification relating to AHU 02 which serves the Catering areas and photographs showing the locations of the filters.

The marked-up façade elevations within this document show the locations of the various louvred intakes and extracts around the external façade of the building.

AHU-01 serves GF Dining and 01 Seminar/ Teaching

AHU-02 serves GF Kitchen & Servery Supply

AHU-03 & AHU-04 both serve Offices, meeting, break out & seminar rooms

AHU-05 & AHU-06 both serve Superlab, Research Laboratory and Support areas

Process Ventilation Extract Flues

The ventilation system is also designed to operate in conjunction with the laboratory fume extract systems, to prevent smells, chemicals and potentially flammable vapours from the chemicals and solvents utilised within the laboratory and storage areas from reaching the adjacent zones, automatically and continuously maintaining a nominal negative air pressure regime. An AMCA “B” rated strobic fan serves the fume cupboards in the new build. The strobic fume extract fan system provides a high velocity discharge of laboratory fume extract to ensure smells, fumes and vapours are not re-circulated into the building or adjacent buildings. The extract is located on the roof but is situated behind the plant screen