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To Whom This May Concern,

After reviewing our internal odour control risk assessment for Witherslack, Market Bosworth site, we can confirm the RA recommends low level odour control is installed to prevent any future issues with odour complaints arising from neighbouring residents. Please see below assessment.

kitchen Ventilation System - Risk Assessment for Odour						
Job #	T24995	Project	Old Rectory - Witherslack			
Issue		Location	Market Bosworth	Engineer	DR	
Issue Date	24/05/2024	Catering Drawing	17791 A (P)	Revision	-	
Criteria	Score	Points	Details			
Dispersion	Moderate	10	Discharging 1m above eaves at 10 -15 m/s.			
Proximity of receptors	Medium	5	Closest sensitive receptor between 20 and 100m from discharge.			
Size of kitchen	Small	1	Less than 30 covers or small take away.			
Cooking type	Low	1	Most pubs, Italian, French, Pizza or steakhouse.			
	Total Score	17				
	Impact Risk :	Low to Medium				
	Requirement:	Low level odour control				

We must reiterate that this isn't a commercial catering kitchen serving high volumes of food, the system designed is to serve lunch 5 days per week during term time only. Based on the above RA, usage & operational days per year, we would strongly recommend the local authority takes this into account and accepts that this site is extremely unlikely to causes any form of nuisance to residents.

To achieve low level odour control, the DEFRA/EMAQ+ guide recommends ESP unit followed by a UV / neutralising unit. Below is an extract from EMAQ guide stating their recommendations for low level odour control.

Odour arrestment plant performance

Low to medium level control may include:

1. Fine filtration or ESP followed 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.

The Old Rectory Market Bosworth is a Grade II listed building and the installation of ductwork to serve the small kitchen needs to be respectful to the visual amenity of the building. As such ductwork to serve the kitchen extraction is to be contained

within the roof space above this area which is restrictive so it would not be possible to install such equipment and achieve correct dwell times.

To achieve the above criteria without using heavy plant items and the low level of cooking / smells being produced by the catering operation, we would propose the following:

- Stainless Steel Baffle Filtration within the extract canopy to filter grease (no smoke is expected to be produced given that the cookline only consists of an oven range & combination oven). This would deal with the grease being filtered out of the system at source.
This can be easily, and cost effectively upgraded to a high efficiency baffle filter to increase the amount of grease captured at source. Details below.

LONGAR® TYPE 2 HE75 HIGH PERFORMANCE BAFFLE FILTER FEATURES:

- High Performance Baffle Filter 75% Grease efficiency at 8 micron
- 100% Flame barrier protection to DIN 18869-5
- Cutsafe safety edges
- Fully welded construction – all stainless steel construction
- Meets insurance requirements
- Meets HVCA DW172 requirements
- Folding handles and drain holes as standard
- Robust baffle filter construction – built to last
- Tested & certified to European standard DIN 18869-5
- Tested to American standard UL1046
- Tested & certified to ASTM 2519

Due to the low cooking volumes and the nearest receptor being beyond <40m away, we wouldn't anticipate odour being an issue on this site, however, as a precautionary measure a carbon bag filter will be installed to filter out smells prior to discharging to atmosphere. This would be a counteractant / neutraliser.

This would require periodic maintenance by the end user to ensure adequate performance. We would recommend this is replaced on a 3-6monthly basis.

Noise:

With regards to noise omitted from the kitchen ventilation fans, Melinex lined attenuation has been included on the kitchen extract system to meet the criteria / insertion losses set out by the acoustic assessment provided. This will meet the requirements of TR/19 by having removable centre attenuator pods to aid future cleaning of the kitchen extract system.

The fresh air fan will also have an attenuator installed to meet the requirements set out by the acoustic assessment.

Full specifications on our proposal have been provided alongside this report.

If any further advice / assistance is required, please don't hesitate to get back in touch.

Kind Regards
David Raynor
Trivent Project Manager

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