HOARE LEA

Memo.

To:	Patrick Stone
Cc:	Ryan Glynn, Jack Britten, Josh Jones
From:	Kirk Buxton, Associate Director
Date:	09 February 2026
Project:	Wrexham Gateway East
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P/2025/0697 – Odour Response.

Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
P01	09.02.2026	First Issue	K. Buxton		
P02	10.02.2026	Capturing Spawforth Comments	K. Buxton	J. Jones	K. Buxton

1. Introduction.

This document has been produced to provide additional information raised in Wrexham County Borough Councils response to consultation on the Wrexham Gateway East Development (P/2025/0697) dated 15.10.2025.

This document focuses on the odour control items raised and provides the additional information requested.

2. RPT 2 – Report Required (WCBC 53)

This section reviews the comments raised along with design team responses for the individual items.

2.1 Brewery Odour Control Techniques.

So as to protect the amenity of nearby residents I recommend details of odour control techniques to be employed by the brewery be required prior to determination:

A detailed report of the odour levels arising from the development and any associated plant, together with measures of control, shall be submitted to, any approved in writing by, the Local Planning Authority. The measures as are approved shall be fully implemented prior to the first occupation / use of the development and shall remain for the life of the development.

Wrexham Lager are the intended occupier and end user for the proposed brewery within the former Jewsons Warehouse building, and the proposed associated museum and taproom/restaurant within the

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cambrian sheds warehouse building. These elements of the scheme are highlighted within the submitted parameters plan (drawing ref. al(05)0020 P03). The Wrexham Lager proposals, will utilise existing buildings on the Site, with conversion works to facilitate the change of use requiring minimal external alterations to the buildings, and the creation of no additional building footprint

Wrexham Lager have not been provided with access to the facility, and as such have not detailed their proposals for the facility.

In the absence of this, they have provided details of the arrangements for odour control within their current facility which utilises a process where the steam and odours from the kettle are converted to condensate and returned to the brewhouse, resulting in a small amount of odourless excess steam being emitted to atmosphere.

Wrexham Lager's intention is to utilise a similar process on the Jewson's facility, resulting in only odourless excess steam being discharged to atmosphere. Further details will be provided by Wrexham Lager once the design of the brewery has progressed to ensure suitable techniques have been provided to mitigate odour.

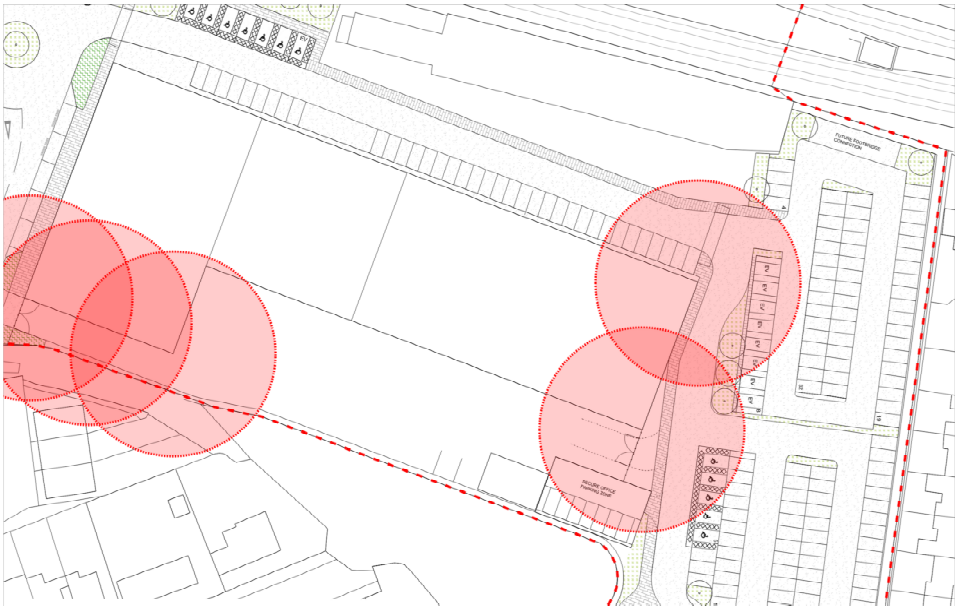
2.2 Kitchen Odour Assessment.

Note this would be in addition to an odour assessment for any cooking smells associated with the proposed restaurant.

As with above the exact details of the catering provisions for the site are unknown at this stage. A worst-case scenario assessment has been undertaken using the methodology within the DEFRA document 'Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems' dated 2005. The purpose of the assessment undertaken in this document is to provide an indication of the mitigation that will be considered as part of the kitchen extract design.

The risk assessment for odour calculation included in Annex C of DEFRA 2005 works on a scoring-based system looking at 4 criteria which is dispersion, proximity of receptors, size of kitchen and cooking type.

The proximity of receptors is known, with the nearest sensitive receptor being the houses on Grosvenor Gardens to the east of the Jewson factory. 20m radius from the façade are shown on the image below, showing that in the worst case scenario where the kitchen is located on the southeast façade then over 20m from the house could be achieved through correct positioning of the outlet.



Kitchen extracts typically discharge at high level above roof level, however for the purpose of the assessment a poor dispersion criterion has been assumed with the outlet discharging at high level on the wall, or at a discharge of below 10 m/s.

Worst case cooking types and size of kitchens are assumed. The results from the calculation and summary of the assumed criteria is provided below.

Criteria	Score	Score	Details
Dispersion	Very poor	20	Low level discharge, discharge into courtyard or restriction on stack.
	Poor	15	Not low level but below eaves, or discharge at below 10 m/s.
	Moderate	10	Discharging 1m above eaves at 10 -15 m/s.
	Good	5	Discharging 1m above ridge at 15 m/s.
Proximity of receptors	Close	10	Closest sensitive receptor less than 20m from kitchen discharge.
	Medium	5	Closest sensitive receptor between 20 and 100m from kitchen discharge.
	Far	1	Closest sensitive receptor more than 100m from kitchen discharge.
Size of kitchen	Large	5	More than 100 covers or large sized take away.
	Medium	3	Between 30 and 100 covers or medium sized take away.
	Small	1	Less than 30 covers or small take away.
Cooking type (odour and grease loading)	Very high	10	Pub (high level of fried food), fried chicken, burgers or fish & chips.
	High	7	Kebab, Vietnamese, Thai or Indian.
	Medium	4	Cantonese, Japanese or Chinese.
	Low	1	Most pubs, Italian, French, Pizza or steakhouse.

Calculating as a total of 35.

Impact Risk	Odour Control Requirement	Significance Score*
Low to Medium	Low level odour control	Less than 20
High	High level odour control	20 to 35
Very high	Very high level odour control	more than 35

* based on the sum of contributions from dispersion, proximity of receptors, size of kitchen and cooking type:

As the impact risk has been calculated as High, high level odour control will be required.

Should the assumptions above match the proposals from Wrexham Lager then an Electrostatic Precipitator followed by carbon filtration will be required within the kitchen extract system to requirements of DEFRA.

It is proposed that Wrexham Lager produce a DEFRA 2005 calculation to refine the required level of mitigation once their layouts and use of the kitchens are known.

Odour arrestment plant performance

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.

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Appendix A – Wrexham Gateway East Parameter Plan.

LAND USE	TOTAL FLOOR AREA PROPOSED	MAX BUILDING / STRUCTURE HEIGHT	APPLICTION TYPE
Main Access / Egress main vehicular route in and out of site including bus stops, taxi ranks, coach stops, lay-by parking, pedestrian crossings & soft/hard landscaping	4100 sqm	3m (bus stops)	OUTLINE
Parking parking zone serving Wrexham General Station & new office development. To include standard, disabled and EV spaces in addition to soft / hard landscaping areas	7300 sqm	N/A	OUTLINE
Public Realm Area to form public realm providing pedestrian access through site comprising hard and soft landscaping and stair access to Regent Street	5500 sqm	6m (external staircase)	OUTLINE
New Office Building new (Class E) office development comprising primary office building and secondary ground floor commercial (Class E) uses	8500 sqm	26m	OUTLINE
Pedestrian Link pedestrian link connecting the application site to existing public footpath, comprising hard and soft landscaping	1000 sqm	N/A	OUTLINE
Pedestrian Footbridge new pedestrian footbridge connecting the application site to Crispin Lane	500 sqm	TBC	OUTLINE
Museum and Taproom/Restaurant Cambrian Shed change of use to become Museum & Taproom/Restaurant - Class E / F.1a (flexible use)	1900 sqm	as existing	FULL
Brewery Former Jewsons Warehouse change of use to become Brewery - Class B2	5800 sqm	as existing	FULL

CRISPIN LANE

REGENT STREET

PEDESTRIAN FOOT BRIDGE

WREXHAM GENERAL

MUSEUM AND TAPROOM/RESTAURANT

PUBLIC REALM

BREWERY

PARKING

PROPOSED OFFICE BUILDING
FFL +85.00 AOD

MAIN ACCESS / EGRESS

PEDESTRIAN LINK

revision:	date:	note:
P01	20250513	preliminary first issue
P02	20250618	redline boundary updated
P03	20250924	outline / full application areas denoted

LEGEND

- application site
- ownership boundary

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project
Wrexham Gateway

job no.
7682

title
proposed parameters plan

scale
1:1250 @ A3

drawing no.
al(05)0020

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