

Document: Brewery Ventilation Strategy

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Site Details & System Overview

This statement outlines the ventilation and odour management strategy for the brewery located at Unit 11 Anglo Industrial Park, Fishponds Road, Wokingham, RG41 2AN. To manage emissions associated with the brewing process—primarily steam, volatile organic compounds and hop aromas—an external exhaust system with a discharge stack height of 9m, or 12m measured from ground level, has been installed.

Dispersion & Stack Height Justification

The primary objective of the extraction system is to ensure that odours are effectively diluted and dispersed in the atmosphere before reaching any nearby sensitive receptors e.g. residential properties & other business units. The installed 9m stack ensures compliance with relevant industry best practices by achieving the following:

- **Elevated Discharge:** By terminating at 12m, the discharge point is positioned well above the breathing zone and immediately surrounding localised obstacles, such as low roof eaves, which minimises the risk of odours pooling at ground level.
- **Effective Dilution:** The elevated height allows the prevailing winds to capture and carry the odorous exhaust away from the immediate vicinity. Atmospheric mixing ensures rapid dilution, reducing odour concentrations to imperceptible levels well before the plume interacts with neighbouring properties.
- **Vertical Discharge:** The exhaust terminates vertically upwards, which ensures the plume is directed straight into the free-flowing air stream without obstruction or downward deflection.

Emission Velocity and Abatement

As steam, which carries the odours, is lighter than air, there is a natural vacuum in our installed ventilation (40cm radius chimney, 10 meters horizontally and then 9 meters vertically) and no pressure is needed for the steam to escape. However, the brew kettle produces heat and this aids pushing the steam through the ventilation.

Conclusion

The 9m external chimney vent operates using the best practicable means for odour mitigation. By releasing the emissions at this height and velocity, the brewery ensures adequate dilution in the ambient air, successfully preventing brewing aromas from causing a statutory nuisance or loss of amenity to surrounding neighbours.