

Noise and Odour from Micro-Brewing

The Airshed was appointed by Orbit Brewing Ltd to conduct an environmental noise and odour impact assessment for a new micro-brewing project to be located under railway arches in Southwark London. The small scale facility has a single brewing kettle with an exhaust terminating below the railway parapet which could potentially operate several times per week, during normal daytime hours. The local planning authority had required further details on the methods proposed to control noise and odour from the operations.

Airshed used ADMS 5, an atmospheric dispersion model, to predict the pattern of odour likely to be released from the brewing kettle to help inform the optimal location and efflux velocity for the kettle flue. The model was used to predict indicative odour concentrations at the nearest residential areas for a range of flue locations, stack heights and efflux velocities. This exercise concluded that odour would reduce by more than a factor of 2 if the release height was increased from 2m to 5m above local ground level. The model predictions were used to help inform the optimal height for the flue.

The nearest residential properties are within 20m of the premises. Airshed used SoundPlan 7.3, a computer based noise prediction model, to determine the noise from the chiller unit at the brewery. This exercise concluded that the unit proposed by the brewery would be < 20 dBA at the nearest dwellings and thus would be highly unlikely to cause any loss of amenity or sleep disturbance.

