

Fats & Proteins Odour Control

Fats & Proteins (UK) Ltd operates an animal rendering process in Lancaster. The plant stabilises 2,500 tonnes per week of animal waste by an evaporative rendering process. The rendering process is highly odorous and requires a high level of odour abatement.

Odour from the process has been the subject of considerable public interest at the site over the last decade.

New Guidance which specifies Best Available Technique (BAT) issued under the Pollution Prevention and Control Regulations requires that odour abatement should be analogous to the level of abatement achieved by thermal oxidation, typically 99.9% and should not exceed 1.5 OU_E/m^3 98thile 1 hour at sensitive receptors.

Odour was measured throughout the plant to determine abatement efficiency of the bio-filter and chemical scrubber. This found that the odour abatement plant reduced the inlet odour emission rate by 99.9%.

The performance of the abatement plant was slightly lower after a bank holiday weekend, probably due to loss of nutrient in the bio-filter medium when the plant is inactive.

A computer modelling study was conducted to predict the atmospheric dispersion from 50m stack.

This concluded that the residual emissions were unlikely to give reasonable cause for annoyance.

The study concluded that fugitive emissions were likely to be the main cause of complaint and that this should be the primary focus of management effort at the site.

The assessment concluded that further work should be conducted at the plant to improve the bio-filter performance after periods of shutdown.

