

# Case Study

## Project

Kings Gate & Zig Zag building

## Client

Lend Lease/Land Securities

## Budget

£10 K

## Overview

IDOM was initially appointed to undertake dispersion modelling of proposed combustion plant at this iconic development in Central London and determine an appropriate stack discharge height based on the predicted impact on sensitive receptors.

With flues from both the Zig Zag building and the Kings Gate building discharging at high level, the major consideration on this particular development was the provision of roof level amenity space on the King Gate building.

Stack height calculation in urban areas commonly involves reaching a compromise between the judgements of the Environmental Health Officer and restrictions on height imposed by the Planning Department. IDOM has a proven record of achieving regulatory sign off in such circumstances.

Detailed dispersion modelling was undertaken using ADMS 5 to predict concentrations at existing and proposed sensitive receptors. The Dispersion Modelling Assessment report was approved by the Local Authority who responded as follows; *'Please convey my appreciation to the writers at the consultancy. IDOM have been very thorough and actually have covered everything I can think of.'*

A subsequent issue arose with odour from a kitchen extract discharging at roof level. The discharge was located in close proximity to the roof terraces and was impacting on sales of the penthouse apartments.

An olfactometry survey was undertaken to determine the odour concentration at the discharge point and ADMS 5 was used to predict dispersion of odour at roof level and inform remedial action.

