

Heathrow Terminal 5 Inquiry BAA

*Preparation and
presentation of
air quality evidence
at Terminal 5 Inquiry*



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BAA is the largest operator of airports in the UK. To meet the increasing demand for air travel, BAA planned to expand the capacity of Heathrow airport by 30 million passengers per annum through the provision of a new terminal with supporting infrastructure. The planning application for the development became the subject of the UK's longest running planning inquiry.

Entec headed the team that assessed the air quality impacts arising from the proposed development and its construction. The work focused on the assessment of existing air quality at, and around, the airport and the modelling of atmospheric emissions nitrogen oxides, carbon monoxide, sulphur dioxide, volatile organic compounds and particulate matter, (specifically PM₁₀) from four source regions, the airport, the near Heathrow region, Greater London and the remainder of the UK in a base year (1993) and two future cases - 2016 with and without the terminal. Modelling of the base year was undertaken to compare the predicted results against measurements at a number of monitoring sites in the near

Heathrow region. Modelling of future air quality allowed the potential change in air quality both with and without the new terminal to be assessed. In examining the future air quality consideration was given to the predicted increase in both air and road traffic in the area around the airport as well as forecast changes in other emissions from road transport, domestic, commercial and industrial.

The individual air quality assessments were published in a series of reports covering for example the terminal, modelling sensitivity and uncertainty tests, construction, calculation of short period concentrations and model and monitoring comparisons. The assessments of existing and future air quality were used as the basis of evidence prepared and presented at the inquiry.

The assessment for the construction of Terminal 5 concentrated on nitrogen oxides, PM₁₀ and nuisance dusts following the change in emissions and concentrations in five years. The assessment showed the impacts of construction against a no Terminal 5 case.

Entec presented evidence at the inquiry in both the air quality and construction topics. Other projects were undertaken by Entec including contaminated land/groundwater assessments, development of a construction waste minimisation strategy and a demographic study. Entec presented evidence on the demographic study.

The early publication of the air quality assessment facilitated extensive discussions with the local planning authority and other interested parties which enabled the preparation and agreement of joint position statements on much of the technical detail of the monitoring and modelling studies. Entec lead these discussions on behalf of BAA and prepared the position statements. The submission of the agreed position statements to the inquiry provided a focus to the issues between the parties thereby reducing inquiry time on the air quality topics.

