

**Current Position:** Principal Consultant with Air Quality Consultants Ltd.

**Qualifications:** BSc Meteorology & Oceanography (2008)

**Positions Held:**

- Member of the Institute of Air Quality Management (MIAQM)
- Member of the Institution of Environmental Sciences (MIEEnvSc)

**Key Experience:**

Ricky has undertaken and managed air quality assessments for a wide range of projects, assessing many different pollution sources using both qualitative and quantitative methodologies, with most assessments having included dispersion modelling (using a variety of models). He has assessed road schemes, airports, energy from waste facilities, anaerobic digesters, poultry farms, urban extensions, rail freight interchanges, energy centres, waste handling sites, sewage works and shopping and sports centres, amongst others. He also has experience in ambient air quality monitoring, the analysis and interpretation of air quality monitoring data, the monitoring and assessment of nuisance odours and the monitoring and assessment of construction dust. He is a Member of the Institute of Air Quality Management.

**Employment Record:**

2018 – Date:	<b>Principal Consultant, Air Quality Consultants Ltd</b> Managing and undertaking air quality assessments for a wide range of sources and pollutants, primarily new developments, across the UK and worldwide.
2015 – 2017:	<b>Senior Consultant, Air Quality Consultants Ltd</b> Preparation of air quality assessments for a wide range of sources and pollutants, primarily new developments, across the UK and worldwide.
2013 – 2015:	<b>Consultant, Air Quality Consultants Ltd</b> Preparation of air quality assessments for a wide range of sources and pollutants.
2012 – 2013:	<b>Assistant Consultant, Air Quality Consultants Ltd</b> Preparation of air quality assessments for new developments, as well as air quality review and assessment reports for local authorities.
2011 – 2012:	<b>Assistant Consultant, Odournet UK Ltd</b> Undertaking of odour sampling, modelling and assessment for a wide variety of potentially odorous facilities.
2008 – 2009:	<b>Oceanographer, Fugro GEOS Ltd</b> Data analysis, QA/QC and report writing for global physical oceanographic measurement studies.

## Mixed-Use Developments

### **Air Quality Assessment of proposed mixed-use development, Kensington (2018)**

Managed the preparation of an air quality assessment in support of the planning application for a major mixed-use development off Cromwell Road in Kensington, London.

### **Air Quality Assessment of proposed mixed-use development, South Gloucestershire (2018)**

Managed the undertaking of dispersion modelling using the ADMS Roads model to determine the potential impacts of a mixed-use development providing a hotel, pub and coffee shop adjacent to the busy A4174 in the outskirts of Bristol.

### **Air Quality Assessment of proposed mixed-use development, Burton-on-Trent (2017)**

Managed the preparation of an air quality assessment in support of the planning application for a major mixed-use development on the outskirts of Burton-on-Trent.

### **Air Quality Assessment of proposed mixed-use development, Hounslow (2016)**

Detailed dispersion modelling using the ADMS Roads and ADMS-5 models to determine the potential impacts of a mixed-use development adjacent to the busy Great West Road (A4) in Hounslow.

### **Air Quality Assessment of proposed mixed-use development, Southwark (2015)**

Detailed dispersion modelling using the ADMS Roads and ADMS-5 models to determine the potential impacts of a low-level release from energy plant within a tall tower mixed-use development.

### **Air Quality Assessment of proposed mixed-use development, Wandsworth (2014)**

Detailed dispersion modelling using the ADMS Roads and ADMS-5 models to determine the potential impacts of a tall tower mixed-use development with an energy centre, as well as the air quality conditions that new residents will experience.

### **Air Quality Assessment of proposed mixed-use development, Barking (2014)**

Responsible for the preparation of an air quality assessment for a large mixed-use development in Barking. Included air quality monitoring and dispersion modelling using the ADMS-Roads and ADMS-5 models, analysing the output and preparing a detailed report.

### **Air Quality Assessment of proposed residential/commercial development, Wolverhampton (2012)**

Responsible for the preparation of an air quality assessment for a proposed residential and commercial development of disused scrub land in Wolverhampton. Included compiling data for, and running, the ADMS Roads model, analysing the output and preparing a detailed report.

### **Air Quality Assessment for a proposed mixed-use development, Sevenoaks (2012)**

Responsible for the preparation of an air quality assessment of a proposed commercial and residential development in Sevenoaks town centre. Included compiling data for, and running, the ADMS Roads model, analysing the output and preparing a detailed report.

## Residential Developments

### **Air Quality Assessment for a residential development in Mendip District (2019)**

Managed the preparation of an air quality assessment for a residential development in Coleford, Mendip District.

### **Air Quality Assessment for a residential development in Barnet (2018)**

Responsible for the preparation of an air quality assessment for a residential development adjacent to the North Circular Road in Barnet.

### **Air Quality Assessment for a residential development in Newcastle (2017)**

Responsible for the preparation of an ES chapter for a 1,200-home residential development with a school in Newcastle.

**Air Quality Assessment for a residential development in Cirencester (2016)**

Responsible for the preparation of an ES chapter for a 375-home residential development in Cirencester, focusing on construction dust impacts and operational road traffic impacts.

**Air Quality Assessment for large residential developments in Tewkesbury (2015)**

Responsible for the preparation of an air quality assessment for two large residential developments in Tewkesbury.

**Air Quality Assessment for a proposed residential development, Thringstone (2014)**

Responsible for the preparation of an air quality assessment of a proposed residential development in Thringstone. Included compiling data for, and running, the ADMS Roads model, analysing the output and preparing a detailed report.

**Air Quality Assessments for a number of proposed residential developments in Bristol City Centre (2013-14)**

Responsible for the preparation of several air quality assessments for proposed residential and student developments in heavily polluted areas of Bristol City Centre.

**Air Quality Assessment for a proposed residential development, Bath (2013)**

Responsible for the preparation of an air quality assessment of a proposed residential development in Bath. Included compiling data for, and running, the ADMS Roads model, analysing the output and preparing a detailed report.

**Air Quality Assessment for a proposed urban extension, Kirkby-in-Ashfield (2013-14)**

Responsible for the preparation of an air quality assessment of a proposed large-scale residential urban extension in Kirkby-in-Ashfield, primarily involving the modelling of a large traffic network in the ADMS Roads model.

**Air Quality Assessment for a proposed residential development, Blaby (2012)**

Responsible for the preparation of an air quality assessment of a proposed residential development in Leicester Forest East, Blaby. Involved analysing traffic and air quality data and preparing a detailed report.

## Commercial/Industrial Developments

**Air Quality Assessment for a proposed third runway at Heathrow Airport (2017-19)**

Responsible for the delivery of dispersion modelling for the air quality assessment of the impacts of a third runway at Heathrow Airport.

**Air Quality Assessment for a proposed concrete batching plant, Newham (2019)**

Responsible for the preparation of an air quality assessment for a proposed concrete batching plant and aggregate transfer facility, primarily focusing on the potential for dust impacts but also considering road traffic and rail impacts.

**Air Quality Assessment for a proposed road scheme, Birmingham (2018)**

Managed the delivery of qualitative and quantitative air quality assessments of the impacts of a proposed road scheme in Birmingham.

**Air Quality Assessment for multiple power generation facilities (2018)**

Management of the preparation of air quality assessments for several proposed power generation facilities across the UK.

**Air Quality Assessment for the proposed retrofitting of buses, Tunbridge Wells (2018)**

Responsible for the preparation of an air quality assessment to demonstrate the air quality benefits of retrofitting buses in Tunbridge Wells District.

**Air Quality Assessment for a distribution warehouse, Rugby (2017)**

Responsible for the preparation of an air quality assessment for a proposed cold drinks storage and distribution warehouse in Rugby.

**Air Quality Assessment for a Short-Term Operating Reserve Facility, Stoke-on-Trent (2016)**

Responsible for the preparation of an air quality assessment for a proposed Short-Term Operating Reserve Facility with 20 gas-fired generators to provide 20 MW of backup power in Stoke-on-Trent.

**Air Quality Assessment for a proposed second runway at Dublin Airport (2016)**

Preparation of emissions inventories and dispersion modelling for the air quality assessment of the impacts of a second runway at Dublin Airport.

**Air Quality Assessment for an energy from waste facility, Rotherham (2016)**

Responsible for the preparation of an air quality assessment of a proposed energy from waste facility in Birmingham. Included dispersion modelling of all of the pollutants covered in the Industrial Emissions Directive, alongside an odour risk assessment.

**Air Quality Assessment for an energy from waste facility, Birmingham (2015)**

Responsible for the preparation of an air quality assessment of a proposed energy from waste facility in Birmingham. Included dispersion modelling of all of the pollutants covered in the Industrial Emissions Directive, alongside an odour risk assessment.

**Assessment of Heathrow and Gatwick for the Airports Commission (2015)**

Preparation of emissions inventories and dispersion modelling of all potential scenarios at both Heathrow and Gatwick to inform the Airports Commission's recommendation.

**Air Quality Assessment for London City Airport Eastern Stand Development (2015)**

Preparation of emissions inventories and dispersion modelling for the air quality assessment of the impacts of the expansion of London City Airport.

**Air Quality Assessment for a proposed commercial development, Wandsworth (2014)**

Responsible for the preparation of an air quality assessment for a proposed commercial development adjacent to a heavily polluted street in Clapham, Wandsworth.

**Air Quality Assessment for a proposed rail freight interchange, East Midlands (2013-14)**

Responsible for the preparation of an air quality assessment incorporating dust, road traffic and rail emissions for a proposed rail freight interchange in the East Midlands.

**Air Quality Assessment for a proposed concrete batching plant, Barking (2014)**

Responsible for the preparation of an air quality assessment for a proposed concrete batching plant, primarily focusing on the potential for dust impacts but also considering road traffic and rail impacts.

**Air Quality Assessment for a new energy from waste facility, Bridgwater (2014)**

Responsible for the preparation of an air quality assessment of a proposed energy from waste facility in Bridgwater. Involved analysing the air quality impacts of the facility on nearby sensitive human receptors and sites of ecological importance, and preparing a detailed report.

**Air Quality Assessment for a proposed expansion to a poultry farm, Taunton (2013)**

Responsible for the preparation of an air quality assessment for a proposed poultry farm expansion, which involved modelling the impacts of ammonia emissions on nearby designated ecological habitats.

**Odour assessment for two proposed anaerobic digestion facilities in Wales (2013)**

Responsible for undertaking an air quality assessment for proposed anaerobic digestions facilities in Cardiganshire and the Vale of Glamorgan, covering the impacts of CHP emissions and the potential for odour impacts.

**Air Quality Assessment for a proposed commercial development, Wychavon (2012)**

Responsible for the preparation of an air quality assessment of a proposed waste transfer station development in Wychavon. Involved analysing traffic and air quality data and preparing a detailed report.

**Air Quality Assessment for a proposed road development, Doha, Qatar (2012)**

Assisted in the preparation of an air quality assessment for a proposed road development in Doha, Qatar. Included setting up and running the Aermot model, analysing the output and assisting in preparing a detailed report.

### **Air Quality Assessment for new CHP Plant, Runcorn (2012)**

Responsible for the preparation of an air quality assessment of a proposed CHP at a facility in Runcorn, Halton. Involved analysing the air quality impacts of the plant on nearby residences and sites of ecological importance, and preparing a detailed report.

### **Air Quality Assessment for a new Waste Management Centre, West Dorset (2012)**

Responsible for the preparation of an air quality assessment of a proposed waste management centre in Bridport, West Dorset. Included compiling data for, and running, the ADMS Roads model, analysing the output, as well as assessing the potential for construction and operational dust impacts, and preparing a detailed report.

### **Air Quality Assessment for a proposed commercial development, Watford (2012)**

Responsible for the preparation of an air quality assessment of a proposed supermarket development in Watford. Included compiling and analyzing air quality and traffic data, and preparing a detailed report.

## Odours

### **Odour assessment for fast food restaurant and drive-thru, Chesterfield (2019)**

Managed the undertaking an odour risk assessment for a proposed fast food restaurant.

### **Odour assessment for fast food restaurant and drive-thru, Belfast (2017)**

Managed the undertaking an odour risk assessment for a proposed fast food restaurant.

### **Odour assessment for a proposed anaerobic digestion facility (2016)**

Responsible for undertaking an odour risk assessment following IAQM guidance for a proposed anaerobic digestion facility in Arun District.

### **Odour assessment of emissions from the kitchen extract of a fried chicken restaurant, Bath (2016)**

Responsible for assessing the odour emissions from the kitchen extraction system at a fried chicken restaurant, which were impacting upon an office building, and provide expert advice to the building's management company.

### **Odour assessment for a new waste management facility adjacent to a holiday park in Lancashire (2014-16)**

Responsible for undertaking sniff tests and a variety of other odour assessment techniques, and preparing detailed assessment reports, investigating the impacts of a new waste management facility upon an existing holiday park.

### **Odour assessment for a proposed residential development adjacent to an active farm, East Lindsey (2013)**

Responsible for short assessment of the potential for odour impacts from an existing active farm adjacent to a proposed residential development.

### **Odour assessment for a proposed gourmet burger restaurant, Bristol (2013)**

Responsible for undertaking a kitchen odour risk assessment following the methodology outlined in Defra's Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems.

### **Odour assessment for a proposed anaerobic digestion facility (2013)**

Responsible for undertaking an odour assessment for a proposed anaerobic digestion facility in Fenland.

### **Odour assessment of a bakery's impact upon a proposed mixed use development, Ealing (2012)**

Responsible for undertaking sniff tests and preparing a detailed statement on the potential for odour impacts from this bakery at the proposed development.

### **Odour assessment of a sewage works' impact upon a proposed residential development, East Herts (2012)**

Responsible for undertaking sniff tests and preparing a detailed assessment of the potential for odour impacts from a sewage works adjacent to a proposed development.

## **Odour assessment of the impact of an equestrian centre upon a proposed mixed use development, Harrow (2012)**

Responsible for undertaking sniff tests and preparing a detailed assessment of the potential for odour impacts from an equestrian centre adjacent to a proposed development.

## **Odour modelling study of the impacts of three sewage works, Northern Ireland (2012)**

Responsible for a project that involved monitoring and modeling of the emissions from odour abatement plant at three separate sewage works in Northern Ireland, and the preparation of a detailed report.

## **Monitoring**

### **Nitrogen Dioxide monitoring in Lambeth (2018-19)**

Managed an air quality assessment that utilised diffusion tube monitoring to determine the suitability of a site in Lambeth for redevelopment as a secondary school.

### **Nitrogen Dioxide monitoring in Bristol (2017-18)**

Responsible for the deployment of diffusion tube monitors near to the M32 in Bristol, to determine the requirement for mitigation on air quality grounds for a proposed residential development.

### **Nitrogen Dioxide monitoring in Bristol (2017)**

Responsible for the deployment of diffusion tube monitors along West Street in Old Market, Bristol, to determine the air quality conditions that future residents of a proposed development would experience.

### **Nitrogen Dioxide monitoring in Hackney (2015-16)**

Responsible for the deployment of diffusion tube monitors in the vicinity of a student residential development in Hackney to determine the air quality conditions that future residents would experience.

### **Nitrogen Dioxide monitoring in Barking (2014-15)**

Responsible for the deployment of diffusion tube monitors around the site of a large urban redevelopment project to inform the baseline for the air quality assessment for the scheme.

### **Nitrogen Dioxide monitoring in Birmingham City Centre (2014-15)**

Responsible for the deployment of diffusion tube monitors at a proposed residential development site in the City Centre, and the subsequent analysis of the results and writing of a detailed assessment report.

### **Nitrogen Dioxide monitoring in Bristol City Centre (2013-14)**

Responsible for the deployment of diffusion tube monitors at two separate sites in the City Centre, and the subsequent analysis of the results and writing of detailed assessment reports.

### **Dust monitoring for the construction of a residential development, Newton Abbot (2012-14)**

Responsible for the deployment of monitoring equipment and production of monthly monitoring reports.

### **Odour Monitoring at 15 sewage works across Southern Ireland (2012)**

Responsible for leading a week-long monitoring exercise at 15 sewage works across several Irish counties.

### **Odour Monitoring at a two Waste Management Centres, East London (2011)**

Responsible for leading monthly monitoring exercises at separate Waste Management Centres in East London, and preparing a detailed monthly report.

### **Odour Monitoring at a composting facility, Northampton (2011)**

Responsible for leading two four-day monitoring exercises at a composting facility adjacent to a sewage works in Northampton, and preparing a detailed report.

### **Odour Monitoring at a sewage works, Dumfries & Galloway (2011)**

Responsible for leading a two-day monitoring exercises at a sewage works in Newton Stewart, and undertaking subsequent dispersion modeling, and providing a detailed report.

### **Air Sampling at a Waste Management Centre for GCMS Analysis (2012)**

Undertook air sampling at the facility and processing of samples onto Tenax tubes for GCMS analysis.