

Current Position: Associate Director with Air Quality Consultants Ltd.

Year of Birth: 1975

Nationality: British

Qualifications: BSc Environmental Science (1997)

#### **Positions Held:**

Chartered Scientist (CSci)

Member of the Institution of Environmental Sciences (MIES)

Member of the Institute of Air Quality Management (MIAQM)

# **Key Experience:**

Over 17 years' experience in the field of air quality. Involved in air quality, dust and odour assessments of a wide range of development projects, covering retail, housing, roads, ports, railways, airports and industrial processes. Prepared air quality review and assessment reports for local authorities. Analysed and interpreted air quality data from the national air quality network and new local authority monitoring, as well as from monitoring of dust. Arranged monitoring programmes for PM<sub>10</sub>, sulphur dioxide and nitrogen dioxide. Carried out dust and odour assessments. Provided Expert Witness Services.

# **Employment Record:**

2017- date	Associate Director, Ai	r Quality Consultants Ltd.

Responsible for air quality monitoring and assessment for a range of clients.

2005- 2017 Principal Consultant, Air Quality Consultants Ltd.

Responsible for air quality monitoring and assessment for a range of clients.

2003- 2005 Senior Consultant, Air Quality Consultants Ltd.

Responsible for air quality monitoring and assessment for a range of clients.

2000- 2003 Consultant, Air Quality Consultants Ltd.

Preparation of reports on air quality monitoring data and contributions to air

quality assessments of new developments.

1998-2000 Process Technician, Wessex Water

Responsible for identifying areas for and justifying water mains renovation, based on water quality. Assisting the Process Scientists in other aspects of water supply science from raw water source protection to customer complaints.

CoSHH assessor and assistant co-ordinator.

1998 Laboratory Technician, Public Health Laboratory Service

Preparation of medical samples for analysis in the mycology department.

1997-1999 Consultant to Bath & NE Somerset Council

Preparation of air quality reports.



# **Commercial and Residential Developments**

# Air Quality Support for Residential-led Development, Spelthorne (2016-17)

Responsible for providing on-going air quality support to developer of a potentially large residential development. Includes air quality modelling, monitoring and general advice to identify potential constraints to the development.

#### Air Quality Assessment, Residential Development, London (2015-17)

Responsible air quality assessment for residential development. Included dispersion modelling and negotiations with Council to agree appropriate mitigation.

# Air Quality Assessment of Cumulative Impact of Developments, Stratford-on-Avon (2014-15)

Responsible for air quality assessment considering the cumulative impact of developments allocated in the Core Strategy on behalf of Stratford-on-Avon District Council. Including modelling of traffic using ADMS-Roads.

# Air Quality Assessment of Mixed-use Development, London (2015)

Responsible for air quality assessment, covering traffic and energy plant impacts of a large mixed-use development in London. Including modelling of traffic using ADMS-Roads, energy plant using ADMS5, construction dust and Air Quality Neutral assessments.

# Air Quality Assessment of Mixed-use Development, Derby (2014)

Responsible for air quality assessment, covering traffic impacts of a large mixed-use development in Derby. Including modelling of traffic using ADMS-Roads and construction dust assessment.

#### Air Quality Assessment of Mixed-use Development, Teesside (2014)

Responsible for air quality assessment, covering traffic impacts of a predominantly residential development in Teesside. Including modelling of traffic using ADMS-Roads, consideration of the impacts of the adjacent airport and a construction dust assessment.

#### Air Quality Assessment of Mixed-use Development, Warwickshire (2014)

Responsible for air quality assessment, covering traffic impacts of a large mixed-use development in Warwickshire. Including modelling of traffic using ADMS-Roads, modelling CHP impacts using ADMS-5 and a construction dust assessment.

#### Air Quality Assessment, Pub/Restaurant Development, Devon (2014)

Preparation of qualitative air quality assessment to address council concerns about the impact of local air quality upon a pub/restaurant with staff accommodation in Devon.

#### Air Quality Assessment, Residential Development, Wiltshire (2013)

Prepared air quality assessment for residential development, adjacent to industrial estate. Considered the potential impacts of dust, odour and other emissions from the industrial estate upon occupants of the proposed development. Included attendance at Informal Hearing.

#### Air Quality Assessment, Residential Development, London (2013)

Prepared air quality assessment for residential development. Included dispersion modelling and negotiations with Council to agree appropriate mitigation.

## Air Quality Advice, Pub/Restaurant Development, Yorkshire (2011)

Provided advice on air quality issues in relation to a pub/restaurant with staff accommodation in preparation for an Appeal. Included negotiation with local authority to agree relevant conditions, in order to remove objection prior to Public Inquiry.

## **Expert Witness, Mixed-use Development, Cambridge (2010)**

Presented air quality evidence on behalf of the developer at an informal hearing for a mixed-use development in Cambridge.

#### Expert Witness, Mixed-use Development, North London (2010)

Presented air quality evidence on behalf of the developer at an informal hearing for a mixed-use development in North London

#### Air Quality Assessment of Mixed-use Development, Portsmouth (2010)

Responsible for air quality assessment, covering traffic and boiler impacts of a mixed-use development in Portsmouth. Including modelling of traffic and boiler impacts using ADMS-Roads and ADMS4, and coordination of air quality monitoring survey using diffusion tubes.



#### Air Quality Assessment of Mixed-use Development, Devon (2010)

Responsible for air quality assessment, covering traffic impacts of a mixed-use development in Devon. Including modelling of traffic using ADMS-Roads.

# Air Quality Assessment of Biomass Boiler, Southern England (2010)

Responsible of air quality assessment, covering impact of proposed biomass boiler at a university campus. Including screening assessment and modelling using ADMS4.

#### Air Quality Assessment of Student Accommodation, Cambridge (2010)

Carried out air quality assessment, covering traffic impacts upon proposed student accommodation in Cambridge. Including modelling of traffic impacts using ADMS-Roads.

# Air Quality Assessment of Mixed-use Development, Bognor Regis (2009)

Responsible for air quality assessment, covering traffic impacts a mixed-use development on the outskirts of Bognor Regis. Including modelling of traffic impacts using ADMS-Roads and co-ordination of air quality monitoring survey using diffusion tubes.

# Air Quality Assessment of Mixed-use Development, London (2009)

Responsible for air quality assessment, covering traffic impacts on a mixed-use development in Islington. Including modelling of traffic impacts using ADMS-Roads.

# Air Quality Assessment of Mixed-use Developments, Cambridge (2009)

Responsible for air quality assessments, covering traffic impacts of four mixed-use developments in Cambridge. Including modelling of traffic impacts using ADMS-Roads and co-ordination of air quality monitoring surveys using diffusion tubes.

# Air Quality Assessment of Multi Storey Car Park, Birmingham (2009)

Responsible for air quality assessment, covering traffic impacts from a multi storey car park in Birmingham. Including modelling of traffic impacts using ADMS-Roads.

# Air Quality Assessment of Mixed-Use Development, Brighton (2006-2008)

Preparation of air quality assessment, covering construction, boiler and traffic impacts from a large residential development at Brighton Marina. Including modelling of traffic impacts using ADMS-Roads and boiler impacts using AERMOD.

# Air Quality Assessment of Residential Development, London (2008)

Preparation of air quality assessment, traffic impacts from and upon a residential development. Including modelling of traffic impacts using ADMS-Roads.

# Expert Witness, Residential Development, Portsmouth (2007)

Air quality evidence prepared and presented at an Appeal for sheltered accommodation adjacent to an AQMA in Portsmouth.

#### Air Quality Assessment of Residential Development, Walsall (2007)

Preparation of air quality assessment, covering construction, and traffic impacts from a residential development. Including modelling of traffic impacts using ADMS-Roads.

## Air Quality Assessment of Residential Development, Bath (2006)

Preparation of air quality assessment, covering construction impacts and traffic impacts from a large residential development Bath Western Riverside. Including modelling of traffic impacts using AAQuIRE.

#### Air Quality Assessment of Mixed-Use Development, Sheffield (2005-2006)

On-going air quality assessment, covering construction impacts and traffic impacts from the redevelopment of The Moor area of Sheffield. Including co-ordination local authority modelling of traffic impacts.

#### Air Quality Assessment of Mixed-Use Development, NW England (2005)

Responsible for air quality assessment, covering construction impacts and traffic impacts from a development in the Wigan Pier Quarter. Including AAQuIRE modelling of traffic impacts.

#### Air Quality Assessment of Residential Development, South Wales (2005)

Preparation of air quality assessment, covering construction impacts and traffic impacts from a residential development at Llanfrechfa Hospital, Cwmbran.

#### Air Quality Assessment of Leisure Development, Cotswolds (2005)

Preparation of air quality assessment, covering construction impacts and traffic impacts from a proposed leisure development at Cotswold Water Park.



#### Appraisal of the Suitability of a Site for Housing, Devon (2005)

Performed an appraisal of the suitability of a site affordable housing adjacent to a proposed new road to address concerns raised by the Local Authority.

# Appraisal of the Suitability of a Site for Housing, Coventry (2005)

Performed an appraisal of the suitability of a roadside location for future housing to address concerns raised by the Local Authority.

#### Air Quality Assessment of Business Park, West Midlands, England (2005)

Preparation of air quality assessment, covering construction impacts and traffic impacts from a proposed new Business Park development.

# Air Quality Assessment of Proposed King's Cross Redevelopment, London (2001-2005)

Contribution to air quality assessment of proposed redevelopment of the King's Cross land. Includes contribution to master plan design issues to minimise air quality impacts and assessment of subsequent construction and operational air quality impacts and preparation of air quality assessment to support the planning application.

## Air Quality Assessment of Retail Development and New Link Road, SW England (2004)

Preparation of air quality assessment, covering traffic impacts from a proposed new superstore development and link road in Newton Abbot, Devon. Involved detailed dispersion modelling using AAQuIRE.

# Assessment of Air Quality for a Proposed Residential Development Partially in an AQMA, SE England (2004)

Assessed the ambient air quality beside a motorway and close to an air quality management area in relation to a proposal for a residential development.

# Assessment of Air Quality for a Proposed Residential Development in an AQMA, SE England (2004)

Assessed the ambient air quality in an air quality management area, with an industrial source in relation to a proposal for a residential development and assessed the impact of the development upon local air quality.

#### Appraisal of the Suitability of a Site for Housing, Norwich (2003)

Performed an appraisal of the suitability of a roadside location for future housing to address concerns raised by the Local Authority.

#### Appraisal of the Suitability of a Site for Housing, Swindon (2003)

Performed an appraisal of the suitability of a site near to a bus station for future housing, to address concerns raised about emissions from buses and a nearby multi-storey car park.

## Appraisal of the Suitability of a Site for Housing, Leicester (2003)

Performed an appraisal of the suitability of a roadside location for future housing to address concerns raised by the Local Authority.

# Air Quality Assessment of Mixed Use Development, Norwich (2003)

Preparation of air quality assessment, covering construction impacts, traffic impacts and potential impacts of odour from catering premises for a development on a former brewery site near the centre of Norwich.

# Air Quality Assessment of Residential Development, North West England (2002)

Preparation of air quality assessment, covering construction impacts and traffic impacts for a proposed residential development near Fleetwood.

#### Air Quality Assessment of Sewerage Scheme, South West England (2002)

Preparation of air quality assessment, covering construction impacts of a sewerage improvement scheme, Bath.

## Air Quality Assessment of New Hospital Facilities, South West England (2002)

Preparation of air quality assessment, covering construction impacts and impacts of traffic for new hospital facilities at Derriford Hospital, Plymouth.

# Air Quality Assessment of Cycleway, South Wales (2002)

Preparation of air quality assessment, covering construction impacts and impacts of traffic for a coastal walkway/cycleway.



# Air Quality Assessment of Hospital Expansion, Eastern England (2002)

Preparation of air quality assessment, defining baseline local air quality and outlining the potential air quality constraints on potential expansion of the existing hospital site.

# Air Quality Assessment of Hospital Redevelopment, Midlands (2001)

Preparation of air quality assessment, covering construction impacts and impacts of traffic for the redevelopment of a hospital site.

#### Air Quality Assessment of Proposed Residential Development, Southern England (2001)

Preparation of air quality assessment, covering construction impacts and impacts of traffic for a large residential development.

# Air Quality Assessment of Mixed Use Development, London (2001)

Preparation of air quality assessment, covering construction impacts and impacts of traffic and boiler plant emissions for a development in an air quality management area.

## Air Quality Assessment of Proposed Retail Outlet, Southwest England (2001)

Preparation of air quality assessment covering operational and construction impacts associated with a proposed town centre supermarket development.

# Air Quality Assessment of Commercial/Leisure Development, London (2000)

Preparation of air quality assessment, covering construction impacts and impacts of traffic and boiler plant emissions for a development in an air quality management area.

#### Air Quality Assessment of Warehouse/Distribution Development, London (2000)

Carried out air quality assessment of impacts of traffic arising from a proposed warehouse/distribution development.

# **Air Quality Management and Policy**

# Air Quality Action Plan and Air Quality Seminars for Haringey Council (2017)

Preparation of Air Quality Action Plan for Haringey Council. Involved attendance at steering group meetings and evaluation of options. Air Quality Seminars were prepared and delivered to a range of audiences covering council officers, councillors, members of the public and vulnerable groups (.

#### Air Quality Action Plan, Further Assessment, Detailed Assessments Rayleigh (2013-17)

Responsible for preparation of a Further Assessment, Detailed Assessment, and Air Quality Action Plan for Rochford District Council. Involved attendance at steering group meetings and evaluation of options.

#### Appraisal of Air Quality Grant Applications (2013-15)

Carried out appraisal of air quality grant applications on behalf of Defra.

#### Review of Air Quality Actions in Worldwide Cities (2013)

Contributed to a review of air quality actions in a number of worldwide cities on behalf of the GLA.

#### Review of King's Lynn Draft Air Quality Action Plan (2012)

Reviewed the draft Air Quality Action Plan for King's Lynn on behalf of King's Lynn and West Norfolk Borough Council. Provided advice on the format and suitability of measures proposed.

## Air Quality Detailed Assessment, Surrey (2011)

Preparation of a Detailed Assessment for Waverley Borough Council. Involved modelling of traffic at level-crossing using ADMS-Roads.

#### Air Quality Progress Report, Cambridgeshire (2011)

Responsible for preparation of a Progress Report for Fenland District Council. Covered monitoring data from 2009 and 2010..

# Assessment of Local Authority Review & Assessment Procedure (2000-10)

Ongoing contribution to Defra and Devolved Administrations contract to appraise Air Quality Review & Assessment reports prepared by local authorities in UK. Includes appraisal of Updating and Screening Assessments and collation of new monitoring data to assess against EC limit values. Contract carried out in co-operation with University of West of England.

# Development Control and Air Quality: Planning for Air Quality Guidance (EPUK) (2004 & 2006 & 2009/10)

Contributed to development and publication of guidance for Environmental Protection UK.



# Air Quality Action Plan, Further Assessment, Detailed Assessment and Progress Report Worcester (2010)

Responsible for preparation of a Further Assessment, Detailed Assessment, Progress Report and Air Quality Action Plan for Worcester City Council. Involved attendance at steering group meetings and evaluation of options.

#### Air Quality Action Plan and Further Assessment, Suffolk (2009-10)

Responsible for preparation of a Further Assessment and Air Quality Action Plan for Babergh District Council. Involved attendance at steering group meetings and evaluation of options.

## Air Quality Action Plan, South Wales (2009-10)

Preparation of an Air Quality Action Plan for Monmouthshire County Council. Involved attendance at steering group meetings and evaluation of options.

# Review and Assessment, Cambridgeshire (2007-2010)

Co-ordination of review and assessment work for Fenland District Council, as part of a 3-year contract. Involves automatic data management and preparation of Detailed Assessment and Further Assessment reports.

#### Review of Bus Fleet Compositions and Implications for Emissions Reductions Strategies (2009)

Responsible for a review of bus fleet compositions, emissions and regulation in the UK. Including interviews and case studies of emissions reduction strategies. Carried out on behalf of Defra.

#### Further Assessment of Nitrogen Dioxide in South Wales (2007)

Preparation of a Further Assessment for Monmouthshire County Council. Involved collation and analysis of monitoring data and modelling using ADMS-Roads.

# Air Quality Guidelines for National Road Schemes (2005)

Contributed to preparation of detailed guidelines for the air quality assessment of national road schemes, on behalf of the National Roads Authority, Ireland.

## **Updating and Screening Assessment in South Wales (2006)**

Preparation of a Updating and Screening Assessment for Monmouthshire County Council. Involved collation and analysis of monitoring data.

#### Detailed Assessments for Five Tyne and Wear Local Authorities (2005)

Preparation of a Detailed Assessments for five local authorities in Tyne & Wear. Involved collation and analysis of monitoring and detailed modelling data.

#### **Detailed Assessment of Nitrogen Dioxide in Norfolk (2005)**

Responsible for preparation of a Detailed Assessment for King's Lynn and West Norfolk District Council.

#### **Detailed Assessment of Nitrogen Dioxide in South Wales (2005)**

Preparation of a Detailed Assessment for Monmouthshire County Council. Involved collation and analysis of monitoring data.

## Detailed Assessment of PM<sub>10</sub> from Quarry Sources, SW England (2004-2005)

Co-ordination of PM<sub>10</sub> monitoring and preparation of a Detailed Assessment of emissions quarry sources.

## Detailed Assessment of Sulphur Dioxide from Domestic Sources, NE England (2003)

Co-ordination of a fuel-use survey and subsequent sulphur dioxide monitoring, to inform a Detailed Assessment of emissions from domestic solid fuel use.

#### Air Quality Updating and Screening Assessment, NE England (2003)

Preparation of Updating and Screening Assessments for a rural Local Authority in Yorkshire.

#### Air Quality Updating and Screening Assessments, SE England (2003)

Preparation of Updating and Screening Assessments for eight Local Authorities in Kent. Included collation of monitoring data, traffic data and liasing with the Local Authorities to determine which locations required Detailed Assessments.

# Evaluation of First Phase of Review & Assessment Process (2001-2002)

Contributed to DEFRA and Devolved Administrations contract to evaluate the Reviews & Assessments process. Contract carried out in co-operation with University of West of England.



# **Airports and Ports**

# **Durham Tees Valley Airport Masterplan (2013)**

Preparation of text covering the potential air quality impacts of proposals within the Durham Tees Valley Airport Masterplan.

# Air Quality Assessment of Proposed Changes at Southampton Container Terminal (2011)

Responsible for air quality assessment of proposed new deep water berth at Southampton Container Terminal. Included modelling of impacts of rail and traffic emissions using the ADMS-Roads model.

# Air Quality Assessment of New Terminal at Gibraltar Airport (2007)

Preparation of air quality assessment of proposed new terminal at Gibraltar Airport. Included modelling of impacts of aircraft and traffic emissions using the ADMS-Roads and AERMOD models.

#### Robin Hood Airport Doncaster Sheffield Masterplan (2007)

Preparation of text covering the potential air quality impacts of proposals within the Robin Hood Airport Doncaster Sheffield 2015/2030 Masterplan.

# Air Quality Assessment of New Terminal at Bournemouth Airport (2005-2007)

Preparation of air quality assessment of proposed new terminal at Bournemouth Airport. Included modelling of impacts of aircraft and traffic emissions using the ADMS-Roads and AERMOD models.

# Air Quality Assessment of Luton Airport Expansion (2006)

Preparation of air quality assessment of proposed expansion of Luton Airport. Included modelling of impacts of aircraft emissions using the AERMOD model.

#### Air Quality Assessment of Coventry Airport Expansion (2004-2006)

Preparation of air quality assessment of proposed expansion of Coventry Airport. Included modelling of impacts of aircraft and traffic emissions using the AAQuIRE model.

# Review of Nottingham East Midlands Airport Masterplan (2006)

Review of the air quality aspects of the Nottingham East Midlands Airport 2015/2030 Masterplan.

## **Liverpool John Lennon Airport Masterplan (2005)**

Preparation of text covering the potential air quality impacts of proposals within the Liverpool John Lennon Airport 2015/2030 Masterplan.

#### Air Quality Assessment of Fire Training Ground at Liverpool John Lennon Airport (2006)

Preparation of air quality assessment of proposed relocation of a fire training facility at Liverpool John Lennon Airport. Included modelling of impacts of emissions using the AAQuIRE model.

#### Cardiff Airport Masterplan (2005)

Co-ordination of nitrogen dioxide monitoring survey and preparation of text covering the potential air quality impacts of proposals within the Cardiff Airport 2015/2030 Masterplan.

# Air Quality Assessment of Durham Tees Valley Airport Expansion (2004-2005)

Preparation of air quality assessment of proposed expansion of Durham Tees Valley Airport. Included modelling of impacts of aircraft and traffic emissions using the AAQuIRE model.

# Air Quality Assessment of Port Development, NW England (2003-2006)

Preparation of air quality assessment, covering construction impacts, traffic impacts and potential impacts of emissions from ships from a proposed new Port development. Including preparation of material and attendance at Public Exhibitions.

# Air Quality Assessment of Port Development, Southern England (2000-2002)

Contribution to air quality assessment of road traffic associated with the proposed new Dibden Terminal at Southampton Docks. Prepared emission inventory for Terminal related activities, including road, rail and shipping movements.



# **Traffic**

#### Air Quality Advice, Greater Manchester (2014)

Provided air quality advice to a developer in relation to the Highways Agency decision to not use all lane running as a result of air quality impacts. Included discussions with the Highways Agency and consideration of the implications for the developer.

# Review of Air Quality Evidence for South East Manchester Multi Modal Strategy (SEMMMS) Cheshire (2014)

Review of air quality evidence submitted to the CPO/side road order inquiry for a new link road on behalf of a local action group. Included preparation of a review document to be submitted to the Inspector.

#### Air Quality Note of T12 Link Road, Derby (2013)

Preparation of air quality note setting out the air quality implications of the T12 Link Road based on previous work carried out for wider development of the area.

## Air Quality Assessment of A14 Ellington to Fen Ditton, Cambridgeshire (2009-2010)

Responsible for reviewing air quality assessment and proof of evidence for the proposals to upgrade and reroute the A14 between Ellington and Fen Ditton on behalf of the Highways Agency.

## Air Quality Assessment for Weston-super-Mare Major Scheme Bid (2009)

Responsible for Webatg assessment covering the air quality and greenhouse gas sub-objectives for a package of measures in Weston-super-Mare.

#### Air Quality Assessment of New Junction Layout, London (2008)

Preparation of air quality assessment for new junction layout on in North London. Included modelling using ADMS-Roads.

# Air Quality Advice to the Scottish Executive National Roads Directorate (2004-2008)

Part of a team of consultants carrying out reviews and audits of Environmental Assessments and Stage Reports for Trunk Roads in Scotland. The aim is to advise on legal and procedural compliance and to raise the standard of road assessment through review and constructive comment.

#### Expert Witness, N6 Athlone to Ballinasloe Upgrade, Ireland (2005)

Air quality evidence prepared and presented at Oral Hearing.

#### Air Quality Assessment of A14 Ellington to Fen Ditton, Cambridgeshire (2006-2007)

Involved in a Stage 2 DMRB assessment for the proposals to upgrade and reroute the A14 between Ellington and Fen Ditton. Including attendance at a Public Exhibition.

### Air Quality Assessment for A391 St Austell to A30 Link Road (2005)

Responsible for Stage 3 air quality assessment for new link road. Including use of DMRB.

# Air Quality Assessment of M8 Upgrade, Scotland (2004-2005)

Involved in a Stage 2 DMRB assessment for a proposed motorway upgrade scheme in Scotland. Air Quality Assessment for New Bypass and Junction Layout, Southern England (2004-2005)

# Air Quality Assessment for New Bypass and Junction Layout, Southern England (2004-2005)

Preparation of Stage 3 air quality assessment for new bypass and junction on the A419 Swindon. Including use of DMRB, attendance at Public Exhibitions and preparation of material for public inquiry.

### Air Quality Assessment of Relief Road, Southern England (2001-2006)

Preparation of air quality assessments for proposed Weymouth Relief Road. Involved use of DMRB methodology to predict local, regional and global impacts at Stage 2 and AAQuIRE dispersion modelling at Stage 3. Involved in preparation of material for use in the Local Plan Inquiry. TAG Assessment completed for LTP.

## Air Quality Assessment of New Junction Layout, Essex (2005)

Involved in a Stage 2 DMRB assessment for a proposed junction upgrade scheme on A13/A130 in Essex. Stage 3 assessment carried out using AAQuIRE.

# Air Quality Design Input for New Bypass and Junction Layout, Southern England (2003-2004)

Involved in the design of a new bypass and junction on the A419, Swindon. Including commenting on the air quality impacts of various options and assessment of the final design.



#### Air Quality Assessment of New Road, Midlands (2003)

Preparation of air quality assessment for proposed new road, Walton on Trent. Involved use of DMRB methodology to predict local traffic and construction impacts.

#### Air Quality Assessment of Expansion of a Metro Network, Midlands (2003)

Preparation of air quality assessments for a number of proposed routes, focusing on construction impacts as well as assessing the impacts of changes in traffic flow.

#### Air Quality Assessment of Link Road, Southern England (2002)

Preparation of air quality assessment for proposed Chickerell Road, Weymouth. Involved use of DMRB methodology to predict local, regional and global impacts.

# Air Quality Assessment of Two Park & Ride Sites, South West England (2002)

Preparation of air quality assessments, covering construction impacts and impacts of traffic for two separate Park & Ride sites.

### Air Quality Assessment of A36 Realignment, Wiltshire (2001)

Preparation of air quality assessment for proposed realignment of A36. Involved use of DMRB and GOMMMS methodology to predict local, regional and global impacts.

# Air Quality Assessment of a Bypass, SW England (1997)

Preparation of a report assessing the impact of the Batheaston bypass on air quality in the surrounding area and the village of Batheaston.

# **Industrial Developments**

# Air Quality and Odour Assessment of Trail Energy from Waste plant, Derby (2016-17)

Preparation of air quality and odour assessments of energy from waste plant. Included consideration of the stack and odour impacts.

# Air Quality and Odour Assessment of Energy from Waste plant, Northamptonshire (2016)

Responsible for air quality and odour assessments of energy from waste plant. Included consideration of the traffic, stack and odour impacts. Attended public exhibition for local residents.

# Air Quality and Odour Assessment of Energy from Waste plant, Warwickshire (2016)

Responsible for air quality and odour assessments of energy from waste plant. Included consideration of the traffic, stack and odour impacts.

# Air Quality and Odour Assessment of Energy from Waste plant, Birmingham (2016)

Responsible for air quality and odour assessments of energy from waste plant. Included consideration of the traffic, stack and odour impacts. Attended public exhibition for local residents.

#### Air Quality Feasibility Study, Extension to District Heating Scheme, Newcastle (2015)

Responsible for feasibility study for additional biomass boilers for a district heating scheme in Newcastle. Included dispersion modelling using ADMS5.

#### Air Quality Assessment of Recycling Facility, Scotland (2014)

Preparation of an ES Chapter for a new recycling facility. Included qualitative assessment of the dust, odour and road traffic impacts.

# Air Quality and Odour Assessment of Anaerobic Digestion Facilities, Wales (2013)

Responsible for air quality and odour assessments of on-farm two anaerobic digestion facilities in Wales. Included consideration of the traffic, CHP and odour impacts.

# Air Quality Assessment of Waste Management Facility, Wiltshire (2011)

Preparation of air quality assessment, covering the impacts of waste recycling facility in Wiltshire. Included consideration of the traffic, dust, odour and bioaerosol impacts.

#### Air Quality Assessment of Animal Incinerator, Suffolk (2011)

Preparation of air quality assessment, covering the impacts of an animal incinerator. Included modelling using ADMS4.

## Air Quality Assessment of MEBCO, Saudi Arabia (2010)

Responsible for air quality assessment, covering the impacts of a lead smelting furnace using AERMOD.



## Air Quality Assessment of Edible Oil Factory, Saudi Arabia (2010)

Responsible for air quality assessment, covering the impacts of boiler plant associated with a new edible oil factory using AERMOD.

# Air Quality Assessment of Power Station, Saudi Arabia (2009)

Preparation of air quality assessment, covering the impacts of a new power station at a copper mine using AERMOD.

#### Air Quality Assessment of a Pyrolysis Plant, Dorset (2009)

Preparation of air quality assessment, covering the impact of a demonstration pyrolysis plant using AERMOD. Assessment took into account the adjacent composting facility and the impact of the facility on nitrogen deposition to sensitive heathland.

# Air Quality Assessment of a Composting Facility, Dorset (2007-2008)

Preparation of air quality assessment, covering the impacts of the expansion of a composting facility using AERMOD. Involved co-ordination of a monitoring survey to determine the efficiency of abatement technology and assessing the impact of the facility on nitrogen deposition to sensitive heathland.

#### Air Quality Assessment of Tyre Factory, Saudi Arabia (2008)

Preparation of air quality assessment, covering the impacts of a new tyre factory using AERMOD.

## Air Quality Assessment of an Extension to a Cement Works, Saudi Arabia (2008)

Preparation of air quality assessment, covering the impacts of the expansion of an existing cement works using AERMOD.

### Air Quality Assessment of a Refinery Extension, Saudi Arabia (2007)

Preparation of air quality assessment, covering the impacts of the expansion of an existing refinery using AERMOD.

#### Air Quality Assessment of CO Plant, Saudi Arabia (2007)

Preparation of air quality assessment, covering the impacts of a new CO Plant using AERMOD.

# Air Quality Assessment of Float Glass Company, Saudi Arabia (2006)

Preparation of air quality assessment, covering the impacts of a new glass manufacturing facility using AERMOD.

# Air Quality Assessment of Flare Upgrade, Saudi Arabia (2005)

Preparation of air quality assessment, covering the impacts of upgraded flares at Safaniyah Gas Compressor Plant using AERMOD.

# Air Quality Assessment of Gas Oil Separation Plant, Saudi Arabia (2005)

Preparation of air quality assessment, covering the impacts of a new gas oil separation plant at the Shaybah oil field using SCREEN3.

# **Planning Application Appraisal**

#### Appraisal of Planning Application submitted to Perth and Kinross Council (2017)

Appraisal of planning application for residential development on behalf of residents group.

## Appraisal of Planning Application submitted to South Gloucestershire Council (2017)

Appraisal of planning application for residential development on behalf of the Council.

#### Appraisal of Planning Application submitted to Central Bedfordshire Council (2016)

Appraisal of planning application for smokery on behalf of the Council.

## Appraisal of Planning Applications Suffolk County Council (2016)

Appraisal of planning applications for minerals and waste sites on behalf of Suffolk County Council.

# Appraisal of Planning Application and Permit Application for Energy from Waste Plant submitted to King's Lynn and West Norfolk Borough Council (2011)

Appraisal of planning application for an Energy from Waste facility for consideration in respect to potential air quality impacts, on behalf Spelthorne Borough Council. Included consideration of the air quality, dust and human health impacts of EfW and Incinerator Bottom Ash plant. A review of the permit applications for the EfW facility and adjoining power station was also carried out.



#### Appraisal of Planning Application submitted to Monmouthshire Council (2011)

Appraisal of planning application for a renewable energy centre for consideration in respect to potential air quality impacts, on behalf Monmouthshire Council. Included consideration of the air quality impacts of a biomass plant.

# Appraisal of Planning Application submitted to Haringey Council (2011)

Appraisal of Scoping Report for a waste management facility for consideration in respect to potential air quality impacts, on behalf Haringey Council.

## Appraisal of Planning Application submitted to Spelthorne Borough Council (2010)

Appraisal of planning application for waste management facility for consideration in respect to potential air quality impacts, on behalf Spelthorne Borough Council. Included consideration of the air quality, dust and odour impacts of anaerobic digestion and gasification plant.

#### Appraisal of Planning Application submitted to Bournemouth Borough Council (2010)

Appraisal of planning application for a mixed-use development for consideration in respect to potential air quality impacts, on behalf Bournemouth Borough Council.

# Appraisal of London Planning Applications submitted to the Mayor (2006-2008)

Appraisals of planning applications referred to the Mayor for consideration in respect to potential air quality impacts, on behalf of the Mayor of London.

# **Ambient Air Quality**

# Nitrogen Dioxide Survey, Southern England (2008-9)

Co-ordination of an air quality survey in Dorset, involving diffusion tube monitoring, to provide baseline information prior to construction of a road scheme.

# Nitrogen Dioxide Survey, Eastern England (2007)

Co-ordination of an air quality survey in Cambridgeshire, involving diffusion tube monitoring, to provide information to inform an assessment of a road scheme.

#### Nitrogen Dioxide Survey, Eastern England (2005)

Co-ordination of an air quality survey in Lincoln, involving diffusion tube monitoring, to provide information to inform an assessment of whether a site is suitable for residential development.

#### Nitrogen Dioxide Survey, East Midlands, England (2005)

Co-ordination of an air quality survey in Coventry, involving diffusion tube monitoring, to provide information to inform an assessment of whether a site is suitable for residential development.

### Nitrogen Dioxide Survey, London, England (2005)

Co-ordination of an air quality survey in London, involving diffusion tube monitoring, to provide information to inform an assessment of whether a site is suitable for residential development.

## Nitrogen Dioxide Survey, NW England (2003)

Co-ordination of an air quality survey, involving diffusion tube monitoring, to provide information to address concerns about the health of the local population.

#### Review of Air Quality Monitoring in London (2003)

Involved in a review of air quality monitoring in London. Contributed to organisation of stakeholder seminar.

#### **Baseline Air Quality Survey, South Wales (2002-2003)**

Co-ordination of an air quality survey, involving both continuous and diffusion tube monitoring, to provide baseline information for future assessment of the potential impacts of an airfield-related development.

# Baseline Air Quality for Impact Assessment, SW England (2000-2001)

Preparation of report summarising passive and continuous monitoring data for nitrogen dioxide as contribution to an impact assessment for a proposed gas-fired gas-turbine plant. Included ratification of hourly data sets.

#### Analysis of PM<sub>10</sub> Monitoring Data, Central England (2000)

Carried out analysis of hourly monitoring data in relation to wind direction and to concentrations at a number of other sites, to help identify the contribution of a local source.



#### Analysis of Monitoring Near Industrial Facility, Ireland (2000)

Preparation of report on sulphur dioxide monitoring undertaken near to an industrial facility. Included analysis in relation to wind direction.

# Annual Air Quality Reports, SW England (1998-1999)

Preparation of two annual reports presenting the results of air quality monitoring for Bath & North East Somerset Council.

## **Odours**

# Multiple Kitchen Odour Risk Assessments, UK (2016-17)

Responsible for numerous kitchen odour risk assessments at locations across the UK in accordance with Defra guidance.

### Odour Assessment, Residential Development, London (2014)

Responsible for odour assessment for residential development adjacent to vehicle spray works. Included qualitative odour assessment, negotiations with Council and recommendations for mitigation. Negotiations concluded in Council removing odour as a reason for refusal of the application, prior to the appeal hearing.

## Odour Assessment, Residential Development, Somerset (2013)

Responsible for odour assessment for residential development adjacent to sewage treatment works. Included odour modelling, negotiations with water company and arranging odour sampling.

# Odour Advice, Residential Development, Cambridge (2013)

Carried out risk assessment and provided advice on odour issues with regards to potential odour impacts of an existing restaurant upon the proposed residential development.

# Odour Assessment, Supermarket Development, Wiltshire (2011-14)

Prepared odour assessment for supermarket development adjacent to sewage treatment works. Included odour modelling, negotiations with water company and arranging odour sampling.

#### Odour Advice, Commercial Development, Suffolk (2010-11)

Provided advice on odour issues and negotiated with statutory consultee with regards to potential odour impacts of an existing sewage treatment works upon the proposed development.

## **Dusts**

### EPUK Guidance on the Assessment of Minerals Dust Impacts for Planning (2015-16)

On Steering Group which prepared the document.

# **Expert Witness, Quarry, Hertfordshire (2014)**

Presented air quality evidence on behalf of a university observatory at an informal hearing for a quarry development in Hertfordshire. Included review of the planning application, dust management plan and monitoring to determine the risk of impacts on sensitive equipment at the university observatory.

#### **Dust Monitoring Scheme, Devon (2014-2015)**

Preparation of a Dust Monitoring Scheme for a long-term construction site in Devon. Involved setting up and co-ordinating monitoring programme and reporting of results.

#### **Dust Assessment, Railway Bridge Yorkshire (2014)**

Qualitative dust and traffic assessment for demolition and construction of new railway bridge.

## Review of Dust Monitoring Plan, Oxfordshire (2014)

Review of a Dust Monitoring Plan for a quarry on behalf of a local resident. Provided comments on the adequacy of the plan and recommendations for additional monitoring.

#### **Dust Monitoring Reporting, Devon (2014)**

Responsible for reporting of dust monitoring data collected during construction of a large housing development.

# **Dust Monitoring, Somerset (2013)**

Responsible for a dust monitoring programme to determine the potential impact of a cement batching plant on a proposed residential development.



#### Housing Development, Isle of Wight (2010-12)

Co-ordination of dust monitoring programme during construction of a large housing development.

### **Business Park Development, Southern England (2010)**

Co-ordination of dust monitoring programme during ground-works phase of a business park development.

# Road Construction Scheme, Southern England (2005-2009)

Co-ordination of dust monitoring programme at a dust sensitive process adjacent to a large road construction scheme.

# Review of Dust Impacts of a Waste Transfer Station, SE England (2008)

Preparation of a report summarising dust impacts of a waste transfer station on nearby office accommodation. Completed on behalf of the landlords to assist with responding to a planning application.

# **Dust Management Strategy, SW England (2006)**

Preparation of a dust management strategy for a proposed waste transfer station to accompany the planning application.

#### Construction Site, SW England (2004)

Co-ordination of dust monitoring programme around a construction site.

#### Landfill Site, London (2000-2004)

Co-ordination of dust monitoring programme around landfill site and preparation of a report to meet requirements of the Local Authority and the Environment Agency.

#### Mineral Extraction Site, SE England (2003)

Preparation of an air quality assessment, for a proposed mineral extraction site. Focused on the potential dust impacts of the scheme.

# **Miscellaneous**

# Lecture on MSc. Air Pollution Management and Control at University of Birmingham (2010 - present)

Presentation of lecture on Local Air Quality Assessments and Planning, as part of the Air Quality Management Module.

# Justification of Water Mains Renovation, SW England (1998-2000)

Identifying water mains requiring renovation for a water company and providing justification of this to the Drinking Water Inspectorate.

## **Control of Substances Hazardous to Health, Site Manuals (1999-2000)**

Preparation of site specific manuals containing CoSHH information for waste water and water supply sites for a water company.