

Current Position: Consultant with Air Quality Consultants Ltd.

Year of Birth: 1986

Nationality: French

Qualifications: BSc Chemistry (2007)
MSc Environmental Sciences (2009)

Positions Held:

- Ø Full Member of The Institution of Environmental Sciences (MIEnvS)
- Ø Associate Member of Institute of Air Quality Management (AMIAQM)

Key Experience:

Pauline has over 7 years' experience in the field of air quality, and has undertaken air quality impact assessments for a wide range of development projects in the UK and abroad. She has assessed potential air quality impacts from residential and commercial developments, transport schemes (rail, road and airport), waste facilities and industrial sites. She has also undertaken a number of odour surveys and assessments in the context of planning applications. She has experience in monitoring construction dust, ambient air quality, indoor pollutant levels and workplace exposure to substances hazardous to health.

Employment Record:

- Sept 2016 - date** **Consultant, Air Quality Consultants Ltd.**
Preparation of air quality assessments for a wide range of developments in the UK.
- Aug 2013 – Aug 2016** **Air Quality Consultant, AECOM.**
Preparation of air quality assessments for a wide range of developments in the UK and abroad.
- Aug 2012 – Aug 2013** **Assistant Air Quality Consultant, URS (AECOM).**
Assisting in the preparation of air quality assessments for a wide range of developments in the UK and abroad.
- Sept 2009 – Aug 2011** **Air Quality Controller, Bureau Veritas France**
Undertaking air quality measurements for auditing purposes, for a wide range of clients in France.
- Sept 2008 – Sept 2009** **Placement Student, Bureau Veritas France**
Assisting in undertaking air quality measurements for auditing purposes, for a wide range of clients in France

Mixed-Use Developments

Air quality assessment for a proposed mixed-use development, Cowes (2015)

Responsible for the production of an air quality assessment in relation to the construction and operation of a residential led mixed-use development in east Cowes, on the Isle of Wight. This included consideration of the suitability of the site for residential use, in particular in relation to the nearby ferry terminal.

Air quality assessment for the proposed Millharbour Village development, Tower Hamlets (2014-2015)

Detailed dispersion modelling using the ADMS Roads and ADMS-5 models to determine the potential impacts of the proposed development on air quality, in particular due to additional road traffic and the operation of an on-site energy centre. The assessment also considered the suitability of the site for the proposed use, as well as potential impacts on nearby properties during construction. Inputs were also made at the design stage to inform the ventilation scheme.

Air quality assessment for a proposed mixed-use development in Colindale, Barnet (2014)

Responsible for the production of an air quality assessment for the residential-led mixed-use development proposed at a former Metropolitan Police Training Centre in Colindale. This included dispersion modelling of emissions from road traffic and the proposed on-site energy centre, as well as a qualitative construction dust assessment.

Air quality assessment for the redevelopment of the former BBC TV Centre, Hammersmith (2013-2014)

Responsible for the assessment of potential impacts on local air quality during the construction and operation of the proposed mixed-use development at the former BBC TV Centre. This included detailed dispersion modelling of road traffic and energy centre emissions using ADMS Roads and ADMS-5, and a qualitative assessment of dust impacts during construction.

Residential Developments

Air quality assessment for a proposed residential development for the British Army, Salisbury Plain (2013-2014)

Assisted in the production of an air quality impact assessment for the construction and operation of a large residential development at four locations in the Salisbury Plain area. This included a qualitative construction dust assessment as well as the detailed dispersion modelling of road traffic using ADMS Roads. Consideration was also given to the potential impacts on designated ecological sites.

Commercial Developments

Air quality assessment and air quality neutral assessment for 22 Bishopgate, City of London (2015-2016)

Responsible for the preparation of an air quality assessment for the proposed office tower at 22 Bishopgate. The assessment considered the potential impacts from the proposed energy centre, as well as dust impacts during the construction phase. An air quality neutral assessment was also undertaken, to determine the scheme compliance with relevant emission benchmarks.

Air quality assessment for a proposed Hotel in Shoreditch, Hackney (2015-2016)

Responsible for undertaking an air quality impact assessment for a proposed hotel in Shoreditch. This included determining potential impacts on air quality during construction and operation, as well as the suitability of the site for the proposed use. An air quality neutral assessment was also undertaken, to determine the scheme compliance with relevant emission benchmarks.

Transport Schemes

Air quality assessment of proposed Wakefield Eastern Relief Road, Wakefield (2013-2014)

Assisted with the assessment of air quality impacts for the proposed relief road to the east of Wakefield. A qualitative construction dust assessment was undertaken, and impacts from road traffic at operation of the scheme were quantified using the dispersion model ADMS roads.

Air quality assessment for High Speed Two (2012-2013)

Assisted with the assessment of potential air quality impacts from the construction and operation of the proposed High Speed Two railway scheme. This included the detailed dispersion modelling of road traffic emissions in Birmingham city centre at construction and operation of the proposed Curzon Street train station. A detailed construction dust assessment was also undertaken, and potential impacts on human and ecological receptors were considered.

Ambient Air Quality Monitoring

Construction dust monitoring at Battersea Power Station, Wandsworth (2012-2016)

Responsible for the monitoring of dust and particulate matter at the Battersea Power Station construction site in Lambeth, using deposition dust gauges and automatic monitors. This also included the preparation of monthly dust monitoring reports.

Construction Dust Monitoring at Tottenham Court Road Station for Crossrail, Camden and Westminster (2012-2016)

Assisted with the monitoring of dust and particulate matter at the Tottenham Court Road construction sites in Camden and Westminster. This included the preparation of weekly and monthly dust monitoring reports.

Baseline air quality monitoring surveys for various developments, UK (2012-2016)

Responsible for conducting baseline air quality surveys using passive diffusion tubes, for the measurement of annual mean nitrogen dioxide and/or sulphur dioxide concentrations. Results were used to inform baseline conditions and the model verification process for a large range of developments in the UK.

Ambient air quality monitoring for Kuwait Oil Company (2015)

Assisted with the production of monthly and quarterly reports detailing and analysing the monitoring data collected at six automatic monitoring stations in Kuwait. Pollutants monitored included particulate matter, ozone, sulphur dioxide, nitrogen dioxide, carbon monoxide, formaldehyde, benzene and toluene.

Odour

Odour assessment for a proposed residential development, Camborne (2015)

Responsible for assessing the potential odour impacts from an existing industrial laundry facility on a proposed residential development. Odour levels were evaluated by undertaking a sniff-test at the site of proposed development.

Odour assessment for a proposed residential development, Barnsley (2014)

Responsible for assessing the potential for future residents of the proposed development to experience high levels of odours due to the proximity of the site with an existing waste water treatment facility. A sniff-test was undertaken to determine existing levels of odours in the area. In addition, the dispersion model ADMS5 was used to quantify future odour levels across the proposed site.

Indoor Air Quality Monitoring and BREEAM

Indoor Air Quality Plan for the refurbishment of an existing office building, Islington (2016)

Producing an Indoor Air Quality Plan to obtain a credit in the context of BREEAM. Included considerations of potential outside and inside pollution sources, and recommendations in order to limit the ingress of pollutants in the refurbished area, but also to limit the impact from the refurbishment activities on air quality in other areas.

Indoor Air Quality Plan for a new office and workshop building, Chorley (2016)

Responsible for the preparation of an Indoor Air Quality Plan for a proposed office/workshop building in Chorley.

Indoor air quality monitoring at Willesden Green Library for BREEAM purposes, Brent (2015)

Undertaking the monitoring of indoor concentrations of formaldehyde and total volatile organic compounds to obtain a credit in the context of BREEAM.

Indoor air quality monitoring at the Tour Ariane at La Defense, Paris (2010)

Undertaking the real time monitoring of indoor air quality parameters at several locations within the building. Measured parameters included concentrations of carbon dioxide, carbon monoxide and dust, as well as temperature and relative humidity. In addition, concentrations of mould, yeast and bacteria were also measured, using appropriate petri media.

Workplace Exposure

Assessment of workplace exposure at Paris Opera House (2011)

Responsible for the measurement of workplace exposure to various pollutants in the Opera House workshops in Paris. This included exposure to various solvents emitted by paints and varnishes, as well as exposure to dust produced by the cutting of materials.

Assessment of workplace exposure, Hopital Bichat, Paris (2011)

Responsible for assessing the workplace exposure of medical staff to various substances found in anaesthetic preparation rooms.

Assessment of workplace exposure at Colgate Palmolive Facility, Picardie (2011)

Responsible for measuring the exposure of workers to various substances found in the facility. Recommendations were then made where levels were found to exceed the relevant workplace exposure limits.

Assessment of workplace exposure to dust at carpentries, Paris (2010-2011)

Responsible for measuring personal exposure of the workers to respirable and inhalable dust. Measurements were undertaken using personal sampling pumps and the appropriate sampling head. Recommendations were made to the client where levels were found to exceed the relevant workplace exposure limit values, in particular regarding extraction systems and personal protective equipment.

Industrial Developments

Air quality assessment for an iron ore mine in Mauritania (2015-2016)

Assisting with the preparation of an air quality impact assessment of a proposed iron ore mine near Fderik in Mauritania. This included the detailed dispersion modelling of various sources within the proposed mine to determine the potential impacts on human and ecological receptors around the mine. Sources of dust and pollutants considered in the assessment included the on-site power plant, trucks and cars on site, conveyors, bag filters, storage areas and explosives used to extract the ore.

Miscellaneous

Counters Creek flood alleviation scheme, Hammersmith and Kensington & Chelsea (2015-2016)

Responsible for the air quality assessment for a proposed flood alleviation scheme in West London. This included a qualitative construction dust assessment, as well as a quantitative assessment of road traffic impacts during the construction phase of the proposed scheme. Consideration was also given to the impacts from the movement of barges along the Thames.

Detailed dispersion modelling of laboratory exhaust fumes at a Hospital, London (2015)

Assisted in assessing the impact that the operation of an existing research laboratory would have on a proposed extension to an existing building within a hospital in London. In particular, the study focused on the laboratory exhaust gas being rejected at roof level, and how they dispersed in the nearby atmosphere. This included the identification of substances used within the laboratory that may pose a risk to health, the measurement of their concentrations in the exhaust gas, and the input into a CDF model used to visualise the dispersion of pollutants in great details.

Inspection of ventilation systems at Hopital Cochin, Paris (2009-2011)

Assisted in the inspection of the full ventilation system at Cochin hospital in Paris. This included the measurement of supply and extract air flows and the inspection of air handling units. Measured air flows were compared against relevant standards, contained in the relevant French legislation.

Inspection of Extraction systems at several bus maintenance facilities, Paris (2008-2011)

Responsible for inspecting extraction systems such as fume hoods, paint booths, exhaust pipes and exhaust grilles in numerous bus maintenance facilities in Paris. Performance of the extraction systems were assessed against standards contained in the relevant French legislation.