

Simon Ford

Principal Consultant - Waste Management & Resource Efficiency

Ricardo Energy & Environment

Qualification(s) *CEnv (Chartered Environmentalist)*
MCIWM (Chartered Waste Manager)
BEng, Env. Engineering, Cardiff University, 1997 (1st class)

Nationality *British*

Language(s) *English (Mother Tongue)*
Portuguese (Fluent Speaker)



Profile

Simon is an environmental engineer with twenty-two years' waste management and environmental consultancy experience. He joined Ricardo Energy & Environment in February 2012 (then known as AEA Technology).

Early in his career, Simon worked in geo-environmental consultancy and gained considerable experience undertaking environmental due diligence assessment of land and industrial facilities and worked extensively in the area of landfill operations, monitoring, risk assessment and permitting.

Since 2008 he has applied his engineering, waste management and environmental consultancy skills to work with modern waste management facilities including materials recovery facilities (MRF), anaerobic digestion (AD) plants, composting plants, mechanical biological treatment (MBT) plants (mechanical separation/ recovery along with composting and/or AD of the organic fraction) and thermal treatment plants. Projects have included technical due diligence, procurement, independent certification (IC), provision of technical advice during construction, commissioning and testing and expert witness services. He is confident and capable at liaising with all levels of site staff, management and advisors within all relevant parties including contractors, sub-contractors, clients, lenders and lawyers. Simon has extensive hands-on experience of facility operations, having spent much of his time from January 2009 to January 2012 working on site throughout the construction, commissioning and testing of the Lancashire waste PFI facilities.

In providing expert services to clients, Simon draws upon his diverse background in environmental and waste management consultancy. He provides informed opinion on all stages of facility development, from permitting and planning matters through to construction, commissioning, contractual testing (typically construction completion, take over and acceptance) and ongoing operation.

For the past nine years Simon has worked extensively in providing expert advice to insurers in relation to EPC contractor's claims and recovery actions for some of the UK's largest waste projects, involving some of the sector's largest insurance claims. Such projects are of significant scale and complexity that Simon's involvement on any one project can sometimes last several years. Simon is typically tasked with identifying what went wrong, whether it was the result of design, construction or operational defects, whose fault it was and whether proposed remedial works are reasonable and proportionate. This can be in circumstances where issues evolve and worsen as commissioning progresses and facility throughput increases, requiring an ability to investigate and form opinions when on site events and information available are constantly changing. It can also involve a need to form opinions in time pressured situations, for example where the contractor, and potentially insurers, are paying large sums in liquidated damages, or where losses will increase if contractual deadlines are not met.

Simon has also provided expert services in relation to disputes associated with waste facility commissioning, typically where contractual tests have not been passed.

Simon is familiar with a range of contract structures used in the construction, commissioning and operation of waste facilities, and common issues with such contracts whether simple standard form or complex bespoke PFI contracts. Waste composition and quality, whether it complies with contract requirements and its implication in terms of issues with facility operation and the ability to achieve

required facility performance is a matter that Simon has had to address in many of the projects he has been involved with. He has also been involved in projects that have suffered serious mechanical failures as well as projects utilising novel technologies.

Clients frequently praise Simon for his level of technical rigour and the quality of his written reports.

Key Skills

- + Expert Witness (insurance claims and disputes)
- + Waste Facility Performance Assessment
- + Waste Treatment Technologies (MRF, MBT, AD and composting)
- + Technical and Environmental Due Diligence
- + Environmental Permitting
- + Environmental Risk Assessment

Selection of Project Experience (Technical Advisory and Expert Opinion)

2020-ongoing, Expert opinion in relation to an evolving dispute involving multiple issues encountered during commissioning of a large AD facility (A&L Goodbody)

Simon is one of two experts from Ricardo tasked with undertaking a review of the design of all areas of a large AD facility, located in the EU and utilising novel technology, that is experiencing significant issues in commissioning. The parties are not yet in formal dispute and Simon and his colleague have been asked to provide expert opinion upon the extent that the design accommodates contractual requirements, and whether it is fit for purpose, in order to inform the client (the purchaser) and counsel such that they can determine the merits of formal action being taken.

2020-ongoing, Expert witness services in relation to a dispute between a Contractor and Local Authority (Pinsent Masons LLP)

Simon is providing expert witness services in relation to a court action between two parties that is concerned with waste composition and facility performance in relation to the processing of bulky waste.

2020, Expert opinion in relation to the regulation of a non-hazardous landfill (Basque Government)

Simon was co-author of a report providing expert opinion in relation to whether a landfill's permit conditions, and regulation against those conditions, was compliant with EU Directive requirements. Simon was responsible for review of the regulation against permit conditions. A significant landslide of waste had occurred at the site, resulting in loss of life.

2019-2020, Expert Opinion- Confidential advanced thermal treatment facility (confidential insurer, via Mayer Brown)

For the third separate project for insurers via the same law firm, Simon advised on issues encountered at a large waste facility that had experienced numerous issues in construction and commissioning. Simon was part of a wider team of specialists looking at a range of aspects of construction and commissioning. Simon looked at alleged defects in engineering management during design and construction and alleged defects with platforms, stairs and walkways.

2020, Independent certification of dry mixed recyclables (DMR) materials recovery facility (Hills Waste Solutions Ltd)

Simon was the independent certifier for a new-build DMR MRF facility which was to receive local authority collected DMR waste. Simon reviewed construction records, inspected the facility and issued a certificate of construction completion, along with the snagging matters list.

2020, Review of absorbent hygiene product (AHP) treatment technologies (Rhondda Cynon Taf County Borough Council)

Simon undertook a review of available technologies, worldwide, for treatment of AHP waste (principally infant nappies, adult incontinence products and feminine hygiene products). The project was to inform the potential procurement of facilities to be located in Wales to treat AHP waste on a national level. Fifteen technology providers were identified, four of which most closely aligned with five success measures identified by the Project Board. A more in-depth assessment was undertaken to review technology maturity, track record, proven performance, nature of process outputs and market conditions for the outputs from the four short-listed technology providers.

2020, Waste Acceptance Criteria (States of Jersey)

Provided steering and review for a project that involved review of laboratory analysis results and modelling of leachable contaminants from landfilled inert waste, in a landfill situated adjacent to the sea, to establish chemical waste acceptance criteria (WAC). Simon also drafted procedures to be followed by users and operators of the landfill in relation to waste acceptance.

2019, Expert opinion (wood pellet plant owner)

Provided an expert opinion report to the client, and its solicitors, on the cause of issues with a wood pelleting line fed with virgin biomass (woodchip). All stages of the processing (storage, conveyance, drying, size reduction, pellet mill, cooling and screening) were reviewed with in-depth analysis of issues. The plant was experiencing throughput issues, blockages and frequent breakdown. The work was undertaken to inform the decision on whether to proceed with a formal dispute process. Simon's advice was central to a decision to not proceed.

2018-2019, Insurance claim and dispute expert witness- two AD facilities (Caytons Law)

Via their legal advisers, Simon advised insurers in relation to a PI insurance claim made by the EPC contractor of two agricultural feedstock anaerobic digestion facilities with up-grading of biogas to biomethane and carbon dioxide bottling. The claim involved alleged defects with various areas of performance and infrastructure, notably the feed train and how feedstocks behaved in it, which were subject to a dispute. Simon advised on liability, causation and quantum i.e. on the alleged design defects and, importantly, the alleged remedial steps and costs claimed to be necessary.

2018-2019, Environmental Permitting of an incinerator bottom ash (IBA) storage and processing facility (Rock Solid)

Simon input into an Environmental Permit application to support the development of an IBA storage area and processing facility to process IBA from the MVV Devonport EfW plant into an aggregate for use in the construction industry. The proposed location was at a landfill that Simon has previously undertaken consultancy work.

2017 & 2019, Expert witness in relation to issues at an agricultural feedstock (waste and crop) gas to grid AD facility (confidential technology provider, via Womble Bond Dickinson LLP & Francis Wilks & Jones)

Simon visited site to inspect it and to interview the technology provider, whom was in dispute with the site owner and operator. The dispute focused upon feedstock composition and alleged deficiencies with the design of the feedstock loading equipment and digester mixing arrangements and failure to achieve stable operation, contractual gas production and failure to be able to undertake Performance Tests. Simon reviewed extensive site data in addition and drafted a full expert witness report, including comment upon an expert report commissioned by the site owner. Simon was commended by the technology provider and its legal advisers for the quality and robustness of the expert opinion report produced. In 2019, Simon was re-engaged to provide further expert witness reports and to take part in a formal, one-week, expert determination process that took place in barristers chambers. Simon worked closely with the solicitors (first WBD and then FWJ) and barrister involved on the side of the EPC contractor.

2012-2020, Technical Advice on MBT Facility Commissioning and Testing (Essex County Council)

Simon undertook numerous projects looking at how the facility was performing with the composition of the waste being received and considering the effectiveness of facility modifications implemented and future possible modifications and how they might affect facility performance against contractual requirements. This was in the run-up to legal action.

2012-2018, Technical Advice on Waste Facility Procurement, Construction and Testing (West Sussex County Council)

For a number of years AEA, which became Ricardo Energy & Environment, had been providing procurement support to WSCC in relation to an MBT-AD facility (Brookhurst Wood, Horsham) and an RDF handling facility. Simon provided technical support in relation to the construction, construction programming and Acceptance Testing of the MBT-AD facility and in undertaking technical reviews of certain elements of a proposed refuse derived fuel (RDF) handling facility.

2018, Process verification of RDF production (5 sites) (Confidential EPC Contractor)

Simon visited five refuse derived fuel (RDF) production sites in the UK to review and comment upon the production processes and sampling and composition analysis of RDF. The client was constructing an energy from waste (EfW) facility and required due diligence information on the quality control employed at the sites that will be supplying the EfW facility with RDF. The client wanted to ensure that the RDF being supplied was to the required specification and that methods were being employed to

ensure consistency in RDF quality. Simon's reports included suggested process and procedure improvements that could be employed as well as highlighting risks. The work was undertaken against the backdrop of a looming dispute process.

2018, Expert Opinion- Confidential thermal treatment facility (confidential insurer, Via Mayer Brown)

Ricardo was appointed in 2017, via the insurer's legal advisors, to provide expert opinion in relation to design issues and delays with the construction of a thermal treatment process used to produce energy from waste. The thermal treatment facility is in addition to, and integral to, a wider MBT development on the same site. Simon advised on specific design and construction issues (platforms, walkways and stairs and refractory lining). The legal firm that appointed Ricardo is the same firm that appointed Ricardo in 2012 in relation to a separate client and separate project at MBT facilities elsewhere. This second appointment reflects the quality of support provided by Ricardo and the strength of the working relationship between Ricardo and the law firm.

2012-2018, Expert Opinion- Confidential MBT Facilities (confidential insurer, Via Mayer Brown)

Simon was one of three nominated experts (each dealing with separate issues and, at times, separate facilities) from Ricardo that advised PI insurers, via Mayer Brown, for a claim made by one of the parties (confidential) involved in the construction, commissioning and testing of the facilities. Simon provided expert opinion on the cause of mechanical failures and failure to achieve contractual performance, with commentary upon whether proposed remedial measures were reasonable and proportionate. The composition of the waste was, as is often the case when reviewing facility performance, a factor to be considered when providing opinions. Simon worked closely with Mayer Brown and the QC advising on the matter and produced a report that was pivotal to the insurers being able to pursue a recovery action against a sub-contractor. This work began in 2012 and is now successfully complete. Simon has since supported insurers, via Mayer Brown, on two further, and unconnected, large waste projects.

2017- 2019, Expert Witness support to waste contractor regarding a dispute with an international (Middle East) government (confidential project)

Simon provided specific input in relation to landfill matters associated with a wider energy from waste project, for which Ricardo are Expert Witness in relation to a dispute between the contractor and client.

2017, Technical acquisition due diligence of an AD Facility and green waste composting facility (Welsh Water Infrastructure Limited)

Simon undertook a detailed technical due diligence assessment of the facilities, located in Cardiff. Ricardo was appointed to provide impartial expert opinion to Welsh Water on the suitability of the assets. Simon visited the facilities to view the assets and interview operational staff and representatives of the AD technology provider, reviewed extensive documentation in the data room, and assessed the performance of reference plant employing the same AD pre-treatment and treatment technology. He assessed construction issues, ability to comply with contract requirements, authorisations and planning permissions, technology suitability and performance, maintenance considerations and equipment and infrastructure lifecycle.

2009-2012, Independent Certification, Lancashire Waste PFI Project (Global Renewables Lancashire, Lancashire County Council and Lloyds TSB)

For his previous employer, Simon spent three years on site at the two sites forming the Lancashire Waste PFI project. These sites comprise green/ food waste composting, MRF and MBT. The facilities employ a wide range of separation and shredding technologies and include MSW composting and AD. Simon's previous employer was the Independent Certifier tasked with inspecting and signing-off construction, snagging and acceptance tests. As the main person on site over the three years, Simon witnessed the construction, commissioning, ramp-up and testing of the facilities. Simon spent many hundreds of hours witnessing operation, maintenance, break-down events, monitoring, waste composition sampling and analysis and ABPR testing under a range of conditions and varying levels of waste and waste quality. Aside from reviewing infrastructure and equipment mechanical performance, Simon reviewed waste and product quality, environmental emissions, maintenance provisions and matters such as planning and permitting, staff provision and training and provision of mobile plant. The AD facility comprises percolators to generate an organic rich liquor from organics separated onsite from MSW. This liquor formed the digester feed. Each site utilises two digesters, ammonia removal, desulphurisation, two spark ignition engines with CHP, a biogas boiler and flare.

Career History

Nov 2012 - Present, Ricardo Energy & Environment

Simon is a Principal Consultant and his role involves developing and leading a diverse range of projects including in relation to waste technologies, technical due diligence, expert witness, technical advice provision during construction and commissioning of waste facilities and environmental permitting.

2012 - Nov 2012, AEA Technology plc

Simon joined AEA Technology as a Principal Consultant in February 2012, shortly before its acquisition by Ricardo plc in November 2012.

2000 - 2012, Hyder Consulting UK Ltd, Exeter

Simon was employed by Marcus Hodges Environment Ltd prior to its purchase by Hyder in 2004. As a Consultant, Senior Consultant and Principal Consultant, Simon managed environmental and waste projects ranging in value from a few thousand pounds to several hundred thousand pounds. Simon was responsible for winning new work, being the main point of client contact on projects, undertaking technical work, managing diverse project team members and ensuring the financial success of the project. Simon worked on a diverse range of projects, which ensured he gained a broad range of technical skills, a good knowledge of EU and UK environmental legislation and a good working knowledge of waste PFI contract documentation.

1999 - 2000, WS Atkins Environment, Bristol

Simon worked on a short-term contract and carried out a project for the Environmental Technology Best Practice Programme (ETBPP- a DTI/ DETR joint initiative). Simon gathered information from fifty companies in Wales and reported on manufacturing process', cleaner technology, waste minimisation, energy efficiency improvements and ISO 14001 Environmental Management Systems (EMS). Recommendations were made on how best to allocate ETBPP resources to companies. In addition, Simon worked on a project for the Welsh Development Agency (WDA) on the success of their 'Source Wales- ISO 14001 Implementation Programme'. This entailed reviewing 116 companies in Wales who have or were implementing EMS'.

1999, Azurix, Bath

Simon worked as a Technical Analyst for this Enron owned international water company. Simon worked on overseas projects performing technical due diligence and transition work, with a view to company acquisition or the gaining of concessions. Simon also worked on Azurix business processes and spent time working on the five-year business plan for the supply division of Wessex Water, an Azurix owned company.