Mobile: +44 (0)7538 755797

Email: sean@independentexpertengineer.co.uk

Qualifications

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| **CEng** | Chartered Engineer | 1995 |
| **C.WEM, FCIWEM** | Chartered Waste Manager, Fellow of CIWEM | 2021 |
| **EUR ING** | European Engineer (FEANI) | 2013 |
| **SFHEA** | Senior Fellow of the Higher Education Academy | 2011 |
| **PhD** | Chemical & Environmental Engineering, University of Nottingham | 2018 |
| **PGCHE** | University of Nottingham | 2011 |
| **MSc** | Biochemical Engineering, University College London | 1991 |
| **BSc** | Science and the Environment, Leicester Polytechnic | 1990 |

Profile

Sean Moran is a Chartered Engineer with over thirty years’ experience in process design, commissioning and troubleshooting. He started his career with the international process engineering contractors Purac (now Enpure) and Water Engineering Limited (now WABAG), and worked on many water and environmental engineering projects worldwide before setting up his own consultancy practice in 1996.

His specialist area is the design, commissioning of water, sewage and industrial effluent treatment plants and he has designed, commissioned and consulted on a vast range of projects, from individual residential plants and specialist industrial units through to large municipal projects across the UK, Europe and the Middle East.

Sean has also authored three textbooks on process and water treatment plant design and layout, and a dictionary of chemical engineering practice.

Key Areas of Expertise

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| **Design** | Design, procurement and commissioning for national and international water, sewage and effluent treatment projects; hydraulic design and commissioning consultancy  |
| **Troubleshooting Consultancy** | Troubleshooting, remedial design and re-commissioning of water, sewage and effluent treatment plants for municipal and private clients. |
| **Advisory** | Membership of UK Government Technical Advisory Panels in water and resource efficiency, environmental consultancy and biotechnology |
| **Expert Witness & Consultancy** | Expert witness in contractual, tort and taxation disputes; expert advice/witness in insurance claims; technical assistance with planning objections; due diligence for mergers & acquisitions projects |
| **Training** | Bespoke lecturing and training in water and process engineering  |

Examples of Projects Undertaken

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| 2024 | CPR Part 35 Expert Witness Instruction – dispute relating to nuisance arising from the design, operation and maintenance of a municipal sewage treatment works |
| 2023 | Overseas Expert Instruction (Denmark): Advisory report to legal team relating to fire damage at an anaerobic digestion plant |
|  | Advisory Report for a UK loss adjuster relating to loss of containment and air pollution at a specialist metals processor (ongoing) |
|  | Overseas Expert Instruction (USA/Germany): Advice for a party to a contractual dispute over process design software development (settled) |
| 2022-23 | Expert Witness Instruction for a UK client in a contractual dispute relating to refinery cooling water quality (settled) |
|  | Advisory report for a UK loss adjuster relating to loss of containment and water pollution at pharmaceutical ingredient manufacturer (settled) |
| 2022 | Expert Witness Instruction from a party in a contractual dispute over dissolved air flotation design at a UK municipal potable water treatment plant |
| 2021-22 | Overseas Expert Instruction (Italy): Advisory report for an international insurance loss adjuster over damage to the effluent treatment plant at a sugar refinery (settled) |
| 2021 | Expert Witness Instruction from Defendant in contractual dispute over dosing design at a municipal potable water treatment plant (settled) |
| 2020-23 | Overseas Expert Instruction (Israel): Advisory report for an international insurance loss adjuster over damage to a major municipal pumped storage plant (ongoing) |
| 2020 | Expert Witness Instruction from Defendant in contractual dispute over sewage treatment plant at a residential development (settled) |
| 2019-20 | Consultancy for international mining company on effluent treatment plant issues (Panama) |
| 2019 | Overseas Expert Instruction (Israel): Advisory Report for an international insurance claims handler relating to a non-functioning process plant (settled)CPR Part 35 Expert Witness Instruction from Defendant in contractual dispute to do with design, construction commissioning and troubleshooting of effluent treatment plant (judgment for my client). Expert Overseas Instruction (Ireland): Advisory report relating to the nuisance radius for a housing development adjacent to a sewage treatment plant.CPR Part 19 Expert Witness Instruction from catering industry business appealing penalties for breach of consent to discharge to sewer. |
| 2018 | CPR Part 35 Expert Witness Instruction – for joint defendants, nuisance claim relating to discharge of trade effluent into a treatment plant at a business park (settled) |
| 2017 | Multiple clients: consultancy on malfunctioning effluent treatment plantsCPR Part 35 Expert Witness Instruction: contractual dispute relating to design and construction of an industrial effluent treatment plant (settled)Overseas Expert Instruction (Russia): contractual dispute relating to design of specialist water treatment equipment (settled) |
| 1999-2016 | Multiple clients: Production of Advisory Expert Witness Reports on problems with industrial and municipal effluent treatment plants |
| 2016 | (Various confidential private clients): Design, troubleshooting, modification and commissioning of packaged and custom designed sewage and effluent treatment plants in residential, municipal and industrial settingsCPR Part 35 Expert Witness Instruction – contractual dispute relating to design and construction of effluent treatment plant works (settled)Overseas Expert Instruction (Austria) – contractual dispute relating to design and construction of produced water treatment plant works (settled) |
| 2015 | CPR Part 35 Single Joint Expert Instruction – contractual dispute relating to completion of effluent treatment plant works (settled)CPR Part 35 Expert Witness Instruction – hydraulics and drainage dispute, including evidence at County Court (judgement for my client) |
| 2013-2014 | CPR Part 35 Expert Witness Instruction from confidential client – taxation dispute relating to sewage sludge treatment (settled)CPR Part 35 Expert Witness Instruction – contractual dispute relating to specification/installation of sewage treatment plant (settled) |
| 2012 | CPR Part 35 Expert Witness Instruction – dispute relating to the operation of a municipal sewage treatment works (settled) |
|  | University of Nottingham, Super-Critical Water Oxidation Research Group: Outline engineering design of a super-critical water oxidation plant |
|  | EPC Groupe UK: troubleshooting and optimising effluent treatment at explosives manufacturing plant |
|  | PriceWaterhouseCoopers LLP: Consultancy associated with water treatment industry and equipment suppliers, to inform a merger/acquisition transaction |
| 2011 | Rawat Dar Al Handasa Iraqi: Hydraulic design and surge analysis for river intake structure, pumping station and twin 11km pipelines for Ramadi Water Treatment Plant, Iraq |
|  | UK Marine & Coastguard Agency via SLR Consulting Ltd: Development of a decision-making tool to be used in the response to coastal oil spills |
| 2010-2012 | Barratt Homes via Wilson Bailey Partnership Ltd: Troubleshooting problems with domestic sewage treatment plant, design and commissioning of solution |
| 2009-2010  | Colorcon Ltd: Troubleshooting problems with pharmaceutical effluent treatment plant, design and commissioning of solutions |
| 2005-2007 | The Kerrygold Co, Ltd: Technical expert consultancy supporting a planning objection to a sewage pumping station near a cheese distribution depotJohns Water Services: Design of SWRO and MBR Plants for holiday development in Cape Verde |
| 2004 | Campbell’s Grocery Products: Design and procurement of industrial effluent treatment plant for a food production facility |
| 2003-2012 | SLR Consulting Ltd: Commissioning of two water treatment plants, troubleshooting of various water and effluent treatment plants, PCB treatment consultancy, Health Safety and Environment surveys |
| 2002 | Alnwick Castle, UK: Hydraulic and process design of new water features for stately home |
| 2001-2010 | Envirowise: Provision of advice on environmental, water and effluent treatment matters to many hundreds of UK businesses on behalf of the government-funded Envirowise programme. 150+ site visits. Provided extensive advice on solid waste minimisation and handling, and landfill waste acceptance criteria. |
| 1996-1999 | Astra Zeneca Pharmaceuticals: Design of effluent treatment plant, completion of HAZOP study |
| 1993-1995 | Jellyholm Water Treatment Works: Refurbishment of the existing drinking water filter station to two-stage DAF and RGF (£5.4M project)  |
| 1991-1993 | Design of Riva Sewage Works, Turkey ($1.8Bn project) |

Employment

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| --- | --- |
| 2024-Date | Independent Expert Engineer Limited*Independent Expert Engineer* |
| 1999-2024 | Expertise Limited*Managing Director & Principal Consultant* |
| 2016-2018 | University of Chester*Royal Academy of Engineering Visiting Professor (part-time)* |
| 2011-2015 | University of Nottingham*Associate Professor of Chemical & Environmental Engineering (part-time)* |
| 1996-1999 | M.P.S.*Technical/Commercial Director* |
| 1995-1996 | Birtley Engineering*Senior Proposals Engineer* |
| 1993-1995 | Purac (Now Enpure)*Proposals Engineer, Senior Process Engineer* |
| 1991-1993 | Water Engineering (Now WABAG)*Projects Engineer* |

Memberships

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| --- | --- |
| Fellow, CIWEM | 2021- |
| Editorial Board Member, Ullmann’s Encyclopaedia of Industrial Chemistry | 2017- |
| Senior Fellow, Higher Education Academy | 2011- |

Awards

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| Royal Academy of Engineering Visiting Professorship | 2017 |
| Lord Dearing Award for Teaching & Learning, University of Nottingham  | 2013 |
| Exxon Mobil Excellence in Teaching Award | 2012 |
| Royal Academy of Engineering, Professional Development Award | 2011 |

Relevant Training

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| Excellence in Report Writing Bond Solon 2023Writing Expert Reports (Advanced) | Bond SolonProsols | 20232016 |
| Successful Communication at Experts’ Meetings | ProSols | 2014 |
| Expert Witness Report Writing  | Expert Witness Institute | 2013 |
| Cross Examination Skills | Expert Witness Institute | 2013 |