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Qualifications

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

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

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 plants CPR 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 settings CPR 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 depot Johns 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

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

1991-1993 *Proposals Engineer, Senior Process Engineer*
Water Engineering (Now WABAG)
Projects Engineer

Memberships

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

Awards

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

Excellence in Report Writing Bond Solon 2023	Bond Solon	2023
Writing Expert Reports (Advanced)	ProSols	2016
Successful Communication at Experts' Meetings	ProSols	2014
Expert Witness Report Writing	Expert Witness Institute	2013
Cross Examination Skills	Expert Witness Institute	2013