# Simon Gomm CEng MiMechE

# **Mechanical Engineer**



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- Chartered Mechanical Engineer
- Member of the Institute of Mechanical Engineers
- RemSoc Committee member
- C&G 2391-52
- C&G 2382-18
- **COMPEX-F**

Simon Gomm is a Chartered Engineer with over 25 years' experience in the remediation of contaminated sites. Simon specialises in problem solving and unlocking best value solutions for clients, including development of innovative technologies and treatment trains for established and emerging contaminants.

His experience enables him to consider client's needs, foresee potential risks and provide both considered advice and tested solutions, whilst offering value and time optimisation. He has also been involved in national and international projects collaborating with a network of industry experts to develop best available techniques and practical cost saving solutions.

Simon has designed a diverse range of soil and groundwater remediation projects, from civil engineering based methods, physical extraction systems, including dual-phase extraction and air sparging, through to in-situ chemical oxidation solutions across Europe, Middle East and Africa. Simon has undertaken remediation option studies and cost appraisals, design of remedial systems from pump and treat through to steam injection and Dual Phase systems, prepares contract documentation, prepares remediation strategies for regulatory approval and carries out contractual and project management. He works on traditional contaminant projects and also emerging contaminants such as PFOA compounds. He is familiar with the requirements of working within the ATEX regulations, including attaining a Certificate of Competency in Hazardous Area Design and Consequence Analysis, and familiar with the regulatory requirements of operating a remedial system in the UK, including the Pressure Systems Regulations.

Simon is a Technically Competent Persons for Mobile Treatment Licenses (Environmental Permit) and has been responsible for the safe and compliant operation of numerous process remediation systems.

Simon has extensive experience in troubleshooting systems where performance is lacking or contractors are not performing according to contractual conditions.

- Contaminated land assessment
- Remediation technology selection
- Process remediation design
- Remediation implementation
- Hazardous area classification
- HAZOP

# Selected project experience

# Former Oil Refinery, Northern France

Principal Designer for the design, installation and operation of a large scale process remediation system at a refinery facility. The €10M project was designed to address a significant off and on-site hydrocarbon plume up to 5m in thickness, present beneath commercial and residential properties. Simon oversaw the original system design, including pilot testing, installation and subsequent expansion of the ongoing process.

#### Oil Facilities, South Africa

Lead Designer for multiple process remediation projects at active oil handling facilities, including soil vapour extraction systems with vapour treatment, air sparging and groundwater pumping systems, all of which were installed and commissioned on active sites.

#### Manufacturing Facility, Indonesia

Lead Designer for process remediation system to recover free phase transformer oil from beneath an operational manufacturing facility. Plant manufactured locally to international standards for safe operation and control.

## Manufacturing Facility, Sweden

Lead Designer for PFAS remediation system upgrade to prevent off-site migration of PFOA compounds. Included options appraisal for the comparison of water treatment technologies to minimize waste production.

#### Department of Defense, Europe

Lead Designer for two large process remediation projects at active military sites, for the treatment of mixed contaminant plumes (Chlorinated solvents and PFOA Compounds) in fractured bedrock aquifers, close to drinking water supply wells. Thermal technology employed to rapidly address contamination and optimize mass recovery including Electrical Resistive Heating and steam injection.

#### Multiple Retail Filling Stations, India

Lead Designer for multiple process remediation projects at active retail filling station, including soil vapour extraction systems with vapour treatment, air sparging and groundwater pumping systems, all of which were installed and commissioned on active forecourts.

#### Former Manufacturing Facility, Switzerland

Lead Designer for a chlorinated solvent remediation project, where residual contamination was present within soil and groundwater at a former manufacturing facility that was earmarked for redevelopment as residential properties in Geneva, Switzerland. Due to the ground conditions, a treatment train utilising Electrical Resistive Heating and Steam/Air injection was selected as providing best performance and value.

#### Oil Facilities, Austraila

Lead Designer for multiple remediation projects at former and active oil handling facilities, including the implementation of a variety of remedial approaches including in-situ treatments, bioremediation and process systems.

#### Dry Cleaning facility, UK

Principal Designer for design and installation of combined soil venting, air sparging and steam injection system at a large dry cleaning facility located on the Sherwood Sandstone Group, to address chlorinated solvent contaminants

in soil and groundwater source areas.

#### **Chemical Plant, UK**

Design Engineer for design and installation of air sparging system and SVE system at a large former chemical works, to address a mixed contaminant plume, including styrene, which was impacting onto adjacent sites.

#### Chemical Storage facility, UK

Design Engineer for ISCO project to deliver a source reduction solution to supplement an ongoing pump and treat system in fractured sandstone.

#### Pharmaceutical Facility, UK

Design Engineer for Low Temperature Thermal Desorption project at former Pharmaceutical Plant

#### Oil Terminal, Saudi Arabia

Principal Designer for 400 well NAPL recovery system at an active oil terminal in Saudi Arabia. The design had to accommodate existing site infrastructure, including access routes for future tank maintenance, and operate in ambient temperatures up to 50C.

# **Chemical Storage facility, Turkey**

Principal Designer for a time dependent dual pump system for a chemical storage facility in Turkey, in order to recover and prevent migration a several hundred tonne spill of chemicals.

#### **Rail Facilities - UK**

Principal Designer for an on and off-site remedial trial programme at a number of operating rail facilities. The works include completion of hydraulic pumping tests and trials on a range of potential remedial techniques for free phase product recovery.

#### Landfill facilities - UK

Project Manager for the investigation, remedial design and monitoring programme of operational and former landfill sites both in the UK and Isle of Man.

#### **Environmental Permitting experience**

Multiple Petrol filling station remediation projects in UK: Warwick, Warwickshire,
Leicester, Leicestershire
Malton, North Yorkshire
Grimsby,Lincolnshire

Industrial site remediation projects in UK: Chemical packaging facility, Nottingham, Nottinghamshire Former Chemical works, South Wales Former Chemical works, Teeside

#### **Employment**

# Infra Innovate Ltd/ Managing Director

April 2024 - present, Sutton Coldfield

Acting as a global subject matter expert for the specialist design and implementation of remediation solutions, supporting International Consultancies and Contractors to address contaminated land including former landfills, petrochemical facilities and manufacturing facilities. Recognised as an SME by Shell and 3M for remediation design. Roles include project management, data assessment and gap analysis, system design and installation oversight.

#### **ERM Ltd/** Technical Director

April 2022 - April 2024, Oxford

Acting as an international subject matter expert for the design and implementation of process remediation solutions to contaminated land including former landfills, petrochemical facilities and manufacturing facilities. Recognised as an SME by Shell and 3M for remediation design. Roles included project management, project direction and system design and installation oversight. In addition played a key role in the development of the Dolphyn Hydrogen project to bring to trial an innovative deployment of hydrogen electrolysis systems in a marine environment.

## **AECOM Ltd / Technical Director**

September 2000 - April 2022, Birmingham

Acted as a global subject matter expert for the design and implementation of process remediation solutions on contaminated land including former landfills, petrochemical facilities and manufacturing facilities. Recognised as an SME by BP, Shell and 3M for remediation system operations and design. Roles included project management, project direction and system design and installation oversight.

# **RSK Ltd / Remediation Engineer**

December 1997 - September 2000, Chester

Project managed and undertook site investigations, remedial assessments and the design and implementation of remediation solutions on contaminated land including former landfills, petrochemical facilities and manufacturing facilities. Roles included project management, project direction and system design and installation oversight.