



PROJECT ENGINEER (SENIOR PROCESS ENGINEER / TECHNOLOGIST)

OVERALL RESPONSIBILITIES

Reporting to the Innovation Manager (Line Manager) and Engineering Innovation Consultant (Functional Manager), the role of the incumbent is to provide professional process and project engineering / management input in the planning, development (including co-ordination and integration of inputs) and implementation of projects to meet Rand Water's requirements.

PRIMARY DUTIES

- Perform a full range of varied and responsible process, and project engineering / management, work independently requiring a high level of judgement and independent evaluation, selection, and adaptation, of standard techniques, and where required, devising new improved approaches to meet unique situations.
- Involvement in work where no clear precedents exists, and which requires going beyond existing parameters and adaptation of plans to fit the situation, always bearing in mind the end objectives, and the underlying reason for them.
- Execute the delivery of assigned activities and projects at the appropriate levels of quality, on time and within budget, in accordance with the Programme Master Plan.
- Develop pre-project recommendations into project scopes of work, functional and detailed requirements (including process calculations and drawings development, technical specifications, tender documents preparations and functional level business case development).
- Interface with the other engineering disciplines (mechanical, electrical, automation, architectural and civil), Multi-stakeholder Project Teams (Scientists and Water Quality experts, Asset Engineers/Managers, SHEQ, EMS, Operations, Maintenance, Legals, Supply Chain Management, Professorial Chairs and research partners), Consultants, and Contractors to accomplish completely integrated project delivery.
- Review project team members' inputs/outputs for technical accuracy, adequacy, and compliance with standards, organisational procedures and best practices.
- Conduct/Participate in scoping meetings, reviews, engineering studies/evaluations, site activities and project execution activities.
- Provided value-add and input towards improving the section's policies, systems and procedures.
- Identify Innovation improvement opportunities and projects for the business resulting in greater effectiveness and efficiencies for Rand Water.
- Be required to provide technical or project based reports to management as well as other areas of the business, on which Rand Water may base significant decisions.

JOB REQUIREMENTS

- Formal Chemical/Process Engineering B Eng/BSc Eng Degree or BTech Degree
- Project management qualification desirable but not mandatory
- 4 to 8 years applicable post graduate experience
- Professional registration (or eligibility for registration) with the Engineering Council of SA
- Process Engineering related to Process Infrastructure, Water Purification and Innovation.
- Project Engineering and Management experience

COMPETENCY PROFILE

Knowledge	Skills	Attitude
<ul style="list-style-type: none"> • Water Industry Experience • Procedures in large bureaucratic organisations • Process/Chemical related to water purification and distribution • Good understanding of Automation/Instrumentation. • Related Legislation • ISO Quality Systems • Working knowledge of techniques for planning, monitoring and controlling projects (eg. PMBOK, PRINCE2). • Finance and budgeting • Innovation and entrepreneurship • Computer competent in Project Management software (SAP Project Systems, Enterprise Project Management Tools and MS Excel) • Working understanding if artificial intelligence in process engineer applications 	<ul style="list-style-type: none"> • Punctuality and accuracy in the execution of Works • Conflict management • Report writing skills • Proven management, communication and leadership skills, • Strong communication and influencing skills (negotiations), • Conflict resolution skills and ability to achieve objectives without having direct responsibility (people management skills); • Problem solving skills • Management of intellectual property 	<ul style="list-style-type: none"> • Participate effectively as a member of the team • Ability to pay attention to detail • Customer focused • Self-motivated • Proactive • Negotiate and arrive at decision • Deadline orientated • Quality orientated • Performance driven • Professionalism • Solution based thinking