



Job Profile

Senior Process Engineer

Group: Water and Environment Services

Job Summary

To be completed by People and Culture team			
Job Family	Engineering	Career Stage	E
Job Function	Generalist Engineering	Career Stream	Professional
Coverage EA = Enterprise Agreement ICE = Individual Contract of Employment	ICE	Last Modified Date	8/02/2024
To be completed by Manager ~ (Team Size relates to People Leadership)			
Work Environment	Hybrid	Team Size	
People Leader	No	Indirect Team Size	

Who we are.

At Sydney Water, we exist for our customers. We're more than 3,500 people working together, striving to do more and be better—better for the environment, our customers, our people, and our water. Our people are passionate about working together, and driving agility, accountability, innovation, sustainability, and exceptional customer experiences.

Sydney Water is the main provider of water, wastewater, recycled water, and stormwater services in Greater Sydney. Our employees are dedicated to our customers, ensuring services are reliable and affordable, we are proactive and easy to engage with, forward-thinking, and environmentally focused.

Working with us means helping to provide essential services, safeguarding Sydney's future with a sustainable water supply, and protecting our iconic waterways. Our strategy guides our journey to enhance customer outcomes and continue delivering robust services to our city into the future.

Job Purpose

Work closely with Planners, Major Projects Team, and WW Treatment Hubs to achieve best operational outcome & resource recovery during the asset creation process from concept to handover. This involves providing high level technical input to Options analysis, reference and or /concept design, detailed design, review of business cases (such as NABC, OABC, DABC), review of FDS (functional design specification) provide input during asset commissioning and handover. Need to have strong commitment to safety in design.

- The assets we create are (a) safe to operate and maintain (b) has the capacity to meet all license conditions



Accountabilities

Job Specific	• Working with stakeholders to ensure external growth and improvement projects are fit for purpose for the Customer Delivery – Production teams throughout the planning, options development, design, construction, commissioning, and operational phases. • Technical interface for Sydney Water internal stakeholders and external service providers, providing operational and technical advice on behalf of Customer Delivery Production on product quality, technologies, and specifications. • Provide technical input to capital projects and review design, construction and commissioning documents and ensure Sydney Water standards are followed in design. • Review technical guidance manuals (Unit Process Guidelines) to assist with standardization across Customer Delivery Production • Lead input into product quality, material and chemical specifications • Provide leadership to resolve complex technical issues relating to product quality or process related issues across Customer Delivery – Production • Provide technical input to Sydney Water research and development projects • Scan the technology market and influence the introduction of new and emerging technology to Customer Delivery Production to realise savings in capital and OpEx • Accountable for implementing new technology, instrumentation, control system upgrades and process modelling • Assist with the design pilot plant, new technology and instrumentation trials. • Lead investigations relating to product quality or processes related issues across Customer Delivery Production • Lead the development of Process Descriptions for input into Functional Design Specifications for control systems • Facilitate technology transfer and cooperation with industry by participating in joint workshops, conferences and seminars. • Responsible for review and endorsement of operational change management, where required. • Accountable for Product Quality Management System • Treatment Operations – Monitor and Control, Diagnose and Resolve • Provide mentoring, support, technical advice and training to Production staff. Identify capability gaps and collaborate with the Process Controllers/Operations Lead and Process Engineers to improve team effectiveness • Lead technical process collaboration forums for the Product • Support the Capital Interface Manager in providing quality input into the product and asset strategies for the Product to ensure product outcomes can be achieved • Lead product improvement programs • Work within Sydney Water's safety systems and processes • Accountable for the health, safety and wellness for all employees and team members • Ensure the safety for their own workplace and work activities, participation in health and safety training and activities, managing and reporting all identified hazards and ensuring their activities do not cause injury to others • Demonstrate positive safety behaviours to achieve zero harm • Demonstrate safety leadership and empower team to identify and rectify hazards • Support product line compliance with Sydney Water's Health and Safety Management System
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	• Ensure safety plans are completed for all work on site • Ensure safety in design is maintained in design, construction and commissioning of plant upgrade projects • Complete all mandatory training, participate in SIP scenarios as required • Contribute to incident investigation and implement lessons learnt • Support the Process Manager in delivering any safety initiatives that will achieve zero harm
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Role Requirements

Education / Qualifications

Required	Degree qualified in Engineering or Science, or equivalent experience
Desired	

Certifications / Licences

Required	- Relevant valid driver's licence required.
Desired	

Experience

Required	- Minimum 8 years' experience in Process Industry, at least 5 years in Water/Wastewater industry Technical speciality in one or more of the unit processes used for Water/ Wastewater Treatment/ Resource recovery - Demonstrated skills in technical report writing and data analysis - Stakeholder management skills in a team environment - Demonstrated communication and negotiation skills with multiple stakeholders - Ability to challenge the status quo and influence team members in new ways of working - Demonstrated technical capabilities that would enable process related diagnosis/ root cause analysis - Demonstrated technical capabilities to review and provide input into design for plant upgrade - Detailed knowledge of product guidelines, Sydney Water specifications and quality management systems (Recycled Water, and Drinking Water, wastewater) - Demonstrated project management skills - Experience with SCADA systems, software for analytics, Microsoft Office application and ability to use customised software packages - Skills in process modelling (desirable)
Desired	



Capabilities and Skills

The capability and skill requirements for this role are identified in the skills profile listed below. This is comprised of Enterprise Capabilities, that are essential for all roles and functional skills, which are specific to each role.

Enterprise Capabilities (C-E)			
Capability	Descriptor		
Accountability	Ensures that own actions and those of others are focused on achieving goals and owning the outcome, in a safe, inclusive collaborative way.		
Agility	Adapts readily to change and encourages alternative views by using a range of interpersonal communication skills. Develops and coach's others while being aware of impact on others.		
Innovation	Develops innovative outcomes to solve problems in ways that are not immediately evident and encourages new ideas and thinking in others.		
Functional Skills			
Skill	Priority	Essential or Desirable	Proficiency level
Process Engineering	1	Essential	Advanced
Engineering Design Process	2	Essential	Advanced
Commissioning	3	Essential	Advanced
Technical Writing	4	Essential	Advanced
Risk Management	5	Essential	Intermediate
Critical Thinking	6	Desirable	Intermediate
Troubleshooting (Problem Solving)	7	Essential	Advanced
Product Requirements	8	Desirable	Intermediate
Influencing Skills	9	Desirable	Advanced
Interpersonal Communications	10	Essential	Intermediate
Proficiency Level Descriptors			
Developing - Building practical experience, needs continued coaching.			
Intermediate - Independent execution, minimal guidance.			
Advanced - Fully independent execution, coaches' others.			
Mastery - Strategic, sought as expert internally and externally.			

Sydney Water takes the safe provision of its services to the public and the protection of its information assets extremely seriously. As a Sydney Water employee, you are required to understand your obligations under the [Acceptable Use of Information Technology Policy](#) and how Sydney Water's Information Technology is to be used. You must also help keep your workplace secure by ensuring you do not enable non-authorised people access to sites, maintain the integrity of locked entries and exits, and where appropriate, alarms being engaged.

Sydney Water requires all users to embrace and adhere to all enterprise and protective security policies, awareness programs and frameworks for Sydney Water assets.