

CS67 - Water Quality Technician

Disclaimer

These Occupational Frameworks and Skill Profiles have been developed as workforce planning, occupational mapping and skills reference resources for the Australian textile, clothing and footwear (TCF) industry. They are intended to describe the typical functions, responsibilities, skills and capabilities associated with occupations across the industry.

These documents are not intended to replace or override industrial instruments or employment arrangements, including awards, enterprise agreements, employment contracts, position descriptions, classification structures, licensing or regulatory requirements, or other statutory obligations. Where differences arise, the relevant industrial, legislative or regulatory requirements take precedence. The Skill Profiles should be used as complementary reference documents to support workforce planning, career development, training and skills recognition.

1. Job role

TCF sub-sector	Cross-sector
Job role	CS67 Water Quality Technician
Job role description	Monitors, tests and manages water quality and wastewater systems used in TCF production processes to ensure compliance with environmental regulations and operational standards. The role supports sustainable production by ensuring safe water usage, effective treatment of wastewater and compliance with discharge standards. It involves sampling, laboratory testing, process monitoring and coordination with production and engineering teams.
Performance expectations	- Ensuring compliance with environmental and water discharge regulations. - Monitoring water quality across production processes. - Maintaining accurate testing and reporting records. - Supporting efficient operation of water treatment systems. - Identifying and resolving water quality issues. - Minimising environmental impact and resource usage. - Supporting sustainability initiatives and reporting. - Maintaining safe handling of chemicals and materials. - Collaborating with engineering and compliance teams. - Adhering to workplace safety and environmental procedures.
Specialisation (optional)	Wastewater treatment, environmental monitoring, chemical analysis, sustainability reporting, water recycling systems.
Application in other TCF sectors	- Textile manufacturing supporting dyeing and finishing processes. - Apparel production supporting washing and finishing operations. - Leather goods production supporting tanning and treatment processes. - Footwear production supporting adhesive and finishing systems.

	• Dry cleaning and laundry supporting washing and wastewater systems. • Technical textiles supporting specialised processing environments. • Manufacturing industries supporting environmental compliance systems.
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2. Key tasks and critical work functions

Key tasks	• Sampling and testing water and wastewater. • Monitoring treatment systems and process performance. • Recording and analysing test results. • Maintaining testing equipment and instruments. • Identifying deviations from quality standards. • Supporting corrective actions and process adjustments. • Ensuring compliance with environmental regulations. • Preparing reports and documentation.
Critical work functions	• Ensuring accuracy of water quality measurements. • Maintaining compliance with discharge standards. • Preventing environmental contamination. • Supporting efficient water usage and treatment. • Maintaining reliable monitoring systems. • Supporting sustainability and resource efficiency. • Ensuring safe handling of chemicals and samples.

3. Technical skills

Water testing	Conducting physical, chemical and biological water tests.
Laboratory techniques	Using testing equipment and analytical methods.
Wastewater treatment systems	Understanding treatment processes and systems.
Environmental compliance	Applying regulations and standards.
Data recording and analysis	Maintaining accurate records and interpreting results.
Instrumentation	Using sensors and monitoring equipment.
Chemical handling	Managing safe use of testing and treatment chemicals.

4. Generic Skills

Attention to detail	Ensuring accuracy in testing and reporting.
Analytical thinking	Interpreting results and identifying issues.
Problem solving	Addressing water quality issues.
Communication	Reporting findings and coordinating with teams.
Time management	Managing testing schedules and reporting deadlines.
Compliance awareness	Understanding regulatory requirements.

5. Emerging skills

Emerging skills	• Using advanced water monitoring and sensor systems. • Applying sustainability and circular water practices. • Integrating water systems with digital monitoring platforms. • Using data analytics for environmental performance. • Supporting water recycling and reuse systems. • Applying Environmental, Social and Governance (ESG) and environmental reporting frameworks.
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6. VET Qualifications and Skill Sets

Entry-level preparation	MSL30122 Certificate III in Laboratory Skills or equivalent qualification.
Advanced development	MSL50122 Diploma of Laboratory Technology or equivalent qualification.

7. Job progression

Possible job progression	Production Assistant → Water Quality Technician → Senior Technician → Environmental Coordinator → Environmental Manager.
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8. Classification

Australian Qualifications Framework	AQF Level 3-5.
Australian Bureau of Statistics (ABS) Skill Levels	Skill Level 4.
Open Source Classification of Occupations for Australia (OSCA)	732431 Wastewater or Water Plant Operator.



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