

SSLPR10 Effluent Treatment Plant (ETP) Operator

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	Leather Production
Functional area	Environmental Compliance and Monitoring
Job role	SSLPR10 Effluent Treatment Plant (ETP) Operator
Job role description	Operates and maintains the effluent treatment plant within a leather production facility to ensure wastewater is treated in accordance with environmental licence conditions and regulatory standards. Monitors chemical dosing, biological treatment processes, sludge handling and discharge quality. Works closely with Environmental Monitoring Technicians and production teams to manage tannery effluent loads.
Performance expectations	- Operate primary, secondary and tertiary wastewater treatment systems. - Monitor pH, chromium levels, biochemical oxygen demand (BOD), chemical oxygen demand (COD) and suspended solids. - Adjust chemical dosing and aeration systems to maintain compliance. - Maintain sludge dewatering and disposal processes. - Record operational data accurately and consistently. - Identify plant faults and escalate maintenance requirements. - Ensure compliance with Environment Protection Authority (EPA) discharge licence limits.
Specialisation	May specialise in chrome recovery systems, biological treatment optimisation, membrane filtration, sludge management or recycled water systems within tannery operations.
Application in other TCF sectors	Transferable to wastewater treatment roles in textile dyeing and finishing plants, industrial laundries, food processing facilities and other water-intensive manufacturing environments.

2. Key tasks and critical work functions

Key tasks	• Monitor influent and effluent flows and treatment parameters. • Operate screening, equalisation and clarification systems. • Control chemical dosing systems for pH correction and chrome precipitation. • Operate aeration tanks and biological treatment processes. • Manage sludge thickening, dewatering and disposal. • Conduct routine water quality testing. • Maintain plant equipment and perform minor maintenance. • Respond to alarms and abnormal discharge events.
Critical work functions	• Prevention of non-compliant discharge to sewer or environment. • Stabilisation of effluent load variations from wet-end operations. • Accurate and timely adjustment of treatment parameters. • Protection of surrounding environment and community health. • Reliable operation of plant equipment to avoid system failure.

3. Technical skills

Wastewater treatment processes	Understand primary, biological and chemical treatment systems.
Chemical dosing control	Adjust lime, acid and coagulant dosing systems.
Water quality testing	Test pH, COD, BOD, chromium and suspended solids.
Chrome recovery systems	Operate precipitation and recovery systems.
Sludge management	Manage thickening, dewatering and disposal processes.
Equipment operation	Operate pumps, aerators, clarifiers and control panels.
Operational data recording	Maintain accurate plant logs and compliance records.

4. Generic Skills

Attention to detail	Monitor plant parameters precisely.
Problem solving	Respond effectively to plant performance issues.
Communication	Report operational status to supervisors and environmental staff.
Time management	Perform routine monitoring within required intervals.
Safety awareness	Handle chemicals and effluent safely.
Teamwork	Coordinate with production and maintenance teams.

5. Emerging skills

Emerging skills	• Operation of automated supervisory control and data acquisition (SCADA) based wastewater control systems. • Remote monitoring and digital sensor integration. • Data-driven optimisation of biological treatment performance. • Advanced chrome recovery and water recycling technologies.
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	- Integration of effluent data into Environmental, Social and Governance (ESG) and sustainability reporting. - Predictive maintenance technologies for treatment equipment.
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6. VET Qualifications and Skill Sets

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

7. Job progression

Possible job progression	ETP Operator → Senior ETP Operator → Environmental Monitoring technician.
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8. Classification

Australian Qualifications Framework	AQF Level 3-4.
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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