



Australian Government

NWPTRT067 Assess and optimise chemical dosing processes in wastewater

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the NWP - National Water Training Package.

Application

This unit involves the skills and knowledge required to assess and improve chemical dosing processes in wastewater.

It includes reviewing, facilitating and optimising chemical addition processes and evaluating and reporting on system performance and process quality control.

This unit applies to those working as technical staff with a responsibility for optimising chemical addition processes in wastewater treatment. Those undertaking this unit would work autonomously, usually with supervisory responsibilities, while performing complex tasks in a range of contexts.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Treatment

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Evaluate chemical addition process

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Review existing process performance data against

performance	organisational operating protocol
	1.2 Identify the impact of changing feed characteristics on chemical addition processes
	1.3 Identify any additional sampling and testing required for valid evaluation of current process performance
2 Investigate chemical addition plant configuration	2.1 Assess existing fault reports and other plant asset information
	2.2 Investigate the operational status of plant components with reference to manufacturer and plant design specifications
	2.3 Contribute to plant configuration investigations to identify potential deficiencies
	2.4 Identify hazards, assess risks and control measures according to workplace procedures
3 Investigate chemical options for process optimisation	3.1 Review current chemical addition practices with reference to organisational protocol to identify potential deficiencies
	3.2 Investigate dosing options for current chemicals
	3.3 Identify and investigate tests to assess effectiveness of existing or alternative chemicals and related dosing options
4 Develop and record a plan for process optimisation	4.1 Determine plant configuration or chemical options for process optimisation
	4.2 Plan a trial to test the performance of the determined optimisation options
	4.3 Compile report with recommendations on optimisation options

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the NWP - National Water Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a new unit. No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>