



Australian Government

NWPTRT009 Operate and control coagulation and flocculation processes

Release: 1

NWPTRT009 Operate and control coagulation and flocculation processes

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 operate and control coagulation and flocculation processes.

It includes monitoring, measuring and reporting on system performance and quality control. It also includes identifying faults, determining and applying technical adjustments and conducting chemical dosing procedures.

This unit applies to operational staff with a specific responsibility for coagulation and flocculation processes in water and wastewater plants. Those undertaking this unit would work under appropriate supervision, while performing routine tasks, within a familiar context.

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

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare for work

1.1 Determine work requirements from job specifications

		and plans
	1.2	Select and check equipment to meet safety requirements of task and worksite
	1.3	Select, fit and use required safety equipment, including personal protective equipment (PPE)
2	Control chemical use	
	2.1	Handle and store chemicals according to workplace procedures
	2.2	Maintain chemical supply and usage records according to workplace procedures
3	Monitor coagulation and flocculation processes	
	3.1	Conduct routine inspections according to workplace procedures
	3.2	Identify and report process faults to relevant personnel
	3.3	Collect process samples according to workplace procedures
4	Operate and control coagulation and flocculation processes	
	4.1	Conduct jar tests and determine optimum chemical dosages
	4.2	Perform process calculations and adjust chemical dosing according to jar test results
	4.3	Collect and test samples to confirm dosage adjustments
5	Complete documentation	
	5.1	Collect, interpret and record process data according to workplace procedures and process requirements
	5.2	Identify data outside of normal operational parameters and report to relevant personnel for further action

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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to NWPTRT015 Operate and control coagulation and flocculation processes.

Links

Companion Volume implementation guides are found in VETNet -

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

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