



Australian Government

NWPTRT042 Assess and improve granular media filters

Release: 1

NWPTRT042 Assess and improve granular media filters

Modification History

Release	Comments
1	<p>This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages.</p> <p>This unit supersedes and is equivalent to NWP406A Investigate and plan the optimisation of granular media filtration processes.</p> <ul style="list-style-type: none"> • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice • Unit title changed to better reflect unit outcomes • One new PC added to Element 2

Application

This unit describes the skills required to evaluate and report on system performance and process quality control and may require the control and coordination of granular media filtration processes used in water and wastewater treatment.

This unit applies to those working as technical staff with responsibility for optimising granular media filtration processes in water or wastewater treatment plants. This role may include coordination or supervision of a work team, or may be performed by a single operator, depending on the size of the treatment plant.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to, particularly those relating to manufacturers' specifications.

Those undertaking this unit would work under indirect supervision, while performing complex tasks within a range of familiar contexts.

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

Competency Field

Treatment

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Assess granular media filtration process performance	1.1 Review existing process performance data. 1.2 Review existing operational <i>processes</i> . 1.3 Identify the impact of incoming water quality on granular media filtration processes. 1.4 Identify any additional sampling and testing required for valid evaluation of current process performance.
2. Investigate granular media filtration plant or equipment operation	2.1 Review existing fault reports and other relevant plant asset information. 2.2 Investigate the operational status of plant components. 2.3 Carry out investigations to identify potential deficiencies.
3. Investigate the operational options for process optimisation	3.1 Review relevant fault and incident reports and remedial actions taken. 3.2 Investigate current media status with reference to manufacturer or plant designer specifications. 3.3 Investigate potential changes to operational processes to identify possible optimisation strategies.
4. Develop and record a plan for process optimisation	4.1 Determine plant configuration or media options and revised operational procedures for process optimisation. 4.2 Plan a trial to test the performance of the determined optimisation options. 4.3 Compile a report making recommendations on optimisation options.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning					Reading					Writing					Oral communication					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Range of Conditions

Processes include:	<ul style="list-style-type: none"> gravity filters pressure filters continuous backwash processes
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Unit Mapping Information

This unit supersedes and is equivalent to NWP406A Investigate and plan the optimisation of granular media filtration 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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