



Australian Government

NWPTRT064 Assess and improve sedimentation processes

Release: 1

NWPTRT064 Assess and improve sedimentation 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 assess and improve sedimentation processes.

It includes evaluating system performance and investigating and reporting on the optimisation of sedimentation and clarification processes.

This unit applies to those working as technical staff with responsibility for optimising sedimentation and clarification processes in water and wastewater treatment plants. 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 Assess sedimentation and clarification process performance

PERFORMANCE CRITERIA

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

1.1 Review existing process performance data against organisational operating protocol

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| | 1.2 | Identify the impact of changing incoming water quality on sedimentation and clarification processes in a range of conditions |
| | 1.3 | Identify any additional sampling and testing required for valid evaluation of current process performance |
| 2 Investigate sedimentation and clarification assets | 2.1 | Review 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 | Conduct investigations to identify potential deficiencies in asset performance |
| | 2.4 | Identify hazards, assess risks and control measures according to workplace procedures |
| 3 Investigate process optimisation | 3.1 | Review relevant fault and incident reports and remedial actions taken |
| | 3.2 | Investigate potential changes to operational processes to identify possible optimisation strategies |
| 4 Plan process optimisation | 4.1 | Determine plant configuration and revised operational processes 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

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 NWPTRT032 Assess and improve sedimentation processes.

Links

Companion Volume implementation guides are found in VETNet -

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