



**Australian Government**

# **NWPTRT059 Assess and improve granular media filters**

**Release: 1**

# NWPTRT059 Assess and improve granular media filters

## 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 granular media filters.

It includes evaluating and reporting 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. Those undertaking this unit would work autonomously, usually with supervisory responsibilities, while performing complex tasks within a range of familiar 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.

### PERFORMANCE CRITERIA

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

- |   |  |
|---|--|
| <b>1 Assess granular media filtration process performance</b>               | <b>1.1</b> Review existing process performance and maintenance data against relevant organisational and legislative requirements |
|   | <b>1.2</b> Identify the impact of incoming water quality on granular media filtration processes                                  |
|   | <b>1.3</b> Identify any additional sampling and testing required for valid evaluation of current process performance             |
| <b>2 Investigate granular media filtration plant or equipment operation</b> | <b>2.1</b> Review existing fault reports and other relevant plant asset information  |
|   | <b>2.2</b> Investigate the operational status of plant components with reference to manufacturer and plant design specifications |
|   | <b>2.3</b> Contribute to plant configuration investigations to identify potential operational improvements                       |
|   | <b>2.4</b> Identify hazards, assess risks and control measures according to workplace procedures                                 |
| <b>3 Investigate the operational options for process optimisation</b>       | <b>3.1</b> Review relevant fault and incident reports and remedial actions taken   |
|   | <b>3.2</b> Investigate current media and system status with reference to manufacturer or plant design specifications             |
|   | <b>3.3</b> Investigate potential changes to operational processes to identify possible optimisation strategies                   |
| <b>4 Develop and record a plan for process optimisation</b>                 | <b>4.1</b> Determine plant configuration or media options and revised operational procedures for process optimisation            |
|   | <b>4.2</b> Plan a trial to test the performance of the determined optimisation options   |
|   | <b>4.3</b> 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 NWPTRT042 Assess and improve granular media filters.

## Links

Companion Volume implementation guides are found in VETNet -

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