



Australian Government

AHCWAT302 Monitor and operate water treatment processes

Release: 1

AHCWAT302 Monitor and operate water treatment processes

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to plan, monitor, control, operate, measure, adjust and report water and waste water treatment performance and process control.

The unit applies to individuals who monitor and operate water treatment processes under broad direction, and take responsibility for their own work.

All work must be carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, food safety codes, and sustainability and biosecurity practices.

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

Pre-requisite Unit

Nil

Unit Sector

Water (WAT)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and prepare for work	1.1 Interpret work plans and identify potential hazards and risks and safe working practices to manage risks, and clarify with supervisor 1.2 Select and use required tools, equipment and machinery, and check for safe operations 1.3 Select, fit, use and maintain safety and personal protective

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	equipment applicable to the task
2. Monitor water treatment plant performance	2.1 Conduct routine inspections of treatment equipment 2.2 Collect water samples and conduct standard tests or send samples for analysis according to food safety codes, biosecurity practices and workplace procedures 2.3 Collect, record and report treatment process data according to workplace procedures
3. Control chemical use	3.1 Use, handle and store chemicals according to workplace health and safety procedures 3.2 Prepare chemical dosing according to workplace health and safety procedures 3.3 Maintain information related to chemical supply and usage according to workplace health and safety procedures
4. Monitor and control water treatment processes	4.1 Monitor water and waste water treatment processes to maintain parameters of operation 4.2 Identify and report process faults and operational conditions of treatment equipment according to workplace procedures 4.3 Initiate basic equipment and process adjustments to enhance performance 4.4 Minimise environmental impacts of water treatment processes
5. Complete work	5.1 Clean and return tools, equipment and machinery to required location 5.2 Identify and report unserviceable tools, equipment and machinery according to workplace procedures 5.3 Record equipment and water treatment processes according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret textual information from a range of sources to identify relevant and key information about water treatment plant operations
Writing	Use clear language, accurate industry terminology and logical structure to complete equipment and water treatment process records
Oral communication	Initiate discussions with supervisor using clear language to confirm and report water treatment activities, and tool, equipment and machinery unserviceability
Numeracy	Calculate ratios for chemical dosing

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCWAT302 Monitor and operate water treatment processes	AHCWAT301 Monitor and operate water treatment processes	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCWAT302 Monitor and operate water treatment processes

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has monitored and operated water treatment processes on at least two occasions, and has:

- applied workplace health and safety requirements applicable to monitoring and operating water treatment processes
- applied food safety codes, environmental and biosecurity practices and workplace procedures applicable to monitoring and operating water treatment processes
- used water sampling and testing techniques
- recorded and reported equipment and water treatment processes according to workplace procedures
- prepared and applied chemicals
- identified and reported process faults
- minimised environmental impacts of water treatment processes.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements applicable to monitoring and operating water treatment processes
- food safety codes, environmental and biosecurity practices and workplace procedures applicable to monitoring and operating water treatment processes
- workplace recording and reporting procedures
- the principles and practices for monitoring and operating water treatment processes, including:
 - chemical dosing processes
 - environmental impacts of irrigation using water from any ground or underground source

- environmental issues associated with water treatment
- hazardous materials handling
- water quality monitoring methods and techniques
- water treatment and water filtration techniques.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - water treatment tools, equipment and machinery
 - water treatment testing equipment and chemicals
 - personal protective equipment applicable to monitoring and operating water treatment processes
 - principles and practices for monitoring and operating water treatment processes
- specifications:
 - workplace health and safety requirements applicable to monitoring and operating water treatment processes
 - food safety codes, environmental and biosecurity practices and workplace procedures applicable to monitoring and operating water treatment processes
 - workplace recording and reporting procedures
- relationships:
 - supervisor
- timeframes:
 - according to job requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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