



Australian Government

Department of Education, Employment and Workplace Relations

NWP365A Identify and confirm blue green algae outbreaks

Revision Number: 2

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Modification History

NWP365A Release 2: Layout adjusted. No changes to content.

NWP365A Release 1: Primary release.

Unit Descriptor

This unit of competency describes the outcomes required to identify and confirm outbreaks of blue green algae blooms.

Application of the Unit

This unit supports the attainment of skills and knowledge required for operational staff with a specific responsibility for ensuring that water and/or wastewater quality conforms to organisational standards and complies with statutory requirements.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Where <i>bold italicised</i> text is used, further information is detailed in the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Prepare samples.	1.1 Receive, handle and prepare samples testing according to <i>organisational and statutory requirements</i>. 1.2 Prepare and check <i>testing equipment</i> for blue-green algae identification and enumeration according to organisational requirements.
2 Conduct tests for blue green algae.	2.1 Conduct blue green algae <i>tests</i> according to organisational requirements. 2.2 Identify and confirm blue green algae. 2.3 Report blue green algae test results according to organisational requirements.
3 Compile blue green algae reports.	3.1 Compile <i>reports</i> to meet organisational requirements. 3.2 Report observations outside defined parameters for further action.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

- identify blue green algae types
- produce reports and logs
- use safety and personal protective equipment
- interpret instructions
- interpret policies, procedures and standards
- communicate with employees and/or customers
- give and receive instructions
- work effectively as part of a team
- determine process requirements
- operate control equipment
- perform system calculations
- conduct blue green algae identification and enumeration tests

Required knowledge:

- characteristics of blue green algae
- problems caused by blue green algae blooms
- methods of blue green algae control
- relevant utilities and service bodies
- communication systems
- impact of blue green algae on water and/or wastewater treatment processes
- risk factors and potential hazards associated with handling blue green algae samples
- equipment operation, capacity and limitations

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The candidate should demonstrate the ability to conduct blue green algae testing, including:

- identification of blue green algae types and characteristics
- reporting blue algae incidents according to organisational and statutory requirements

Context of and specific resources for assessment

Access to the workplace and resources including:

- documentation that should normally be available in a water industry organisation
- relevant codes, standards, and government regulations

Where applicable, physical resources should include equipment modified for people with disabilities.

Access must be provided to appropriate learning and/or assessment support when required.

Assessment processes and techniques must be culturally appropriate, and appropriate to the language and literacy capacity of the candidate and the work being performed.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice
- a decision of competence only taken at the point when the assessor has complete confidence in the person's competence over time and in various contexts
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence
- where assessment is for the purpose of recognition (RCC/RPL), the evidence provided will need to be authenticated and show that it represents competency demonstrated over a period of time
- assessment can be through simulated project-based activity and must include evidence relating to each of the elements in this unit

Questioning will be appropriate to the skill levels of the operator, any cultural issues that may affect responses to the questions, and reflecting the requirements of the competency and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Testing equipment may include:

- microscope
- Sedgwick-Rafter counting chamber
- volumetric glassware
- equipment and solutions for sample concentration
- identification charts and photos

Tests include:

- blue green algae identification and enumeration
- tests may also include:
 - Secchi clarity
 - odour testing

Organisational and statutory requirements may include:

- by-laws and organisational policies
- standard operating procedures
- environment protection
- occupational health and safety, including use of personal protective equipment
- Australian Drinking Water Guidelines
- National Water Quality Management strategy
- World Health Organisation standards
- licensing agreements
- Environment Protection Authority regulations

Reports may include:

- organisational reports:
 - alert levels
 - government agencies
 - water users/special consumers
- environmental reports
- chemical usage
- plant performance data

Unit Sector(s)

Not applicable.

Competency field

Common.