



Australian Government

NWPSOU003 Identify and confirm blue-green algae outbreaks

Release: 1

NWPSOU003 Identify and confirm blue-green algae outbreaks

Modification History

Release	Comments
1	This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to NWP365A Identify and confirm blue green algae outbreaks. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice • Element 2 removed. • Two new Elements added

Application

This unit describes the skills required to sample, identify and confirm outbreaks of blue-green algae blooms.

This unit applies to those working as operational staff with a specific responsibility for ensuring that water and/or wastewater quality conforms to organisational standards and complies with statutory requirements.

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.

Those undertaking this unit would work under supervision, while performing routine tasks within a familiar context.

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

Competency Field

Source

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. Confirm and conduct algae sampling	1.1 Confirm <i>type of samples</i> required, procedures for sampling and sampling locations from the work instruction. 1.2 Select and prepare sampling equipment according to specified samples required. 1.3 Carry out algae sampling. 1.4 Maintain integrity of samples during sampling and label sample containers.
2. Prepare samples for testing	2.1 Receive, handle and prepare samples for testing. 2.2 Prepare and check testing equipment for blue-green algae identification and enumeration.
3. Identify and enumerate blue-green algae	3.1 Conduct microscopic examination of algae sample. 3.2 Determine number of cells using Sedgwick-Rafter Counting Chamber and calculate cell concentration.
4. Complete documentation	4.1 Complete data report of the blue-green algae test results. 4.2 Report observations outside defined parameters for further action.

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 NA					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

Types of sample techniques include:	• grab • integrated • concentrated
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Unit Mapping Information

This unit supersedes and is equivalent to NWP365A Identify and confirm blue green algae outbreaks.

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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Assessment Requirements for NWPSOU003 Identify and confirm blue-green algae outbreaks

Modification History

Release	Comments
1	These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages. • Assessment Requirements created drawing upon specified assessment information from superseded unit

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. The candidate must be assessed in at least one type of sampling technique listed in the Range of Conditions. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- using safety and personal protective equipment
- interpreting instructions
- interpreting policies, procedures and standards
- performing algae sampling
- maintaining integrity of samples
- recording information and reporting on basic data
- identifying algae types
- conducting blue-green algae identification and enumeration tests
- performing calculations
- reporting test results

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- types and purposes of algae samples
- sampling and testing of water quality parameters related to algae growth
- procedures and techniques for all algae sampling
- hazards associated with collection and handling of blue-green algae samples
- environmental factors which favour the growth of algae

- characteristics of algae
- problems caused by algal blooms
- impact of blue-green algae on water and/or wastewater treatment processes

Assessment Conditions

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

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