



Australian Government

NWPSOU051 Monitor and operate groundwater extraction

Release: 1

NWPSOU051 Monitor and operate groundwater extraction

Modification History

Release	Comments
1	This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages. • New unit, created drawing upon information from deleted units NWP242B and NWP243B

Application

This unit describes the skills required to monitor the extraction of water from waterways and water bodies and to report risks, compliance and complaints. This includes operating pumps and meters. Skills to monitor the availability and quality of supply and control of water flows from the source are also required, in conjunction with the ability to apply legislative and organisational requirements.

This unit applies to those working as field staff with responsibility for ensuring that water extraction complies with water use legislation.

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 in range of familiar contexts.

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. Prepare for work	1.1 Interpret relevant legislation and organisational rules and

	requirements. 1.2 Locate bore sites from plans and job specifications. 1.3 Schedule and plan inspection. 1.4 Select, check and prepare basic equipment to monitor water extraction.
2. Monitor and operate groundwater extraction systems	2.1 Monitor designated locations within groundwater source area according to agreed schedule. 2.2 Conduct inspection taking readings of meters for water depth and water quality. 2.3 Check the integrity of assets. 2.4 Collect samples. 2.5 Make adjustments to flows when required. 2.6 Identify breaches of legislative and organisational requirements.
3. Identify and report risks, breaches and complaints	3.1 Identify risks to public, users and environment. 3.2 Identify and report breaches of relevant legislation. 3.3 Investigate and report complaints from the public and users regarding water allocation and quality.

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					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.

Unit Mapping Information

No equivalent unit.

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 NWPSOU051 Monitor and operate groundwater extraction

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.

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- interpreting plans, instructions and standard operating procedures
- identifying and preventing well contamination
- adjusting pump flows
- isolating tag and lock out pumps
- reading meters
- taking samples
- conducting risk assessment
- inspecting bore assets
- reading levels
- calculating recharge and extraction rates

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.

- system hydraulics and flushing
- system layout
- lock-out procedures for pumps and electric motors
- risk factors and potential hazards of groundwater source systems
- well contaminants
- equipment operation, capacity and limitations
- effects of weather and conditions on operation of site or plant
- basic types of bore construction and principles
- characteristics of groundwater and aquifer

- characteristics of groundwater systems

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.

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