



Australian Government

Assessment Requirements for MSS025006

Collect and evaluate groundwater data

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MSS025006A Collect and evaluate groundwater data

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- collecting representative samples of groundwater in accordance with a site sampling plan for at least two (2) sites
- measuring bore conditions and conducting reliable field tests of groundwater parameters on at least two (2) sites
- planning and preparing for field activities
- interpreting and applying groundwater sampling/monitoring plans and procedures for sites, including requirements covering pre-treatment, containers, preservation, storage, labelling and traceability
- recognising site hazards and applying safe work procedures during sampling, testing and transport to and from site
- communicating effectively with site personnel, drillers and supervisors about issues such as site access and permits, site operations, scheduling of sampling/testing and environmental requirements
- demonstrating correct and safe use and calibration of field instruments and/or equipment
- identifying atypical sampling conditions and samples and taking appropriate action
- identifying and rectifying basic instrument faults
- calculating results using appropriate units/precision
- identifying atypical results as out-of-normal range or an artefact
- seeking advice when issues/problems are beyond scope of competence/responsibility
- cleaning, decontaminating and maintaining purging/sampling equipment
- following relevant legislative requirements for the disposal of waste and the preservation of the environment
- preparing accurate records of groundwater sampling, site observations and measurements
- producing concise and accurate reports within the agreed timeframe.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- terminology used to describe aquifers, drilling/construction of wells and bores, and groundwater sampling/testing procedures
- principles of representative sampling and field testing of common groundwater parameters

- preservation of the integrity of samples
- maintaining identification of samples relative to their source, workplace and/or legal traceability requirements
- typical values of groundwater parameters, common pollutants/contaminants
- links between quality control, quality assurance, quality management systems and sampling procedures
- workplace procedures dealing with legislative requirements for the handling, labelling and transport of hazardous goods
- common site hazards, links between safe work procedures and personal and environmental safety, particularly at high risk sites.

Assessment Conditions

- Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace, or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept in each case).
- Holistic assessment methods include:
 - inspection of groundwater samples collected by the candidate from at least (2) two sites
 - review of groundwater measurements, test results, calculations and site observations produced by the candidate for at least two (2) sites
 - review of sampling/testing records completed by the candidate
 - feedback from supervisors about the candidate's ability to apply workplace procedures consistently, work safely and produce results within the agreed timeframe
 - oral and/or written questions to check the candidate's understanding of groundwater parameters, sampling/test procedures and calculations.
- Access is required to all instruments, equipment, materials, workplace documentation, procedures, and specifications associated with this unit including, but not limited to:
 - vehicles, sampling equipment, field test equipment, digital camera, containers and reagents/consumables
 - safe work procedures and safety equipment
 - workplace procedures, work program, maps, site plans, site sampling plans and test methods, and equipment manuals.

- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing environmental monitoring, management or technology related services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>