



Australian Government

Assessment Requirements for MSS024018 Perform sampling and testing of water

Release: 1

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Modification History

Release 1. Updated unit code. Changes to performance criteria. Range of conditions removed. Assessment requirements amended. Equivalent outcome.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- sampled natural, polluted or process water for both chemical and microbiological parameters
- conducted field tests of at least 2 water samples.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- scientific terminology used in job role covering water chemistry, biology and microbiology
- hydrologic cycle
- fundamentals of aquatic chemistry, including:
 - physical and chemical properties of water
 - chemical equilibria in natural, polluted and process waters
 - biogeochemical processes in freshwater and marine systems
 - water analytical environmental chemistry
 - environmental contaminants in water (fate, transport and bioaccumulation)
- fundamentals of hydrobiology, including:
 - aquatic and benthic flora and fauna
 - aquatic microorganisms
 - marine, estuarine and freshwater ecosystems
 - stratification and eutrophication in water bodies
 - aquatic microbiology
- principles of representative sampling
- principles and procedures for random, systematic and stratified sampling, including consistency of sampling procedures
- laboratory and field test parameters and measurements
- preservation of the integrity of samples
- maintaining identification of samples relative to their source
- workplace and legal traceability requirements

- cost-effectiveness of sampling
- common characteristics of water to be sampled and likely 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
- hazards for role
- health and safety and site environmental management requirements
- importance of personal and environmental safe work procedures particularly at high risk sites
- field test equipment

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of facilities, equipment and resources, including:
 - vehicle transport, survey or test equipment, water sampling and monitoring equipment, camera, consumables
 - documentation, including work program, maps and field protocols, codes of practice, user manuals, workplace safety procedures and sampling, test or survey methods.

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

Links

The MSS Sustainability Companion Volume implementation Guides are available from VETNet: -

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