Assessment Requirements for MSS027006
Coordinate water quality management activities

Release: 2
Assessment Requirements for MSS027006 Coordinate water quality management activities

Modification History

Release 1. Supersedes and is equivalent to MSS027006A Coordinate water quality management activities.

Release 2. Prerequisite code updated. Equivalent outcome.

Performance Evidence

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

- planning and implementing the day-to-day water quality management activities for at least one (1) site, project or ongoing program
- accessing, interpreting and applying relevant legislative/regulatory requirements, standards, codes, guidelines and manuals
- explaining relevant water quality standards and management plans, sampling/monitoring methods, equipment operating procedures and workplace water quality management actions
- verifying the accuracy and completeness of water quality data, results and technical records
- using statistical tests (e.g. to determine data acceptability, estimate uncertainties, examine trends and infer basic relationships)
- investigating unexpected or unacceptable water quality results in a logical and efficient manner to identify possible root causes
- seeking advice when issues/problems are beyond scope of competence/responsibility
- recommending appropriate preventative/corrective actions to control potential/actual non-conformances or incidents
- responding effectively to complaints and requests for information
- providing accurate, complete and timely reports of water quality performance and identifying opportunities for improvements
- maintaining water quality records in accordance with legislative/licensing/workplace requirements
- working safely and monitoring the safety of others.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- water quality management terminology, concepts and principles used in job role
- legislative/regulatory requirements, standards, codes and guidelines dealing with water quality
• workplace water quality management plans and procedures, common water quality issues, control measures and mitigation/management actions
• measurement parameters for waters, sediments or biota relevant to site/project/program
• detailed scientific and technical knowledge of the samples, sampling/monitoring methods, equipment, materials and instrumentation used to generate the water quality data, including calibration, fault-finding and troubleshooting
• expected values for water quality parameters, relevant ANZECC guidelines, and statutory environmental quality concentration limits or similar
• problem-solving techniques and cause analysis
• impacts of common human, environmental and/or meteorological factors on data quality
• sources of interference, uncertainty, limitations of methods and sources of variability
• workplace procedures for identifying/assessing environmental risks/impacts, responding to complaints and environmental incidents, and record management and reporting water quality data
• interpersonal communication, negotiation and conflict resolution techniques
• relevant hazards, health, safety and workplace emergency response procedures.

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:
  • review of water quality management data files, results and records verified by the candidate
  • review of work schedules, checklists/clear work instructions, water quality performance reports prepared by the candidate
  • feedback from manager and/or site personnel regarding the candidate’s ability to safely coordinate day-to-day water quality management activities
  • oral and/or written questions to assess the candidate’s understanding of procedures governing the validation of data, acceptability of data/results, sources of water quality data variability, interferences and uncertainty, and relevant preventative or corrective actions
• analysis of case studies/reports of water quality management issues and incidents relevant to the candidate’s job role.

• Access is required to all instruments, equipment, materials, workplace documentation, procedures and specifications associated with this unit including, but not limited to:
  • site/project/program history
  • relevant legislation, codes and standards; workplace environmental management policies, plans, actions, procedures, checklists and equipment manuals; sampling methods and description of monitoring set-up
  • water quality data sets, records and reports, computer and relevant software or workplace information management system
  • water sampling and testing equipment.

• 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

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