



Australian Government

Assessment Requirements for NWPTRT017 Operate and control activated carbon processes

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the NWP National Water Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and includes:

- applying process formulae of at least one of the following:
 - backwash flow rates (biological activated carbon (BAC), granular activated carbon (GAC))
 - bed expansion
 - dosage powdered activated carbon (PAC)
 - empty bed contact time
- conducting routine plant inspections on asset conditions
- identifying and reporting faults
- making at least one of the following process adjustments:
 - backwash flow rate
 - backwash frequency
 - detention time (PAC)
 - dosage
 - flow rate
 - process flow rate (BAC, GAC)
- performing at least one of the following processes:
 - biologically activated carbon (BAC)
 - granular activated carbon (GAC)
 - powdered activated carbon (PAC)
- taking samples and conducting at least one of the following tests:
 - jar testing
 - odour analysis
 - ultraviolet absorbance at 254 nanometres

Knowledge Evidence

- activated carbon adsorption principles
- features and components of activated carbon processes

- relevant legislation, regulations and workplace procedures
- risk factors and potential hazards associated with activated carbon
- water quality characteristics including:
 - assimilable organic carbon (AOC)
 - biodegradable dissolved organic carbon (BDOC)
 - dissolved organic carbon (DOC)
 - total organic carbon (TOC)

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

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.

Resources for assessment must include access to:

- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including legislation, regulations, codes of practice, workplace procedures and operation manuals.

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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