



Australian Government

Assessment Requirements for NWPTRT040 Operate and control digestion processes

Release: 2

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Modification History

Release 2. Performance evidence point 4 reworded and moved to knowledge evidence.

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:
 - solids loading
 - solids retention time
 - volatile acids to alkalinity ratio
- collecting data and completing documentation
- making process adjustments according to instructions including at least one of the following:
 - feed rate
 - mixing
 - pH
 - sludge withdrawal
- planning and conducting routine inspections
- taking samples and performing at least one of the following tests:
 - alkalinity (anaerobic)
 - gas composition
 - pH
 - Redox
 - total solids
 - volatile acids
 - volatile solids

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of:

- chemical and biological principles of anaerobic digestion
- chemicals used for pH control, odour control, nutrient addition

- detention times
- operation of anaerobic processes
- relevant legislation, regulations and workplace procedures
- risk factors and potential hazards relating to anaerobic bioreactor systems including hazards related to explosives, hydrogen sulphide and carbon dioxide

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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