



Australian Government

**Assessment Requirements for NWPTRT014
Operate and control iron and manganese
removal processes**

Release: 1

Assessment Requirements for NWPTRT014 Operate and control iron and manganese removal processes

Modification History

Release	Comments
1	These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages.

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. The candidate must be assessed in at least one of the processes listed in the Range of Conditions. If not otherwise specified the candidate must demonstrate evidence of performance of the following on least one occasion.

- identifying and reporting faults
- completing logs
- preparing and applying chemical dosing
- monitoring test results and processes
- conducting routine process inspections
- taking samples and performing basic tests including at least either jar testing or iron and manganese analyses
- applying basic process formulae including at least either chemical dosage or detention time
- making basic process adjustments according to instructions including at least one of:
 - dosage
 - flow rate
 - detention time
 - pH

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- chemical forms and occurrence of iron and manganese
- impact of stratification in reservoirs
- problems associated with iron and manganese in drinking water systems

- chemistry of common oxidation removal processes including aeration, chlorination, potassium permanganate
- manganese coated filtration removal processes including greensand
- ion exchange removal processes
- sequestering with polyphosphates
- chemical dosing processes
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Assessment Conditions

Competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace, the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice.

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

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>

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