



Australian Government

UEPOPS105 Operate and monitor reverse osmosis plant

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UEP Electricity Supply Industry – Generation Sector Training Package Release 2.0.

Application

This unit involves the skills and knowledge required to operate, inspect and monitor reverse osmosis plant.

Reverse osmosis is a water purification technology that uses a semipermeable membrane to remove dissolved inorganic solids such as salts, ions, molecules and larger particles from water.

Competency in this unit requires the ability to plan work, operate reverse osmosis plant, test reverse osmosis plant, analyse reverse osmosis plant faults, monitor and inspect reverse osmosis plant, and complete all documentation. Individuals will, in general, work under supervision, in a power generation facility as an operator.

Power generation plant operators are trained and authorised to isolate, prepare plant and issue permits to work.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

There are no prerequisite units

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

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| 1 Plan and prepare work | <ul style="list-style-type: none">1.1 Work health and safety (WHS)/occupational health and safety (OHS) regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, environmental requirements and workplace procedures are identified, applied and monitored1.2 Work requirements are identified from relevant personnel and documentation in accordance with workplace procedures1.3 Documentation to determine reverse osmosis plant status is assessed and evaluate, in accordance with workplace procedures1.4 Inspection and field preparations for reverse osmosis plant service are carried out in accordance with manufacturers' recommendations and specifications, and workplace procedures1.5 Reverse osmosis plant operational prerequisites are established in accordance with manufacturers' recommendations and specifications, and workplace procedures1.6 Sequence for recommissioning of reverse osmosis plant is determined to suit existing circumstances in accordance with workplace procedures |
| 2 Operate reverse osmosis plant | <ul style="list-style-type: none">2.1 Reverse osmosis plant is operated in accordance with manufacturers' recommendations and specifications, and workplace procedures2.2 Reverse osmosis plant is monitored and observed to detect deviations from normal operating conditions in accordance with workplace procedures2.3 Corrective actions are taken to rectify abnormalities in reverse osmosis plant in accordance with manufacturers' recommendations and specifications, and workplace procedures2.4 Reverse osmosis plant is identified and removed from service in accordance with workplace procedures |
| 3 Test reverse osmosis plant operation | <ul style="list-style-type: none">3.1 Operational tests are performed in accordance with workplace procedures3.2 Reverse osmosis plant is observed for correct operational |

		response in accordance with workplace procedures
	3.3	Reverse osmosis plant is returned to required operational status upon completion of testing in accordance with workplace procedures
4 Analyse reverse osmosis plant faults	4.1	Causes of abnormal reverse osmosis plant operating conditions are identified by analysing technical and operational information in accordance with workplace procedures
	4.2	Reverse osmosis plant integrity and personnel safety is maintained in consultation with relevant personnel and technical and operational documentation in accordance with workplace procedures
5 Monitor and inspect reverse osmosis plant	5.1	Reverse osmosis plant is monitored and inspected for normal operation and to detect deviations in accordance with workplace procedures
	5.2	Relevant personnel are notified when defects are detected in accordance with workplace procedures
6 Complete documentation	6.1	Reverse osmosis plant problems, movements, abnormalities and status are reported in accordance with workplace procedures
	6.2	Documentation is updated in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEP Electricity Supply Industry – Generation Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS323 Operate and monitor reverse osmosis plant.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>