



Australian Government

UEPOPS246 Operate waste and contaminated water plant

Release: 1

UEPOPS246 Operate waste and contaminated water plant

Modification History

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

Application

This unit involves the skills and knowledge required to operate, inspect and monitor waste and contaminated water plant associated with a power generating facility.

Wastewater treatment covers the mechanisms and processes used to treat wastewater that is produced as a by-product of power generation activities. Wastewater from generating plants can contain significant levels of metals, flue-gas desulfurization, fly ash, bottom ash and flue gas mercury. After treatment, the treated wastewater can be either reused or released.

Competency in this unit requires the ability to plan and prepare waste and contaminated water plant; operate, test, analyse and inspect plant; report on abnormalities and complete documentation. Individuals will, in general, work under supervision, in a power generation facility as an operator.

Power generation plant operators are typically 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.

Note: Workplace practice

The application of the skills and knowledge described in this unit may require a licence or training permit to practice in the workplace where work is carried out on gas and electrical installations. Additional conditions may apply under state and territory legislative and regulatory licensing requirements.

Pre-requisite Unit

There are no prerequisite units.

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Plan and prepare waste and contaminated water plant work

- 1.1** Safety issues are identified, in accordance with Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards and workplace procedures
- 1.2** Work requirements are identified from relevant personnel and documentation, in accordance with workplace procedures
- 1.3** Documentation to determine waste and contaminated water plant status is assessed and evaluated, in accordance with workplace procedures
- 1.4** Inspection for waste and contaminated water plant service are carried out, in accordance with manufacturers' specifications and workplace procedures
- 1.5** Waste and contaminated water plant operational prerequisites are established, in accordance with manufacturers' specifications and workplace procedures
- 1.6** Sequence for recommissioning of waste and contaminated water plant is determined, in accordance with workplace procedures and site requirements

2 Conduct operation of waste and contaminated water plant

- 2.1** Waste and contaminated water plant is operated, in accordance with manufacturers' specifications and workplace procedures
- 2.2** Waste and contaminated water plant is monitored and observed, in accordance with workplace procedures, to detect deviations from normal operating conditions
- 2.3** Corrective actions are taken to rectify waste and contaminated water abnormalities, in accordance with manufacturers' specifications and workplace procedures
- 2.4** Waste and contaminated water plant is removed from service, in accordance with workplace procedures and site requirements

3 Test waste and contaminated water plant

- 3.1** Tests are performed, in accordance with WHS/OHS and environmental statutory requirements, industry

operation	standards, manufacturers' specifications and workplace procedures
	3.2 Waste and contaminated water plant is observed for correct operational response, in accordance with workplace procedures and legislative requirements
	3.3 Corrective action is taken, in accordance with workplace procedures, when response does not meet documentation, plant integrity or personnel safety requirements
	3.4 Waste and contaminated water plant is returned to required operational status upon completion of testing in accordance with workplace procedures and legislative requirements
4 Analyse waste and contaminated water plant faults	4.1 Causes of abnormal waste and contaminated water plant operating conditions are identified, in accordance with workplace procedures, by analysing technical and operational information
	4.2 Corrective action is taken, in accordance with workplace procedures
	4.3 Waste and contaminated water plant integrity and personnel safety is maintained, in accordance with workplace procedures, through consultation with appropriate personnel and technical and operational documentation
5 Monitor and inspect waste and contaminated water plant	5.1 Waste and contaminated water plant to be monitored and inspected is identified, in accordance with workplace procedures
	5.2 Waste and contaminated water plant is monitored and inspected, in accordance with workplace procedures, for normal operation or to detect deviations
	5.3 Corrective action is taken, in accordance with workplace procedures
	5.4 Appropriate personnel are notified, in accordance with workplace procedures, when defects are detected
6 Complete documentation	6.1 Waste and contaminated water plant problems, movements 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS246B Operate waste and contaminated water plant.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for UEPOPS246 Operate waste and contaminated water plant

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and includes:

- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations including:
 - emergency procedures
 - risk control measures
 - safe working practices
- communicating with personnel
- completing documentation
- complying with legislation, industry standards, codes of practice and regulations
- identifying and responding to abnormal waste and contaminated water plant operating conditions
- interpreting drawings and manufacturers' specifications and manuals
- monitoring and inspecting waste and contaminated water plant
- operating waste contaminated water plant
- organising resources
- planning work
- preparing waste and contaminated water plant or equipment for operation
- reporting on waste and contaminated water plant status
- testing waste and contaminated water plant using diagnostic and data analysis techniques
- using testing and measurement instruments to identify faults and abnormalities
- working with permit to work system

Knowledge Evidence

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

- legislation, industry standards, codes of practice and regulations
- manufacturers' manuals and specifications

- permit to work system
- testing and fault finding techniques
- typical arrangements of power production plant
- waste and contaminated water plant and equipment, its location and operating parameters
- WHS/OHS regulations including:
 - emergency procedures
 - risk control measures
 - safe working practices
- workplace documentation
- workplace policies and procedures

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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