



Australian Government

UEPOPS245 Conduct chemical batching operations

Release: 1

UEPOPS245 Conduct chemical batching operations

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 conduct mixing of chemicals for the treatment of a primary substance.

A chemical that is needed in the workplace in a small amount (i.e. a speciality chemical) is usually made through using a batching process. Considerable care with all compounds and substances must be undertaken when conducting chemical batching operations due to toxicity.

Competency in this unit requires the ability to plan work, perform chemical batching and the completion of work. Individuals will, in general, work as an operator in a power generation facility.

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 work

- 1.1** Work requirements are identified and confirmed with appropriate personnel, in accordance with workplace procedures
- 1.2** Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards, codes of practice, manufacturers' specifications, environmental obligations and workplace procedures are identified, applied and monitored
- 1.3** Potential hazards are identified and risk control measures are selected, in accordance with workplace procedures
- 1.4** Resources, including Material Data Safety Sheet (MSDS) and Personal Protective Equipment (PPE), are inspected and used, in accordance with workplace procedures

2 Perform chemical batching

- 2.1** Staff are notified on commencement and completion of chemical batching work, in accordance with workplace procedures
- 2.2** Chemical requirements for batching is calculated, in accordance with workplace procedures and job requirement
- 2.3** Correct chemical is added to tank or chemical batching plant, in accordance with workplace procedures
- 2.4** Demineralised water is added to chemical batch to correct level, in accordance with workplace procedures
- 2.5** Mixing device is operated, in accordance with workplace procedures
- 2.6** Work site is left clean and safe, in accordance with workplace procedures to ensure personnel safety and power generating plant integrity

3 Complete documentation

- 3.1** Chemical batching problems are reported, in accordance with workplace procedures
- 3.2** 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 UEPOPS245B Conduct chemical batching operations.

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 UEPOPS245 Conduct chemical batching operations

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) requirements including:
 - emergency procedures
 - Personal Protective Equipment (PPE)
 - risk control measures
 - safe working practices
- communicating with personnel
- completing documentation using recording procedures
- complying with legislation, industry standards, codes of practice and regulations
- conducting chemical batching operations
- identifying power generating plant status using diagnostic and testing techniques
- organising resources
- performing chemical batching
- planning and preparing work
- preparing chemical batching plant and/or equipment for operation
- safely handling hazardous materials
- using risk mitigation processes such Safety Data Sheets (SDS)/Material Data Safety Sheets (MSDS)

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:

- chemical batching operations
- chemicals, uses and hazards
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals

- power generating plant and equipment, its location and operating parameters
- power generating plant status
- risk mitigation processes including Safety Data Sheets (SDS)/Material Data Safety Sheets (MSDS)
- safe handling of hazardous materials
- types of chemicals, properties and precautions to be taken
- typical arrangements of power production plant
- WHS/OHS legislated requirements including:
 - emergency procedures
 - risk control measures
 - safe working practices including Personal Protective Equipment (PPE)
- 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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