



Australian Government

NWPNET018 Disinfect network assets

Release: 1

NWPNET018 Disinfect network assets

Modification History

Release 1. This is the first release of this unit of competency in the NWP National Water Training Package.

Application

This unit involves the skills and knowledge required to disinfect network assets.

It includes planning and preparing the worksite and performing volumetric calculations, when additional disinfection is required.

This unit applies to those working as field and operational staff with responsibility for the operation and maintenance of chemical dosing equipment. Those undertaking this unit would work independently, under appropriate supervision, while performing routine tasks with a moderate level of complexity in a familiar context.

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

Pre-requisite Unit

Not applicable.

Competency Field

Networks

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for work

PERFORMANCE CRITERIA

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

1.1 Determine work requirements from specifications, instructions and pre-work inspections

1.2 Conduct risk assessment for environment, safety and

- water quality factors
- 1.3** Select and check equipment and personal protective equipment to meet safety requirements of task and worksite
 - 1.4** Determine size of area to be disinfected according to work requirements
 - 1.5** Perform calculations to establish dose rate, target residual and contact time
- 2 Conduct disinfection**
- 2.1** Set up and operate chemical dosing equipment at injection point according to manufacturer instructions
 - 2.2** Commence chemical dosing at predetermined dose rate
 - 2.3** Perform residual measurement to ensure target disinfection residual is being met
 - 2.4** Achieve contact time and stop chemical dosing
- 3 Finalise work**
- 3.1** Collect samples ensuring types, locations and times comply with work requirements
 - 3.2** Prepare samples for laboratory testing according to work requirements
 - 3.3** Check, maintain and store equipment, tools and materials according to workplace procedures
 - 3.4** Restore worksite, complete and submit workplace records according to 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 NWPNET001 Disinfect network assets.

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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Assessment Requirements for NWPNET018 Disinfect network assets

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 and performance criteria on at least one occasion and includes:

- conducting risk assessment
- handling of chlorine in different forms, including at least one of the following forms:
 - liquid
 - solid
- operating analytical equipment
- operating and maintaining chemical dosing equipment
- operating system valves
- operating network mains
- performing calculations
- performing chemical dosing on at least one of the following network assets:
 - bores
 - network mains and services
 - network storages
- using maps and diagrams

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 dosing
- chlorine handling techniques in at least one of the following forms:
 - gas
 - liquid
 - solid
- interrogation of supervisory control and data acquisition (SCADA) system
- network assets including:
 - bores
 - network mains and services

- network storages
- principles of chlorination and chloramination
- relevant legislation, regulations and workplace procedures
- safe limits of disinfectant residual
- water chemistry
- water network operation

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.

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