



Australian Government

NWPGEN033 Sample and test trade wastewater

Release: 1

NWPGEN033 Sample and test trade wastewater

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 sample and test trade waste.

It includes collecting and preparing trade waste samples, performing field tests and conducting and recording analysis.

This unit applies to those working as trade waste officers or inspectors with responsibility for sampling and testing trade wastewater. Those undertaking this unit would work autonomously, usually with supervisory responsibilities, while performing complex tasks in a range of contexts.

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

Pre-requisite Unit

Not applicable.

Competency Field

General

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for trade waste sampling and testing

PERFORMANCE CRITERIA

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

- | | |
|------------|---|
| 1.1 | Schedule sampling and testing in accordance with a monitoring program |
| 1.2 | Identify the need to sample based on trade waste customer risk, sewer catchment and infrastructure issues |

- 1.3 Review the trade waste approval for the site and determine the relevant flow meter and its location
 - 1.4 Obtain the relevant approvals for access to the site
 - 1.5 Identify quality parameters for waste to be tested according to workplace procedures and relevant trade waste approvals
 - 1.6 Identify appropriate sampling location and type of sample to be taken in accordance with the monitoring program
 - 1.7 Communicate with laboratory regarding sampling, preservation, parameters to be analysed and transportation requirements
 - 1.8 Select and prepare the appropriate sample preservation methods
 - 1.9 Select, check, calibrate and prepare equipment and resources for the proposed testing sampling
 - 1.10 Select, fit and use personal protective equipment relevant to site hazards
- 2 **Conduct trade waste sampling and testing**
 - 2.1 Carry out job safety analysis or risk assessment and adopt necessary hazard controls
 - 2.2 Adopt hygienic work practices and secure the work area
 - 2.3 Determine the appropriate sampling method according to workplace procedures
 - 2.4 Sample and determine the trade waste related to the typical operation of the business
 - 2.5 Collect samples ensuring the sampling techniques, locations and times provide a representative sample of the business trade waste discharge
 - 2.6 Maintain integrity of samples during sampling and field testing
 - 2.7 Conduct field trade waste tests
 - 2.8 Limit hazards and contamination to self, work area and environment according to workplace procedures

3 Finalise work

- 3.1** Apply chain of custody according to workplace procedures
- 3.2** Organise transportation of samples to the laboratory
- 3.3** Assess observational and field data and report any abnormal characteristics to the discharger, seeking explanation and early corrective action
- 3.4** Clean testing equipment and sampling site according to workplace procedures
- 3.5** Review and record results from field and laboratory testing according to workplace procedures
- 3.6** Interpret test results, assess compliance and amend the sampling plan as required

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 NWPGEN014 Sample and test trade wastewater.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for NWPGEN033 Sample and test trade wastewater

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:

- applying labels to samples and prepare appropriate documentation for external analyses
- conducting appropriate manual grab samples
- conducting at least two types of trade waste tests on-site according to job specifications
- conducting hazard and risks assessments
- identifying necessary equipment and resources for sampling and testing
- identifying which parameters can be analysed in-field and which need laboratory testing
- maintaining a safe work environment
- planning working activities
- selecting appropriate sampling containers and preparing documentation
- setting up sampling, flow measuring (if applicable) and recording equipment according to manufacturer specifications
- using field test kits

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 include knowledge of:

- characteristics of trade waste discharges from regular business types
- hazards associated with collection of trade waste samples
- range and purpose of trade waste quality testing and sampling
- range of requirements in order to gain access to worksites
- relevant legislative and organisational requirements
- relevant policies and procedures including chain of custody and required laboratory accreditations
- relevant sampling calculations
- relevant standard methods for testing of water
- sample methods including:
 - grab sample; manual or automatic
 - time-weighted or flow weighted composite sampling

- trade waste sample preparation requirements including:
 - appropriate containers
 - disposal procedures for excess trade waste samples
 - documentation and transportation procedures for trade waste samples including labelling
 - equipment
 - location selection
 - preservation
 - prevention of contamination
 - sampling and testing requirements
 - volume of sample
- trade waste volumes
- water quality parameters of significance to a range of trade waste discharges
- workplace recording requirements

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.

Links

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