



Australian Government

NWPNET037 Inspect sewer or stormwater assets

Release: 1

NWPNET037 Inspect sewer or stormwater 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 inspect sewer or stormwater assets.

It includes planning, preparing and conducting inspections of gravity sewers or stormwater assets, using specialised inspection equipment and transport systems, and reporting on observed defects. It also includes interpreting technical information, identifying and assessing hazards, operating and maintaining specialised technical equipment and generating data and images on the condition and features of the asset inspected.

This unit applies to those working as operators with a specific responsibility for inspecting and reporting on the condition of operational gravity sewers and stormwater assets and new or rehabilitated sewers or stormwater assets; and operating and maintaining specialised inspection equipment. This unit may also be applied to the inspection of other types of asset system. Those undertaking this unit would work under appropriate supervision, while performing routine tasks in a familiar context, and ensuring minimum damage to the environment.

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.

PERFORMANCE CRITERIA

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

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| 1 Prepare for asset inspection | 1.1 Identify inspection purpose and location, size, type and extent of the assets |
| | 1.2 Determine the inspection method and equipment to be used |
| | 1.3 Conduct and document hazard identification and risk assessment and implement appropriate risk control processes |
| | 1.4 Establish and implement asset isolation, flow management plans and inspection schedules in consultation with the system operator |
| | 1.5 Arrange for preparation of the asset and worksite for inspection |
| 2 Operate and maintain inspection equipment | 2.1 Set up, calibrate and operate equipment relevant to size, type and conditions of the asset according to industry codes and specifications |
| | 2.2 Examine, record and report features of the asset |
| | 2.3 Conduct routine maintenance of inspection equipment according to manufacturer instructions |
| | 2.4 Diagnose and correct equipment malfunction |
| | 2.5 Recognise and respond to potential risks to equipment or system operation |
| 3 Identify and code defects and features observed during inspection | 3.1 Identify and code structural defects, service conditions and other features of the asset |
| | 3.2 Record asset and inspection data using approved data capture software |
| | 3.3 Investigate and report defects, service conditions or other features according to workplace procedures |
| | 3.4 Identify an asset at risk of imminent failure and communicate details to the system operator or owner |
| | 3.5 Identify and report defects or malfunctions of access structures |
| 4 Withdraw inspection equipment and reinstate | 4.1 Clean and inspect equipment for damage during and after withdrawal from the asset |

system operation

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|----------|---------------------------------------|---|
| | 4.2 | Reinstate system operation according to asset isolation, flow management plan and specifications |
| | 4.3 | Restore worksite to meet organisational, safety, environmental and property owner requirements |
| 5 | Review, record and report work | |
| | 5.1 | Check inspection data and images prior to removal of equipment for completeness, quality and accuracy |
| | 5.2 | Compile inspection reports and present to the stakeholder in the required format |
| | 5.3 | Complete job documentation and communication 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 NWPNET016 Inspect sewer or stormwater line.

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 NWPNET037 Inspect sewer or stormwater 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:

- accessing and interpreting drawings, plans, maps, diagrams, instructions, specifications relevant to workplace procedures
- applying industry inspection reporting code requirements
- inspection procedures
- assessing risks and preparing for hazards
- calibrating equipment for asset inspection
- completing and processing inspection information according to workplace procedures
- conducting inspections and identifying and coding asset defects and condition
- identifying structural defects, service conditions and other features in a range of different assets
- identifying the location and extent of the work, methods to be applied and equipment, including safety equipment, to be used
- implementing and reinstating isolation techniques
- investigating and recording defects and asset conditions
- operating and maintaining specialised inspection equipment
- planning, preparing and conducting an inspection of gravity sewer or stormwater assets
- preparing for asset inspection
- removing equipment and reinstating system operation
- reporting asset at risk of failure
- restoring worksite
- using data capture software
- using safety equipment and personal protective equipment.

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:

- capabilities of specialised equipment
- confined space entry procedures

- construction and operation of sewerage and stormwater systems
- data capture, recording and reporting software
- drawings, plans, maps and diagrams
- effects of weather and conditions on operation of worksite or plant
- environmental aspects of operation and installation
- equipment operation
- industry inspection reporting code
- potential hazards and risk factors of operational processes
- relevant legislation, regulations and workplace procedures
- routine maintenance and calibration requirements of inspection equipment.

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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