



Australian Government

NWPNET023 Maintain and repair network assets for wastewater

Release: 1

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Modification History

Release	Comments
1	This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages. • New unit, created drawing upon information from deleted units NWP255B, NWP257B, NWP253B and NWP229B

Application

This unit describes the skills required to maintain and repair pipes, drains and wastewater collection assets.

This unit applies to those working as field staff with specific responsibility for ensuring that repair and maintenance of wastewater assets is completed in a safe and timely manner.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work under indirect supervision, while performing routine tasks, in a familiar context, ensuring minimum damage to the environment.

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

Competency Field

Networks

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Plan and prepare for work	1.1 Conduct risk assessment for environmental and safety factors. 1.2 Determine work requirements, materials and configuration from plans, specifications, instructions and/or organisational procedures.

	1.3 Check coordination issues with relevant personnel, including isolations, licences and permits to work. 1.4 Identify networks system operation requirements. 1.5 Arrange remove site protection.
2. Conduct maintenance	2.1 Isolate the work area. 2.2 Determine appropriate repair method from job specifications and instructions. 2.3 Maintain and repair structural damage to assets. 2.4 Check maintenance and repairs to assets to ensure specifications are met. 2.5 Restore work site to meet environmental and organisational requirements.
3. Review, report and record work	3.1 Check, tag and report faulty equipment and tools. 3.2 Store equipment, tools and materials. 3.3 Complete and process workplace records.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning					Reading					Writing					Oral communication					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Range of Conditions

Network assets includes:	- water mains - connections
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	• pump stations
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Unit Mapping Information

No equivalent unit.

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 NWPNET023 Maintain and repair network assets for wastewater

Modification History

Release	Comments
1	These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages.

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. The candidate must be assessed on at least two of the network assets listed in the Range of Conditions. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- planning work site i.e. personnel, equipment, materials
- requesting permits, approvals, other utilities diagrams and maps
- conducting risk implementing appropriate environmental controls
- using tools and specific wastewater equipment
- selecting and applying PPE
- preserving personal safety
- performing work-related calculations
- identifying and responding to operational problems including main, connection chokes, pump stations and faults
- using communication tools including phones and laptops
- interpreting plans, instructions and procedures
- determining location, size, utilities, services from plans, specifications and organisational procedures
- applying excavation techniques
- maintaining and repairing wastewater pipes and fittings by:
 - undertaking excavation
 - clearing chokes
 - undertaking CCTV inspection for roots intrusion, storm water ingress and infiltration
 - jet foaming
 - jet cleaning
 - installing connections
 - installing pipes and fittings
 - measuring and cutting pipes
 - making joints

- selecting and placing bedding and backfill material
- locating and repairing chokes
- repairing valves
- controlling flows in gravity networks
- maintaining and repairing structures by:
 - undertaking excavation
 - repairing access chambers
 - maintaining pump stations

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- system hydraulics basics
- infiltration
- roots intrusion
- storm water ingress
- excavation techniques
- ground support systems
- environmental and health aspects and impacts
- relevant legislation, policies and procedures
- safety data sheets (SDS)
- landscape and ground structure of work area
- equipment operation, capacity and limitations
- control systems
- pipe systems and installation requirements
- characteristics of pipe materials
- testing and sampling systems
- methods of repairing concrete, brick and stone structures
- concrete placement techniques, including compaction
- relevant utilities and service bodies to identify allocation of road reserve
- effects of weather and conditions on construction site or plant
- requirements around excavation
- Cathodic Protection, Denso wrap, Stopaq

Assessment Conditions

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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