



Australian Government

Department of Education, Employment and Workplace Relations

HLTPOP216C Monitor and maintain septic or on-site systems

Release: 1

HLTPOP216C Monitor and maintain septic or on-site systems

Modification History

Not Applicable

Unit Descriptor

Descriptor

This unit aims to describe the competencies needed to identify the basic way in which septic tanks function, and the strategies needed to maintain on-site systems in the community

Application of the Unit

Application

Plumbing work must only be performed by a person authorised by registration or licence granted by the relevant State or Territory regulatory authority under legislation

As certification may vary between States and Territories workers should consult with the relevant regulatory authority before undertaking this work

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills

This unit contains Employability Skills

Elements and Performance Criteria Pre-Content

Elements define the essential outcomes of a unit of competency.

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. Terms in italics are elaborated in the Range Statement.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1. Identify components of the septic or on-site system in the community

1.1 Identify household *plumbing design and fixtures* and the way in which effluent and sullage (grey water) waste leaves the house or building to go out to the waste disposal system

1.2 Identify *septic tank design and components of on site systems*

1.3 *Identify the basic way in which septic tanks work* to treat the sewage

1.4 Identify problems that can occur with septic systems and household plumbing and fixtures

ELEMENT

2. Monitor and maintain the septic or on-site disposal system in the community

PERFORMANCE CRITERIA

- 2.1 Identify strategies within the workers own roles and responsibilities to prevent the transmission of disease as it relates to septic or on site systems
- 2.2 In conjunction with supervisor, *develop a work plan* in relation to the identified strategies to be used
- 2.3 Implement strategies in accordance with the plan
- 2.4 Report any difficulties or *problems* to supervisor in accordance with organisation policies and procedures
- 2.5 Refer any problems or difficulties that are outside of area of responsibility or expertise to key people or agencies

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Essential knowledge:

The candidate must be able to demonstrate essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes knowledge of:

- Appropriate trees to plant around septic tanks if required consistent with local codes of practice or legislation
- Basic knowledge and understanding of the water and sewerage plans for the community if available
- How to monitor septic system and check for signs of potential problems
- OHS requirements in relation to working with sewage and sewerage systems
- Sewerage disposal strategies for communities or outstations without a sewerage disposal system (on site/septic system or sewerage/effluent system) e.g. grease trap and soakage pit, pit toilets, shallow trench latrines etc.
- Various problems that can happen household plumbing, on site systems and the reasons why e.g. people putting things other than toilet paper down the toilet, people putting food scraps down the sink etc.
- What sewage is and the difference between effluent (black) and sullage (grey) water

Essential skills:

It is critical that the candidate demonstrate the ability to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes the ability to:

- 'Check for signs' of potential problems
- Apply monitoring and recording skills, i.e. checklists, notes etc.
- Apply problem solving skills in relation to identifying potential problems that can occur with septic or on-site systems, and household plumbing and fixtures
- Demonstrate understanding of the how septic/on-site systems function
- Effectively network and communicate with the employing organisation, householders,

REQUIRED SKILLS AND KNOWLEDGE

community members, key people and outside agencies

- Monitor septic or on site systems and check for signs of potential problems
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues
- Use a phone and fax

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate this competency unit:

- The individual being assessed must provide evidence of specified essential knowledge as well as skills
- Consistency in performance should consider the workers ability to be able to monitor septic or on-site systems, and check for signs of potential problems
- This needs to occur more than once and over a period of time

Access and equity considerations:

- All workers in the health industry should be aware of access and equity issues in relation to their own area of work
- All workers should develop their ability to work in a culturally diverse environment
- In recognition of particular health issues facing Aboriginal and Torres Strait Islander communities, workers should be aware of cultural, historical and current issues impacting on health of Aboriginal and Torres Strait Islander people
- Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on health of Aboriginal and/or Torres Strait Islander clients and communities

EVIDENCE GUIDE

Context of and specific resources for assessment:

- This unit is best assessed on the job or in a realistic workplace setting
- Access to:
 - a phone and fax when required
 - tools, materials and equipment for basic repairs and maintenance tasks if necessary
 - appropriate trees to plant around septic tanks if required
 - simulation of realistic workplace setting for assessment

Range Statement

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Plumbing design and fixtures may include:

- Bath , basin and shower recess
- Drain or floor waste gully
- Kitchen sink
- Grease traps
- Water trough
- Toilet and toilet vent
- Sewer pipe
- Rod end
- Inspection openings
- Disconnecter traps, 'S' or 'P' traps

RANGE STATEMENT

Septic tank design and components of on-site systems may include:

- Inspection opening
- Round or rectangular tank design
- Two tank design or one tank with a dividing wall down the middle
- Concrete bottoms and lids, some rectangular tanks may have metal lids
- Scum bucket
- Inlet/outlet pipes
- Baffle
- Leach/French drain
- Soakage trenches and transpiration beds

Identify the basic way in which septic tanks work to treat the sewage may refer to:

- Germs treat the waste matter and turn it into a sludge or effluent (waste water) which is then carried to the leach drain etc
- A scum blanket (hard crust) forms on the top of the material in the septic tank creating an air tight seal which assists in the break down of sewage by the germs

RANGE STATEMENT

Problems that can occur may include but are not limited to the following:

- Cars driving over septic tanks lids and drains causing them to collapse
- Sludge build up in the tank
- Scum blanket or solid matter that may be blocking the inlet or outlet pipes
- Broken, blocked or collapsed leach/French drains
- Septic tanks that are not installed correctly, or installed in the wrong position e.g. too close to a water supply, in areas that flood regularly, in areas that have a high water table etc.
- Kitchen sink blocked by food scraps
- Flushing toilet bowl blocked
- Flushing toilet cistern not working
- Grease trap lids not properly sealed resulting in smell, and access for pests to breed
- Septic tank lids that are not sealed properly resulting in smell, the possibility of people coming into contact with disease causing germs, and access for pests to breed
- Leaking taps and toilet cisterns which can fill up septic systems

RANGE STATEMENT

Identify strategies within the workers own roles and responsibilities may include:

- Education/health promotion to householders and community members as part of job role
- Repairs and maintenance to household or community plumbing and fixtures to ensure that all faulty, blocked, damaged or worn out parts are mended or replaced as soon as possible
- Monitoring and maintaining septic or on-site systems, i.e. check scum bucket, blanket, inlet/outlet pipes, sludge, and the lid of the tank for cracks and damage. Also need to check for overflow, and if drain has collapsed
- Checking for signs of potential problems with on-site systems, e.g. the sewage in the toilet or the liquid waste from other fixtures flows away very slowly, liquid waste overflows from the disconnector traps, wet areas on top of the tank, etc.
- Planting appropriate trees around septic tanks to prevent cars from driving over the top of them if required
- Assisting with septic tank pump outs

Develop a work plan may include:

- Diary planner/timetable
- Prioritising tasks
- Organising task check lists
- Ordering in supplies i.e.: trees to plant around septic tanks, etc.

Report may be:

- Verbally in either first language or English
- Written in either first language or English
- By showing supervisor the problem

Referrals may be:

- Verbally in either first language or English depending on the target group and whether or not the referrals take place internally within the community, or outside the community to other key people or agencies
- Written correspondence i.e.: faxes, letters, etc.
- Photos of the problem/issue
- Video of the problem issue

RANGE STATEMENT

Problems that may be outside of the workers area of responsibility include some of the following:

- Inappropriate septic tank size or design, e.g. a septic tank that is unable to deal with fluctuating occupancies in the household
- Inappropriate installation of septic tanks, e.g. septic tank installed less than 100m from the communities water supply
- Septic tank and leach drain that need replacing

Key people or agencies may include:

- Community council
- Environmental Health Officers
- Essential Services Officers
- Relevant water authority
- Plumbers
- Others involved with the maintenance of on - site systems

Relevant others:

- Housing Officers/managers
- Community council
- Housing and Local Government
- Contractors

Follow up procedures may include:

- Monitoring reported repairs and maintenance requirements to ensure that problems are being adequately addressed and dealt with
- Ensuring that the work is being done within an appropriate time frame, particularly for urgent repairs and maintenance
- Ensuring that all repairs and replacement parts are being made with durable health hardware items appropriate for the region
- Monitoring community reporting processes

Unit Sector(s)

Not Applicable