



**Australian Government**

# **FWPWPP3217 Process production effluent**

**Release: 1**

## FWPWPP3217 Process production effluent

### Modification History

| Release | Comment                                                                                                                                                                                                                               |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Replaces equivalent unit FPIWPP3217B Process production effluent, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2.<br>This is the first release of this unit in the new standards format. |

### Application

This unit of competency describes the outcomes required to operate the effluent plant and distribute waste water to pasture.

The unit applies to production operators and technicians who process production effluent in a forest and wood products factory setting and includes draining and cleaning equipment.

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

### Pre-requisite Unit

Nil

### Unit Sector

Wood Panel Products

### Elements and Performance Criteria

| <i>Elements describe the essential outcomes.</i> | <i>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.</i>                                                                                                                                                                                                                                                                              |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Prepare effluent plant                        | 1.1 Select appropriate personal protective equipment and check for operational effectiveness.<br>1.2 Use equipment in line with organisational safety procedures, manufacturer's instructions and environmental protection practices.<br>1.3 Set up pumping lines and check for operational effectiveness.<br>1.4 Pump treatment solution from mixing tank to effluent line, settling pits and clarifier.<br>1.5 Run sludge from clarifier and drain water from sludge beds in line |

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | with organisational procedures and environmental protection practices.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 2. Distribute water to pasture   | <p>2.1 Set flow rate and pump water to pasture area.</p> <p>2.2 Check absorption and pH levels; monitor and adjust flow rate for optimal distribution.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3. Complete operator maintenance | <p>3.1 Follow organisational safety procedures to lock out equipment.</p> <p>3.2 Drain settling pits and clean to collection point.</p> <p>3.3 Clean solids from discharge drain and dispose of in line with environmental protection practices.</p> <p>3.4 Recirculate water from catchment area to irrigation.</p> <p>3.5 Monitor dam banks for weed and vermin.</p> <p>3.6 Keep effluent plant area clear of foreign bodies and debris in line with organisational safety procedures.</p> <p>3.7 Record and report effluent processing and equipment faults to appropriate personnel.</p> |

## Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

|                                    |                                                                                                                                                                                                                                                     |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy skills to:                | <ul style="list-style-type: none"> <li>measure correct amount of treatment solution required for settling pits and clarifier</li> <li>complete routine calculations to determine optimal flow rate for water distribution and pH levels.</li> </ul> |
| Reading skills to:                 | <ul style="list-style-type: none"> <li>interpret: <ul style="list-style-type: none"> <li>workplace health and safety and other organisational procedures</li> <li>safety data sheets</li> <li>manufacturers' instructions.</li> </ul> </li> </ul>   |
| Writing skills to:                 | <ul style="list-style-type: none"> <li>complete accurate basic records for effluent processing and equipment faults.</li> </ul>                                                                                                                     |
| Planning and organising skills to: | <ul style="list-style-type: none"> <li>efficiently and logically sequence the stages of effluent treatment and water distribution.</li> </ul>                                                                                                       |
| Problem-solving skills to:         | <ul style="list-style-type: none"> <li>identify and dispose of foreign material</li> <li>recognise faulty equipment and resolve by reporting or rectifying.</li> </ul>                                                                              |

|                       |                                                                                                                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Technology skills to: | <ul style="list-style-type: none"><li>• select and use appropriate personal protective equipment for processing production effluent</li><li>• efficiently and safely operate and monitor mechanical pumps used for processing effluent.</li></ul> |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Range of Conditions

Not Applicable

## Unit Mapping Information

FPIWPP3217B Process production effluent

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

# Assessment Requirements for FWPWPP3217 Process production effluent

## Modification History

| Release | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | <p>Replaces equivalent unit FPIWPP3217B Process production effluent, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format.</p> <p>Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement.</p> |

## Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- process production effluent over two four hour shifts
- across those two shifts complete these activities:
  - treat production effluent
  - distribute treated water to pasture
  - drain and clean equipment and dispose of solids
  - complete basic written records of process outcomes and equipment faults.

## Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- applicable commonwealth, state, territory or local government regulations relevant to effluent discharge
- environmental protection practices for processing production effluent:
  - reducing energy use
  - distributing treated water with appropriate levels of acidity and alkalinity
  - monitoring presence of weeds and vermin
  - disposing of solids and hazardous substances
- purpose of treating effluent and distributing water to pasture
- typical work flow processes and effluent treatment techniques

- properties, at a basic level of understanding, of treatment solutions used in effluent treatment
- range of acceptable levels of acidity and alkalinity in processed effluent to minimise environmental impacts on the local area
- purpose, features and operation of equipment used to process production effluent:
  - pumping lines
  - mixing tanks
  - effluent line settling pits
  - clarifiers
  - sludge beds
- methods used to:
  - safely handle chemicals used in the treatment process
  - drain and clean equipment
- organisational procedures specific to processing production effluent:
  - workplace health and safety with particular emphasis on equipment lock out, use of personal protective equipment and handling hazardous substances
  - communication reporting lines
  - recording and reporting process outcomes and equipment faults.

## Assessment Conditions

The following resources must be made available:

- effluent processing and water distribution plant including:
  - pumping lines
  - mixing tanks
  - effluent line settling pits
  - clarifiers
  - sludge beds
- personal protective equipment suitable for processing production effluent
- treatment solution
- manufacturers':
  - safety data sheets
  - instructions for equipment use
  - recommendations for draining and cleaning equipment
- template documents for recording process outcomes and equipment faults
- relevant personnel for the purposes of communicating information
- organisational procedures for processing production effluent.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

## Assessor requirements

### Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

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