

# Administrative procedures for water recycling

## Low-exposure recycled water schemes:

- Irrigation of public open spaces (such as playing fields & parks)
- Irrigation of pasture and fodder crops
- Irrigation of heavily processed food crops
- Irrigation of non-food crops
- Dust suppression on mining or construction sites

## High exposure recycled water schemes:

- Augment a supply of drinking water via a source supply (e.g. a dam)
- A development by way of a dual reticulation system
- Irrigate minimally processed food crops

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# 1. Introduction

## 1.1. Purpose

The Administrative procedures for water recycling complements the Code of Practice for Water Recycling. The procedures explains the Department of Health (DoH) notification process for low-exposure recycled water schemes and approval process for high-exposure recycled water schemes in the Northern Territory.

The term recycled water is commonly taken to mean any sort of wastewater that has been treated for the purpose of beneficial reuse. For the purpose of this part, recycled water applies to sewage or effluent, sourced from a service provider's infrastructure that is intended to be reused. A common example is treated effluent sourced from a water utility's sewage treatment plant that is intended to be reused for municipal irrigation.

## 1.2. Scope

The procedures apply to:

- Low-exposure recycled water schemes
  - Irrigation of public open spaces (such as playing fields & parks)
  - Irrigation of pasture and fodder crops
  - Irrigation of heavily processed food crops
  - Irrigation of non-food crops
  - Dust suppression on mining or construction sites.
- High-exposure recycled water schemes
  - Augment a supply of drinking water via a source supply (e.g. a dam)
  - A development by way of a dual reticulation system
  - Irrigate minimally processed food crops.

## 1.3. Statutory framework

### 1.3.1. Public and Environmental Health Act and Regulations

The *Public and Environmental Health Act 2011* provides a head of power enabling administration of the Public and Environmental Health Regulations 2020. The operation and management of any recycled water scheme installed in the Northern Territory must not cause a public health nuisance in terms of the *Public and Environmental Health Act 2011*.

The Public and Environmental Health Regulations 2014 – Part 6 Wastewater, detail the legislative requirements with regard to a wastewater management system that has a capacity to recycle water, and that is not an on-site wastewater management system. The Code is prescribed code and must be read in conjunction with the Public and Environmental Health Regulations.

### 1.3.2. Building Act and Regulations

Plumbing and drainage works undertaken inside building control areas must comply with the codes adopted under Building Regulation 4. The requirements in the Building Act 1993 and Regulations apply inside declared building control areas.

The codes referred to in Building Regulation 4 include the Building Code, the Plumbing Code (PCA) and the Code of Practice for Wastewater Management. These codes also refer to Australian Standards which are therefore also technical requirements

For all drainage works being undertaken, the plumber or drainer carrying out drainage works must notify the Director of Building Control (by contacting BAS) of the completion of drainage work prior to covering up those works; and stop carrying out those works if required by the Director of Building Control.

Where plumbing and drainage works are undertaken without other building work (e.g. replacement or upgrades to an existing disposal area) a building permit may not be required. For all drainage works being undertaken, the plumber or drainer carrying out drainage works must notify the Director of Building Control (by contacting Building Advisory Services) of the completion of drainage work prior to covering up those works; and stop carrying out those works if required by the Director of Building Control. This notification will facilitate the creation of a 'Plumbing only permit' associated with the building record. In these circumstances the plumbing and drainage works must be certified by a certifying plumber and drainer, a certifying plumber or drainer (design) or a certifying engineer (hydraulic) and a section 40 certificate of compliance must be submitted to BAS within 7 days after completion of the works to be included on the building record.

If a building permit applies then the recycled water scheme must form part of the approval by a building certifier. Generally, the building certifier will require the installation to be certified by a certifying plumber and drainer or a certifying engineer (hydraulic) and a section 40 certificate of compliance submitted.

## 2. Relevant documentation

### 2.1. Code of Practice for Water Recycling

The Code of Practice for Water Recycling (the Code) is a process document and provides proponents of recycled water schemes with advice on how to demonstrate compliance with the Australian Guidelines for Water Recycling 2006 (AGWR) for low exposure and high exposure recycled water schemes.

### 2.2. Low exposure recycled water schemes

- Calculation tool (Excel spreadsheet): Class A+ recycled water
- Calculation tool (Excel spreadsheet): Class A recycled water
- Calculation tool (Excel spreadsheet): Class B recycled water
- Calculation tool (Excel spreadsheet): Class C recycled water
- Calculation tool (Excel spreadsheet): Class D recycled water.

## 2.3. High exposure recycling water schemes

- Preliminary DoH approval checklist for a RWMS
- DoH approval checklist for a RWMS
- Recycled Water Management System – RWMS template
- Critical Control Point Template
- Model recycled water end-user agreement
- Information sheet – recycled water
  - Indicators, reference pathogens & log reductions: What does it all mean?
  - Calculating log reduction values
  - Critical control points
  - End-user agreements
  - Getting chlorination right
  - Non-treatment barriers – End-use and on-site controls
  - Recycled water – Public health incident - Notification and response
  - The benefits of risk-based prevention vs end-point testing
  - Types of monitoring
  - Validation and verification.

## 3. Notification for low-exposure recycled water scheme

### 3.1. Completion of form

The preparation of the notification for low-exposure recycled water scheme must be carried out by a wastewater consultant [Hydraulic engineer or a Certifying plumber and drainer (design)] using the approved form. This form is available on the [Northern Territory Government website](#).

The form requires the completion of six sections:

1. Notification detail
2. General and supporting information
3. Managing risk posed by users of recycled water
4. Monitoring of recycled water
5. Recycled water end-user agreements
6. On-site controls.

## 4. Application for high exposure recycled water scheme

### 4.1. Completion of form

The preparation of the application for high-exposure recycled water scheme must be carried out by a hydraulic consultant using the approved form. This form is available on the [Northern Territory Government website](#).

The form requires the completion of five sections:

1. Application detail
2. General and supporting information
3. Preliminary DoH approval checklist for a recycled water management system
4. DoH approval checklist for a recycled water management system
5. Submission of RWMS (using template).

### 4.2. Lodgement of forms

A notification/application fee is applicable and must be payable to the NTG Receiver of Territory Monies. Further information about the fees is available on the [Northern Territory Government website](#).

The notification/application must be signed by the applicant, i.e. recycled water scheme owner, scanned, and lodged online with the receipt of payment to [wastewater@ntg.gov.au](mailto:wastewater@ntg.gov.au)

## 5. Decision tree for recycled water schemes

