

Wastewater management

Introduction

If you are not connected to a sewer you will need another way to collect, treat and dispose of wastewater.

This section has information for people who want to install a wastewater system in the Northern Territory (NT).

This includes septic tanks, holding tanks and treatment systems. Read more about [types of wastewater system](#).

In this section you can find out how to install on-site and large scale systems for:

- [unsewered rural or remote residential properties](#)

In most cases you'll need a licensed plumber or hydraulic engineer to help design and install your system.

Wastewater systems in the NT

The administrative process to install a wastewater system may involve different NT government agencies and consultants depending on:

- where you want to install the system:
- [inside a building control area](#)
- or [outside a building control area](#)
- the scale of the system -on-site or large
- technology - conventional or alternative
- the type of system.

Types of wastewater system

Read below for information about how wastewater systems are classified.

On-site systems

An on-site wastewater system has a daily hydraulic flow of 8,000 litres or less.

Conventional on-site wastewater systems include septic tanks and holding tanks.

Alternative on-site wastewater systems include:

- aerated wastewater treatment systems
- biological treatment systems
- composting toilet systems
- hybrid toilet systems

- pit toilets.

Installation requirements are determined by the type of on-site wastewater system and whether it will be installed:

- [inside a building control area](#)
- or [outside a building control area](#).

Large scale systems

Large scale on-site wastewater systems and decentralised wastewater systems have a designed hydraulic load greater than 8,000 litres per day.

Before installing these systems, you will need [wastewater works design approval](#).

Large scale systems may also require a Northern Territory Environment Protection Authority (NT EPA) waste discharge licence.

For more information go to the approvals and licences page at the [NT EPA website](#) .

Inside building control areas

Wastewater systems inside building control areas are subject to the Building Act. They are administered by Building Advisory Services at the Department of Infrastructure, Planning and Logistics.

You can use the [online tool](#) to check if your land is in a building control area.

Read more about [building control areas](#).

For all plumbing and drainage works inside building control areas you will need:

- a registered certifying plumber or hydraulic engineer to certify the design
- a certifying plumber to certify the installation.

To find a registered hydraulic engineer or certifying plumber, search the [Public Register of Building Practitioners](#) .

Install a wastewater system alongside other works

If the wastewater system is installed at the same time as building a house, industrial or commercial development - your plumber or engineer will need to provide documents to the building certifier.

Before giving an occupancy permit, the building certifier will need:

- the plumbing and drainage installation, system installation, design and certification documents
- for an on-site wastewater system on industrial or commercial property, a Department of Health wastewater works design approval.

Install a wastewater system on its own

If there is no other building work, your plumber must:

- [contact Building Advisory Services](#) before starting work
- arrange for a mandatory inspection of drainage work - do not cover or fill over this work until it has been inspected
- submit the installation, design and certification, and plumbing and drainage installation documents
- submit a Department of Health wastewater works design approval for an alternative on-site wastewater system installed for an industrial or commercial property.

On-site wastewater systems for residential properties

Your licensed plumber must submit a notification of installation of an on-site wastewater system before work starts on all on-site systems providing secondary treatment for residential properties inside building control areas.

When work is finished, they must submit the second part of the form, the notification of installation completion.

[Notification of installation/completion of an on-site wastewater system](#) (86.8 kb)

[Notification of installation/completion of an on-site wastewater system](#) (398.9 kb)

The forms must be submitted to the Department of Health using the contact details provided.

On-site wastewater systems for industrial and commercial properties

You must seek approval from the Department of Health before work starts on all on-site systems providing secondary treatment for industrial or commercial properties inside building control areas.

Read more about [wastewater works design approval](#), including how to apply.

Outside building control areas

Wastewater systems installed outside building control areas are administered by the Department of Health. They are subject to the requirements of the Public and Environmental Health Act and regulations.

This includes on-site wastewater systems and decentralised systems.

You can use the [online tool](#) to check if your land is in a building control area.

Read more about [building control areas](#).

On-site systems

Before starting work on any on-site wastewater systems with a maximum hydraulic flow of 2000 litres or under per day, your licensed plumber must fill in a notification of installation of an on-site wastewater system.

When work is finished, they must submit the second part of the form, the notification of installation completion.

[Notification of installation/completion of an on-site wastewater system](#) (86.8 kb)

[Notification of installation/completion of an on-site wastewater system](#) (398.9 kb)

The forms must be submitted to the Department of Health using the contact details provided.

Aboriginal community housing

The proponent of any Aboriginal housing must contact the Department of Health at the design stage as alternative on-site wastewater systems may require a wastewater works design approval.

Large scale systems

Before starting work on large scale on-site wastewater systems including those with a hydraulic flow exceeding 2000 litres per day and decentralised wastewater systems, you will need [wastewater works design approval](#).

Wastewater: rural and remote residential

This page has information for people who want to install an on-site wastewater system on their residential rural or remote property.

All on-site wastewater systems must be installed by a licensed plumber. If the system is to be installed [inside a building control area](#), the design and installation must be certified.

Alternative on-site wastewater systems

For all alternative on-site systems, your licensed plumber must fill in a notification of installation of an on-site wastewater system before work starts.

When work is finished, they must submit the second part of the form, the notification of installation completion.

[Notification of installation/completion of an on-site wastewater system](#) (86.8 kb)

[Notification of installation/completion of an on-site wastewater system](#) (398.9 kb)

The form must be submitted to the Department of Health using the contact details provided.

Read more about alternative on-site and other [types of wastewater system](#).

Greywater reuse

The following information is for people who want to reuse greywater from their home. If you grow food commercially, you should read about [using recycled water to grow crops](#).

Greywater is wastewater from bathrooms, laundries and kitchens. You can use greywater to water your lawns and gardens.

You can apply greywater to your garden - using a bucket, container, or temporary hose - or install a permanent greywater system.

Greywater can carry disease, chemicals and dirt. You can reduce the risk by using greywater sensibly.

Using greywater

You can use a bucket, container or temporary hose to apply greywater from your bathroom or laundry to garden or lawn areas.

You must not apply greywater within 50m of a bore that will be used by people to drink or wash.

The chemicals in greywater can damage your house.

The point where you release greywater must be more than:

- 0.5m from a fence, path, driveway or carport
- 1.2m from a boundary without a fence
- 1.2m from buildings other than a carport.

Guidelines

Follow these guidelines for using greywater sensibly:

- don't use greywater if other people in the house are sick
- don't use greywater from washing clothes covered in vomit or faeces - this includes nappies
- don't keep untreated greywater for more than 24 hours
- don't use kitchen wastewater - it must be treated before use
- try not to splash greywater
- keep children away from areas where greywater is used until it has soaked into the ground
- don't let greywater form puddles or run off onto other properties, watercourses and drains
- don't keep watering in one spot - salts and other contaminants will build up
- rotate greywater use with mains and rain water - this will help flush salts from the soil
- don't overwater your plants
- be careful when watering acid-loving plants such as azaleas and camellias - greywater tends to be slightly alkaline
- if plants are damaged, reduce the amount of water used or try a bigger irrigation area
- wash your hands before eating, drinking or smoking.

Permanent greywater systems

The most commonly used permanent greywater systems are diversion devices and treatment systems.

If you want to install a permanent greywater system, you must choose a product that has been approved by the Department of Health. Read about and get lists of [approved products](#).

Laws and regulations to be followed will vary if the device is to be installed either:

- [inside a building control area](#)
- or [outside a building control area](#).

Diversion devices

Diversion devices use gravity or a pump to move greywater without storing or treating it. No permit or approval is required. These devices must be installed by a licensed plumber.

Gravity diversion devices have a valve, switch or tap fitted to the outlet of a plumbing fixture, such as a laundry sink, to divert greywater for use.

Pump diversion devices use a surge tank to move greywater without storing or treating it. All greywater should be screened as it enters the tank. The screens must be cleaned regularly.

Diversion devices must meet the following criteria:

- each system installed is for a single home only
- you must not store greywater
- you must not use kitchen wastewater
- greywater must not be used for spray irrigation - the system must release it below the surface of the ground
- you must connect an overflow to a sewer or septic tank.

Treatment systems

Greywater treatment systems collect, store, treat and may disinfect greywater.

You must use an approved system. It must be installed by a licensed plumber.

If the system is to be installed [inside a building control area](#), the design and installation must also be certified.

The manufacturer or agent for the approved system must fill out a notification of installation of an on-site wastewater system.

When work is finished, they must submit the second part of the form, the notification of installation completion.

[Notification of installation/completion of an on-site wastewater system](#) (86.8 kb)

[Notification of installation/completion of an on-site wastewater system](#) (398.9 kb)

The forms must be submitted to the Department of Health using the contact details provided.

Approved products

All on-site wastewater systems with a design flow of up to 2,000 litres per day must be product approved by the Department of Health before they can be sold and installed in the Northern Territory (NT).

Product approval provides authorisation for that type of system to be installed anywhere in the NT, subject to compliance with conditions.

This includes septic tanks, aerated wastewater treatment systems, alternative wastewater systems, greywater systems, composting toilets and effluent disposal systems.

Register of approved products

You can get register lists of government approved products for all of the following.

Aerated wastewater treatment systems

[Aerated wastewater treatment systems](#) (93.7 kb)

[Aerated wastewater treatment systems](#) (41.3 kb)

Alternative wastewater treatment systems

[Alternative wastewater treatment systems](#) (23.6 kb)

[Alternative wastewater treatment systems](#) (35.8 kb)

Composting and hybrid toilets

[Composting and hybrid toilets](#) (27.9 kb)

[Composting and hybrid toilets](#) (36.7 kb)

Effluent disposal systems

[Effluent disposal systems](#) (26.3 kb)

[Effluent disposal systems](#) (33.4 kb)

Greywater diversion devices

[Greywater diversion devices](#) (86.0 kb)

[Greywater diversion devices](#) (39.5 kb)

Greywater treatment systems

[Greywater treatment systems](#) (23.9 kb)

[Greywater treatment systems](#) (40.7 kb)

Septic tanks

[Septic tanks register](#) (34.9 kb)

[Septic tanks register](#) (42.1 kb)

Secondary treatment systems

Secondary Treatment Systems (STS) include all aerated wastewater systems, reed beds and aerated sand filters.

If you are a manufacturer of an existing or new STS up to 2000 litres per day, you need to test and accredit your system against the Australian Standard in order to sell them in the NT.

The new Australian Standard for onsite domestic wastewater treatment units is Part 3: Secondary Treatment Systems AS 1546.3:2017.

You must test and accredit your systems using a Joint Accreditation System of Australia and New Zealand (JAS-NZ) accredited Product Certification Body (PCB).

A PCB certifies that an STS meets the requirements of the AS1546.3 so that it can be assessed for DoH product approval.

You must get accreditation for existing or new systems by 31 December 2020.

Get a product approved

If you are a manufacturer or importer of wastewater systems, you can apply to have your product approved for use in the NT.

To apply to get your product approved, follow these steps:

Step 1. Fill in the form.

[Application for product approval of an on-site wastewater system](#) (232.7 kb)

[Application for product approval of an on-site wastewater system](#) (66.0 kb)

Step 2. Submit supporting documents. This includes a covering letter, manufacturer's specifications and product certificates.

Step 3. [Pay the fee and submit your form.](#)

Product approvals are valid for five years. You will need to renew your approval after this time

Renewal

To renew your product approval, follow these steps

Step 1. Fill in the form.

[Application to renew a product approval for an on-site wastewater system](#) (232.8 kb)

[Application to renew a product approval for an on-site wastewater system](#) (65.9 kb)

Step 2. Submit supporting documents. This includes a covering letter, manufacturer's specifications and product certificates.

Step 3. [Pay the fee and submit your form.](#)

Make changes to product approval

You will need to apply if you want to make a change to your product after approval. Follow these steps:

Step 1. Fill in the form.

[Application to vary a product approval of an on-site wastewater system](#) (223.8 kb)

[Application to vary a product approval of an on-site wastewater system](#) (66.7 kb)

Step 2. Submit supporting documents, including a description of the reason for the change.

Step 3. [Pay the fee and submit your form.](#)

Codes and guidelines

The following table has documents you should read before you apply for wastewater works design approval.

Document

Administrative procedures for wastewater works design approval in the NT

Application All wastewater systems requiring a wastewater works design approval

Purpose To assist proponents, owners, designers and installers to establish on-site and decentralised wastewater systems through the Wastewater Works Design Approval process

[Code of practice for on-site wastewater management](#) (7.1 mb)

[Code of practice for on-site wastewater management](#) (6.4 mb)

Application Applies to small scale on-site wastewater systems with a maximum design capacity of 8,000 litres per day

Purpose To ensure the safe disposal and reuse of domestic or other wastewater to protect public and environmental health

[Draft guidelines for wastewater works design approval for recycled water systems](#) (1011.1 kb)

[Draft guidelines for wastewater works design approval for recycled water systems](#) (1.2 mb)

Application Applies to large scale on-site and decentralised wastewater systems including recycled water systems and schemes

Purpose To provide a framework to manage the public health and environmental risks associated with the use of recycled water

Guidelines for land capability assessment for on-site wastewater management (1.3 mb)

Guidelines for land capability assessment for on-site wastewater management (1.4 mb)

Application Applies to a range of unsewered development proposals including subdivisions and significant developments on single lots

Purpose To explain the process undertaking a land capability assessment for on-site wastewater management for unsewered development proposals

Waste stabilisation pond design manual (5.3 mb)

Application Applies to waste stabilisation ponds

Purpose To provide guidance on the planning and design of waste stabilisation pond

Wastewater works design approval

To find out how to make an application for wastewater works design approval, contact Environmental Health by calling 1800 095 646 or emailing envirohealth@nt.gov.au.

Wastewater fees

The following fees apply for wastewater applications:

Application

Application for grant of product approval

Revenue 500 units
Fees \$575
Application to vary product approval
Revenue 150 units
Fees \$172
Application to renew product approval
Revenue 150 units
Fees \$172
Application for wastewater works design approval
Revenue 200 units
Fees \$230
Application to vary wastewater works design approval
Revenue 100 units
Fees \$115

Find out more about [revenue units](#).

How to pay fees

You can pay your fee with a credit card by phone. MasterCard or Visa are accepted.

Call the Receiver of Territory Monies office on (08) 8943 6219.

You will need to provide the following information:

- advise that you are paying an environmental health fee
- the type of application
- the fee in dollars
- the name and email address of the applicant
- the name of the system or site address.

You will receive a tax invoice by email after the payment is made. You will need to take a copy of it along with your application to the nearest Environmental Health office.

Contact

You can get more information or pay your fees at the Receiver of Territory Monies offices listed below.

Darwin

PO Box 2391
Darwin NT 0801
Level 7, Charles Darwin Centre
19 The Mall
Darwin NT 0800
Phone: (08) 8999 1628
rtmdarwin@nt.gov.au

Casuarina

PO Box 40250
Casuarina NT 0811
The Domain
16 Scarturchio Street
Casuarina NT 0810
Phone: (08) 8943 6219
rtmcasuarina@nt.gov.au

Alice Springs

PO Box 4037
Alice Springs NT 0871
Floor 1, Alice Springs Plaza
Todd Street Mall
Alice Springs NT 0870
Phone: (08) 8951 6491
rtmalice@nt.gov.au

Check and empty your septic tank or grease trap

There are rules you must follow if you own a septic tank or grease trap and want to dispose of the waste.

Check and empty your septic tank

If you own a septic tank on your property you are responsible for checking and emptying it.

You will need to arrange for a plumber or waste handler to get your septic tank pumped out.

Find out more about how to [check and pump out your septic tank](#).

Check and clean your grease trap

If you are a food business owner that uses grease traps you are responsible for checking and maintaining it.

Find out more about how to [check and clean your grease trap](#).

Contractors: how to dispose of waste

If you are a contractor wanting to dispose of septage and grease trap waste you will need an [environment protection approval or licence](#).

Find out more about how to [dispose of septic tank and grease trap waste](#).
