



AUSTRALIAN
TINY HOUSE
ASSOCIATION

TINY HOUSE WASTEWATER GUIDE

AN OVERVIEW OF WASTEWATER
MANAGEMENT OPTIONS AVAILABLE
FOR TINY HOUSES



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WASTEWATER GUIDE

Introduction

Welcome to the Tiny House Wastewater Guide!

This introductory guide aims to provide you with an overview of wastewater management options available for tiny houses. While it offers valuable insights, it's important to remember that each tiny house setup is unique. The most suitable solution for you requires considering several factors specific to your circumstances.

Understanding the available options is just the first step in determining the right wastewater management system for your tiny house.

You must also consider variables such as;

- local regulations
- site conditions
- water availability
- personal preferences

Know Your Options:

Outlined below are common wastewater management options for tiny houses:

1. Composting Toilets:

Composting toilets are eco-friendly and independent of water supply. They break down waste into compost, which can be used as a soil amendment. Consider the design and specific needs of your tiny house when choosing a composting toilet. Keep in mind that addressing greywater management is also essential for a complete wastewater management system.

2. Incinerating Toilets:

Incinerating toilets use high temperatures to burn waste, eliminating the need for water. They are compact and suitable for off-grid living but require a power source or gas supply. Similar to composting toilets, considering greywater management is crucial when using incinerating toilets.

3. Greywater Systems:

Managing greywater generated from kitchen, bathroom, laundry, and hand basin use can be done in an environmentally responsible way. Different systems, such as soil absorption, reuse/irrigation, and treatment systems, are available. Choose the most suitable system based on your circumstances, site and soil conditions, and local regulations.

4. Septic Systems:

Septic systems, consisting of a septic tank and a land application area, are widely used in rural areas. They handle both blackwater and greywater and utilise naturally occurring processes in the tank, and in the soil, to treat the wastewater.

5. Secondary and Other Alternative Wastewater Treatment Systems:

These systems provide advanced treatment compared to traditional septic systems. They include aerated wastewater treatment systems and natural treatment systems like constructed wetlands etc. Performance, cost, and suitability vary among these systems.

6. Connection to a Municipal Sewer System:

Connecting your tiny house to an existing municipal sewer system may be an option in some areas. Contact your local council or wastewater authority to understand the process, requirements, and associated costs. If a connection to sewer is available, it is usually the most appropriate solution.

7. Connection to an Existing Onsite Wastewater Management System:

If your tiny house is located on a property with an existing wastewater management system, utilising that system may be practical and cost-effective. Consider local regulations and the capacity of the existing system.

8. Short-Term Storage and Holding Tanks:

For tiny houses that frequently change locations or cannot have an onsite wastewater management system, holding tanks can temporarily store waste until proper disposal is available. This includes caravan style “cassette toilets” etc. that are portable and removable. Consider the frequency and cost of waste removal.



Important Factors to Consider

When choosing the most suitable wastewater management setup for your tiny house, there are several important factors to consider:

Site and Soil Conditions:

Evaluate your site's characteristics, such as soil permeability, water table depth, slope, and available space for installation. Different systems require specific soil types or conditions, so understanding your site is crucial.

Your Tiny House and Its Usage:

Assess your water usage patterns, number of occupants, daily consumption, and appliances used. Different systems have varying capacities and processing capabilities, so choose one that aligns with your tiny house's needs.

Longevity and Maintenance:

Consider the durability and maintenance requirements of the system. Evaluate the lifespan of components and understand the recommended maintenance procedures. This will help you anticipate costs and ensure proper maintenance.

Regulations:

Research and understand the regulations and guidelines set by local authorities regarding wastewater treatment, disposal, and system installations for your area. Ensure that the chosen system meets the necessary regulatory requirements.

***Note:** All wastewater system options, (except number 8, 'Short Term Storage and Holding Tanks'), are typically classified as On-Site Wastewater Management Systems, even the smaller-scale systems such as composting toilets. On-Site Wastewater Management Systems must be confirmed for compliance with local regulations prior to installation and usage.

Points to Note:

While this guide provides an overview of wastewater management options for tiny houses, it is important to remember that your unique circumstances and preferences will play a crucial role in determining the most suitable solution for you. Discussion of all variables involved in choosing a wastewater management system are beyond the scope of this guide, which serves as a starting point to familiarize yourself with the available options.



Finding reliable and unbiased information on wastewater management can be challenging. Therefore, we strongly recommend seeking advice from a professional who specialises in this field or connecting with individuals who have firsthand experience in similar situations. Their expertise and experience can save you potential future issues and help you make cost-effective decisions.

Remember, responsible wastewater management is not only environmentally beneficial but also ensures compliance with regulations and contributes to a sustainable future for your tiny house. By considering the options outlined in this guide and seeking suitable advice, you can make informed decisions that align with regulations, mitigate risks, and promote long-term cost savings.

This guide has been produced by ATHA's Environmental Engineer and Wastewater Management Advisor, Anthony Smith from the Wastewater Management Consultancy, "Water Wally".

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