



On-site wastewater management systems – post-construction information requirements

■ Introduction

The purpose of this fact sheet is to provide guidance to wastewater consultants, engineers and designers on the presentation of post-construction information.

After the wastewater treatment and disposal system are installed on the site, the wastewater engineer or consultant is required to provide additional information to verify the system has been installed in accordance with the approved design and resource consent requirements.

These 'one-off' requirements include, 'as-built' plans, management plans, maintenance contracts certification (PS4), and installation documentation (i.e. receipts for water reduction fixtures).

■ As-built plans

As-built should include the following items:

- The location and capacities of main treatment system components, including pre-treatment devices, remote septic tanks and disc filters
- The location of all land disposal system components including the approximate location of all distribution lines and the size and location of the primary and reserve land disposal areas
- The location of all electrical cables and components
- The location of all sewer pipes discharging to the treatment plant
- The location of all rising mains to the land disposal system
- The location of all system control components, including control units and alarms, meters, re-circulating valves, splitter valves/boxes and shutoff valves
- Identification of all critical separation distances, such as to buildings, property boundaries and surface waters
- The date the plan was drawn, title and site address, north point, scale bar, installers name and contact details

■ Management Plan

Management Plans are required to give the property owner a clear understanding of how the system is designed to work and the maintenance requirements necessary to achieve this.

Management plans should include the following:

- **The system and process description:** Details of the type and scale of facilities the system is designed to service, details of each of the system components and how the effluent flows through the system, treatment capacity and maximum allowable flows.
- **Wastewater treatment and disposal system maintenance:** Include operation and maintenance requirements, inspection procedures and frequency. Also specify who is responsible for maintenance tasks at different levels.
- **Monitoring and reporting requirements:** Should include the frequency and procedures for monitoring the system and recording monitoring. It should note the location on the site or within the treatment system where samples should be taken, and a procedure for correctly undertaking any required sampling.
- **Trouble-shooting guide:** To help diagnose system problems, potential causes and appropriate response actions. For example, what to do in the event of pump failure, power failure, alarm activation or effluent breakout on the disposal field?
- **Routine precautions:** Precautions householders should be aware of, including details of water producing activities, devices which may influence the performance of the system (e.g. rubbish grinders, dishwashers), the need for water conservation and the need to minimise the addition of strong chemicals to the wastewater treatment system (refer TP58 Appendix I, ARC Technical Sheets 11 – 16).
- **Contact Details:** Emergency contact details of the system supplier, installation agent, and recommended service agent, including 24 hour emergency contacts.
- **Information:** A copy of the 'As-Built' Plans, installation certification, maintenance contract and system warranty (if applicable).

Management plan templates are available from the ARC upon request.

■ Maintenance Contract

Maintenance contracts are necessary to ensure the on-going maintenance of the treatment and land disposal systems. The contractor should have experience with on-site wastewater treatment systems and be familiar with the specific design and components of the system to be serviced.

Maintenance servicing should be undertaken at least on a six-monthly basis and more frequently where the system is subject to high or fluctuating wastewater loads or where the system is servicing commercial facilities.



A maintenance service checklist is available from the ARC upon request.

■ Installation certification

The wastewater design consultant/engineer should prepare certification verifying the correct installation of the wastewater system and provide this to the property owner and to the council as soon as possible after installation.

It may be a regulatory requirement for installation certification to be in the form of a producer statement (PS1 - 4). These statements are issued by registered professional engineers and may be a requirement for gaining final regional and/or territorial council approval. The most commonly requested producer statements are PS4, which relates to construction review and PS1, which relates to the design of the system.

Installation certification should confirm:

- The system has been installed in accordance with the approved design, or should specify where installation has varied from this design. It is important that the council and/or the system designer are consulted before installation of any component if not part of the approved design
- The design loading rate and operating range (hydraulic and organic) of the treatment and disposal field systems
- That any existing components to be re-used have been inspected and are in sound condition
- That any abandoned components have been decommissioned as required.
- The date of inspection of the installed system
- The name, contact details and qualifications (including professional memberships) of the certifying person

■ For more information

The ARC has a range of fact sheets about onsite wastewater management. Copies are available online at www.arc.govt.nz or upon request. Topics include:

- Septic Tanks
- A Guide for Homeowners
- Treatment and Disposal Systems – Maintenance and Trouble Shooting
- Consent Compliance

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