



## Onsite Wastewater Management Programme (OWMP)

To improve performance of onsite wastewater treatment systems through the coordination and strengthening of the shared management roles of the Water Authority, System Suppliers, Installers, Owners and Service Providers.

### technical guide 3: owner’s guide to onsite treatment system management

#### ROLES & RESPONSIBILITIES

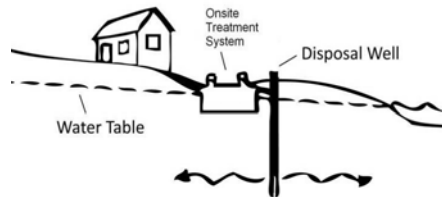
Unlike the central wastewater treatment facility, which is managed from conception through operation by a single entity, the management of onsite wastewater treatment systems is a shared responsibility. **Once onsite wastewater treatment systems are installed, their management is shared between the Water Authority, System Owners, and Service Providers:**

**The Water Authority’s role** is to monitor system performance, provide owners and service providers with information needed to meet their responsibilities and take enforcement action when there is an immediate risk to public health or the environment, or when insufficient efforts are being made to achieve compliance with Water Authority effluent quality limits.

**The System Owner’s role** is to know their system’s purpose, use and care requirements, advise all residents / tenants of the "do's and don'ts" of proper use of the system, provide power and access required to operate and maintain the system, obtain routine maintenance services and notify service provider of unusual conditions (alarms, overflow, noise, odour) observed.

**The Service Provider’s role** is to carry out service per manufacturer and Water Authority guidelines to ensure the system performs as designed, and to provide the System Owner and Water Authority with Standard Service Reports documenting observations made, tasks carried out and follow-up actions needed.

#### GET TO KNOW YOUR ONSITE WASTEWATER TREATMENT SYSTEM



The graphic above shows the most basic onsite treatment system: wastewater flows out of the building, into the treatment system and down a disposal well. In reality, each installation is unique given the size and layout of a development, the type of system installed, additional components required at some sites (pump stations, grease interceptors, etc.).

**Specific information on your system can be obtained by contacting Development Control via email at the address below.** Provide the name of the development and/or the Block & Parcel to determine:

**Where is it?** Request a site map showing the relative location/layout of the systems). For many sites, we have installation photos that are helpful for locating systems since obscured by landscaping.

**What is it?** Request information on the Make, Model and number of systems installed on your property.

**How does it work?** Request Owner’s Manuals for the type(s) of systems installed on your property and the OWMP technical guide on wastewater basics.

#### WHAT TO LOOK FOR IN A SERVICE CONTRACT

Review of your system’s Owner’s Manual, this guide and the Standard Service Report will increase your understanding of the types of service required to keep your system performing satisfactorily.



**When evaluating /comparing Service Contracts, it is important to consider more than the “bottom line” price:**

- Require that the Service Provider use the Standard Report Form as a guide and record for all service visits.
- Require that the Service Provider provide a copy of Service Reports to you and the Water Authority to allow us to monitor the system and service performance .
- How often will maintenance visits occur?
- Will Owner be notified when service visit is scheduled?
- What services are included in base price?
- What services incur an additional fee? (e.g., pump out, well cleaning)
- What is the hourly rate for performing/ supervising additional services?
- Will Owner approval be obtained before additional services are carried out?
- What is the charge for Service Call initiated by Owner report of a system alarm?
- What are Owner’s required activities associated with the system’s operation?

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The Water Authority was established in 1983 as a statutory body responsible for supplying wholesome and affordable drinking water to the people of the Cayman Islands. The Water Authority is also responsible for the proper treatment of wastewater and for the protection of the fresh groundwater lenses that exist throughout our islands.

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### SERVICE PROVIDER

The Service Provider's role is critical in ensuring that onsite systems perform as designed. Too often, owners only call on Service Providers for reactive maintenance: something fails and they want it fixed. Reliance on reactive maintenance results in poor system performance; routine **Operation and Maintenance (O&M)** is needed. Routine maintenance minimizes more expensive, inconvenient corrective or emergency maintenance.

**Registration, training & certification of Service Providers** provides a level of assurance to System Owners that their investment, public health and the environment are being protected by competent practitioners. To begin the process, the Water Authority has established baseline standards of practice and quality control for **Registration of Service Providers:**

- Pass basic proficiency tests.
- Use the **Standard Service Report** as a guide and record for service visits.
- Carry out works in accordance with manufacturer and Water Authority best practices.
- Provide copies of the Report to the System Owner and Water Authority.

**The Water Authority's Register of Service Providers will be maintained and provided to System Owners**, along with a Standard Service Report and information specific to their system.

The Water Authority seeks to facilitate training and continuing education to lead to Service Provider Certification through accredited Correspondence Courses.



### ROUTINE MAINTENANCE

The **Standard Service Report** outlines a routine maintenance visit where the operational status of a system is assessed through observations and measurements, and system equipment is maintained/adjusted for proper operation. The need for less frequent activities such as solids removal (pumping) and repair or replacement of equipment is documented for follow up with the owner.

**Observations include:** noise and odour levels as well as visual checks of structures, equipment and wastewater liquids and solids.

**Tasks include:** testing of alarms, pumps and aeration equipment, cleaning/replacing filters, lubricating equipment, and measuring solids levels.

**Frequency of visits depends on** factors including system complexity, loading and capacity. In general, monthly visits are recommended. For simple installations with steady flows within design limits, and owners who make routine observations to identify any unusual or upset conditions, once every other month may be sufficient.

### SYSTEM ACCESS

Accessibility to system compartments and components is essential for effective maintenance.

#### ACCESS COVERS SHOULD BE:

- At or above grade level with covers that one person can open and close with standard tools.
- Located over each compartment of the primary and secondary treatment sections to allow for monitoring and removal of accumulated solids.
- Located over inlet and outlet Ts to facilitate rodding and inspection.
- Located over any flow-splitting devices and pump stations.

#### ACCESS COVERS SHOULD NOT BE:

- Built over, paved over, planted over, or sealed with cement, caulk, silicone, spray foam, etc.

Proper access covers are designed to achieve a watertight seal with recessed covers that fit into frames or with lids fitted with gaskets and screws or clamps to tighten the lid.

In instances where safety or security requires locked access (such as at schools), a duplicate key shall be provided to the Water Authority.

If system access is insufficient to carry out routine maintenance tasks, note on the Standard Service Report and detail retrofit under "follow up services required".

