

# Flush toilet connection to simplified or conventional sewerage system

**This document provides guidance for the operation and maintenance (O&M) of a flush toilet connected to a simplified or conventional sewerage system.**

Guidance for typical O&M activities is provided in Table 1 with suggested frequencies for each activity. These activities are important for maintaining a flush toilet connection in a good working condition.

Table 2 lists potential issues associated with a flush toilet connection to a sewerage system and provides suggested corrective actions.

## I. OPERATION AND MAINTENANCE

Operation and maintenance of an individual household flush toilet is typically arranged by the users themselves; whereas repairs to the sewerage system will require skilled labour, which may be provided by local craftsmen.

**Table 1. Operation and maintenance schedule guidance<sup>a</sup>**

Frequency	Activity
Daily	<ul style="list-style-type: none"> <li>Inspect and clean the toilet pan or pedestal, clear squat-hole if blocked</li> <li>Check sufficiency of anal cleansing facilities, repair/replace as necessary</li> <li>Check the handwashing facilities, repair/replace as necessary</li> <li>Check toilet is accessible for all intended users, e.g. access is clear and handrails (if fitted) are not loose</li> </ul>
1 to 3 times per year	<ul style="list-style-type: none"> <li>Inspect and repair the toilet pan or pedestal, and cover slab checking for cracks, damage and leaks</li> <li>Inspect and repair the superstructure, checking for cracks, damage and leaks</li> <li>Inspect and repair/replace the squat-hole lid and/or ventilation pipe with fly screen</li> <li>Check that the door, lock and light is working, repair/replace as necessary</li> </ul>
As the need arises	<ul style="list-style-type: none"> <li>Carry out repairs and replace parts</li> </ul>

### Notes:

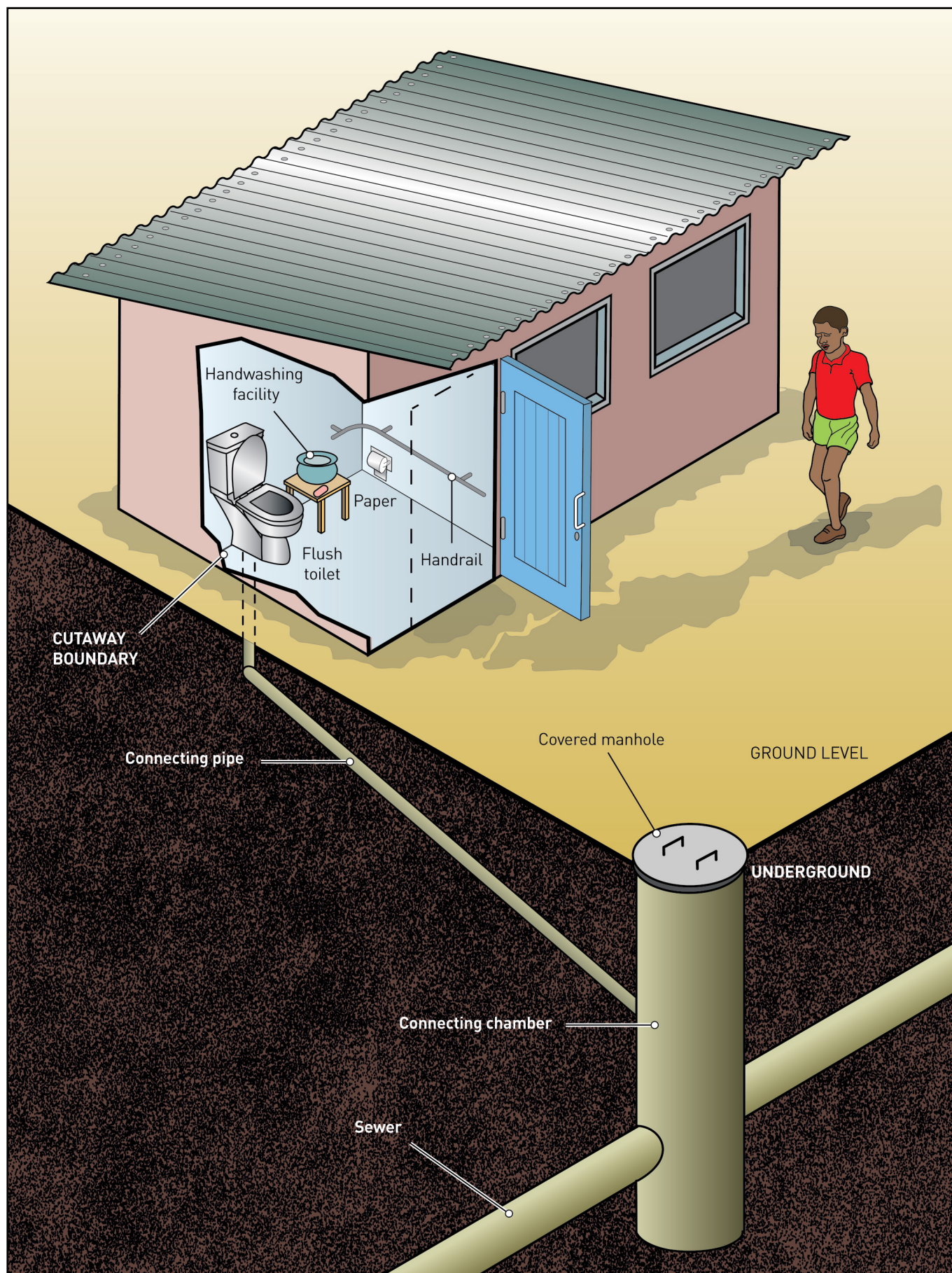
- The suggested frequencies in Table 1 represent a minimum requirement and may need to be increased depending on the local context.
- Only persons with relevant training/skills should undertake the activities in Table 1. Care should be taken when handling disinfection products or undertaking any activity that requires entry into a pit (e.g. inspection, maintenance etc.).
- For guidance on appropriate frequencies for monitoring refer to *WHO Guidelines for Sanitation and Health*.

<sup>a</sup> Adapted from: Brikké, F. and Bredero, M. (2003). *Linking technology choice with operation and maintenance in the context of community water supply and sanitation: A reference document for planners and project staff*. World Health Organization, Geneva.

II. ISSUES AND REMEDIAL ACTIONS

Table 2. Common issues associated with a flush toilet connected to a simplified or conventional sewerage system

	Risk	Remedial action
<b>TOILET</b>	Access route to the toilet is blocked or not manageable for some intended users	<ul style="list-style-type: none"> <li>Clear the access route and/or carry out repairs/ improvements so that the toilet is accessible for all intended users (e.g. fitting a handrail or building an access ramp).</li> </ul>
	The toilet superstructure is damaged or absent	<ul style="list-style-type: none"> <li>Repair or replace the superstructure so that it provides privacy for the intended users, prevents ingress of rainwater, and prevents animals, rodents and insects from entering the toilet room and/or pit.</li> <li>To provide security for the users: repair or replace the door and lock, repair or replace the light inside the toilet room.</li> </ul>
	Toilet is dirty with visible excreta on the surface	<ul style="list-style-type: none"> <li>Clean the toilet pan or pedestal and the surfaces of the toilet room (e.g. bathroom, washroom, rest room, cubicle etc.) so that they are clean and free of excreta.</li> </ul>
	No anal cleansing material or inappropriate for the type of technology/system	<ul style="list-style-type: none"> <li>Replace and/or provide sufficient appropriate material.</li> <li>Ensure that where required there is a receptacle for disposal of used anal cleansing products and menstrual products, and that this is regularly emptied, and the contents is disposed of safely.</li> </ul>
	Handwashing facilities absent inside or next to the toilet	<ul style="list-style-type: none"> <li>Replace and/or provide sufficient, appropriate handwashing facilities. This includes water and soap.</li> </ul>
	Flies can easily enter and leave the pit	NA
	Excreta overflowing from the squat hole, pan or pedestal; and/or there are ponds of effluent visible on the ground outside the toilet	<ul style="list-style-type: none"> <li>Check the water seal and sewer pipe, and clear if blocked.</li> </ul>



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