The capital cost of the treatment plant may also be considerable, while the treatment plant maintenance costs will depend on the technology chosen and the energy required to operate it.

Design considerations

: The toilet should be made from concrete, fibreglass, porcelain or stainless steel for ease of cleaning and designed to prevent stormwater from infiltrating or entering the pit [2, 3].

C ( ): The septic tank is sealed and impermeable but the soak pit is permeable and designed to leach effluent into the surrounding soil. Therefore, the water table level and groundwater use should be taken into consideration in order to avoid contaminating drinking water. If groundwater is not used for drinking or alternative cost-effective sources can be used, then these options should be explored before assuming that groundwater contamination by the soak pit is a problem. Where groundwater is used for drinking and to prevent its contamination, the bottom of the soak pit should be at least 1.5m above the water table [3]. In addition, the pit should be installed in areas located down gradient of drinking water sources, and at a minimum horizontal distance of 15m [4].

This water-based system is suitable for cleansing water inputs, and, since the solids are settled and digested onsite, easily degradable dry cleansing materials can also be used. However, rigid or non-degradable materials (e.g., leaves, rags) could clog the system and cause problems with emptying and, therefore, should not be used. In cases when dry cleansing materials are separately collected from the flush toilets, they should be collected with solid waste and safely disposed of, for example through burial or incineration. Greywater can be managed along with blackwater in the same containment technology; alternatively it can be managed separately.

C : As the untreated sludge is full of pathogens, human contact and direct agricultural application should be avoided. The emptied sludge should be transported to a dedicated sludge treatment facility. The con5 (e)-3.63(-)Tj0.006 d(e un)5.5 (t0.008 Tral-3.9 (g0 16.71 0 T-0.9 (tu6 (l)-4.5 (e)-0.9g3.1 (i)1.2 (n)-3.8h s)-5.4 (o a d)(w)-3.6 (a)4(s)4.7

C : The conveyance step removes the patho-