

# The Sanitation Decision Support tool

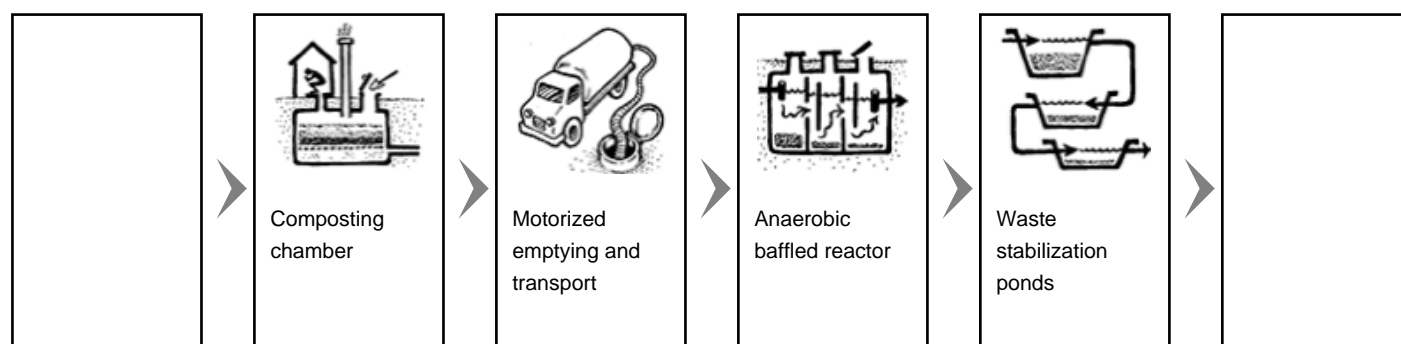
Results of the Sanitation Decision Support Tool. The tool was created by WASTE (www.waste.nl) and the Akvo Foundation (www.akvo.org), in order to assist people in choosing sanitation technologies. We hope this tool proves useful, any comments can be send to m.t.westra@akvo.org.

Session information  
Date: Sun May 16, 2021  
Time: 23:54:37

## Options chosen

<b>Water supply (one possible)</b> <ul style="list-style-type: none"> <li>• none</li> <li>• fetched / hand-pump / standpipe / tanker</li> <li>• <u>connection</u></li> </ul>	<b>Groundwater table (one possible)</b> <ul style="list-style-type: none"> <li>• shallow</li> <li>• medium</li> <li>• <u>deep</u></li> </ul>	<b>Soil type (one possible)</b> <ul style="list-style-type: none"> <li>• clayey</li> <li>• silty</li> <li>• <u>sandy / gravelly</u></li> <li>• rocky</li> </ul>
<b>Space availability (one possible)</b> <ul style="list-style-type: none"> <li>• <u>large</u></li> <li>• medium/large</li> <li>• medium</li> <li>• small/medium</li> <li>• small</li> </ul>	<b>Terrain / Topography / Slope (one possible)</b> <ul style="list-style-type: none"> <li>• <u>flat</u></li> <li>• slope</li> </ul>	<b>Anal cleansing method (more possible)</b> <ul style="list-style-type: none"> <li>• water</li> <li>• <u>soft paper</u></li> <li>• hard or bulky</li> </ul>
<b>Flood prone (one possible)</b> <ul style="list-style-type: none"> <li>• <u>not affected</u></li> <li>• frequent (low-lying area)</li> </ul>	<b>Vehicular accessibility (one possible)</b> <ul style="list-style-type: none"> <li>• no access</li> <li>• limited / narrow access</li> <li>• <u>full access</u></li> </ul>	

## Selected technologies



## Links to Akvopedia articles

- Composting chamber:  
[http://www.akvo.org/wiki/index.php/Composting\\_Chamber](http://www.akvo.org/wiki/index.php/Composting_Chamber)
- Motorized emptying and transport:  
[http://www.akvo.org/wiki/index.php/Motorized\\_Emptying\\_and\\_Transport](http://www.akvo.org/wiki/index.php/Motorized_Emptying_and_Transport)
- Anaerobic baffled reactor:  
[http://www.akvo.org/wiki/index.php/Anaerobic\\_Baffled\\_Reactor](http://www.akvo.org/wiki/index.php/Anaerobic_Baffled_Reactor)
- Waste stabilization ponds:  
[http://www.akvo.org/wiki/index.php/Waste\\_Stabilization\\_Pond](http://www.akvo.org/wiki/index.php/Waste_Stabilization_Pond)

## Short descriptions

### Composting chamber



Composting refers to the process by which biodegradable components are biologically decomposed under aerobic conditions by microorganisms (mainly bacteria and fungi). A Composting Chamber converts excreta and organics into Compost. Compost is a stable, inoffensive product that can be handled safely and used as a soil conditioner. This technology usually requires four main parts: 1) a reactor (storage chamber); 2) a ventilation unit to provide oxygen and allow gases (CO<sub>2</sub>, water vapour) to escape; 3) a leachate collection system ; and 4) an access door to remove the mature product.

#### Relevant options

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### Motorized emptying and transport



Motorized Emptying and Transport refers to a vacuum truck or another vehicle equipped with a motorized pump and a storage tank for emptying and transporting faecal sludge, septage and urine. Humans are required to operate the pump and manoeuvre the hose, but they do not lift or transport the sludge.

#### Relevant options

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### Anaerobic baffled reactor

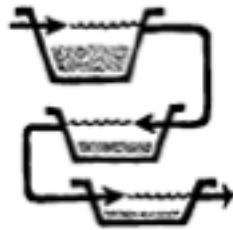
An Anaerobic Baffled Reactor (ABR) is an improved septic tank because of the series of baffles over which the incoming wastewater is forced to flow. The increased contact time with the active biomass (sludge) results in improved treatment.



Relevant options

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## Waste stabilization ponds



Waste Stabilization Ponds (WSPs) are large, manmade water bodies. The ponds are filled with wastewater that is then treated by naturally occurring processes. The ponds can be used individually, or linked in a series for improved treatment. There are three types of ponds, (1) anaerobic, (2) facultative and (3) aerobic (maturation), each with different treatment and design characteristics. For the most effective treatment, WSPs should be linked in a series of three or more with effluent being transferred from the anaerobic pond to the facultative pond and finally the aerobic pond.

Relevant options

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