

Advanced Sewage Treatment System Using the Soil Microbial Membrane Treatment Technology



Sofil

ALCO CO., LTD.

“Sofil”: Eco-friendly System of Sewage Treatment

“Sofil” acquired a general authorization from the Minister of Land, Infrastructure, Transport and Tourism of Japan

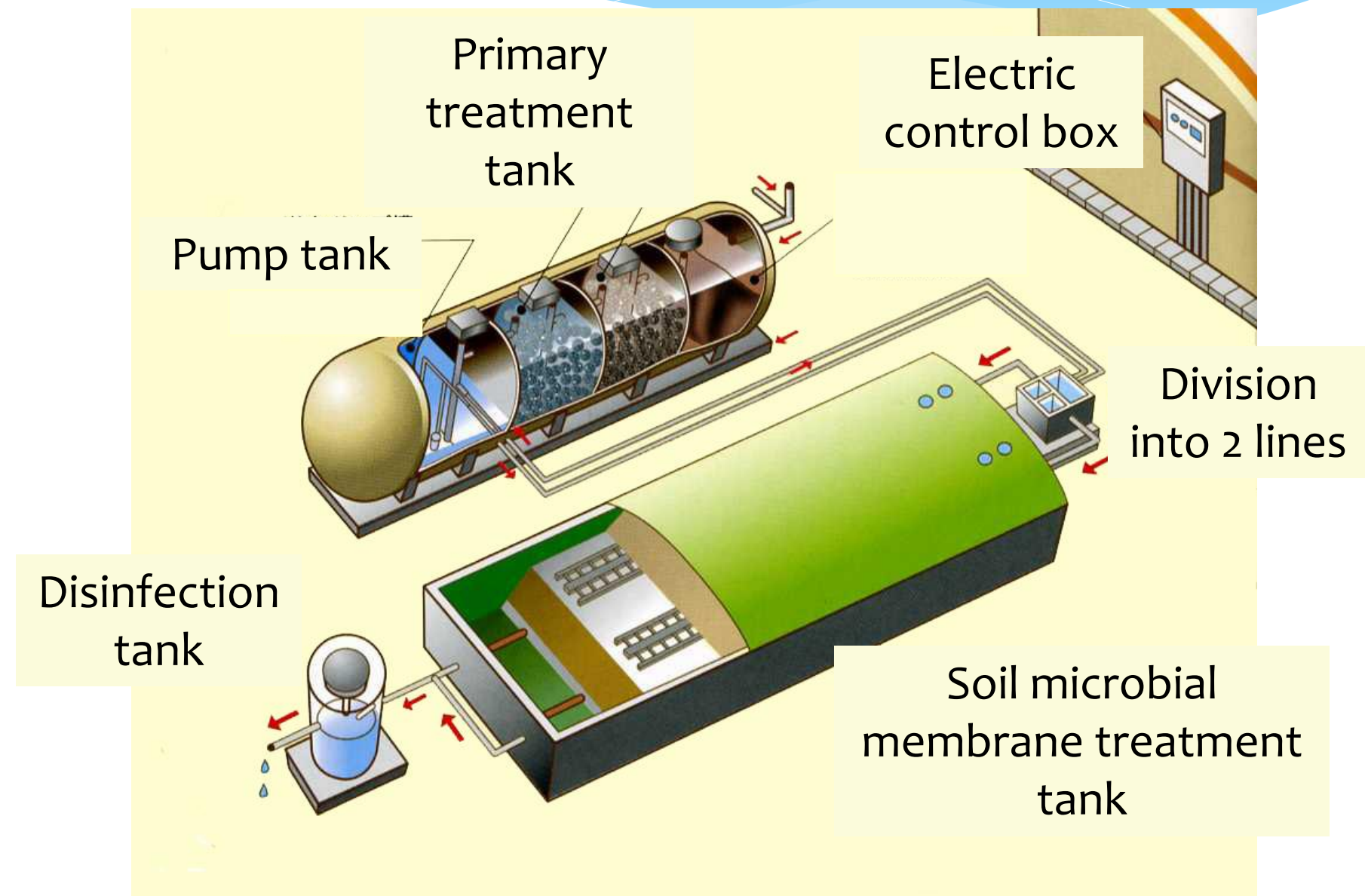
◇Average volume of sewage treatment:

2~100 m³/day

◇Treated water quality:

BOD 10 mg/L or less

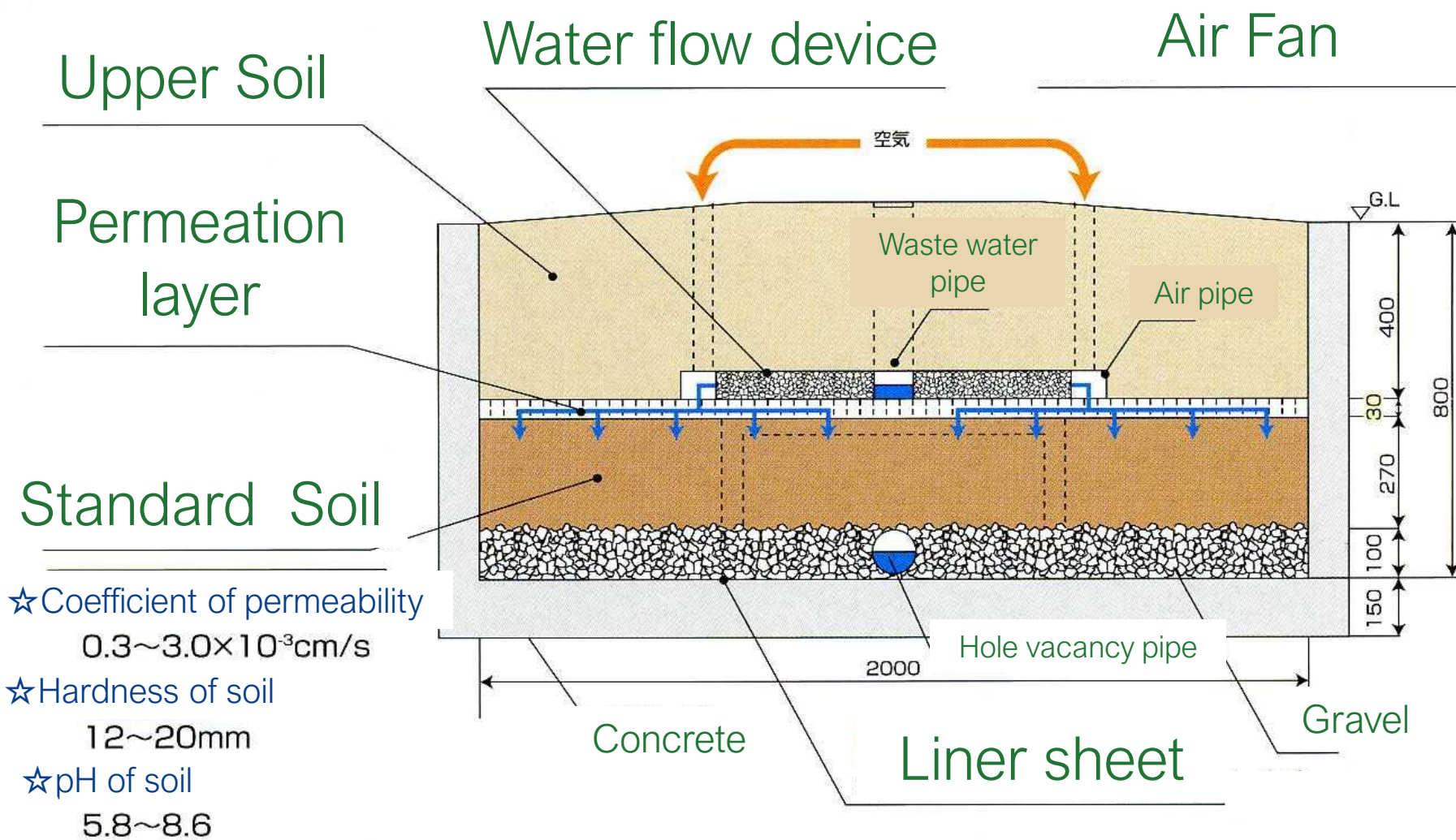
SS 10 mg/L or less



Flow of the system

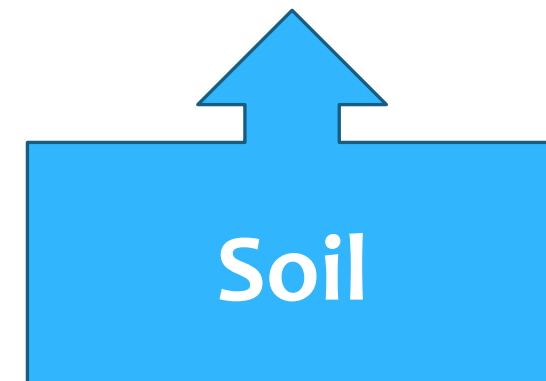
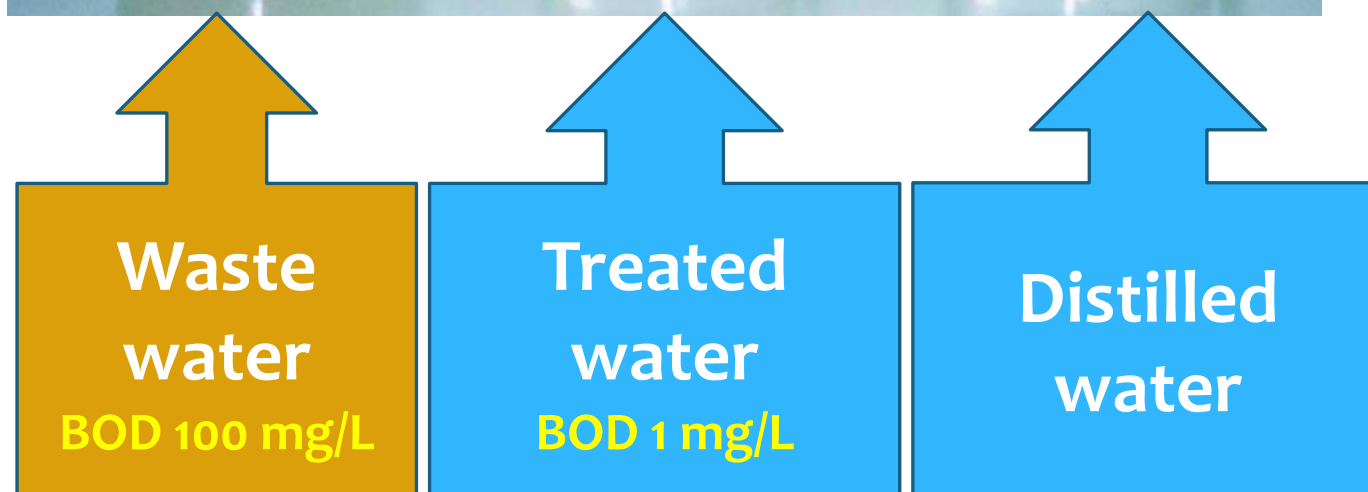
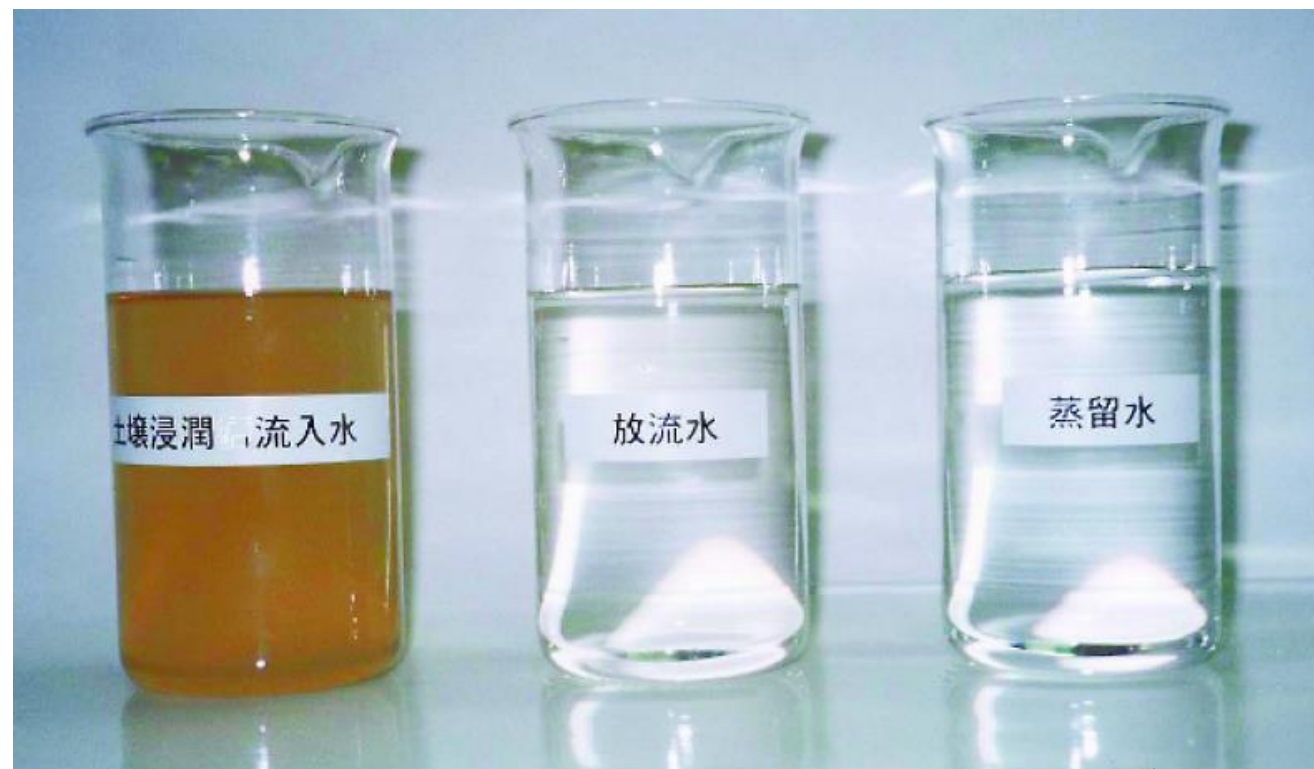
Structure of Soil Microbial Membrane Treatment Tank

☆ Long and stable operation is possible.



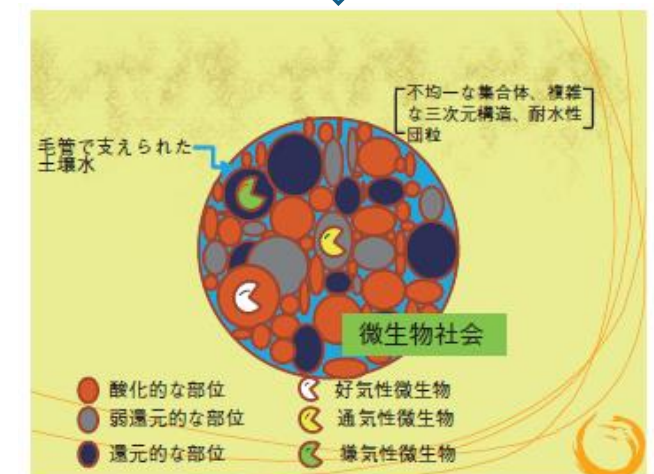
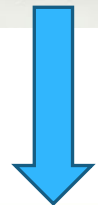
Sectional view

Waste Water Treatment by the Soil Power



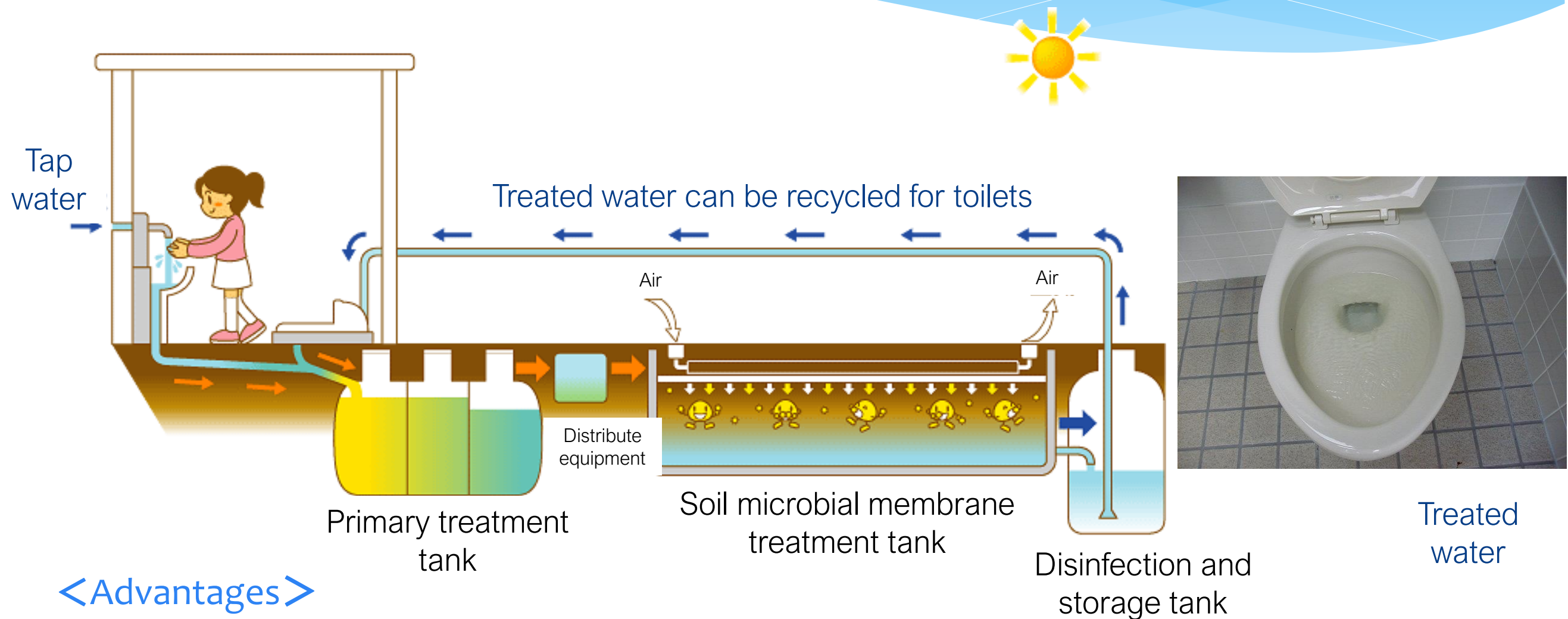
Features of “Sofil”

- ◇ Advanced sewage treatment system using the soil microbial membrane treatment technology.
Quantity of bacteria: $10^7 \sim 10^8$ /gram of soil
- ◇ Advanced processing with small power consumption.
- ◇ Phosphorus in the wastewater can be removed almost completely.
- ◇ Treated water can be recycled for toilet and planting.



Aggregated structure of soil

Treated water can be recycled for toilets.

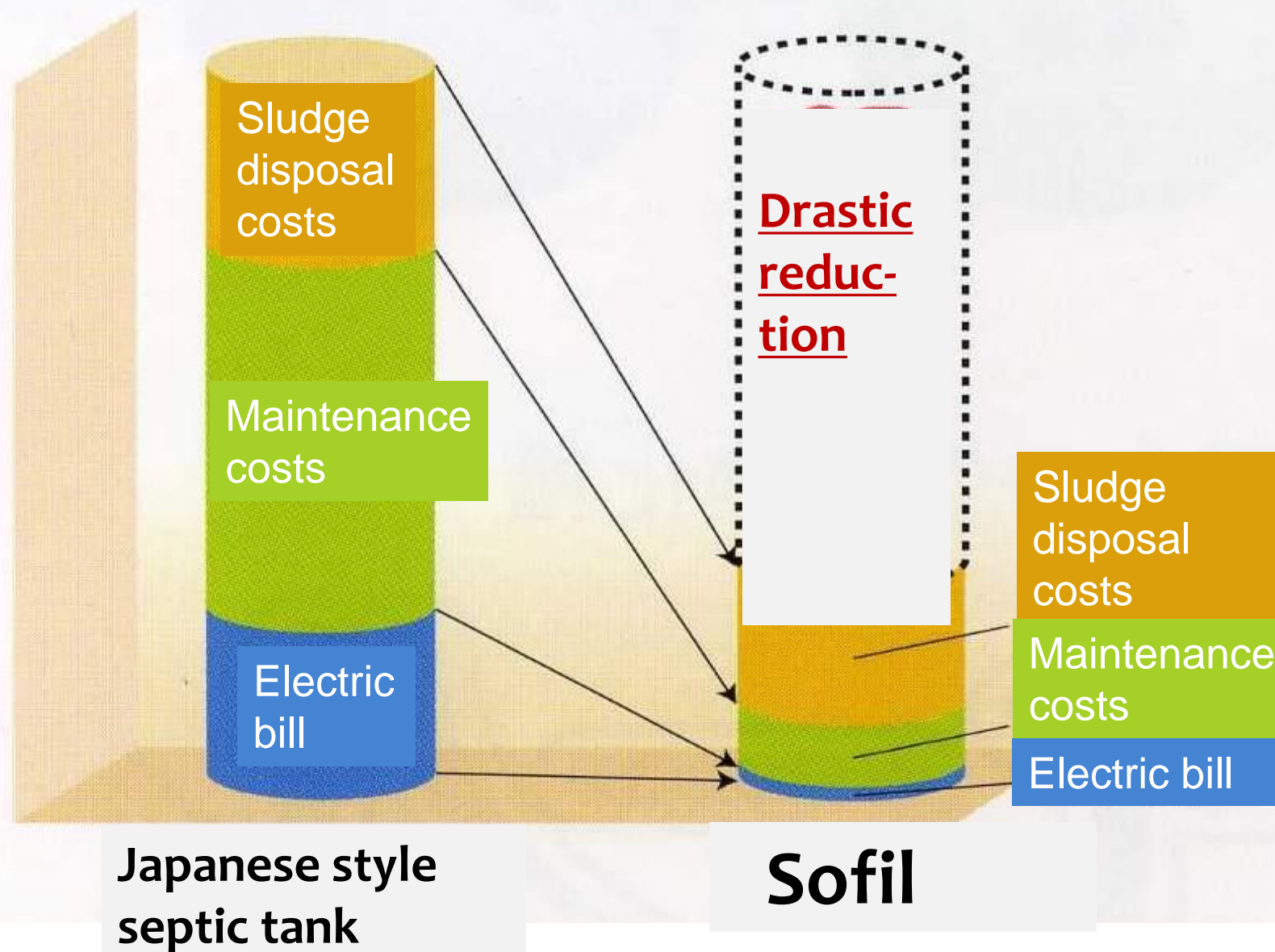


<Advantages>

- Significant reduction in tap water bill
- Reduced pollution to the rivers, lakes and sea
- Toilet can be used even when there is no water, such as after disaster.

Low Running Costs

Comparison of the running costs



Delivery Records in Japan (1997~)



World Geopark “Island of Oki”



(西ノ島)

World Heritage
”Bonin Islands”



(父島)

(黒島)

200 locations

Public toilets, schools, factories, campgrounds, etc.