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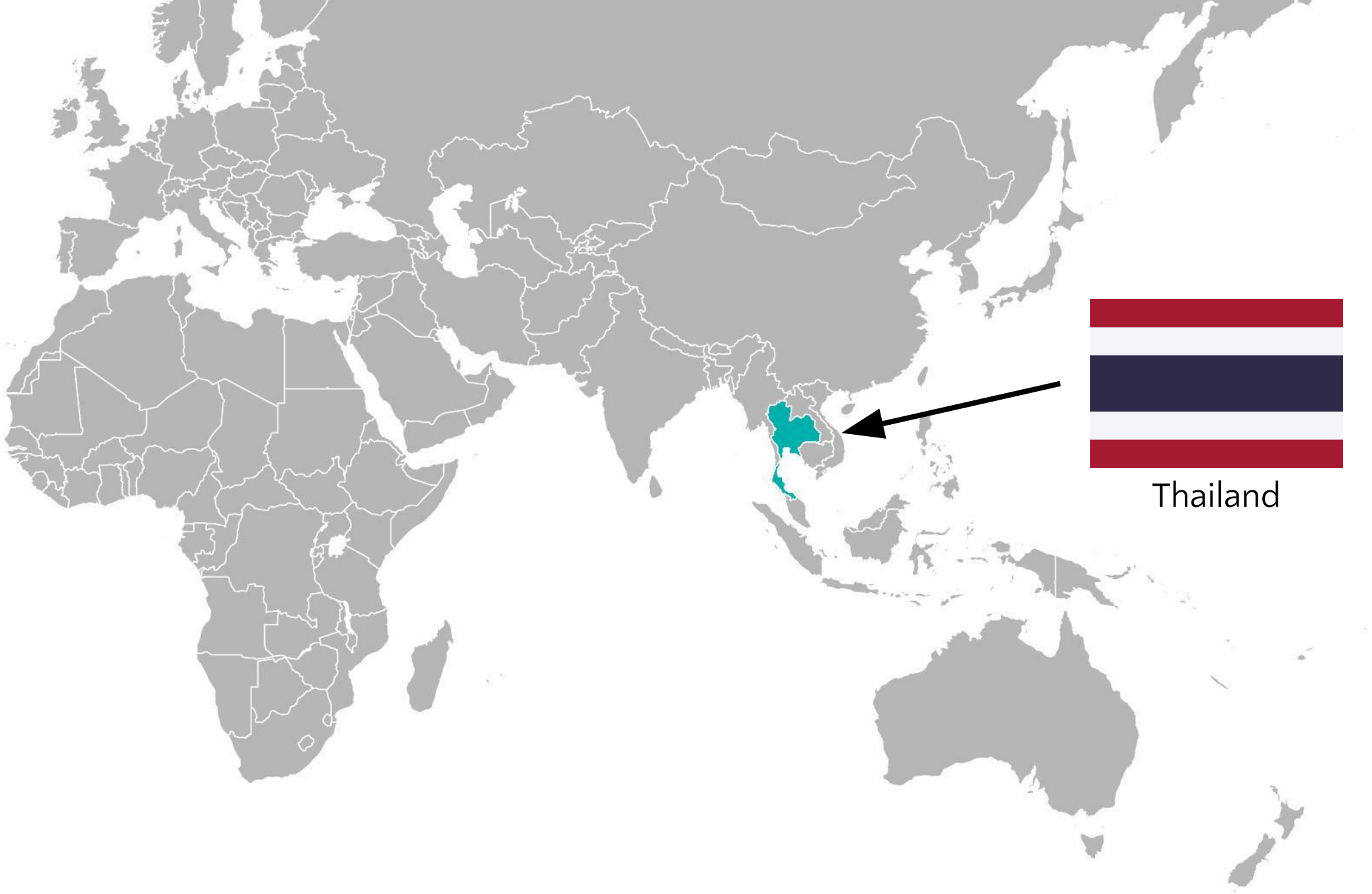
Technology Introduction


Thailand

Minburi, Thailand

Kindergarten Islamic School

Minburi, Bangkok, Thailand

Status: Operational since September 2022

Facility:
- 20 toilet cubicles
- School with over 300 pupils and staff
- Lunchtime kitchen

Treated Waste:
- Blackwater from flushing toilets + grey water from kitchen
- Approx. 3000L p/day

Technology setup:
- 2 x Aquonic 1000L tanks
- Site designed 3 chamber septic tank made from pre-cast cement rings and grease trap for kitchen water

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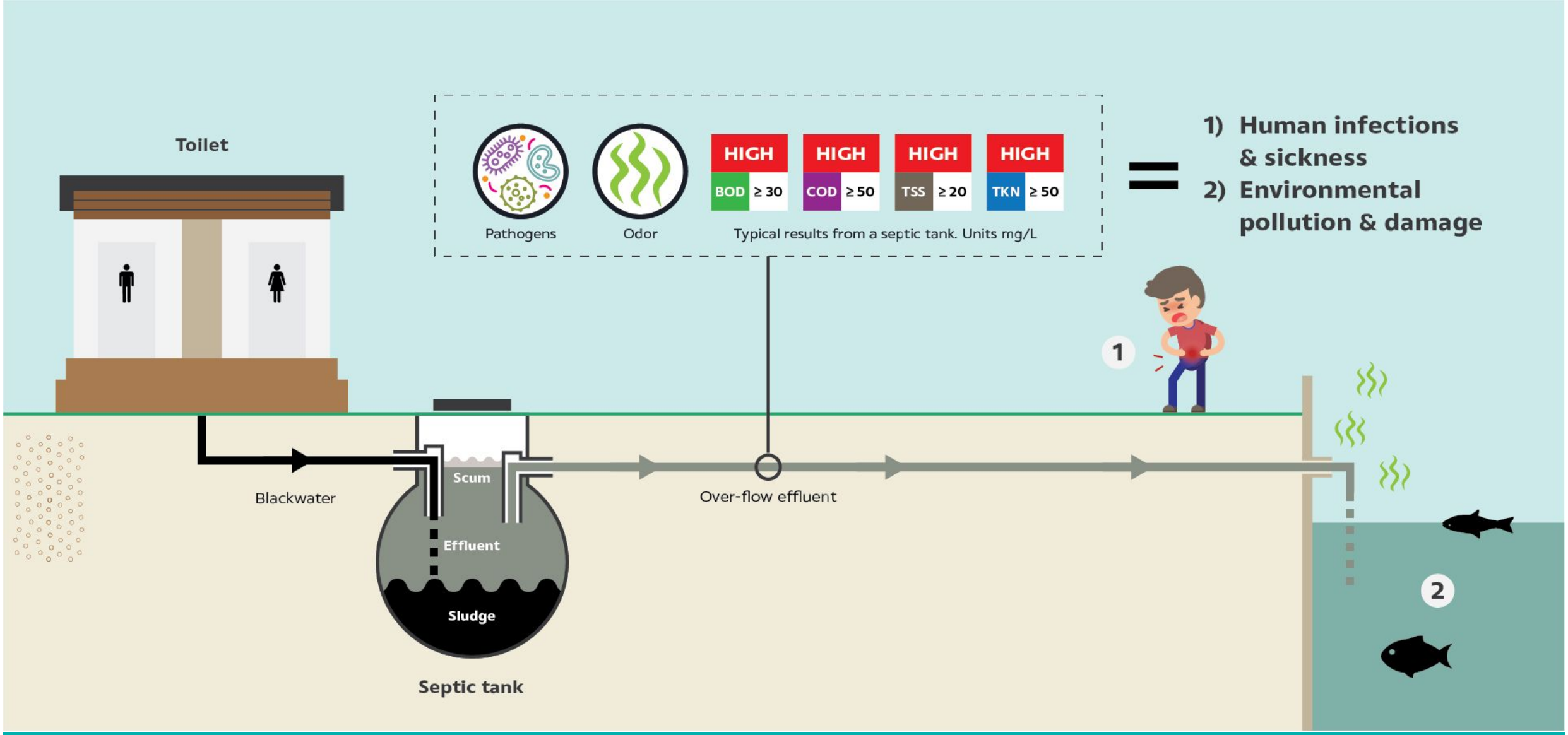
Minburi, Thailand



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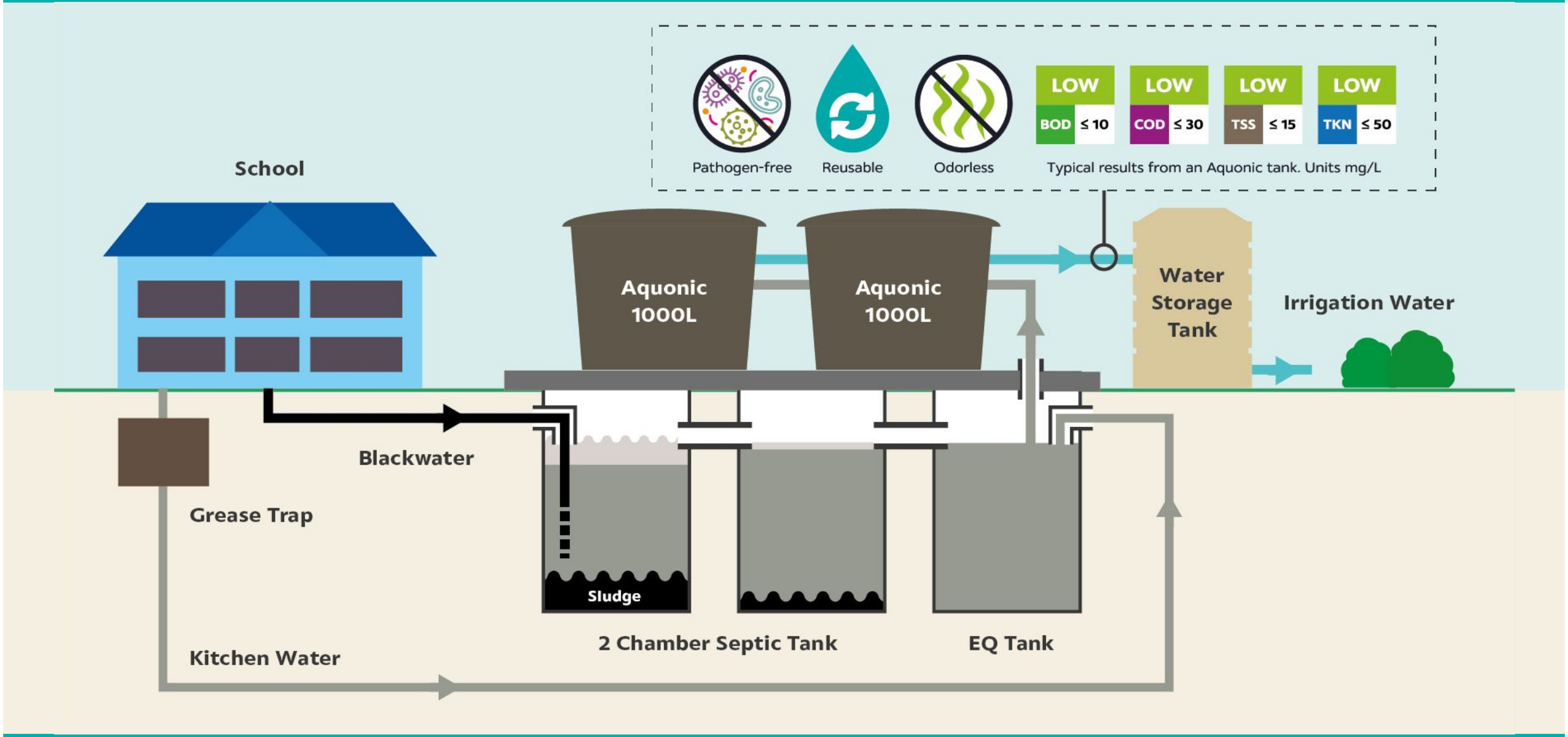

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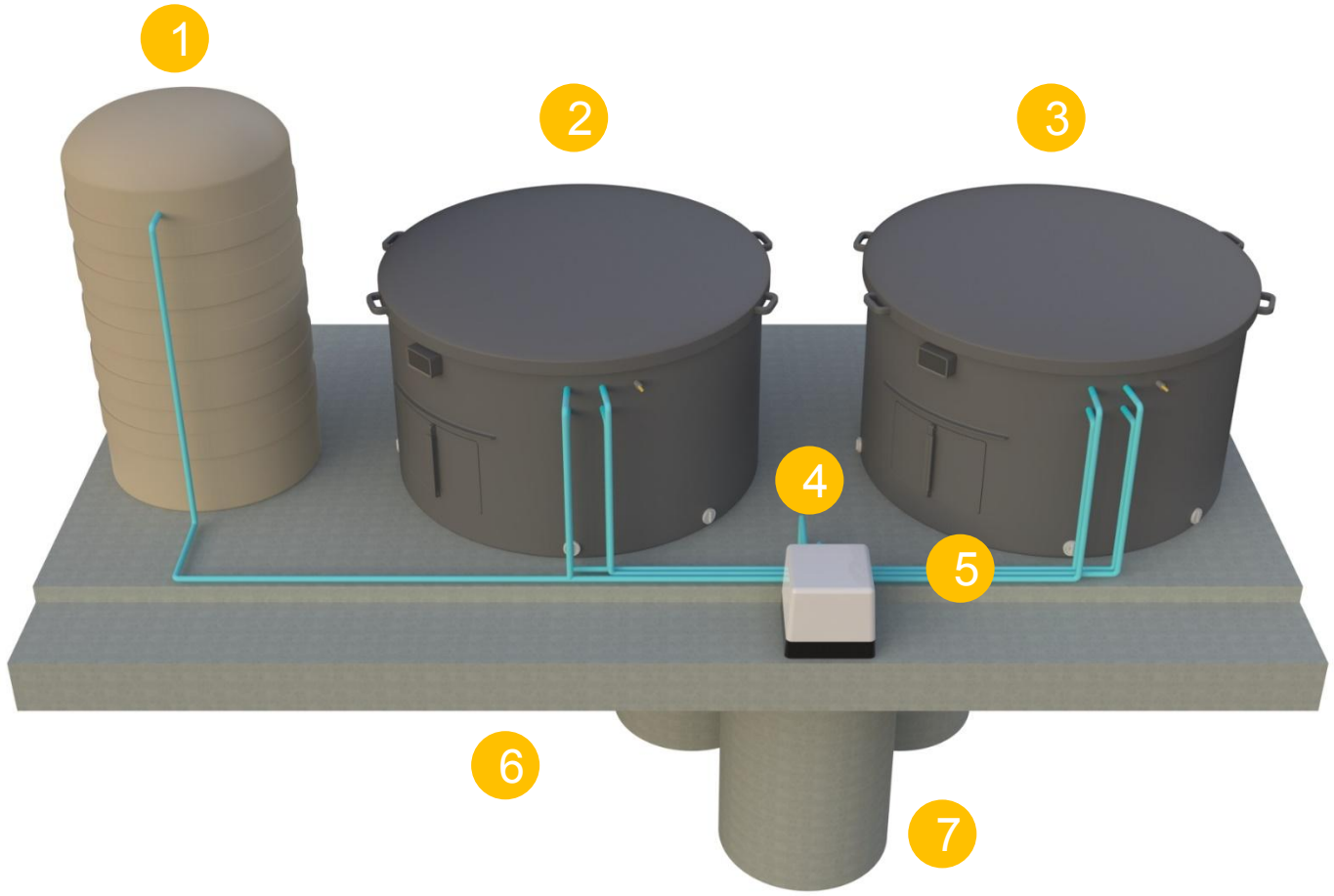

Technology Setup	
1	1000L Water storage tank
2	Aquonic 1000L
3	Aquonic 1000L
4	Septic feed water pump
5	Fixings and fitting

Site Groundwork Construction	
6	Concrete platform
7	Pre-cast cement ring septic tank

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How to Calculate Number of Required Aquonic

Basic idea - Calculate for the maximum generation of wastewater per site

Info required

1) Number of toilet cubicle – e.g. 5
2) Volume of the toilet flush or pour – e.g. 6L
3) Number of hours per day the toilet is open for use – e.g. 8h
4) Number of days per week the toilet is open for use – e.g. 5 days

Assumptions

1. Use assumption that 1 person use toilet for 10min and flushes twice
2. Use assumption that 1 x Aquonic can treat 1000L per day, 7 days per week

Example calculation

Max wastewater per day for 1 toilet cubicle
= 6L x 2 x 6 x 8 = 576L

Max wastewater for toilet block per week
= 576L x 5 cubicle = 2,880L x 5 days = 14,400

Required Aquonic tanks =
14,400 ÷ 7 days = 2,057L per day ÷ 1000L = 2 Aquonic

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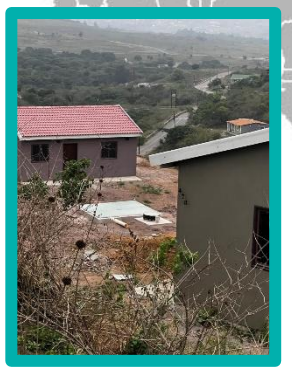

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Act Local

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