

## Water (WR)

### Water Recycling Program Implementation



#### Description:

Recycling wastewater is the method of treating and reusing used or gray water for another purpose, such as agricultural irrigation or industrial processes. Recycled wastewater can be used to flush toilets and replenish the groundwater levels of water.

Inside Tanta University campus we applied the Safe groundwater treatment system. In which, the wastewater recycling process involves a combination of technologies, depending on the source of the water itself and the future use of the wastewater.

The general treatment method applied in Tanta University campus involves treating water effluent at an existing wastewater treatment small primary plant before it reaches the recycling plant. The recycled water is then mixed with the natural water supply.

Also, sewage water goes through micro filters, which involves forcing the water molecules across a dense plastic film. Water can pass through the film, but other molecules (even tiny salt molecules) and microbes (including viruses and bacteria) can't.

The recycled water is then added to a reservoir or groundwater aquifer, where it can be stored and blended with the regular water supply but it is not suitable for drinking or human direct use.