



ABDULLAH GÜL
UNIVERSITY

ABDULLAH GÜL UNIVERSITY GREY WATER TREATMENT SYSTEM

“Greywater or sullage is all wastewater generated in households or office buildings from streams without fecal contamination, i.e. all streams except for the wastewater from toilets. Sources of greywater include, sinks, showers, baths, clothes washing machines or dish washers.”

The Abdullah Gül University uses a precise system to treat wastewater and reuse the purified end product in its toilet flushing system in order to reduce its consumption of drinking quality water. The usage of this Grey Water Treatment System has contributed to the Abdullah Gül University being awarded the LEED Silver Award in 2015.

What is AGU's Grey Water Treatment Process?

GREY WATER:

Grey water is collected domestic wastewater, from sinks and so on. Using recycled grey water, that is not drinking water quality, can reduce our drinking water consumption rate (where drinking water quality is not required, e.g. in our WC flushing system) by half.

GREY WATER TREATMENT:

Bristle Filter (Fine Filter)

Grey Water is used to hold coarse substances such as hair, hair and nails in the water coming to the system.

Biological Treatment / Oxygen Enrichment

Grey Water passing through the Bristle Retention Filter is aerated for a certain period of time and oxygen enrichment is performed. By increasing the amount of oxygen in the water, an ideal environment for the survival of aerobic bacteria is provided and biological treatment is performed successfully.

Ultrafiltration Process with Membrane Technology

The third treatment process is carried out by passing the 0.04 micron MBR modules, produced with the latest technology, to the grey water that has been biologically treated. All bacteria and pathogen removal are also provided with MBR modules.

With multiple drainage outlets, partial contamination is prevented by equal pressure distribution across the entire surface of the plate.

The diffuser holes of equal size reach and clean every point of the membrane plate. The need for chemical maintenance is minimized. The entire surface of the membrane is cleaned with air without the need for backwashing.



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Disinfection with Chlorine

The water passing through the MBR modules is transferred to the clean water tank and Ph controlled chlorine dosage is made in the clean water tank to keep the water sterile at all times.

Water is sent to consumers from the clean water reservoir to be used in wc reservoirs.

AGU Grey Water Treatment System:

