

# Value Proposition

Nubian's patented commercial water treatment systems offer modular designs that are flexible to customer needs.

# Re-use applications

Water savings by up to 60%\*

- Toilet Flushing
- Laundry
- Landscape

## The Solution

Nubian's bio filter technology is scalable from 2,000 to 100,000 lpd (520 to 26,420 gpd). Systems are complete with real time monitoring to ensure compliance with water quality standards set by regulators. These factory tested integrated systems are self standing and can be used in widespread applications.

Greywater Treatment System, Apartment Building





#### **Treatment Train**

#### Pre-screening

The pre-screening system uses an automatic self cleaning screen to remove coarse materials, such as hair and lint.



Greywater flows through a bed of proprietary granular media. Contaminant removal is achieved through physical removal, adsorption and microbial induced aerobic degradation.

## 3 Ultrafiltration

The Nubian system utilizes a simple modular approach to add-on ultrafiltration following biofiltration.

## 4 UV Disinfection

A high dose of UV radiation is applied following ultrafiltration, providing a powerful second disinfection barrier.

### 5 Chlorination

The recycled water is dosed with chlorine following UV disinfection, preventing regrowth of bacteria.

## 6 Real time monitoring

A Hydroguard provides real time water quality analysis measuring turbidity, pH and free chlorine. Out of specification water is automatically diverted to sewer.

#### **Design Features**

- ✓ Fully automated with remote online monitoring
- Standard or tailored packages to meet project needs
- ✓ Five step advanced treatment process
- Modular, future capacity upgrade
- Skid mounted and factory tested
- Meets quality and risk management requirements of the AGWR (Australian Guidelines for Water Recycling)
- Robust biological treatment
- ✓ Small footprint
- ✓ Low operating costs
- ✓ Low power consumption

### **Greywater Treatment System, Army Barracks**



### **Typical Recycled Water Quality**

Parameter	Effluent Compliance Value	Nubian
BOD	<10 mg/L	V
SS	<10 mg/L	V
рН	6.5-8.5	V
Turbidity	<2 NTU (95%ile) <5 NTU (maximum)	<b>~</b>
Disinfection	Cl: 0.2-2.0 mg/L residual	<b>~</b>
Coliphages	<1 pfu/100 mL	V
Clostridia	<1 cfu/100mL	<b>V</b>
E.coli	<1 cfu/100mL	<b>~</b>

make every drop count