





Industry

Municipalities

Farming & Nurseries

Resorts & Hotels

Health Care

Your water is our business

At Okiana, we know water. We help you identify and understand your water problems, and build custom treatment systems that solve them efficiently and economically.



# Tailored for Your Organization

## Industry

- Pharmaceutical
- Electronics & Microelectronics
- Chemicals
- Food & Beverage
- Power & Utilities
- Automotive

#### Tailored solutions:

- Influent Purification
- Wastewater Treatment
- Water for Power & Heating
- Reclamation
- Demineralization

#### Health Care

- Hospitals
- Specialist Clinics
- Dialysis Facilities
- Managed Care

# Tailored solutions:

- Dialysis
- Bacteria Removal
- Water Purification
- Sewage Treatment

## Farming & Nurseries

- Field Crops
- Nurseries
- Growers
- Livestock

#### Tailored solutions:

- Tertiary Sewage Treatment
- Influent Desalination
- Water Reclamation
- Well Water Desalination

## **Municipalities**

- Cities
- Towns
- Rural Settlements
- Villages

#### Tailored solutions:

- Surface Water Purification
- Well Water Purification
- Desalination
- Sewage Treatment
- Industrial Wastewater

#### Service Sector

- Hotels
- Resorts
- Institutions
- Military
- Office Buildings

#### Tailored solutions:

- Influent Purification
- Water for Power & Heating
- Water Reclamation
- Primary & Secondary Sewage Treatment

# Solutions



### Water Purification

#### Surface Water

Water originating from rivers, lakes, channels and reservoirs is often muddy, and may contain oil or heavy metals. We remove these contaminants using a variety of techniques.

#### Well Water

Well water may be polluted with iron, magnesium, nitrates, etc. We test the water to identify contaminants, then remove them using oxidation, or chemical treatment which solidifies unwanted material, allowing its removal.

#### Seawater & Brackish Water

Salt and salty water must be desalinated to be used for domestic and industrial purposes. We perform desalination using corrosion-resistant membrane systems, including micro-, ultra-, nano-filtration, and RO.

#### **Tapwater**

Tapwater must be treated for many industrial and farming applications. Depending on the specific need, we can desalinate the water, soften it by removing magnesium and calcium, or perform disinfection.

## Wastewater Treatment

#### Sewage: Primary, Secondary & Tertiary Treatment

Sewage first undergoes mechanical filtration (primary treatment), then removal of organic and unorganic materials (secondary treatment). We also perform tertiary treatment: filtration, chlorine treatment and coagulation, which purifies wastewater for use in irrigation and industry.

#### Industrial Wastewater

Treatment of industrial wastewater is often required by the local authorities. We build custom solutions that economically treat effluent to comply with regulatory requirements.







# **Process Liquids Treatment**

#### Power & Heat

We perform side-stream and full-stream filtration for cooling towers, provide boiler feed water, and serve the water requirements of other power and heat generation facilities.

#### Reclamation

Process water used in industry, farming and elsewhere can be recycled and reclaimed for further use. We consult on how water can be reclaimed, and construct the required pipes, pumps and treatment facilities.

#### Demineralization

We provide simple solutions that remove calcium, magnesium and sodium from process water using cation and anion exchangers, as well as specialized solutions to treat high alkalinity and dissolved gases.

#### Bacteria Removal

Depending on the need, we remove bacteria from process water using chlorinators, UV light, and ozonization.

#### Dialysis

We perform turn-key dialysis projects for health-care facilities. We construct complete hemodialysis facilities which perform pretreatment with RO, then purify blood using a membrane process.



# Technologies







#### **Pretreatment**

- Coagulation & flocutation
- Softening (using antiscalant or cation resin softeners)
- Clarifiers
- Flotation, settling, sedimentation
- Activated Carbon absorption

#### **Filtration**

- Media filtration using sand, anthracite & quartz, catalytic media
- Basic filtration using depth filters, pressure filters, cartridge filters, gravity filters
- Mechanical screening & filter press Ion Exchange
- Co-current/countercurrent regeneration
- Layered bed/mixed bed

#### Decontamination

We provide highly effective treatment and removal of:

- Organic compounds
- THMs (Trihalomethanes)
- Heavy metals
- Iron, Manganese and Sulphide
- Nitrate removals

#### Membrane Process

- Micro Filtration (MF)
- Ultra Filtration (UF)
- Nano Filtration (NF)
- Reverse Osmosis (RO)
- Submersible Membranes
- Membrane Bio-Reactor (MBR)

#### **Polishing**

- Mixed bed
- Deep-bed/sodium-cycle polishers

#### Mobile Systems

- Compact treatment solutions built to your requirements
- Flange-to-flange system is delivered to your site and immediately starts working



- Careful design and testing ensures high reliability and simple maintenance
- Small footprint allows you to deploy the system in an optimal location





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