

Professionals in water!

Solutions and systems within the potable water, waste water and process water industry.

RWB differentiates itself by supplying standard systems on the one hand and by developing custom made solutions on the other hand. By keeping all disciplines, like engineering, process management,

assembly, commissioning and maintenance in-house and also because of a 24/7 service, RWB can offer a complete package in water treatment. That is our added value!

RWB's services

- Process technology
- Engineering
- System realization
- Service



WATER REUSE FOR INDUSTRY

Reclaimed water with Ozonizer and Ceramic Membrane filtration



WATER REUSE SYSTEM FLOW DIAGRAM

Information:

- **Location:** Municipal waste water treatment plant
- **Capacity:** 7000 m³/day, expansion up to 21.000 m³/day
- **Usage:** Water for public fountains, washing and flushing toilets
- **Further treatment:** Reverse osmosis to produce process water for the industry

		Secondary Effluent	Reclaimed Water from water reuse system	Standards of water for recreational use
SS	mg/L	~3	<1	N/A
Turbidity	Degree	1-5	<0.1	<2
COD _{Mn}	mg/L	5-11	3-5	N/A
Color	Degree	4-23	0-3	<10
T-P	mg/L	~1.1	0,4	N/A
E.coil	MPN/100mL	1300	N/D	N/D

Biological Treatment Process (optional)

Nitrification with bio-filter to reduce ozone consumption at the ozonation stage.
 [Targets removed] NH₄⁺, NO₂, SS




Ozonation Process

Odor/color removal, disinfection and refining of fine particles by ozonation.
 [Targets removed] Color, odor, organics, bacteria, viruses



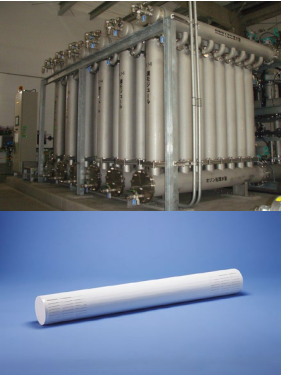
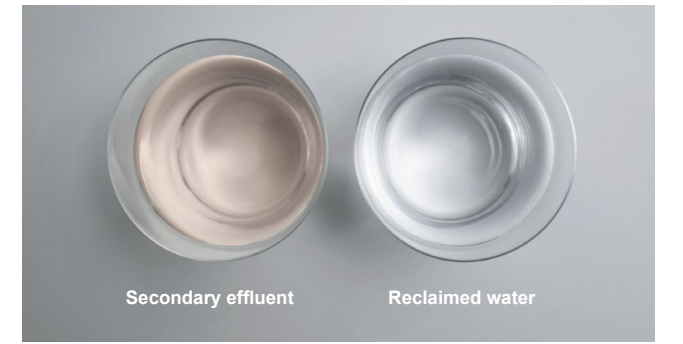
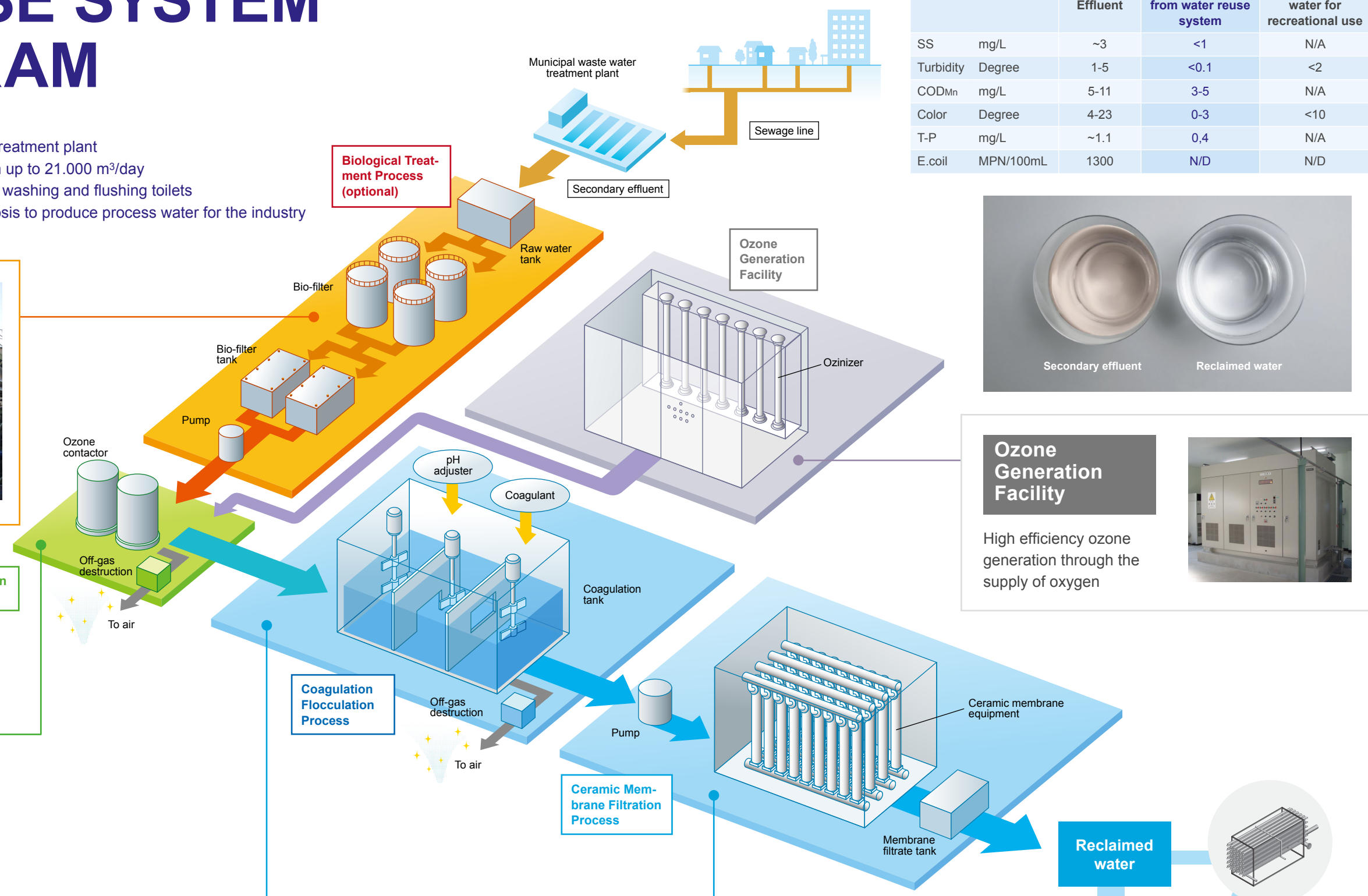
Coagulation / Flocculation Process

Coagulation / flocculation of SS to prevent membrane fouling.
 [Targets removed] SS (organic substances, phosphorus, viruses etc.)



Ceramic Membrane Filtration Process

Filtration of coagulated water using μm MF ceramic membrane to remove micro-flocs
 [Targets removed] Turbidity, bacteria

Ozone Generation Facility

High efficiency ozone generation through the supply of oxygen

