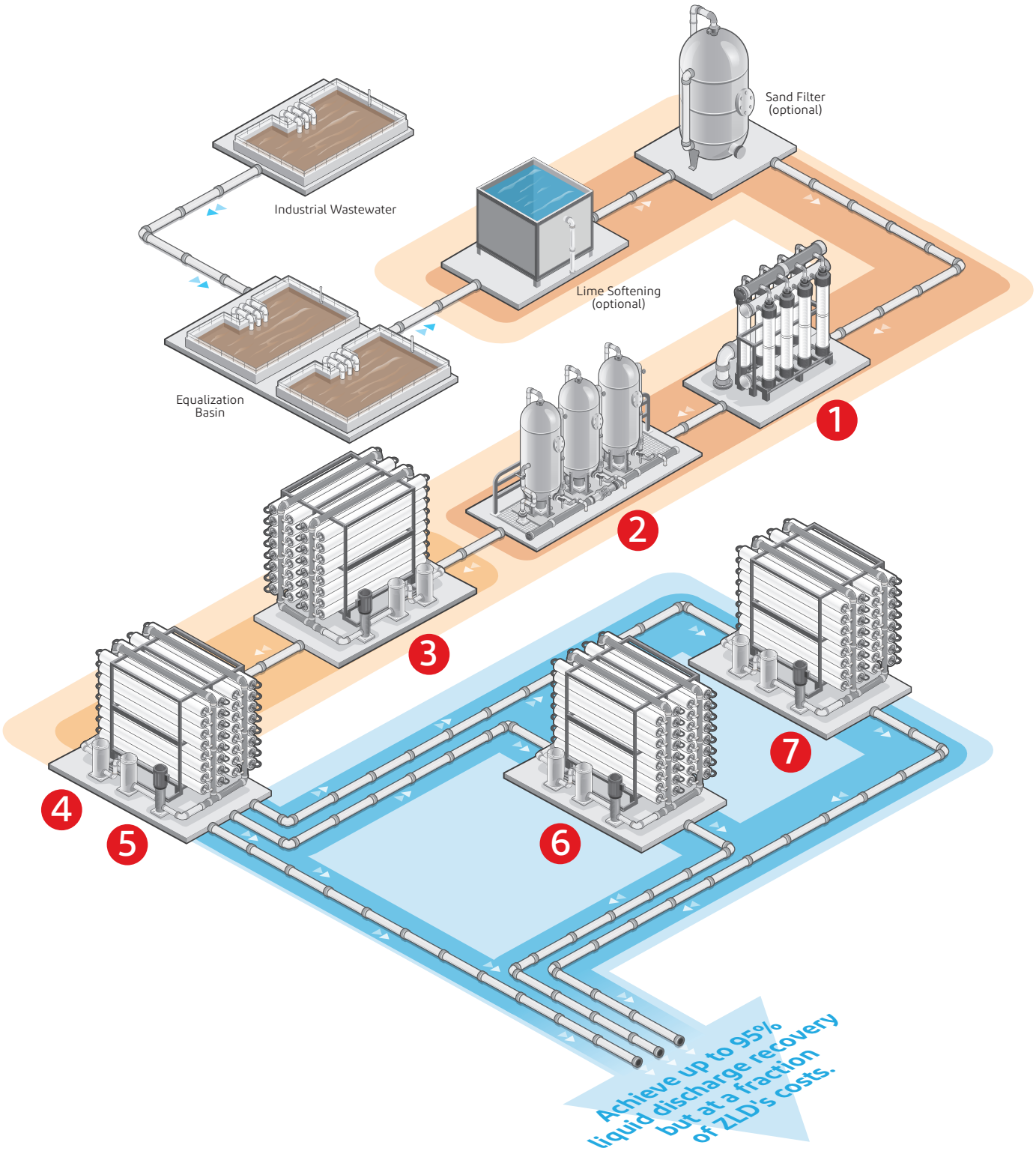
Water Solutions

DUPONT™

Minimal Liquid Discharge (MLD) Solution

A water management approach that can help you increase recovery and reduce costs.



Minimal Liquid Discharge (MLD) Solution

1 IntegraFlux™ XP Ultrafiltration Modules

- High-productivity ultrafiltration modules with industry-leading membrane area and high-permeability XP Fiber
- High-mechanical-strength PVDF fiber with excellent chemical resistance providing long membrane life and reliable operation
- Outside-in flow configuration allowing a wide range of solids in the feedwater minimizing the need for pretreatment processes and reducing the backwash volume compared to inside-out configurations

2 AmberLite™ IRC83 H WAC Resin for Hardness Removal

- Up to 30% more operating capacity than current weak acid cation resins
- Fewer regeneration cycles reduce waste volume up to 15%
- Superior physical stability yields long resin life

3 FilmTec™ Fortilife™ CR100 RO Elements

- Up to 50% less frequent cleanings due to biofouling
- Improved hydraulic balance for low organic fouling and lower energy
- Reduced rate of flux loss in challenging waters
- Highly cleanable membrane chemistry
- Up to 10% lower energy operation
- High permeate quality to enable blending with higher TDS for reuse

4 FilmTec™ Fortilife™ XC70 RO Elements

- Maximize purity of reuse water while concentrating the brine to > 70,000 ppm TDS within standard operating limits
- Fouling resistance
- Increased productivity
- Less frequent cleaning, more up-time, longer element life

5 FilmTec™ Fortilife™ XC80 RO Elements

- Lower brine volume and maximize recovery by concentrating the brine to > 80,000 ppm TDS within standard operating limits
- Fouling resistance
- Reduce discharge with standard RO system designs
- Less frequent cleaning, more up-time, longer element life
- Low-energy RO operation

6 DuPont™ Specialty Membranes UHP RO Elements

- Reduce brine volume and achieve concentrations of 100,000 – 200,000 ppm TDS, thus significantly reducing discharge volume and downstream processes
- Distinctive ultra-high-pressure element construction allowing operation up to 120 bar (1,740 psi)
- High-pressure, fouling-resistant FilmTec™ SW30 flat sheet

7 FilmTec™ Fortilife™ XC-N and XC-N HP NF Elements

- Highly selective membrane with high monovalent ion passage and divalent ion rejection
- Purified brine solution for reuse
- Increases the concentration and weight fraction of divalent ions in the concentrate stream for more efficient evaporator / crystallizer operation in ZLD systems
- Less dissolved solid wastes
- Low-energy operation

Have a question? Contact us at: dupont.com/water/contact-us

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