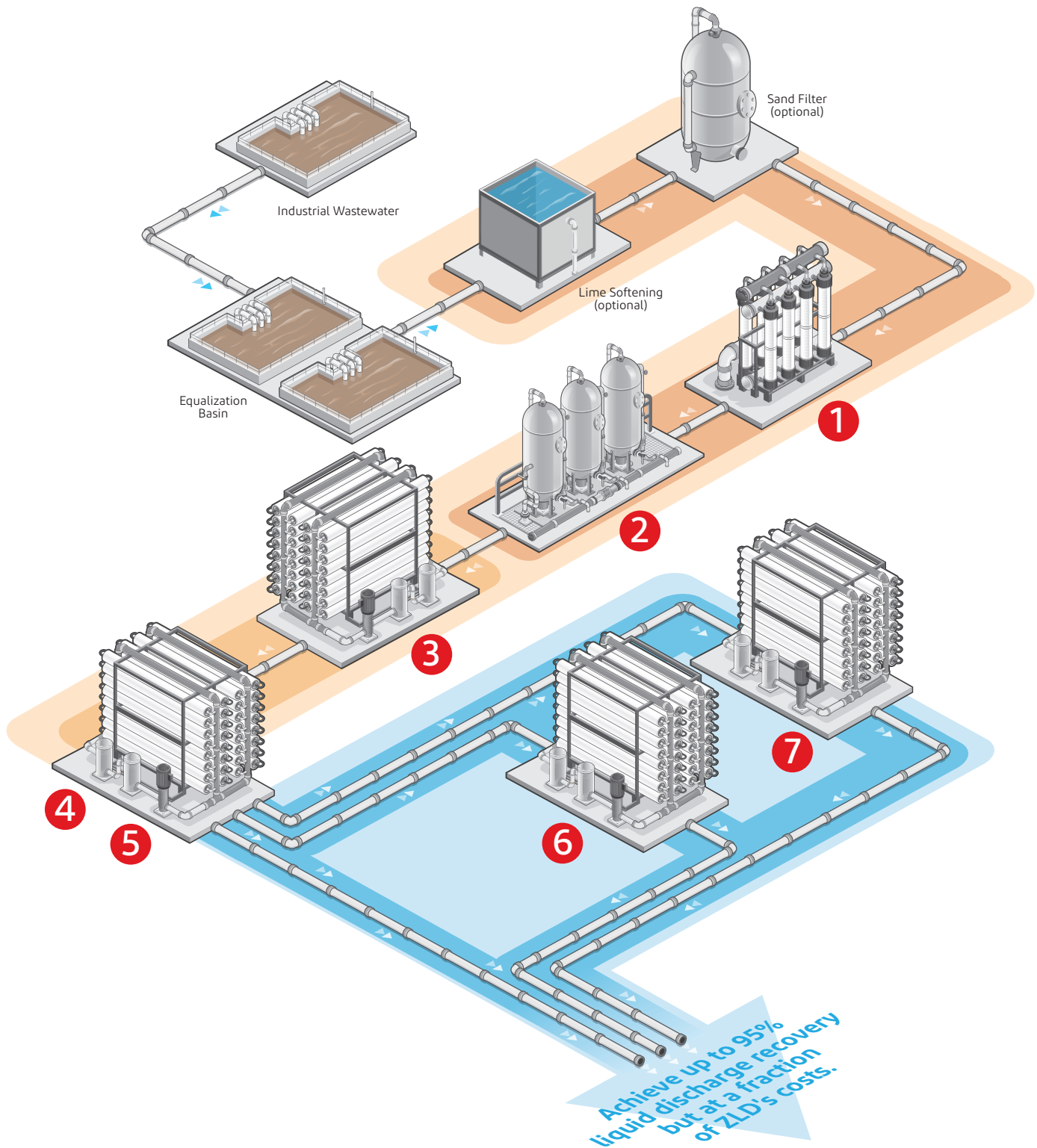


# Minimal Liquid Discharge (MLD) Solution

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](https://www.dupont.com/water/contact-us)



[dupont.com/water](https://www.dupont.com/water)

No freedom from infringement of any patent or trademark owned by DuPont or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

DuPont™, the DuPont Oval Logo, and all products, unless otherwise noted, denoted with ™, SM or ® are trademarks, service marks or registered trademarks of affiliates of DuPont de Nemours, Inc. © 2020 DuPont de Nemours, Inc. All rights reserved.

Form No. 45-D01074-en CDP, Rev. 2  
February 2020