Sargent & Lundy provides comprehensive water treatment process and balance-of-plant (BOP) engineering services for mining, chemical injection, and power-generating facilities. We help clients prepare the mass balances, specifications, technology analyses, and wastewater quality estimates necessary to execute a wide variety of water treatment projects, such as demineralized makeup water, high-volume reagent preparation, and wastewater treatment.

**Treatment Experience**

- Biological reduction
- Chemical precipitation
- Decarbonization
- Deaeration
- Electrodeionization
- Fish return
- Forced circulation crystallization
- Gravity filtration
- Gravity separation
- Ion-exchange demineralization
- Mechanical vapor compression
- Multimedia filtration
- Multiple-effect distillation
- Multistage flash desalination
- Neutralization
- Reverse osmosis
- Radioactive waste vitrification
- Traveling screens
- Ultrafiltration
- Zero-valent iron

**Recent Water Treatment and Wastewater Projects**

- BOP upgrade for flue gas desulfurization (FGD) wastewater treatment system to ensure compliance with new federal and state effluent limit guidelines
- Study comparing the design, operation, and performance of plants in several Organisation for Economic Co-operation and Development (OECD) countries
- Study evaluating equipment upgrades required for plant life extension
- Detailed BOP design support for seawater reverse osmosis facility
- Detailed BOP design support for makeup demineralizer system for international project
- Detailed BOP design for upgrade of demineralized water treatment system