

Ball Corporation, St. Paul

Sayandeep Biswas

Chemical Engineering, University of Minnesota Jane Paulson, MnTAP Advisor

Organization

Ball Corporation is a global leader in innovative, sustainable metal packaging for beverage, personal care and household product headquartered in Broomfield, Colorado. It was founded in Buffalo, New York in 1880 by Frank C. and Edmund B. Ball.

Intern Project

The project focused on improving systems for tracking the water usage in different segments of the plant and reducing water consumption.

Incentives to Change

Ball Corporation's St. Paul facility has consumed a total of 26 million gallons of water in 2018. Water scarcity, quality, and discharge are operational and reputational risks for Ball and their value chain partners.



Solutions

Wastewater Reuse in Lime Silo

Annual waste reduced: 4,700,000 gallons
Implementation cost: \$1,000
Annual Cost savings: \$44,200
Payback period: 10 days

Wastewater Reuse for Polymer Discharge

Annual waste reduced: 1,000,000 gallons
Implementation cost: \$1,100
Annual Cost savings: \$9,800
Payback period: 1.5 months

Replacing Compressed Air Lines with Blowers

Annual waste reduced: 4,700,000 kWh
Implementation cost: \$750
Annual cost savings: \$350,000
Payback period: 3 hours

