## Challenge

### Background
Absorber recycle pump required sleeve and packing replacement every six months causing considerable expense and operational downtime. Slurry leaks on the floor increased labor costs and caused safety issues. Uncontrolled flush water use was extremely high, which resulted in excessive water treatment costs.

### Goal
- Resolve issues with sleeve wear
- Improve pump availability and dependability
- Reduce excessive water usage and treatment costs at this zero-discharge plant
- Reduce and control absorber slurry dilution

## Solution

### Product
- Chesterton packing SuperSet, which consists of 3 rings of Chesterton 1830 packing
- SpiralTrac™ technology, which redirects and removes abrasives from the stuffing box to improve packing performance while reducing flush water needs

## Results

- Sleeves can now be reused multiple times—saving $4,800 per sleeve
- Pump MTBR extended up to 2x
- Flush water reduced from approximately 3,000,000 gallons
- Eliminated labor costs and safety issues once caused by slurry leaks

### Client Savings
- Reduced sleeve wear/3 pumps: $14,400/yr.
- Flush water reduction: 2.5 mil gallons/yr.
- Significantly reduced water treatment costs at this zero-discharge plant

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