

Sediment filtration reduces sediment levels by 96.7%, helping a Colorado hospital avoid additional pipe replacement costs

Challenge

A newly built hospital in Colorado began experiencing issues with its plumbing infrastructure soon after opening its doors to patients in 2016, including:

- » Sediment buildup inside pipes and equipment.
- » Two to four pinhole leaks per month in different sections of pipe.

A sediment test by LiquiTech uncovered 26 times the World Health Organization-recommended sediment levels in the building's water system. This sediment level is equivalent to 218 pounds of sediment entering the building per one million gallons of water.

An analysis of the building's plumbing infrastructure revealed the sediment source as the incoming water supply. Sediment was mainly concentrated to the hot water recirculation line, continuously circulating and collecting in bends and turns of pipe. The constant rubbing of sediment on pipe eventually caused pinhole leaks.

Highlights

- ▶ **2 to 4 pinhole leaks in different sections of pipes per month** caused by excessive sediment.
- ▶ **\$80K+ incurred by hospital** to replace the damaged pipe.
- ▶ **96.7% reduction in sediment with a Sediment Filtration System**, preventing damage to new pipe and equipment.

Solution

The hospital worked with a plumber to implement a three-phase pipe replacement project totaling more than \$80,000.

Simultaneously, LiquiTech worked with facility staff to install a LiquiTech® Sediment Filtration System on the incoming water supply to remove sediment before it could enter the building and damage the newly installed pipe and other plumbing infrastructure.

Results

The new Sediment Filtration System is removing 96.7% of incoming sediment, helping the hospital:

- » Improve water quality.
- » Reduce the risk of Legionella and other bacterial growth.
- » Reduce maintenance time and costs.
- » Extend the life of the new pipe and other water-bearing equipment.
- » Avoid \$80,000 in future pipe replacement costs.

“ Working with LiquiTech has been very positive. The new Sediment Filtration System is easy and hands-off. It’s self-maintaining and self-cleaning, has improved our water quality, and is already increasing the life of our pipes.”

- **Facilities Director**

Sediment levels (96.7% reduction)

