Finding Success with T&S:

Water audits



The Background

A major private Pennsylvania university, with enrollment of more than 10,000 graduate and undergraduate students, began to examine water use — particularly water waste — across its dining facilities.

Outdated high-flow faucets and periodic leaks were previously overlooked since they did not impede regular operation of the kitchens.

The university agreed to an initial T&S Brass water audit in one dining facility, which includes an all-you-care-to-eat dining room and convenience store.

The Process

T&S' proprietary water audit process involves a comprehensive look at water use in a facility and involves several areas of assessment and measurement.

The water audit provided the university's dining services and facilities managers with a detailed report of the amount of water being used, as well as an estimate of the significant savings in water, energy and financial resources that could be realized with updated fixtures

"The audit report was an eye-opener for the university's dining services director," said Kevin McTague, the T&S sales representative who conducted the audit. "We were able to show the kitchen was unintentionally wasting a tremendous amount of water with outdated fixtures and untended leaks."

The results of the water audit compelled the university to take immediate action to reduce water usage.

T&S water audits are a comprehensive evaluation of water use within a facility.

- Measure faucet and spray valve flow rates
- Identify any drips or leaks
- Measure water loss from drips or leaks
- Inspect fixtures for appropriate use and adequate function
- Calculate potential savings with repairs and updates





The Solution

The university was already a longtime customer of T&S Brass because of the reliability and durability of T&S products. Minor, low-cost updates were able to effect dramatic savings.

A few faucet bodies were replaced as needed, but most of the existing T&S faucets, some of which had been in use for 40 years, were retrofitted with Cerama cartridges and low-flow aerators to resolve leaks and reduce water usage. These included fixtures used in hand sinks and prep sinks.

For example, two of the kitchen's prep sinks, which previously were measured at flow rates of 13.3 gpm and 16.3 gpm, saw a dramatic reduction when fitted with 2.2 gpm aerators. Likewise, a hand sink was fitted with a 1.0 gpm aerator after the water audit measured it at 1.68 gpm water flow.

Pot sinks were also evaluated but left at higher flow rates because of the nature of their use.

Pre-rinse unit spray valves were updated to reduce flow. And several hose reels were added to streamline cleaning needs.

100s GALLONS SAVED PER DAY

The water audit results were so compelling that a larger dining hall, serving up to 1,200 students per meal, also underwent an audit with similar results.



The Results

The updates are helping the university's dining halls reduce water consumption by hundreds of gallons per day. The changes conserve not only natural resources but also the institution's financial resources by lowering water costs, energy expenses associated with heating water, and sewer and water treatment costs, enabling the university to realize a return on investment measureable in days.

Staff have not noted any declines in performance with the lower-flow products in place and have expressed pleasure at the convenience of retractable hose reels over their previous method of storing hoses in a back room and retrieving them for daily cleaning.

Based on the results of the audit and the successful updates in two dining facilities, the university plans to extend the audit and update process to all of the school's dining operations over the following 12 to 18 months.