

# BRIEFING 11

**FLUSHMATE®**

A DIVISION OF SLOAN VALVE COMPANY

## Public Housing With The Right Attitude:

### Saving Water and Reducing Maintenance with SLOAN *FLUSHMATE®* Pressure-assist Technology

The Norwalk Housing Authority within the City of Norwalk, Connecticut manages 1,133 units of family and senior housing in 18 developments. The most basic mission of the housing authority becomes providing safe, decent and sanitary housing.

“Our attitude is that all of our units are people’s homes,” says Robert Colonnese, Construction Manager at the Norwalk Housing Authority (NHA). “We want to respect people and their homes, and so we treat them as our own home. Routine maintenance is part of that commitment, and when it came to renovations, we took a very close look at toilets that would save water and reduce stoppages.”

Colonnese is referring to the fact that the residential toilet is one of the largest “consumers” of water in the home.

“When a toilet clogs repeatedly it can become a maintenance challenge,” he says, “so when we renovated the project at Roodner Court apartments (218 in total) which is our largest facility, we looked closely at all the bathrooms.

Our research led us to pressure-assist toilets utilizing Sloan *FLUSHMATE®* technology. We really wanted to find out if it would help with the backups we were experiencing.”

Water Management, Inc. (WMI) has been a leading water efficiency company in the US since 1980. Offering expertise in water conservation, the company creates innovative efficiency programs for Multi-Unit Residential properties, Public Housing Authorities, Industrial, Commercial and Institutional properties, and Utility Companies. With offices in Alexandria, VA, Nashville, TN and San Diego, CA, the company’s goal is to help clients nationwide save water, the planet’s most precious resource.



Colonnese, who is a registered architect, has worked at NHA for 12 years, and says the initial test resulted in a 40% drop in toilet stoppages at the apartments. “This was only counting the toilet stoppages - not the main stoppages. We found pressure-assist effective in helping to eliminate both types of stoppage,” he says. “That pretty much sold us.”

After the successful test project at Roodner Court, NHA executed a performance contract with Siemens Building Technologies, Inc. Water Management, Inc. performed the work to replace ALL of the toilets, update the flow controls on faucets, and install high efficiency showerheads. A total of 836 pressure-assist *FLUSHMATE* units were installed in NHA’s residential units, office buildings and community centers.

“Essentially, our objective is not only to reduce the water costs, but to reduce

maintenance costs by standardizing to a product that performs. Unless you achieve both, you really do not accomplish what the client needs,” explains Charlie Gildehaus, the Project Director for Water Management, who worked with Colonnese. “It’s our experience that a pressure-assist toilet in these apartments offers the best solution because of their commercial capacity to handle the task. Too many gravity toilets fail to perform under field conditions.”



“If you have three or four bathrooms in the house, you will use some more frequently than others,” explains Gildehaus. “But in an apartment, there is usually one toilet that gets most of the usage. That places stress on a single fixture and we have found *FLUSHMATE* can handle the stress better than other systems. *FLUSHMATE* delivered the results Robert was looking to achieve.”

Both Colonnese and Gildehaus had concerns with tenants “tinkering” with the moving parts of a standard toilet, but because all of the water and moving parts are contained within the vessel there is less concern. With fewer moving parts, that are less complicated than other systems, there are fewer service calls.

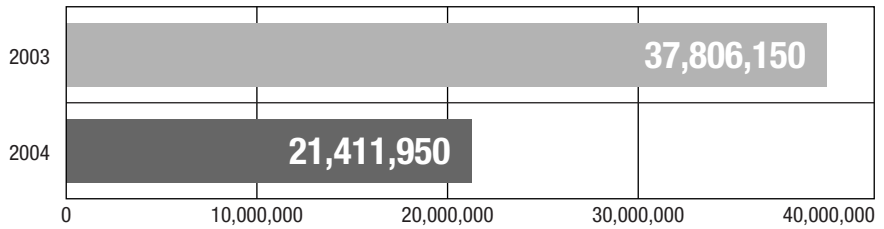
“And they are more likely to call when there is a problem with pressure,” Gildehaus agrees, “which is beneficial from a water conservation perspective. In a gravity toilet that is slowly leaking water, many people say to themselves, ‘Oh it’s just dripping, never mind maintenance.’ That’s why it was important to choose a reliable system like *FLUSHMATE*.”

The *FLUSHMATE* system has a ten-year written warranty and replacement parts are readily available at dealers throughout the country.

“*FLUSHMATE*-equipped toilets also produce a unique sound,” says Colonnese. “People have to get used to it, but it doesn’t take very long.”



### Norwalk Water Usage (January-June 2003 vs. 2004)



NORWALK saved 16,394,200 gallons, a 43% reduction in water usage.

“After two years of service, the *FLUSHMATE* units are working very well,” Colonnese says. “People need to flush once, now, he adds. “Not twice. You know, in our facility – in any facility for that matter – you don’t know what gets flushed. Anything from diapers to toys can go into the toilet. Pressure-assist toilets help to evacuate such mistakes without clogging and cut down on work orders.”

“What is important about *FLUSHMATE* is that it is a fixed volume fixture,” says Gildehaus. “It flushes at the same amount of water today as it would five years from today. With a typical gravity toilet you can hold the handle down to release more water and as the flapper ages, leakage occurs. This defeats the purpose of water efficient toilets. The vessel reduces water usage, improves performance, and here in Norwalk it made Robert’s life easier when it comes to maintaining his facilities. I’d say *FLUSHMATE* made all that possible.”

#### Running the Numbers

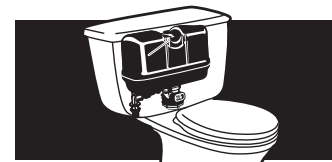
In 2003, Norwalk was using fixtures that flush 3.5 gpf. In 2004, NHA was using new 1.6 gpf toilets, improved faucet flow controls and more efficient shower heads. Based on current residential consumption levels, toilets use 35% of the total water consumed in a residential setting. So, just how did Norwalk achieve a 43% drop in usage? (refer to the chart).

This can be explained by saving 2 gallons per flush, the elimination of double flushing and leakage, in combination with improved flow controls. “The reliability of the *FLUSHMATE* pressure-assist,” Gildehaus states, “ensures that this

project will be able to maintain a consistent level of cost savings over time.”

Stoppages have been virtually eliminated and the cost of maintaining the toilets has dropped. “Tenants are happier and our engineering department can now focus on real problems-not clogged toilets,” adds Colonnese. “This is a product that delivers!”

*FLUSHMATE* systems are available in 1.6 gpf (6.0 Lpf), 1.28 gpf (4.8 Lpf) and 1.0 gpf (3.8 Lpf) models from leading fixture manufacturers worldwide in a variety of styles and colors. For more information on these systems, including *FLUSHMATE*’s automatic sensor flushing systems, please contact us or visit our website: [www.flushmate.com](http://www.flushmate.com).



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