

Commercial High-Efficiency Toilet Installation Program

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AWWA Water Sources Conf.
February 7, 2006



Santa Clara Valley Water District

- Northern California – Bay Area – “Silicon Valley”
- Wholesale Water Agency
 - 13 major water retailers
- Serves 1.7 million residents
- Water Resources Management Agency for Santa Clara County



Commercial High-Efficiency Toilet Installation Program *Background*

In 2003, the District received grant funding for an “innovative high-efficiency commercial plumbing installation program” from the State of California Department of Water Resources.



Commercial High-Efficiency Toilet Installation Program

Description of HETs

- HETs are toilets that use at least 20% less water to flush than ULFTs (1.28 gpf or less)
- SCVWD decided to install only 1.0 gallon per flush HETs (use ~38% less than ULFTs)
- Why pressure-assisted flush? Work well in commercial settings. Loud but flush well



Commercial High-Efficiency Toilet Installation Program

Description of HETs

- Model currently being installed is the Vortens “Tornado”
- “Maximum Performance” test (MaP) by Veritec Consulting, Inc.
- Scored 700



Example of pressure-assisted
Flushing mechanism.

Commercial High-Efficiency Toilet Installation Program

Goal for Program

- Installation goal = 1,200 HETs installed in Santa Clara County over three years.
- One year into the program and over 1,000 have been installed.



Commercial High-Efficiency Toilet Installation Program

Program Details

- Only replaced non-ULFTs (replaced toilets must flush 3.5 gpf or higher).
- \$269 per installation. Includes HET (Vortens “Tornado”), marketing and administration of program, toll-free number, installation of new HET, recycling of old toilet, follow-up as needed, record keeping, warranty.



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Where to put HETs

- Targeted settings with highest savings potential. *Source: California Urban Water Conservation Council (CUWCC) CII ULFT Study from 1997.*
- Wholesale, Food Stores, Restaurants, Retail, Automotive, Multiple Use. Other sectors approved as needed (health clubs, etc).



Commercial High-Efficiency Toilet Installation Program

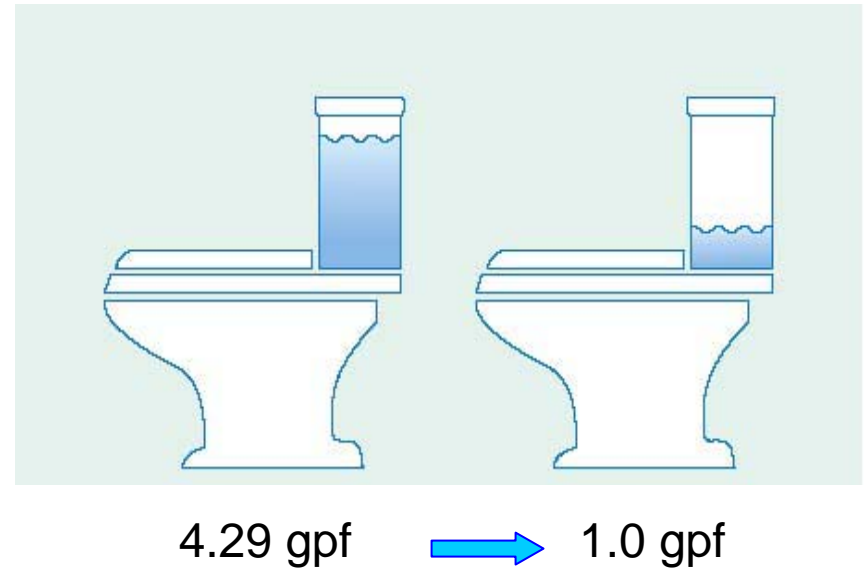
Marketing

- Since start of program, over 1,000 HETs installed
- These marketing methods worked well:
 - Sent flyers targets sectors.
 - Door-to-Door marketing. Good with older strip malls. Once one store is signed up, others likely to follow.
 - Worked with commercial property management companies who gave permission to retrofit numerous strip malls.
 - Utilized information gathered through Pre-Rinse Sprayer Installation Program (Rinse & Save).

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Savings

- Each old toilet's flush volume is measured before it is removed.
- The average flush volume for toilets replaced in FY 04/05 was 4.29 gallons (3.5 gpf was minimum).



Example: Ann's Universal Cuts in Sunnyvale, CA



Toilets changed out on 11/15/05

Example: Ann's Universal Cuts in Sunnyvale, CA
Before & After



Before: 7.0 gpf



After: 1.0 gpf

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Savings

- In FY 04/05, ~1,000 HETs were installed in nine different CII sectors.
- Savings (for all HETs) =
36,730 gallons per day
- Savings determined by taking CII ULFT savings from CUWCC Saving Study (1997) and adding 20% to each sector.



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Customer Satisfaction

- Follow up inspections – in-person and via phone.
- Inspectors look at installation and also gauge customer satisfaction.
- Enormous amount of positive feedback.



“The program was great. There was no hassle, it was quick and easy.” Speed Merchant, San Jose

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Lessons Learned

- Direct installation programs worked best.
- Target sectors with highest savings potential.
- Follow up inspections – very important. Go back or call within a month of installation.
- Marketing – try door-to-door, especially with older strip malls.
- Give HETs a try, instead of ULFTs. Pressure-assisted flushing makes them work well in commercial settings.

Questions?

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