



THE BOTTOM LINE

The 5th Annual \$traight to the Bottom Line Conference

Friday May 2, 2003
8:00-11:30am
Doubletree Hotel, Rohnert Park
\$35 (continental breakfast incl.)

Keynote

Dr. Gordon Forward, former Chief Executive Officer and President of Chaparral Steel, will inspire participants with the innovative ways his steel manufacturing company has realized substantial profits through beyond-compliance environmental practices.

Best Practices

Guest speaker Edward Quevedo from WSP Environmental will speak about successfully educating and involving employees in environmental business practices, one of the common concerns identified by the Best Practices Progress Report.

Plus, table exhibits by environmental product and solution providers and a prime networking opportunity with other top North Bay businesses!

Break Out Sessions

Learn the real financial payoff from environmental design, resource conservation, and waste reduction at one of three informative break-out sessions:

- 1 High-Performance Development**
A panel of energy analysts, architects, and land developers present the business case for environmental building design.
- 2 Small Steps, Big Payoff**
Three local businesses from the retail, high tech and ag industries present case studies of energy and water conservation and waste reduction. Energy, water and waste service providers on hand to answer questions.
- 3 Commercial/Industrial Kitchen Energy Efficiency**
Experts from the Food Service Technology Center (FSTC) teach energy efficiency for commercial and industrial kitchens.

Major Sponsors:



Sonoma County Water Agency
Sonoma County Waste Management Agency

Media Sponsors:



Please return completed registration form with tax-deductible check (\$35 per participant) made out to:
Sonoma County Economic Development Board Foundation

Business Environmental Alliance
401 College Ave., Suite D
Santa Rosa, CA 95401

Fax: (707) 565-7231
Phone: (707) 565-7257

Name _____

Business _____

Address _____

Email _____ Phone _____

Website _____ Fax _____

The Low-Down on Low-Flow Toilets

Recognizing the potential for large-scale water savings from the use of 1.6 gallons per flush ("low-flow") toilets, Congress mandated in 1994 that only 1.6 gpf toilets would be sold in America. Auxiliary benefits of compliance with this mandate are lower water and wastewater bills, resulting in direct savings to consumers.

A somewhat unfavorable reputation for low-flow toilets developed in the early 1990s because old models often required multiple flushes to get the job done, negating any intended water or financial savings.

Today, however, toilet manufacturers have vastly improved the design of low-flow toilets available to American consumers. Recent studies have shown that the latest models meet the expectations of both residential and commercial consumers and many models work even better than old, higher flow models.

With Sonoma County's increasing population, an ever-diminishing water supply, and local rebate programs making the installation of new toilets affordable, the case for installing low-flow toilets is stronger than ever.

Where can I find my low-flow toilet?

Look in the phone book under hardware! Here are a few suggestions among many possibilities:

Santa Rosa: **Friedman Bros.** (584-7811) carries Toto, Kohler, St. Thomas and Gerber models.

Rohnert Park: **Yardbirds** (585-3800) carries Eljer and Kohler brands, including the Wellworth model.

Petaluma: **Yardbirds** (778-6100) carries th Eljer Aqua Saver, Canterbury and Patriot and the Kohler San Raphael and Wellworth.

Windsor: **Ace-Garrett Hardware** (433-6590) carries Eljer models.

Healdsburg: **Ace-Garrett Hardware** (433-5593) carries Eljer Savory & Patriot and Kohler models.

Cloverdale: **Ace Harware** (894-2165) carries Eljer Savoy & Patriot models.

Guerneville: **Ace Hardware** (525-8635) carries an Eljer kit called "toilet-to-go" or "toilet-in-a-box" in both elongated and regular styles.

More water savings...Clotheswasher rebate programs

Petaluma has a high-efficiency clotheswasher rebate of up to \$500 for businesses, multi-family complexes, hotels, and laundromats. For more information, call the Department of Resources & Conservation at (707) 778-4507.

Santa Rosa has partnered with Energy Solutions, Inc. to provide rebates to commercial laundries and multi-unit residential laundry facilities for converting to front-load, coin-operated washing machines. Contact Gail Chavez at (707) 543-3991.



Low flow toilet rebate programs

In Petaluma: The City of Petaluma offers a toilet & waterless urinal replacement program to businesses that utilize the City's water or sewer services. The program provides a rebate of up to \$200 for the cost of purchasing a low-flow toilet, plus up to \$120 for the cost of the first installation and \$60 for any additional replacements. For more information, call the Department of Resources & Conservation at (707) 778-4507.

In Sonoma Valley: Business customers of the Sonoma Valley County Sanitation District are eligible for rebates of up to \$260 for each low-flow toilet or waterless urinal purchased and installed. To inquire about eligibility, call (707) 547-1933.

Overall Toilet Ratings

Toilets ranked VERY GOOD and GOOD OVERALL, in order from top to bottom

Brand & Model	Price	Type *	Comments
Briggs Vacuity 4200	\$190	Vacuum	A Consumer Reports Best Buy.
American Standard Cadet PA 2333.100	450	Pressure	Very good at minimizing soil and odor in bowl.
Gerber Ultra Flush 21-302	280	Pressure	Round-front bowl. Very good at minimizing soil and odor in bowl.
Crane Vacuum Induced Power Flush VIP 3999	250	Vacuum	Taller than most; designed for the elderly and disabled. Very good at minimizing soil and odor in bowl.
Gerber Ultra Flush 21-312	300	Pressure	
Kohler San Raphael Power Lite K-3398	600	Pressure	One-piece design. Seat included. Uses electric pump.
Crane Economiser 3834	200	Pressure	Round-front bowl.
Mansfield Quantum 150-100	230	Pressure	Discontinued but may be available.
Toto Carlyle MS874114SG	460	Gravity	One-piece design. Seat included.
Kohler Wellworth 3422	150	Gravity	As received, used more than 2 gallons per flush.
American Standard Cadet 2798.012	170	Gravity	Round-front bowl. Very good at minimizing soil and odor in bowl.
Eljer Aqua Saver 091-7025	420	Pressure	Poor at minimizing soil and odor in bowl.
Kohler Wellworth K-3423	120	Gravity	As received, used more than 2 gallons per flush. Round-front bowl.
Eljer Canterbury 081-1625	505	Gravity	One-piece design. Seat included.
Eljer Patriot 091-2125	185	Gravity	Poor at minimizing soil and odor in bowl.
Eljer Patriot 091-2175 17"	285	Gravity	Taller than most. Designed for the elderly and disabled. Poor at minimizing soil and odor in bowl.

* Types of toilets

Vacuum Assist A vacuum chamber inside the tank works like a siphon to pull air out of the trap below the bowl so that it can quickly fill with water to clear the waste.

Pressure Assisted The china covers a tank of pressurized water. It expands with a loud whoosh when you flush, adding force to help push waste away. Most work mechanically. Noise is the biggest drawback of a pressure-assist toilet. Also, mold and mildew can grow in the stagnant water below the pressure-assisted tank.

Gravity The tried-and-true mechanism, which depends on water dropping from the tank into the bowl and trap to move waste down the drain.

The information on on this page was provided by "Successful water-savers," a *Consumer Reports* test of 1.6 gpf ("low-flow") toilets. See the article on pages 52-55 in the October 2002 issue of the *Consumer Reports* magazine.

Other studies and consumer testimonials

- NAHB Research Center *Toilet Performance Test*: www.cuwcc.org/Uploads/product/NAHB_ToiletReport.pdf
- Washington-based plumbing expert Terry Love's report and testimonials: www.terrylove.com/crtoilet.com
- "Tackling Low Flow Toilet Woes." Online at: http://realtimes.lycos.com/renews/20020808_lowflow.htm

Medtronic AVE "cleans up" their cleaning up process

Medtronic AVE has replaced isopropyl alcohol with a water-based cleaner for wiping down work surfaces, resulting in numerous environmental improvements and a cost savings of 87%.

Isopropyl alcohol (rubbing alcohol) is commonly used in the Medical Device industry to wipe down work surfaces in order to maintain adequate sterility and cleanliness in the manufacturing environment. When isopropyl alcohol evaporates, it contributes to air pollution. Isopropyl alcohol is a volatile organic compound (VOC) which forms ozone when mixed with Nox, primarily from automobile exhaust, on warm, sunny days.

While ozone in the stratosphere (ozone layer) protects the earth from too much ultraviolet radiation, ground level

ozone is a respiratory health hazard that irritates the lungs and aggravates asthma. Ozone is also toxic to vegetation, inhibiting growth and causing leaf damage.

The Bay Area Air Quality Management District has fairly stringent limits on VOC emissions because this region's ground level ozone is not in compliance with the Clean Air Act's ambient air quality standard.

To reduce their contribution to air pollution by 4 tons per year, Medtronic AVE began replacing isopropyl alcohol with a water-based cleaner for wiping down work surfaces (but not for product cleaning) in February of 2002. As of January 2003, all four manufacturing rooms at the facility now use the water-based cleaner instead of isopropyl alcohol. As an additional cost-saving environmental

measure, the wiping cloths are now laundered and reused, rather than disposed of after a single use.

The water-based cleaning solution costs 87% less than the isopropyl alcohol and the wiping cloths are reused 10 times, which corresponds to a 90% cost reduction.

Additional environmental benefits of this material substitution include the elimination of hazardous waste generation and a more efficient use of materials by laundering and re-using wiping cloths. Furthermore, fire hazard is reduced by eliminating isopropyl alcohol, which is a flammable solvent.

