

FREQUENTLY ASKED QUESTIONS (FAQs) ABOUT THE COST OF CERTIFIED "GREEN" CLEANERS

Prepared by the Green Purchasing Institute and Green Schools Initiative

Do environmentally preferable cleaners cost more than conventional products?

Although "green" cleaners may sometimes appear more expensive than conventional products, they most often cost the same – or less – to use. Many school districts as well as local and state agencies that have switched to environmentally preferable cleaners have saved money by replacing a "ready to use" conventional cleaning product with a highly concentrated "green" cleaner. All institutional cleaning products certified by Green Seal and EcoLogo are concentrates.

The cost savings are even more dramatic when institutions start using automatic dilution equipment, which reduces the unnecessary, expensive and potentially hazardous over-concentration of cleaning products diluted manually. Moreover, many schools that have embarked on a green cleaning program have saved money by reducing the number of cleaning products they need to stock by eliminating unnecessary products. Finally, some school districts have negotiated comparable prices for green cleaners from their vendors or through cooperative purchasing agreements.



Jason Luke, Associate Director of Custodial Support Services at Harvard University Medical Center explained:

In the past, green cleaning products were more expensive, but that is not the case anymore. At minimum the decision to use green cleaning products will be cost neutral. A strong case can be made for cost savings, but this largely depends on what one is switching from: if the current products are not purchased in concentrate form, if dilution control systems are not being utilized, if the current number of products being used is excessive and can be replaced by a smaller group of core products, etc., then a significant cost savings can be realized.¹

Which school districts have switched to environmentally preferable cleaners with no additional cost?

A variety of reports document the experiences of individual school districts switching from conventional to "green" cleaners. According to an October 2008 report published by the Connecticut Foundation on Environmentally Safe Schools, "Many school districts that have adopted green cleaning products and practices have experienced no increased costs or significant cost savings."² For example:

- After the Palm Beach County School District (Florida) saved over \$500 in one school during a three-month pilot project, it began phasing in green cleaning to all of its 180 schools in June 2008, with a projected annual district-wide savings of \$360,000.³
- Northern Tioga County School District (Pennsylvania) saved nearly \$20,000 in one year by eliminating aerosols and other hazardous cleaning products. "Ounce for ounce, aerosols often are more expensive than other cleaning solutions and emit harmful fumes that are inhaled by building occupants."⁴
- A 2003-2004 pilot project led by the Healthy Schools Campaign to introduce green cleaning into the Chicago Public School District revealed that the price of Green Seal-certified products was cost-competitive with traditional products.⁵

¹ Jason Luke, Associate Director of Custodial Services, Harvard University Medical Center; email correspondence; March 31, 2009. See also "Greening Harvard's Cleaning," *Harvard Gazette*, April 7, 2005; www.greencampus.harvard.edu/greenclean/media.php.

² Connecticut Foundation on Environmentally Safe Schools, "Green Cleaning in Schools is Cost Effective," October 2008; www.safehealthyct.org/documents/Green_Cleaning_Cost_Effective_2_.doc.

³ Ibid.

⁴ Ibid.

⁵ Healthy Schools Campaign, "Green Clean Schools: Success Stories", www.healthyschoolscampaign.org/programs/gcs/success.php.

Have any other entities reported cost savings associated with the use of certified “green” cleaners?

Yes. The City of Santa Monica, CA reported spending 5% less on its cleaning products costs when it switched from conventional cleaners to less-toxic brands a decade ago. Part of this savings was accrued by eliminating duplicative and expensive cleaning products – many of which were in aerosol containers.⁶

The City and County of San Francisco found environmentally preferable janitorial cleaning products at comparable costs to replace 13 out of 14 product-types.⁷ A report by the San Francisco Department of the Environment concluded that “Buying EPP [janitorial products] is expected to cost roughly the same as traditional products for most product categories.”⁸

Minneapolis, MN, which adopted a *Low Environmental Impact Cleaning Policy* in 2007, reported cost savings in its three-year pilot test of “green” cleaning products.⁹ Similarly, Nassau County, NY, which “spends more than \$40,000 each year on cleaning supplies” issued a “green cleaning” Executive Order in 2006, after “County officials found that, in most instances, the environmentally friendly products are cheaper than existing products.”¹⁰ The City of Seattle made the transition to certified “green” cleaning products several years ago. A fact sheet published by the City states, “In addition to their ‘green’ benefits, the [environmentally friendly cleaning] products improve health and safety in our buildings, are cost-effective, and they work!”¹¹

How have schools saved money using certified “green” cleaning products?

1. Green-certified cleaning products save money because they are often more highly concentrated than conventional cleaning products. Savings are greatest when schools use automated equipment to dilute concentrated green cleaners. (When comparing cleaning products, it is important to calculate the cost of the diluted product on a per-application, “as used” basis, rather than looking only at the cost of the bottle of concentrate, since dilutions can vary widely.)

- In a pilot test conducted by the Green Purchasing Institute for the State of Hawaii, two schools in Honolulu reduced the cost of their restroom cleaning products from \$6-12 per gallon to less than \$1 per gallon by replacing a ready-to-use conventional product with a highly-concentrated Green Seal-certified product that is typically diluted with 64 to 256 parts water.¹²
- Harvard University Medical School replaced its conventional ready-to-use glass cleaner, which cost \$1.50 per quart, with a less-toxic, concentrated glass cleaner that cost only \$0.25 per quart when diluted. The Manager of Custodial Services reported: “The cost impact of going Green for us at the Medical School was negligible for two reasons: We had gone to portion control chemical dispensers previous to Green chemicals and the Green chemicals are on the portion control system. Portion control is where the real savings are. Our price on the Green chemicals was the same as the cost of the non-Green chemicals.”¹³

⁶ US Environmental Protection Agency, Environmentally Preferable Purchasing Program, *The City of Santa Monica’s Environmental Purchasing: A Case Study*, EPA742-R-98-001, March 1998; www.epa.gov/epp/pubs/case/santa.pdf.

⁷ City and County of San Francisco, *Environmentally Preferable Purchasing Pilot Program, Volume I Final Report*, Appendices A-F, page ES-6, February 2003.

⁸ Chris Geiger, San Francisco Department of the Environment, Toxics Reduction Program, “Review on Implementation of San Francisco’s Precautionary Purchasing Ordinance, July 2005 – July 2007, Presented to the Commission on the Environment, July 24, 2007; <http://sfgov.org/site/frame.asp?u=http://www.sfenvironment.org>.

⁹ Minnesota Pollution Control Agency, “Featured Leader: Minneapolis Passes a Green Cleaners Resolution,” *Buying Green: Minnesota’s Environmentally Preferable Purchasing Newsletter for Government and Institutional Purchasers*, February 2007, www.pca.state.mn.us/oea/epp/newsletter/200702.pdf.

¹⁰ “Suozzi Signs Executive Order to Use ‘Green’ Cleaning Products in County Facilities,” November 20, 2006; www.nassaucountyny.gov/agencies/CountyExecutive/newsrelease/2006/11-29-2006.html

¹¹ City of Seattle, “Janitorial Commodity Team Makes a Clean Sweep,” (Undated fact sheet); www.seattle.gov/environment/janitorial%20product%20list.pdf.

¹² Green Purchasing Institute, “Final Report on the Hawaii Green Cleaning in Schools Pilot Tests,” 2008 (unpublished).

¹³ Robert Christiano, Custodial Services Manager, Harvard University Medical School, email correspondence, March 31, 2009.

2. Several school districts have reported saving money by reducing the number of different products they use.

- Riverside Military Academy in Gainesville, GA realized a \$280,000 annual savings by replacing 20 different cleaning products with a single Green Seal-certified product to clean 270 dorm rooms and 100 bathrooms.¹⁴
- The Portland, OR municipal transit agency, TriMet, experienced a substantial cost savings when it switched to certified “green” cleaners in 2008, reducing the number of products it used from 22 to 4. “Initial cleaning chemical cost savings to the municipality amounted to 70%, not including training cost savings associated with the inventory simplification.”¹⁵
- Harvard University Medical School reported saving \$11,700 a year when it switched to green cleaning products by reducing the number of products they used.



3. Many school districts have saved money through negotiated procurement contracts.

The Novato Unified School District in Marin County, CA, for example, successfully transitioned to green cleaning products at all sites with no additional expense above what the District had been paying for conventional cleaning products by working through its long-term contract with a local vendor. “The market trend is that the costs for green products are going down, and having a long-term contract has helped us to lock-in prices and better manage our budget projections,” according to Mark Silva, Director of Maintenance, Operations and Transportation for Novato Unified.¹⁶

Last year, a multi-state contract negotiated by the Western States Contracting Alliance (WSCA) with Waxie, a San Diego-based janitorial supplies vendor, resulted in 45-50% discounts off retail prices on several major brands of green cleaning and floor maintenance products (such as Johnson Diversey, 3M, Spartan, EcoLab, and others). Additional discounts are offered to schools for online or bulk purchases, and for groups participating in Waxie’s Environmental Partnership Program. The contract also offers free dilution equipment, technical assistance, and training.¹⁷ Mike Muscara, Corporate Accounts Director for Waxie, testified before the CA State Assembly in 2008 that the prices of its “green” cleaners are equivalent to its conventional cleaning chemicals. By ordering discounted green cleaning products from Waxie, San Francisco USD has been able to switch to less-toxic cleaners with little or no additional cost. School districts in California can also receive discounts on green cleaners through cooperative purchasing agreements with the State of California (from Grainger), US Communities (from Zep), and several localities.

What are other costs associated with using conventional cleaners?

Conventional cleaners can pose serious health and safety risks to custodial workers. There are an estimated 40 to 60 chemical injuries per year for every 1,000 custodians, most are chemical burns to the eyes and skin as well damage to the respiratory system. Nationally, these injuries cost about \$25 million per year for in workers’ compensation claims and lost time.¹⁸ In a Washington State study, the validity of these costs were generally confirmed by higher insurance premiums paid for janitorial contractors, compared to auto repair shops or metal finishing firms.¹⁹ Some chemical ingredients in cleaners can cause asthma, which is the primary cause of school absenteeism from a chronic illness. According to a report by Community Health Works, for California children ages 12-17 alone, the California Department of Health Services estimates a loss of \$40.8 million to schools from

¹⁴ Connecticut Foundation on Environmentally Safe Schools, *supra* note 2.

¹⁵ Investor Environmental Health Network, “Coastwide Labs: Product and Strategy Redesign in Commercial Cleaning Products,” Undated Case Study, <http://www.iehn.org/publications.case.coastwide.php>.

¹⁶ Mark Silva, Director of Maintenance, Operations, and Transportation, Novato Unified School District, email correspondence and phone interview with Deborah Moore, Green Schools Initiative, April 13, 2009.

¹⁷ A summary of the Western States Contracting Alliance-Waxie contract is at www.waxie.com/western_states_contracting_all.html.

¹⁸ Thomas Barron and Lara Sutherland, Environmentally Preferable Janitorial Products: Issues and Opportunities, published by INFORM, undated, page 6. www.informinc.org/PPRJanitorial.pdf [Originally published in Pollution Prevention Review Fall 1999.] Tom Barron, Janitorial Products Pollution Prevention Project (JP4, A Public Service Project of the US EPA), “Learn More About Cleaning Product Risks: Be Healthy -- Clean Safely #1” (Undated). <http://www.p2pays.org/ref/17/16809.pdf>

¹⁹ Barron and Sutherland, *Ibid*, pp 6-7.

preventable absences due to asthma in 2001.²⁰ Asthma costs California approximately \$1.3 billion per year, with Medi-Cal paying approximately 45% of the cost of care for children.²¹

Have schools experienced other benefits from using certified “green” cleaning products?

Yes. According to Francis Kennedy, Custodial Supervisor for Fairfield-Suisun USD, there is often additional, unquantified “savings in better indoor air quality, fewer job injuries due to toxic chemicals, and less damage to the facilities because of spills or misuse of the toxic product.”²² Mary Curtin, an RN at Martinez Unified School District, noted that “The green products will most likely save district money with diminished school absences and improved employees’ health....The dilution machines also cut down cleaning time.”²³ Using green cleaners contributes to better indoor air quality, which the U.S. EPA has documented has numerous benefits for student academic achievement.²⁴

What are the experiences of schools in New York and Illinois, where laws were adopted requiring schools to use certified environmentally preferable cleaners?

Kurt Larson of the New York State Office of General Services Environmental Services Unit, spearheading implementation of New York’s 2005 *Green Cleaning in Schools Law*, stated that his office has not heard complaints from schools about the cost of green cleaners. “Since there are about 750 school districts in the state, if the requirement to use certified green cleaners was onerous, we would likely be hearing about it,” Larson said. “Anecdotally, we’re hearing that the green cleaning products work effectively and last longer because they are concentrated and the dispensing systems are more accurate. In addition, the new products are usually implemented in conjunction with a comprehensive green cleaning program, often reducing the number of cleaning products required, which saves money.”²⁵

Prior to passage of the Illinois Green Clean Schools Act in 2007, several cleaning product manufacturers and distributors testified that green cleaning programs are cost-neutral. Nevertheless, the legislation was written to include an exemption clause that addresses the concern some schools had about costs. This clause – similar to the language in AB821 – allows schools to opt out of the law’s green cleaning requirements if they determine that it would increase their cleaning costs. Mark Bishop of the Chicago-based Healthy Schools Campaign noted, “In follow up discussions with more than 25 districts, not a single facility manager told us that their costs increased. Most of the facility managers we spoke to said that while some elements of the green cleaning program cost more, some elements cost less; overall, green cleaning resulted in no additional cost. Additionally, as of April 2, 2009, the State of Illinois has received only four notices of schools determining that green cleaning is not economically feasible [out of nearly 900 districts in the state].”²⁶

²⁰ Saving Lives and Money through Children’s Asthma Care Management, Community Health Works, 7/21/2006; Dana Hughes, Mary Kreger, Vicki Legion. <http://www.communityhealthworks.org/CACM/> and California DHS Guidelines for the Management of Asthma in California Schools, April 2004. www.caasthma.org/files/dhsASTHMAguidelinesFINAL.pdf.

²¹ Community Health Works, Ibid.

²² Francis Kennedy, Custodial Supervisor of the Fairfield-Suisun Unified School District; email correspondence, March 31, 2009.

²³ Mary Curtin, RN, Martinez Unified School District Respiratory Nurse; *supra* note 13.

²⁴ School Facilities and Their Impact on Learning, U.S. EPA, accessed April 15, 2009.

www.epa.gov/iaq/schooldesign/impactonlearning.html

²⁵ Kurt Larson, New York State Office of General Services Environmental Services Unit; personal communication with Alicia Culver, GPI; April 10, 2009.

²⁶ Mark Bishop, Deputy Director, Healthy Schools Campaign, Communication to Deborah Moore, GSI, re: AB821, April 3, 2009.