

## INFORM Publishes One-Stop Guide to Safer Cleaners

At some point, nearly everyone complains about the air at work. Over the past 10 years, awareness has grown of the effects of the indoor environment on our comfort and sense of well-being, as well as on productivity, absenteeism, and medical and insurance costs. According to one study, US businesses could realize a productivity gain of \$30 to \$150 billion annually, and an increase in worker performance of up to 5 percent, by improving the air inside buildings through better ventilation and cleaning.

Janitorial workers, in particular, are vulnerable to a variety of health risks stemming from their exposure to the toxic chemicals contained in the products they use. A study of worker's compensation data in Washington State found that six out of 100 janitors are injured by these products each year, with 20 percent of the injuries being serious burns to the eyes and skin. These figures account for acute injuries only, not for carcinogenic and chronic health risks to the respiratory, reproductive, and other systems of the human body. And emissions and contaminants from improperly used, sealed, or stored cleaning products pose dangers to all building occupants, not just janitors.

A new manual from INFORM, *Cleaning for Health: Products and Practices for a Safer Indoor Environment*, looks at the health and environmental risks posed by cleaning products commonly used in schools, hospitals, office buildings, and other facilities and surveys the most up-to-date methods and products for protecting the health of occupants and workers.

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## Phones "R" Us: INFORM's Take on Wireless Waste

Cell phones...they're everywhere you look, and often they're brand-new. Used for an average of 18 months before being replaced, most of our old phones get stored away in closets and drawers. Eventually they and the many toxic substances they contain will wind up in landfills and incinerators, with the same fate awaiting our current phones. This waste stream is augmented by Palm Pilots and other increasingly popular wireless devices, which are made of similar materials and are also short-lived.

A new INFORM report, *Waste in the Wireless World: The Challenge of Cell Phones*, takes a serious look at the environmental issues raised by the growing problem of wireless waste. The study found that about 130 million cell phones will be retired annually in the US by 2005, creating a stockpile of 500 million phones waiting to enter the waste stream.

"These devices may be small," says Bette Fishbein, the report's author, "but because the numbers used and discarded are so huge — and are growing so fast — the environmental and health impacts of the resulting waste are a real concern."

Hazardous substances in cell phones and other wireless products, and in the batteries and chargers that power them, include lead (a known neurotoxin), brominated flame retardants (used to keep plastic components from burning), and a number of persistent and bioaccumulative toxic chemicals, or PBTs, all of which have been linked to serious health problems, from developmental abnormalities to cancer. When these products are buried in landfills, burned in incinerators, or even processed in recycling facilities, releases of toxic substances to the environment can eventually cause humans (and other organisms) to be exposed.

### Design for Reuse

The solution is to design out the toxic substances contained in these products and implement reuse and recycling programs that prevent them from entering the waste stream. Making such programs cost-effective, however, requires a new approach to product design. Fishbein explains: "If manufacturers made ease of disassembly a priority, designers would create products with parts that can be easily removed for repair or reuse and materials that can be easily separated for recycling." Similarly, products made with less toxic components would be easier and cheaper to recycle.

One way to encourage such design changes is requiring manufacturers to take back their used products for reuse or recycling. In the European Union, where electronics makers will soon have to phase out toxic components and meet strict collection and



*continued on page 4*

# Letter from the President

## Buying for a Sustainable Future



Over the past 12 months, INFORM has achieved a new level of impact by taking our research into the marketplace to promote the “products of the future.” A

key ingredient in an environmentally sustainable world is products that are free of toxic materials, that use natural resources more efficiently, that can be reused and recycled again and again, and that, once disposed of, may even enrich rather than degrade our environment. INFORM’s work this year has provided encouraging evidence that, given effective public policies and market forces, business ingenuity can be harnessed to design this new generation of products. And this shift is something that you, as citizens, can encourage, either through your own purchasing choices or through the practices of the businesses in which you work. For instance:

- **Don’t throw your cell phone away.** Instead, send it back to the service provider or retailer when you replace it.

As reported in our recent study, *Waste in the Wireless World*, sending back cell phones and other electronic devices encourages manufacturers to create designs that eliminate the many toxic chemicals these products now contain.

- **Help phase out products that contain highly toxic chemicals.** Tell your company about INFORM’s Purchasing for Pollution Prevention initiative, which is advising purchasing officials in 14 states on the products they buy that contain mercury, lead, dioxins, and other chemicals (called PBTs) that persist in the environment and bioaccumulate — and about safer alternatives. Tap into our information on safer product choices, such as mercury-free medical devices, fluorescent lamps, and vehicles, by calling INFORM or visiting the project web page at <http://www.informinc.org/PBT.htm>.

- **Encourage the use of safer cleaning practices and products in the building where you work.** Tell the building manager about INFORM’s new manual, *Cleaning for Health* (coming in August), which describes proven and cost-effective products and practices to safeguard the health of millions of janitorial workers and building occupants.

- **Help us channel computers for reuse.** If you’re a New Yorker, a state-of-the-art computer refurbishing and recycling program in the Bronx, Per Scholas, is ready and waiting for your old computers. INFORM will be launching a computer reuse project this fall, targeting companies with large inventories of unused or outdated equipment. If you work for a company that’s a big computer user, contact Eric Most, director of our Solid Waste Prevention program, for more information.

- **Help reduce product waste in New York City.** Support our Waste-Free NYC product take-back days, part of INFORM’s new waste prevention initiative in New York City. We will tell you where to take hangers, batteries, textiles, and other products for reuse and recycling. If you want to help, contact Eve Martinez, the project’s director.

- **Take mass transit and promote the cars of the future.** If you’re thinking of buying a new car, check out Toyota’s Prius or Honda’s hybrid-electric Civic, which get more than 50 miles a gallon. Or, if natural gas refueling is available in your area, leave the oil era behind with a car that burns this domestically plentiful and 90 percent cleaner fuel. Every economical and fuel-efficient car that’s purchased sends a message to Detroit that carmakers shouldn’t count on gas-guzzling SUVs for their future success.

Companies make what consumers want to buy. Let them know that you want products that are attractive, that perform well, *and* are environmentally sound. Every consumer dollar counts!

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# Springtime Revels

Our 2002 awards dinner was held waterside this spring, at New York's Chelsea Piers on the Hudson River. Former EPA Administrator William K. Reilly received INFORM's Environmental Leadership Award for his lifelong commitment to conservation, and energy entrepreneur T. Boone Pickens received the Corporate Environmental Leadership Award for his contribution to reducing this country's dependence on oil by helping to build a natural gas infrastructure. The Real Estate Board of New York (REBNY) received the Environmental Vision Award for its energetic promotion of "green" design, and actor/environmentalist Blythe Danner was honored with the Environmental Citizenship Award for her dedication to living and promoting an environmentally sound lifestyle. The evening's activities included a silent auction featuring such "Earth-friendly" items as an openwork shawl made from qiviut, the soft undercoat of the musk ox.



*Left:* Event emcee Cynthia Adler, actor and environmentalist, with INFORM Board of Directors Chairman Dennis J. Krumholz.



*Above:* Bill Reilly (left), captures the attention of Julie Belaga, former EPA Administrator for the New England Regional Administration, and Judge Guido Calabresi, former dean of Yale Law School.



*Top:* Nelda Cain Pickens (left) with Norma Glover, Governing Board Chairman, South Coast Air Quality Management District (California).

*Right:* Event co-chair and INFORM board member Bailus Walker Jr. (left), with Joanna Underwood and Bill Reilly.



*Top:* William K. Reilly, former EPA Administrator, with his Environmental Leadership Award — a telescope signifying his far-reaching vision in the field.

*Left:* President Steven Spinola (left) and Executive VP Deborah Beck of the Real Estate Board of New York, with event co-chair and underwriter Douglas Durst.



*Above:* Event co-chair and underwriter Douglas Durst



*Above:* Award winner Blythe Danner



*Above:* Gerhard Schmidt (left), VP Research, Ford Motor Company, with INFORM president Joanna Underwood and award winner T. Boone Pickens.



*Above:* Paul V. Tebo (center), VP Safety, Health & Environment at E.I. du Pont de Nemours and Co., with wife Pamela, get the scoop on Honda's hybrid-electric Civic from Alan Goldstein of Bay Ridge Honda.



*Above:* Mr. Krumholz places a bid at the silent auction, which included a commemorative American flag made of Corian.



*Left:* Event co-chair Eugene Stetson III



*Right:* Event Committee Chair Constance Huguet Neel

## Cell Phones (cont'd.)

recycling targets, researchers have developed a cell phone that can disassemble itself in 1.5 seconds. In the US, in contrast, voluntary take-back programs implemented by some manufacturers lack targets and other elements of an effective program, like enforcement mechanisms. As a result, they have failed to recover significant amounts of waste, let alone drive the design of environmentally sustainable products.

### One Part Fits All

To stop wireless waste before it begins, *Waste in the Wireless World* recommends standardizing adapters and other accessories to allow for interchangeability among different makes and models. These are now dedicated to specific devices, so consumers tend to discard them whenever they buy a new phone or other product. The result is additional waste, much of it toxic. Similarly, replacing today's competing technical standards with a single standard would permit the same phone to be used everywhere, regardless of service provider.

Taken together, product design changes (such as the use of standardized, removable parts made from nontoxic materials) and programs that ensure the collection, reuse, and recycling of large numbers of discarded products (along with their power sources and accessories) would go a long way toward reducing the environmental and health impacts of wireless waste. "US electronics makers are already facing tough new mandates to phase out a number of toxic substances and achieve ambitious take-back and recycling targets for cell phones and other wireless products sold in the EU," says Fishbein. "So it makes sense for them to get ahead of the curve by implementing effective programs to reduce waste from the products they sell in the US as well." ❖

*Waste in the Wireless World* is available on INFORM's web site at <http://www.informinc.org/cellphone.htm>.

## Safer Cleaners (cont'd.)

For example, one study found that the use of hazardous chemicals could be reduced by 5.4 pounds per janitor per year, or 13 percent, if janitors used fewer and less toxic chemicals, installed mats and vacuumed, and avoided aerosols. Another study found that improved cleaning and preventive techniques, such as focused dust removal and damp-mopping instead of



Some toilet bowl cleaners contain hydrochloric acid, which is highly corrosive to the eyes and skin.

sweeping, can reduce dust, fungi, and air-borne bacteria while improving indoor air quality and worker health. The manual provides extensive lists of environmentally preferable products available for specific applications, as well as contacts and resources from around the country.

*Cleaning for Health* is a single, easy-to-use source of information on how to evaluate, purchase, and use these alternatives. For instance, INFORM looked beyond manufacturer claims that their products are "environmentally preferable" and compiled information based on evaluations and performance tests conducted by not-for-profit certification organizations, government agencies, and private labs. The result, as one reviewer observed, is "the authoritative text" for janitorial service companies, purchasing agents, facility managers, and others who wish to reduce their toxic chemical use and improve indoor air quality in the buildings they serve. ❖

To order *Cleaning for Health*, see "INFORM Publications." For bulk discounts, call 212-361-2400 ext. 240. The manual is also available on INFORM's web site.

## INFORM PUBLICATIONS

📖 **Cleaning For Health: Products and Practices for a Safer Indoor Environment**  
ISBN: 0918780799 2002 85 pp. \$30

📖 **Waste in the Wireless World: The Challenge of Cell Phones**  
ISBN: 0918780780 2002 109 pp. \$30

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# INFORMing Others

**INFORM's recent activities and findings**

## Working for Clean Transportation

### Environmental Justice

For years now in New York, it is low-income and minority communities that have carried the heaviest burden of pollution from the city's waste transfer stations, highways, and bus and truck depots. In the Bronx and northern Manhattan, for instance, exposure to emissions from large numbers of diesel-burning trucks and buses has contributed to asthma hospitalization rates that are among the highest in the nation, especially among children. According to a study conducted at the Mt. Sinai School of Medicine in New York, hospitalizations for asthma are up to 21 times higher in poor communities than in the city's affluent neighborhoods.

This spring, as part of its ongoing effort to encourage the use of less polluting alternative-fuel vehicles in the city's economically disadvantaged communities, INFORM joined the US Dept. of Energy and Environmental Protection Agency, the NYC Dept. of Transportation, and local businesses, community groups, and political leaders in planning the National Alternative Fuels Day and Environmental Summit, which aimed to increase the use of such vehicles through community-based public- and private-sector partnerships. "Over the past few years, collaborations between business owners, community groups, and government agencies have led to the conversion of several diesel and gasoline fleets to clean compressed natural gas," says Juliet Burdelski, Director of Urban Outreach for INFORM's Sustainable Transportation Program. "Manhattan Beer Co., in the Bronx, recently rolled out the first of 15 heavy-duty delivery trucks that will run exclusively on CNG, and there are plenty of opportunities for other fleets to do the same."

To foster additional alternative-fuel vehicle programs and partnerships in New York City, INFORM coordinated a planning process for community organizations that led to the development of a set of recommended goals. The highest priority among them was converting heavy-duty diesel-fueled buses and trucks to 90 percent cleaner natural gas and publicizing tax credits and other funding mechanisms available to reduce the costs of conversion. In the coming months, INFORM plans to work with three of the city's leading environmental justice groups — Sustainable South Bronx, West Harlem Environmental Action (WE ACT), and the United Puerto Rican Organization of Sunset Park (UPROSE) — to implement the recommendations and educate business and labor groups about the health and safety benefits of alternative-fuel vehicles.

## Building Safer Communities

### Right to Know Survives in Oregon

People who live near industrial facilities have good reason to be concerned. Are there flammable or combustible materials stored at the site? Are they toxic? What if there's a fire or chemical spill? Do these materials pose any short- or long-term risks to workers, residents, and the surrounding environment?

In Eugene, Oregon, a program that makes information on toxic chemicals at local plants publicly available via the Internet gives police, firefighters, and other emergency personnel the ability to respond quickly and effectively in the event of a fire, spill, or other chemical accident. Established by a citizens' ballot initiative in 1996, Eugene's Toxics Right-to-Know law created the first and only such program at the local level in the US. This spring, when the city's Toxics Board — under pressure from area businesses — began to consider removing the information from the Internet, INFORM stepped in and helped to defuse the threat.

Working with the Oregon Toxics Alliance (OTA), INFORM brought to bear its expertise in designing and analyzing right-to-know laws in support of continued public access to chemical data reported by Eugene facilities. In contrast to the federal Toxics Release Inventory (TRI) program, which requires plants to report on the amounts of any of more than 650 toxic substances generated as waste, Eugene's program (like similar initiatives in Massachusetts and New Jersey) requires facilities to also report on the amounts of these chemicals that they use, ship in and out of the plant, and incorporate into products. Its ultimate goal is to reduce toxic chemical use, emissions, and wastes by giving the local community a way to monitor plant operations and ensure that maximum efforts are being made to protect the environment and public health. As INFORM pointed out in a letter to the Eugene City Council, companies reporting under Massachusetts' right-to-know program decreased their overall use of toxic chemicals by 41 percent from 1990 to 1999, including an 87 percent decrease in air emissions and discharges to ground and surface water.

"Thanks to the joint efforts of OTA and INFORM, we succeeded in convincing the Toxics Board that the right-to-know program should not be rolled back or restricted," said OTA's Executive Director David Monk. "Eugene's voters want to reduce the risks associated with the use of toxic chemicals, and the board's decision to preserve public access to reports collected under the program ensures that the community will continue to be able to do so."

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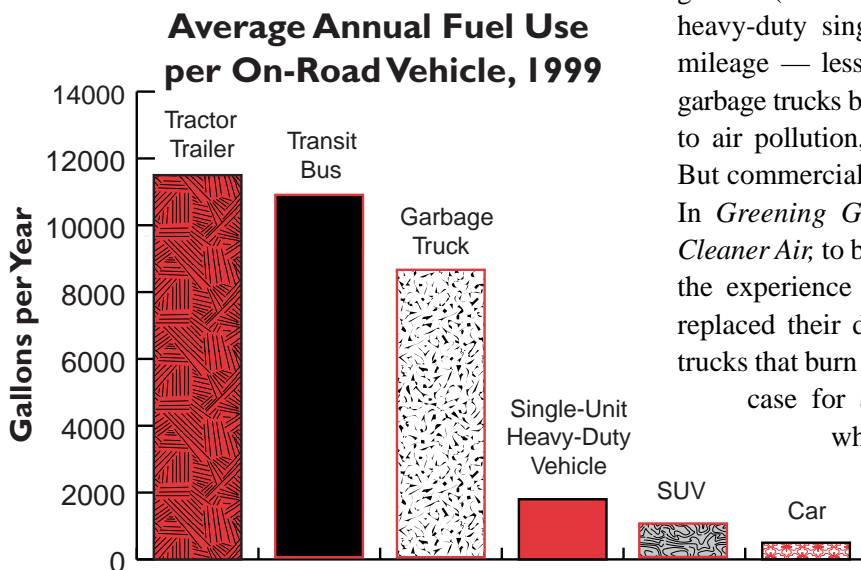
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## INFORMation: Transportation's Dependence on Diesel

When it comes to dependence on foreign oil, heavy-duty trucks are major "users." Garbage trucks, for instance, account for only 0.06 percent of the vehicles on US roads but consume more fuel annually than any vehicles other than tractor trailers and transit buses. This is because they cover so much



ground (twice as many miles per year as the typical heavy-duty single-unit truck) and get extremely low mileage — less than 3 miles per gallon. And because garbage trucks burn diesel fuel, their emissions contribute to air pollution, asthma, and cancer rates nationwide. But commercially viable alternative fuels *are* available. In *Greening Garbage Trucks: New Technologies for Cleaner Air*, to be released this fall, INFORM documents the experience of dozens of waste haulers that have replaced their diesel garbage trucks with hundreds of trucks that burn natural gas. The report presents a strong case for a shift to this alternative fuel option, which can help the US advance its goals of cleaner air, healthier workers, and greater energy security.