

# A DAY LATE AND A DOLLAR SHORT

Discount Retailers Are Falling Behind on Safer Chemicals





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# CAMPAIGN FOR Healthier Solutions

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**The Campaign for Healthier Solutions** seeks to work with discount retailers (dollar stores) to help them protect their customers and the communities in which they operate, and grow their own businesses, by implementing corporate policies to identify and phase out harmful chemicals in the products they sell.

The Campaign is a collaborative project including many partners that is led by:

**Coming Clean**, a national environmental health collaborative that unites community organizers, scientists, advocates, business leaders, communications specialists, and diverse issue experts in common work to transform the chemical and fossil fuel industries so they are sources of health, economic sustainability, and justice rather than of pollution, disease, and planetary harm. Visit [www.comingcleaninc.org](http://www.comingcleaninc.org).

**The Environmental Justice and Health Alliance for Chemical Policy Reform**, a network of grassroots organizations throughout the country, supports diverse movement towards safe chemicals and clean energy that leaves no community or worker behind. Visit [www.EJ4All.org](http://www.EJ4All.org).

The information and recommendations presented in this report do not necessarily reflect the views and opinions of the contributors or reviewers.

The ratings included in this report do not provide a measure of health risk or chemical exposure associated with any individual product, or any individual element or related chemical. HealthyStuff.org ratings provide only a relative measure of high, medium, and low levels of concern for several hazardous chemicals or chemical elements in an individual product in comparison to criteria established in the site methodology.

This report is available online at  
[www.nontoxicdollarstores.org](http://www.nontoxicdollarstores.org).

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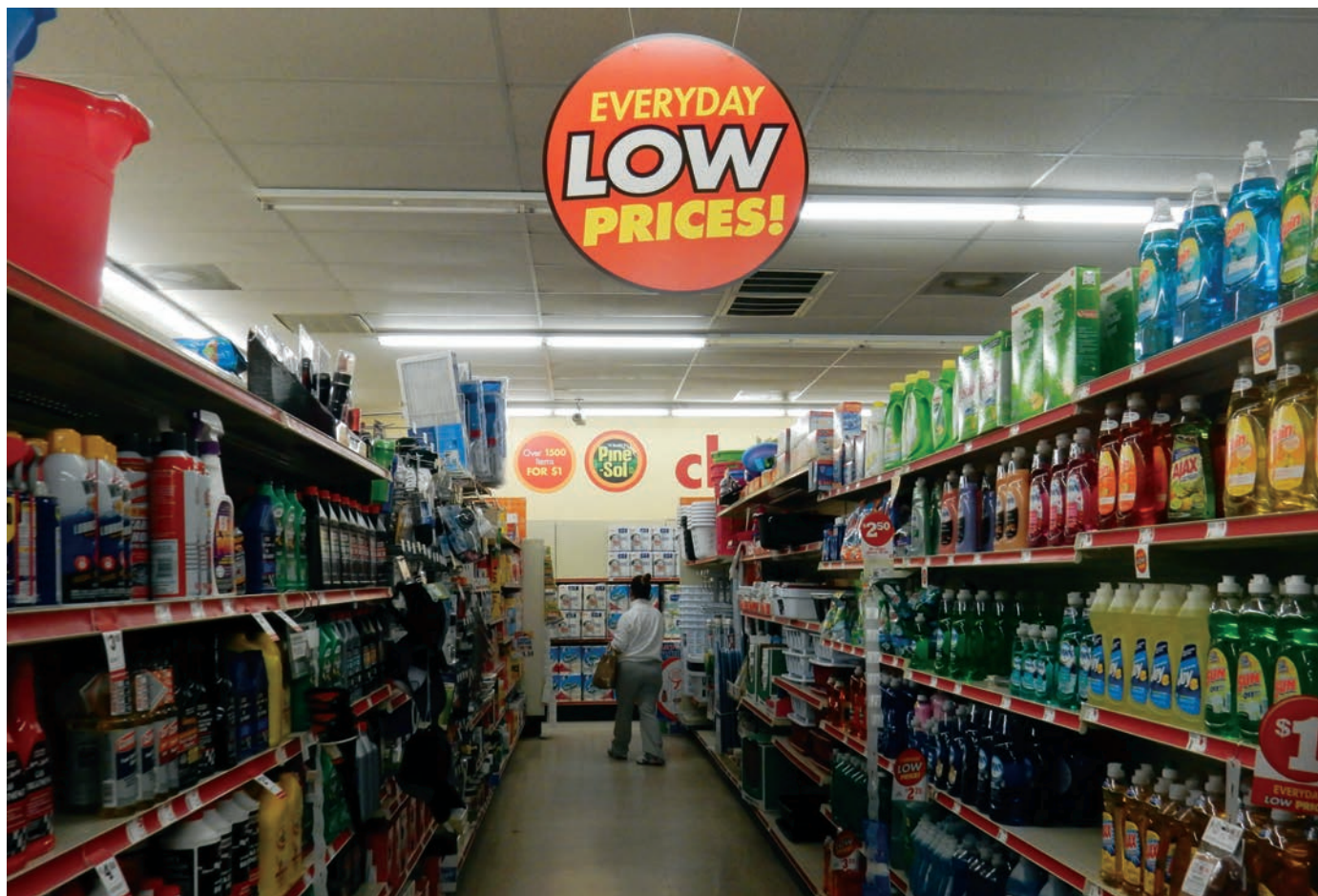


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## EXECUTIVE SUMMARY



**D**iscount retailers (commonly called “dollar stores”) make up a significant portion of the U.S. retail sector. The four largest chains—Dollar General, Dollar Tree, Family Dollar (tentatively acquired by Dollar Tree on January 22, 2015), and 99 Cents Only—operate over 21,500 U.S. stores, more than Walmart, with total annual sales of more than \$36 billion.

Many communities served by dollar stores are predominantly communities of color or low-income communities that are already disproportionately exposed to chemical hazards and health effects linked to chemical exposures. Residents in these areas often have reduced access to quality medical care, fresh and healthy food, and public services,

which are critical to overall health and to withstanding chemical exposures. In many of these communities, dollar stores are often the only store selling essential household goods, including food. These factors place a higher level of responsibility on dollar stores to ensure they are not selling products that contain harmful chemicals.

Although the largest dollar store chains have taken some initial steps to address toxic chemicals in the products they sell, mostly in response to federal and state requirements, their failure to adopt and disclose comprehensive plans of action is leaving their customers, and their own businesses, at risk. Recent events, and new testing of dollar store products, show that these chains need to do more.

- A 2012 report found that 39% of vinyl packaging sold by discount retailers contained levels of cadmium or lead that violate state laws.<sup>1</sup>
- 99 Cents Only will pay over \$2 million in 2015 for improper storage and disposal of hazardous products, and was fined \$409,490 in 2010 by the U.S. Environmental Protection Agency (EPA) for selling unregistered and mislabeled pesticides in household cleaning products. In the latter case, EPA's Administrative Law Judge declared that the company's management has a "culture of indifference."<sup>2</sup>
- In 2014, Dollar Tree had to remove toy Clingy Darts from its stores after the product was found to contain high levels of a toxic phthalate chemical.<sup>3</sup>

Given the failure of the largest dollar store chains to join their competitors—including Walmart and Target—in adopting comprehensive policies to know, disclose, and address chemicals of concern throughout their supply chains, it is not surprising that new testing of 164 dollar store products for just a few hazardous chemicals found some disturbing results.

Key findings include:

- 81% of the products tested (133 of 164) contained at least one hazardous chemical above levels of concern, compared to existing voluntary toy standards and mandatory toy, packaging and electronics standards;<sup>4</sup>
- 38% of the products tested (63 of 164) contained the toxic plastic PVC (vinyl);
- 32% of vinyl products tested for phthalates (12 of 38) contained levels of regulated phthalates above the Consumer Product Safety Commission (CPSC) limit for children's products;<sup>5</sup>
- At least 71% of the products tested from each dollar store chain contained one or more hazardous chemicals above levels of concern.<sup>6</sup>

There is a growing movement by mainstream retail and manufacturing brands to adopt chemical management policies to identify, disclose, and replace chemicals of concern in the products they make or sell with safer alternatives.<sup>7</sup> Companies that are phasing out toxic chemicals reduce the risk of fines, lost sales, and reduced market share; create long-term value for shareholders; and remain competitive by responding to increasing consumer demand for safer products. Dollar stores are lagging in this

shifting landscape, leaving their customers and investors exposed to potential harm and liability.

The largest dollar store chains are in a unique position to benefit the health and welfare of many communities of color and low-income communities where they operate, and grow and benefit their own businesses, by providing safer products. What has been missing in the discount retail sector so far—with the exception of a few important but limited actions—has been sustained focus on this issue at the top corporate leadership level and broad corporate policies to identify and phase out harmful chemicals across supply chains.

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## WHICH DOLLAR STORE CHAIN

will seize the opportunity to become the leader in providing safer products in the competitive discount retail sector?

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As the market increasingly moves to full disclosure of chemicals in products and to safer chemicals, one or more dollar store chains will likely emerge as the leaders in providing nontoxic products and therefore best positioned to thrive in the competitive discount sector. **The question is: which dollar store chain will seize the opportunity?**

Successful strategies to replace harmful chemicals in everyday products with safer alternatives are already well documented, and are already being implemented by many companies, states, or municipalities. Model policies, technical resources, and expert assistance are available to help the dollar store chains identify and disclose chemicals in their supply chains, and require vendors to move to proven safer alternatives.

Simple, common-sense actions can better protect dollar store customers and their families from the most hazardous chemicals, while positioning discount retailers as sustainability leaders committed to safe products and vibrant local economies.

## CHAPTER ONE TOXIC CHEMICALS AND OUR HEALTH



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**R**ates of chronic diseases and health conditions linked to chemical exposures have risen sharply across the United States over the past several decades, especially for children. Some of the most striking increases are:

- Attention-deficit/hyperactivity disorder (ADHD) in children increased by 50% from 1997–2010, and autism spectrum disorders increased by 1,000%.<sup>8</sup>
- Leukemia in children increased by 55% between 1975 and 2005, and primary brain cancer in children increased by 39%.<sup>9</sup>
- The prevalence of asthma in children has more than doubled (100% increase) since 1980;<sup>10</sup>
- Major birth defects are now the leading cause of infant death; the rate of some birth defects are increasing, e.g. hypospadias (birth defect of the urethra in males) has doubled;<sup>11</sup>
- Incidence of breast cancer in adults has increased by 40%;<sup>12</sup>
- Difficulty in conceiving and maintaining a pregnancy affected 25% more women in 2002 than in 1982; from 1982 to 1995, the incidence of reported difficulty almost doubled in younger women, ages 18–25.<sup>13,14</sup>

The President’s Cancer Panel concluded in its 2010 report that “the true burden of environmentally induced cancer has been grossly underestimated.”<sup>15</sup>



Many of these health issues, including asthma, learning disabilities linked to lead poisoning, and heart disease linked to arsenic exposure, disproportionately affect communities of color and low-income communities—exactly the consumers who are most likely to use dollar stores as their primary source of household products.

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**MANY OF THESE HEALTH ISSUES** disproportionately affect communities of color and low-income communities—exactly the consumers who are most likely to use dollar stores as their primary source of household products.

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Diseases with links to environmental exposures are not only harmful and often devastating to the people and families affected, but trigger huge costs to our health care system, local school budgets, the economy, and governments. Just four childhood diseases linked to chemical exposures—asthma, cancer, lead poisoning, and learning disabilities—cost the U.S. \$55 billion every year.<sup>16</sup> Many of these impacts and costs are preventable.

Many businesses have suffered serious costs for failing to address toxic chemicals in the products they make or sell, including fines, lost sales, reduced market share, lower stock price, and even bankruptcy. (See page 15.)

The U.S. chemical safety system that should ensure that chemicals used in commerce are safe is badly broken. In thirty-nine years since the passage of the federal law that should require chemicals used in consumer products to be safe (the Toxic Substances Control Act, or TSCA), only about 200 chemicals out of 80,000 registered for commercial use have been fully screened for health and safety, and only 5 chemicals have ever been restricted. When passed into law, TSCA approved more than 60,000 chemicals that were in existence prior to 1976. The law allows chemical manufacturers to keep the ingredients in some chemicals secret—nearly 20 percent of the 80,000 chemicals are secret, according to the U.S. Environmental Protection Agency (EPA). TSCA has failed to provide basic health and safety screening of most chemicals or protect public

health from even the most hazardous chemicals, leaving consumers, manufacturers, and retailers to fend for themselves.

In the face of the chemical industry's insistence on business as usual and Congress' failure to fix TSCA, states, consumers, and some consumer products companies and retailers have stepped forward to protect children and adults from exposure to unnecessary toxic chemicals in products. Over the past decade, at least 35 states have enacted more than 150 policies addressing specific chemicals in everyday products (including Bisphenol-A or BPA, flame retardants such as polybrominated diphenyl ethers or PBDEs, and some phthalate chemicals), and five states (California, Maine, Minnesota, Vermont, and Washington) have passed comprehensive policies to identify and/or phase out hazardous chemicals.<sup>17,18</sup> Many consumers are intentionally seeking out safer products free of hazardous chemicals and patronizing businesses that provide them. Smart companies have taken swift actions to replace some of the worst chemicals in many products, and in some cases adopt broad corporate policies that encourage their supply chains to phase out many hazardous materials.

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**“CHEMICALS ARE A HOT TOPIC** right now in consumers' minds.”<sup>19</sup>

*Kate Heiny, Target's Director of Sustainability*

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While some companies are making progress, limited responses to one chemical of concern<sup>20</sup> at a time aren't protecting children, businesses, or our economy. Most manufacturers continue to use, and most retailers continue to sell, products containing chemicals that are either hazardous or not tested for health and safety. Dozens of toxic chemicals continue to be found every year in consumer products; in homes, schools, and workplaces; and in the bodies of babies, children, and adults.<sup>21</sup>

## CHAPTER TWO

# DOLLAR STORES AND ENVIRONMENTAL JUSTICE

**D**ollar stores are often located in small rural towns or in urban neighborhoods where they might be the only place to buy essential household items, including food. Family Dollar specifically targets “food deserts” where they may be the only store selling food.<sup>22</sup>

Many communities served by dollar stores are predominantly communities of color or low-income communities that have reduced access to quality medical care, fresh and healthy food, and public services, which are critical to overall health and to withstanding chemical exposures. These factors place a higher level of responsibility on dollar stores to ensure they are not selling products that contain harmful chemicals.

Communities of color and low-income communities are already disproportionately exposed to chemical hazards and health effects linked to chemical exposures.<sup>23</sup> An extensive literature documents disproportionate exposure to toxic chemicals, and to health impacts linked to chemical exposures, among people of color and low-income people. For example:

- African-American children have rates of asthma double that of White, Hispanic, and Asian children;<sup>24</sup>
- African-American children and Mexican-American children are much more likely to be lead poisoned than White children;<sup>25</sup>
- Low-income Mexican-Americans and African-Americans are more highly exposed to a potentially carcinogenic chemical found in household products (including cheap toilet deodorizers);<sup>26</sup>
- Mexican-American 7-year-olds in California have more PBDEs (polybrominated diphenyl ethers), which are widely used as flame retardants in consumer products, in their bodies than almost all other people tested worldwide;<sup>27</sup>
- A Massachusetts study found that communities where 15% or more of the population is non-White bear more than 20 times the environmental burden of White

## “A LARGE BODY OF RESEARCH

has established that racial and ethnic minorities and low-income households in the United States tend to face higher pollution burdens than non-Hispanic whites and higher-income households.”<sup>28</sup>

*James K. Boyce, Klara Zwickl, and Michael Ash,  
Three Measures of Environmental Inequality*

communities, more than 10 times as much chemical pollution released into the environment every year, and 48 hazardous waste sites per square mile as opposed to an average of just two in White communities.<sup>29</sup>

Nationally, the percentage of Blacks and Latinos living in fenceline zones near facilities using extremely hazardous chemicals is significantly higher than for the U.S. as a whole, and the poverty rate in these zones is significantly higher than for the U.S. as a whole.<sup>30</sup>

Unequal exposures to toxic pollution—whether from industrial sources or from household products—not only violate human rights to a clean and safe environment, they reduce opportunities to lead healthy and productive lives and cause economic harm to individuals and communities.<sup>31</sup>

Low-income communities and communities of color, from which dollar stores draw much of their profits, cannot afford additional toxic exposures. These stores are in a unique position to significantly benefit the health and welfare of their customer base, and grow and benefit their own businesses, by providing products free of dangerous chemicals.

To date, the major discount retail chains have been slow to respond to consumer and market movement to safer

products, even while their mainstream competitors have acted to disclose chemicals in products and replace hazardous chemicals with safer alternatives. The largest dollar store chains don't even appear to have policies requiring disclosure of chemicals or use of safer chemicals in their own "house" brands.

As the market increasingly moves to full disclosure of chemicals in products and to safer chemicals, one or more dollar store chains will likely emerge as the leaders in providing nontoxic products and therefore best positioned to thrive in the extremely competitive discount sector. The question is: which dollar store chain will seize the opportunity?

**BOX 2**

**Affordability Doesn't Mean We Can Afford to Skimp on Safety and Health**

**Dee Treviño**

t.e.j.a.s. barrios  
Houston, Texas



© Dee Treviño

I use dollar stores quite frequently when it comes to household items, celebrations and my son's school assignments. The convenience and affordability allows my family to stock up on the items we need at an affordable price. I've lived in many areas around Houston, so when I find myself in an area far from dollar stores I usually end up spending money on household items that cut into my grocery budget. Like most working families, we try to get deals on products that help us save money to put aside for emergencies. The savings I aim for does not mean I will invest in products that I know are harmful to my family. Take for instance a recall on peanut butter: I won't buy recalled peanut butter simply because it is cheaper, because at the end of the day it is harmful or has the potential to be harmful.

Likewise, if I know a product contains a compound that can harm my family in the future, why would I invest in such a product? This is why we stopped buying cooking pans with Teflon, BPA plastic and some terra cotta pottery known to have a high lead content. My family is already exposed to pollutants and other environmental dangers, so why would I add onto that? Seeing illnesses in my own extended family and lack of access to healthcare, why would I increase my family's chances of developing

something due to my poor choices when buying products? My family relies on the products that I bring home, so if I buy something that will harm them in the future they weren't at fault for exposure, I am, and I could not live with my conscience.

As a mother, and now an expectant mother, I am especially careful about the things I consume and allow my family to consume. I also want to support the businesses in my community rather than circulating income outside of our area.

When we invest money in our own community we support the circulation of our local economy. When businesses in my community don't offer the items I need to make conscious choices for the health of my family, I'm forced to go elsewhere. I want these businesses like dollar stores to invest in products that will not make my family sick, now or in the future. I want to know these companies care about my family and my community.

Affordability doesn't mean we can afford to skimp on safety and health. It means we can afford to buy the items we need to live and be assured they will not harm our bodies or minds. Families that can't afford to spend freely on high end products shouldn't have to settle for toxicity at the counter. My family and other families have the right to access toxic-free products in neighborhoods with little to no resources, like any other community.

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**I WANT THESE BUSINESSES LIKE DOLLAR STORES** to invest in products that will not make my family sick, now or in the future. I want to know these companies care about my family and my community. Affordability doesn't mean we can afford to skimp on safety and health.

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## Helga Garza

Los Jardines Institute  
Albuquerque, New Mexico

I shop at the dollar store because of economics and short-term convenience. These stores are located primarily in our low-income and working-class, Spanish-speaking communities. My community needs social services, infrastructure such as paved roads and sidewalks, education and recreation programs for children, a community center, and health services. None of these basic needs have been met or brought into our rural community in more than 30 years. In 2014, Dollar General opened its doors on prime property located in our vulnerable community.

Locally, we found toxic chemicals in headbands and other products from the dollar stores used by school-aged children, exposing our children to health hazards like learning disabilities linked to the chemicals found in the products. The retail discount stores are less expensive than Walmart and create a huge economic incentive for low-income people to shop at. What we are lacking is the knowledge of how toxic these products are and the long-term effects the chemicals have on our health and the environment.

Your everyday dollar store shopper is often already overburdened with environmental and economic injustices. The dollar stores make billions of dollars a year by selling cheap toxic products to our burdened communities. We have a right to know what is being sold in these stores, and we have a right to act to keep these toxic chemicals out of our communities.

I have been making everyday healthy, organic products for over 20 years. This includes soaps, shampoos, body wash, scented oils, salves, tinctures, and ointments. The seed money that is needed to sustain a growing business while finding and creating a market to sell the products



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has been one of my biggest challenges as a low-income woman of color competing with discount retail stores, such as the dollar stores. Our method of production respects the vision of what is being produced and maintains our traditional customs, which counters the global market approach used by the dollar stores that exploits environmental resources to produce and transport these products across the world, the labor of those who produce the products, and the health of the consumers. Some of these stores have been in business for a very long time, and have a history of selling toxic products.

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**“THE RETAIL DISCOUNT STORES** are less expensive than Walmart and create a huge economic incentive for low-income people to shop at. What we are lacking is the knowledge of how toxic these products are and the long-term effects the chemicals have on our health and the environment.”

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## CHAPTER THREE

# HAZARDOUS CHEMICALS FOUND IN DOLLAR STORE PRODUCTS



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**W**e tested 164 products purchased at the four largest dollar store chains (Dollar General, Dollar Tree, Family Dollar, and 99 Cents Only) in six states (California, Kentucky, Maine, New Mexico, Texas, and West Virginia) for several chemicals of concern, including lead and other hazardous metals, phthalates, and polyvinyl chloride plastic (PVC or vinyl). Exposure to these chemicals has been linked to health effects by independent scientific evidence, and each chemical, and some additives to PVC plastic, is addressed by government and/or corporate policies on hazards in consumer products.

### RESULTS

Key findings include:

- 81% of the products tested (133 of 164) contained at least one hazardous chemical above levels of concern, compared to existing voluntary toy standards and mandatory toy, packaging and electronics standards;
- 49% of products tested (80 of 164) contained two or more hazardous chemicals above levels of concern;

**CHEMICALS OF CONCERN ARE THOSE** “which, due to their inherent hazardous properties, present a known or reasonably suspected risk to human health and/or the environment.”<sup>32</sup> Levels of concern for each chemical were established by HealthyStuff.org by reviewing levels restricted in one or more of the most protective government, corporate or third-party standards on hazards in consumer products.<sup>33</sup>

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## 81 PERCENT OF THE DOLLAR

store products tested contained at least one hazardous chemical.

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- 38% of the products tested (63 of 164) contained the toxic plastic PVC (vinyl);
- 32% of vinyl products tested for phthalates (12 of 38) contained levels of regulated phthalates above the Consumer Product Safety Commission (CPSC) limit for children's products;
- At least 71% of the products tested from each dollar store chain contained one or more hazardous chemicals at levels of concern.

The good news is that our testing results suggest that consumer demand, government regulations, and corporate actions targeting lead appear to have reduced the presence of lead in children's products sold by the largest discount retail chains. We did find several products that, while mostly not regulated as children's products, could expose children to lead and contained levels of lead above the limit that would be allowed in a children's product. We found two products, one of which might be considered a children's product under CPSC regulations, that contained levels of lead ten times and 65 times the limit for children's products.

Of the 38 vinyl plastic (PVC) products screened for phthalates, we found 12 (32%) that exceeded the CPSC limit for these chemicals in children's products. Although most of the products tested would not be considered as "children's products" under CPSC regulations, the CPSC standard serves as an important benchmark because these products could still expose children to the toxic phthalates in homes, schools, or vehicles.

Unfortunately, compliance with minimal federal requirements limiting lead and some phthalates in the narrow group of products specifically marketed to children won't protect kids and their families from these chemicals in thousands of other household products, or from hundreds of other chemicals of concern used in consumer products (particularly given that scientists are especially concerned about exposure to chemicals in the womb during critical windows of development).

We found that 81% of the dollar store products tested (133 of 164) contained at least one hazardous chemical above levels of concern compared to existing voluntary toy standards and mandatory toy, packaging, and electronics standards. Forty-nine percent of products tested contained two or more, despite the fact that we tested for just a small group of the many hazardous chemicals often found in consumer products. At least 71% of the products tested from each chain contained one or more of the chemicals of concern for which we screened.

Thirty-eight percent of the products tested (63 of 164) contained the toxic plastic polyvinyl chloride (PVC or vinyl), and 32% of the subset of vinyl products tested for phthalates (12 of 38) contained levels of regulated phthalates above the CPSC limit for children's products. Testing results for all products, and explanation of how levels of concern were identified, are available online at [www.healthystuff.org](http://www.healthystuff.org).

### THE CHEMICALS, HEALTH CONCERNS, AND ALTERNATIVES

Chemicals used in everyday household products often don't remain in the product, but are released into homes, vehicles, schools, and workplaces. People can be exposed to chemicals released from products in many ways, including: through food and beverages packaged in materials containing chemicals; by inhaling and ingesting particles (often referred to as "house dust") that have been released from home products or materials that contain chemicals; or by absorbing chemicals through the skin (especially when using cosmetics or personal care products containing chemicals).<sup>34</sup>

Children are at greatest risk from exposure to toxic chemicals, because they eat, drink, and breathe more per pound of body weight than adults, their bodies do not process many toxic chemicals in the same way that adult bodies do, and children's bodies are changing and developing rapidly.<sup>35</sup> In addition to fetal development, babies, infants, and toddlers are especially vulnerable to chemical exposures during the first 1,000 days of growth. In addition to chemical exposures from personal care products and inhalation or ingestion, small children may also mouth or chew on toys or on other products. Many children crawl on, sit or sleep on, play with, or put into their mouths items that are not specifically toys or childcare products (and so may not be regulated for exposure to children).

## PHTHALATES

Phthalates (pronounced “thal-ates”) are a class of chemicals that are used in many inks, paints, and other materials. They are found in hundreds of consumer and commercial products including toys, childcare articles, cosmetics and personal care products, food wrap, shower curtains, blinds, product packaging, medical devices, and building materials.<sup>36,37</sup> Approximately 90% of phthalates used are added to polyvinyl chloride (PVC or vinyl) plastics to make them softer and increase their flexibility.<sup>38</sup>

Among their various hazardous properties, some phthalates are endocrine disrupting chemicals that interfere with the body’s hormone system. Scientific studies have linked phthalates to many serious health effects, including birth defects, reduced fertility, prostate and testicular cancer, learning disabilities, asthma and allergies, and diabetes.<sup>39</sup>

In February 2009, the U.S. Consumer Product Safety Improvement Act (CPSIA) restricted the use of six phthalates (DEHP, DBP, BBP, DINP, DIDP, and DnOP) above designated threshold amounts in children’s toys and some childcare articles. Unfortunately, the CPSIA failed to address the hundreds of products that expose children to these phthalates but are not specifically toys or childcare products (including soaps, shampoos, and other personal care products; school supplies; clothing; food; product packaging; building materials; and “adult” plastic products that children might put in their mouths). The law also failed to require that any chemicals used to replace the six phthalates be screened for health hazards and be clearly safer.<sup>40</sup> In 2014, an expert advisory panel recommended that CPSC restrict additional phthalates, and that CPSC and other agencies act to identify and address risks from phthalate exposure from other products.<sup>41</sup>

## METALS

Some metals, including “heavy metals,” are toxic and can impact people’s health.

Lead (Pb)—Lead is still widely used in consumer products, especially as a pigment, as a stabilizer in PVC (vinyl), and in castings for metal products such as jewelry. Lead harms brain development, leading to learning disabilities, lower IQ, inattention, and behavior problems. There is no safe level of lead exposure for children.<sup>42</sup>

Other hazardous metals, including Arsenic (As), Cadmium (Cd), Chromium (Cr), Mercury (Hg), Antimony (Sb), and Tin (Sn) in the form of organotins, are also widely used in consumer products for different purposes.<sup>43</sup>

## POLYVINYL CHLORIDE PLASTIC (PVC OR VINYL)

As the American Public Health Association points out, PVC products are ranked among the most hazardous of plastic materials. The production, use and disposal of products made with PVC plastic uses and releases harmful chemicals including chlorine gas, mercury, ethylene dichloride, vinyl chloride, dioxins and furans, and other persistent bioaccumulative toxic (PBT) chemicals. PVC products often contain additives such as phthalates, lead, cadmium and/or organotins that pose risks to infants, children and other vulnerable populations. The chemical plants where PVC is manufactured are often located in or near low-income neighborhoods and communities of color. The impact on the communities near facilities that produce PVC is a major environmental justice concern.<sup>44</sup>

## SAFER ALTERNATIVES

The toxic chemicals found in the dollar store products tested are likely not essential to those products. Safer chemicals could likely have been used instead by the manufacturers, or similar products made without toxic chemicals could have been sourced by the retail chains that sold them.

Alternatives to phthalates that may be safer are widely available and are already in use in many products.<sup>45</sup> Alternative plastics (including both petroleum based and biobased plastics) that do not require as many harmful additives as PVC are also widely available.<sup>46</sup> Alternatives for consumer product applications of many toxic metals exist, including for lead and cadmium.<sup>47,48</sup>

Many resources are available to manufacturers and retailers to help them identify and move to safer alternatives to chemicals of concern, including those listed on page 22.

**Testing of 164 products purchased at dollar stores in six states for several hazardous chemicals produced striking results. These are some of the most concerning products that we found.**

**“MY GRANDCHILD DOESN’T**

care if the product he is crawling on, sitting on, sleeping on, or putting in his mouth was intended for children or not.”

*Helga Garza, Albuquerque, NM*

**CHILDREN’S BODIES CAN’T TELL WHICH PRODUCT RELEASED A HAZARDOUS CHEMICAL**

Some laws and regulations, including the U.S. Consumer Product Safety Improvement Act (CPSIA) administered by the Consumer Product Safety Commission (CPSC), restrict chemicals of concern only in products specifically intended for or marketed to children.

But thousands of other household and consumer products—including carpets, mattresses, furniture, shower curtains, electronics, and others—can release chemicals of concern into homes and schools that expose children to these hazards. Children’s developing bodies don’t distinguish between lead, phthalates, or other chemicals released from toys, flooring, school supplies, tablecloths, or other products.

The only way to protect children from chemicals of concern is to replace them with demonstrably safer alternatives in all products that may expose children to the chemicals.



**Flannel Back Tablecover**

BRAND: Christmas House  
STORE: Dollar Tree, Albuquerque, NM  
UPC CODE: 639277214966  
MANUFACTURER: Greenbrier International, Inc.  
Made in China  
CHEMICALS OF CONCERN: Lead (1,028 ppm), Chromium (204 ppm), Antimony (130 ppm), Tin 112 ppm)



**Earrings**

BRAND: Mix & Co.  
STORE: Family Dollar, Bath, ME  
UPC CODE: 32251095016  
MANUFACTURER: Midwood Brands, LLC  
Made in China  
CHEMICALS OF CONCERN: Lead (6,548 ppm)

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**Spider Man Dog Tags**

BRAND: Marvel  
 STORE: Dollar Tree, Topsham, ME  
 UPC CODE: 639277964540  
 MANUFACTURER: Greenbrier International, Inc.  
 Made in China  
 CHEMICALS OF CONCERN: Lead (153 ppm), Bromine (11,510 ppm), PVC, Antimony (3,063 ppm), Tin (139 ppm)



**Headbands**

BRAND: None listed  
 STORE: Dollar General, Albuquerque, NM  
 UPC CODE: 731351969332  
 MANUFACTURER: Dolgencorp, LLC  
 Made in China  
 CHEMICALS OF CONCERN: Phthalates (DiBP 18.9%), PVC, Chromium (153 ppm), Antimony (1,002 ppm)



**Vinyl Floor Runner**

BRAND: Interiors by Design  
 STORE: Family Dollar, Albuquerque, NM  
 UPC CODE: 32251059810  
 MANUFACTURER: Midwood Brands, LLC  
 Made in USA  
 CHEMICALS OF CONCERN: Phthalates (DEHP 2.88%, DINP 18.54%, DIDP 3.15%), PVC



**Silly Straws**

BRAND: None listed  
 STORE: Dollar Tree, Charleston, WV  
 UPC CODE: 639277438225  
 MANUFACTURER: Greenbrier International, Inc.  
 Made in China  
 CHEMICALS OF CONCERN: Phthalates (DEHP 1.5%), PVC



**Pencil Pouch**

BRAND: jot  
 STORE: Dollar Tree, Albuquerque, NM  
 UPC CODE: 639277024398  
 MANUFACTURER: Greenbrier International, Inc.  
 Made in China  
 CHEMICALS OF CONCERN: Phthalates (DEHP 13.7%), PVC



**Bath Tub Appliques**

BRAND: Interiors by Design  
 STORE: Family Dollar, Houston, TX  
 UPC CODE: 32251068188  
 MANUFACTURER: Family Dollar Services, Inc.  
 Made in China  
 CHEMICALS OF CONCERN: Phthalates (DiBP 12.3%, DEHP 6.9%), PVC

## CHAPTER FOUR

# DOLLAR STORES ARE BIG BUSINESS



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**D**iscount retailers (commonly known as “dollar stores”) comprise a very significant portion of the retail sector in the U.S. Just the four largest chains—Dollar General, Dollar Tree, Family Dollar, and 99 Cents Only—operate a combined 21,500 U.S. stores, more than Walmart, and total annual sales of more than \$36 billion.<sup>49,50</sup>

The dollar store business model—selling products priced at or around \$1—first emerged in the 1950s. Dollar General, founded in Kentucky, and Family Dollar, founded in North Carolina, grew steadily throughout the southeast. Dollar Tree (headquartered in Virginia) and 99 Cents Only (headquartered in California) followed in the 1980s. For many years, the dollar store chains focused on closeout merchan-

dise and irregular items, salvage products, returned and liquidated items, damaged goods, and bankruptcy inventories,<sup>51</sup> and have long kept overhead costs low by siting their stores in cheaper spaces than other retailers and employing fewer people, who each perform many different functions.

More recently, the largest chains have begun to stock more mainstream products, including no-frills versions of some products made by major manufacturers, and even their own “house” brands, that often bring in a higher profit margin. Even as the recent economic downturn has driven more middle-class customers to dollar stores, their core customer base (42%) is still lower-income people who make less than \$30,000 a year.<sup>52</sup> Forty percent of dollar store customers rely on public assistance of some type.<sup>53</sup>

## CHAPTER FIVE SMART COMPANIES ARE RESPONDING

Consumers, investors, and regulators are increasingly demanding safer products free of toxic chemicals, leading to rapid growth in the sale of safer and more sustainable products.<sup>54</sup> Safer chemicals and products benefit not just consumers, but workers, businesses, governments, and the economy as a whole. The American Sustainable Business Council, a national network of businesses and associations representing 200,000 businesses and 325,000 business executives, owners, and investors, has identified many ways in which the transition to safer chemicals benefits business and the economy, including:

- Expanding markets for safer and greener chemicals and products;
- Reducing the costs and risks associated with managing chemicals in products and across supply chains;
- Lowering expenses from chemically-induced employee illness and enhancing productivity from improved employee health;

**FIGURE 1**  
Ripples of Responsibility



Source: Rossi, Peele, and Thorpe (2012). BizNGO and Clean Production Action. *The Guide to Safer Chemicals*.

### “WALMART AND SAM’S CLUB

believe that customers/members should not have to choose between products that they can afford and products that are better for them and the environment.”<sup>55</sup>

*Walmart’s Policy on Sustainable Chemistry in Consumables*

- Identifying chemicals of high concern to human health or the environment;
- Increasing trust among consumers, employees, communities, and investors;
- Improving transparency and communication throughout the supply chain, leading to increased confidence for downstream users;
- Creating a more competitive, innovative and economically sustainable chemical industry in the U.S.<sup>56</sup>

Costs and liabilities triggered by hazardous chemicals in products can be significant. Even when regulators don’t act, consumers and investors may avoid companies that allow toxic chemicals into the products they make or sell. A few recent cautionary tales:

- In January 2015, Safeway was required to pay almost \$10 million for illegally disposing of hazardous waste from cleaners, aerosols, hair dyes, electronic devices, and other products it sells;<sup>57</sup>
- Costco, CVS, Target, Walgreens, and Walmart paid \$138 million in fines over a three-year period due to chemicals of concern found in their products;<sup>58</sup>
- Sony lost over \$150 million in costs and sales from a recall of its PlayStations for illegal levels of cadmium;<sup>59</sup>
- Mattel’s toy recall for lead caused an 18% stock price drop and \$110 million in costs, and RC2’s recall for lead in toy trains cut its stock price in half and cost \$48 million;<sup>60</sup>

- Johnson & Johnson's baby products market share in China dropped 10% after toxic chemicals were found in some of its U.S. products;<sup>61</sup>
- Water bottle manufacturer Sigg USA went bankrupt largely because it failed to disclose the presence of bisphenol-A (BPA) in its bottles.<sup>62</sup>

Both niche and mainstream companies are responding, in different ways, to increasing market, regulatory and consumer demands that they understand, disclose, and eliminate chemicals of concern from their products, and ensure that substitutes are truly safer.

Some mainstream retailers—including Staples, Target, Walmart, Whole Foods, buybuy BABY and others—have acted to address chemicals in their supply chains. Major brands such as Apple, Adidas, Clorox, HP, Levi Strauss, and SC Johnson have adopted significant chemical disclosure policies and targeted measures to replace priority hazardous chemicals. The health care organizations Kaiser Permanente and Dignity Health have required that their suppliers report on many chemicals in their products. Companies following “green building” principles—including Google and the Durst Organization—are also demanding disclosure of chemicals in building materials, and supporting safer materials that will not expose building occupants to harmful chemicals.

Although the largest discount retail chains (Dollar General, Dollar Tree, Family Dollar, and 99 Cents Only) have worked to comply with minimum legal requirements governing chemicals in the products they sell, and some have taken specific actions to remove a few harmful products from their shelves or test some of their products, none of the largest chains have yet adopted comprehensive chemical management policies, leaving their customers workers, and investors exposed to possible harm and liability. It's time for that to change.

#### BOX 1

#### Safe and Healthy Products for All: It's Just Good Business

Health impacts linked to exposure to toxic chemicals, and the often higher cost of healthier products sold by some companies, can both impose substantial burdens on the economic well-being of low-income communities and communities of color. Retailers must consider how to make safe and healthy products affordable to all.

On the one hand, low-income communities may be exposed to chemicals in household products, children's toys, and food purchased from the discount stores. The low cost of these products creates the perception that the consumer is getting a bargain. But once impacts on health are quantified, such as long-term diseases like cancer or diabetes, it may not a bargain at all.

On the other hand, healthy alternatives to toxic products are often sold at high-end stores, such as Whole Foods and Trader Joe's, located in better-resourced communities. The prices of safer products are often not realistic prices for an everyday dollar store shopper. Organic produce, chemical-free cosmetics, and phthalate-free toys are often priced beyond what a low-income person can afford.

**For these reasons, economic justice has equal importance in the environmental and economic justice movement in the United States.** Many veterans of the environmental and economic justice movement today are engaged in intergenerational projects throughout the country, creating local economies and models of economic self-sufficiency, such as urban farming, locally-made beauty & health products, and worker cooperatives.

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**MANY VETERANS OF THE**  
environmental and economic justice  
movement today are engaged in  
intergenerational projects throughout  
the country, creating local economies  
and models of economic self-sufficiency.

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## CHAPTER SIX

# BABY STEPS AREN'T ENOUGH

### Dollar Stores Are Falling Behind on Chemicals



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**T**he largest dollar store chains have taken some minimal initial steps to address chemicals of concern in their supply chains, but their failure to adopt and disclose comprehensive plans of action is leaving their customers, and their own businesses, at risk.

In 2006 and 2007, Dollar General, Dollar Tree, and Family Dollar all experienced product recalls due to the highly toxic heavy metal lead, while mainstream retailers experienced similar problems. As reflected in new testing of dollar store products released in this report (see page 4), this experience, the resulting consumer backlash, and adoption of new state and federal regulations on lead in children's products seem to have encouraged the dollar

store chains to ensure that their vendors largely removed lead from children's products.

Dollar Tree claims to have gone further than minimum federal requirements, saying in its 2013 Sustainability Report that the company has advised vendors to not "use heavy metals in any products supplied to Dollar Tree." The report also states that Dollar Tree began testing for phthalates in PVC plastic in 2008, "advised" vendors not to use PVC plastic in rainwear or BPA in products and drinking containers designed for infants (and more recently in all food and beverage containers), tests for cadmium in its products, and tests products in its stores for compliance with state Toxics in Packaging legislation.<sup>63</sup>

In its 2010 Sustainability Report, Family Dollar notes that the company “established a higher set of requirements” than required by the 2008 Consumer Product Safety Improvement Act (which restricted lead and six phthalates in products intended for children under 12) and met the new requirements earlier than required by the law.<sup>64</sup>

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## TESTING OF 164 PRODUCTS

purchased from the four largest dollar store chains in six states for just a few hazardous chemicals found that 133 of 164 products contained one or more of these chemicals at levels of concern.

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These targeted actions demonstrate recognition by the dollar store chains that they must comply with the minimal legal requirements adopted by states and the federal government, or in some cases slightly exceed them. But the failure of these chains to adopt and publish comprehensive policies to address the many other chemicals of concern throughout their supply chains continues to expose their consumers to possible harm and leave their businesses vulnerable to the type of consumer and investor backlash, and regulatory actions, experienced by Mattel, Johnson & Johnson, Sigg USA and other companies.

Recent developments also show that the major dollar store chains continue to struggle with toxic chemicals in their products.

As noted on page 4, new testing of 164 products purchased from the four largest dollar stores chains in six states for just a few hazardous chemicals found that 133 of 164 products tested (or 81%) contained one or more of these chemicals at levels of concern (compared to existing voluntary toy standards and mandatory toy, packaging and electronics standards).

A 2012 report found that 39% of vinyl plastic packaging sold by discount retailers contained levels of cadmium or lead that violate state laws.<sup>65</sup>

99 Cents Only will pay over \$2 million in 2015 for improper storage and disposal of hazardous products and was

fined \$409,490 in 2010 by the U.S. Environmental Protection Agency (EPA) for selling unregistered and mislabeled pesticides in household cleaning products.<sup>66</sup> In the latter case, EPA’s Administrative Law Judge declared that the company’s management has a “culture of indifference.”<sup>67</sup>

California’s Proposition 65 law requires companies to disclose products they sell that contain chemicals known to the state to cause cancer or reproductive toxicity. All four major dollar chains may sell such products, in California and elsewhere. 99 Cents Only provides a notice on its web site in order to comply with the law, warning consumers that certain products sold in its stores contain Cocamide Diethanolamine (or Cocamide DEA) or Diethanolamine (or DEA), which are chemicals known to the State of California to cause cancer.<sup>68</sup>

Why would 99 Cents Only or any other dollar store chain continue selling products that contain chemicals proven to cause cancer, birth defects, or other reproductive harm? Isn’t this endangering not only their workers and customers, but their businesses as well, given the steep price paid by many other companies found to be selling products that contain toxic chemicals?

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## OUR COMMUNITIES DESERVE

to know what’s hidden in these stores and to act in our best interest, that is, a life of wellbeing and dignity for all.

*Suguet Lopez, Executive Director Organizacion en California de Lideres Campesinas*

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In 2014, Dollar Tree had to remove toy Clingy Darts from its stores after the product was found to contain high levels of a regulated phthalate chemical.<sup>69</sup> Various dollar store products have been found to be mis-labeled, including medications, toothpastes, and cleaning products.<sup>70</sup>

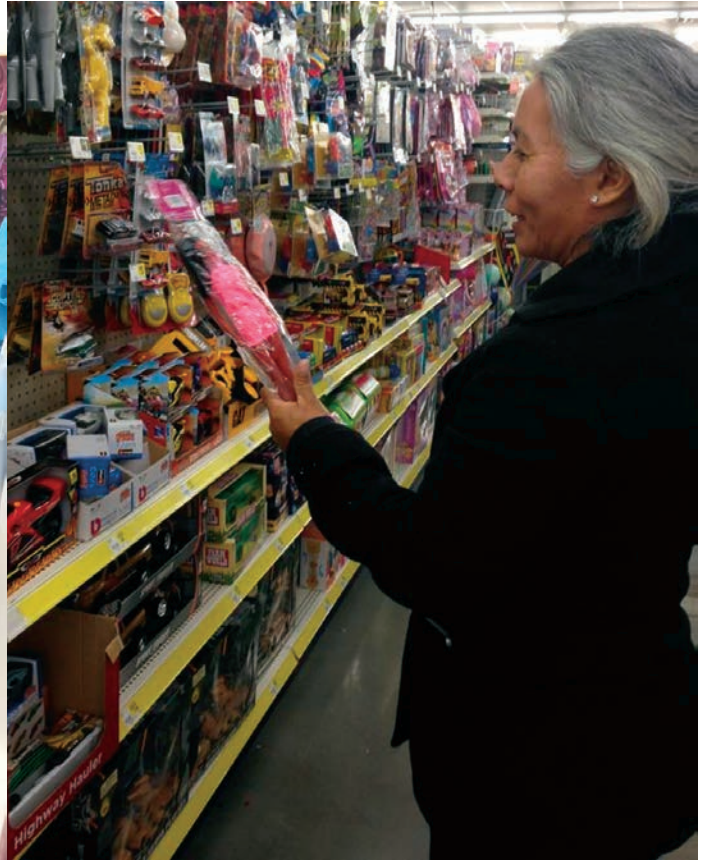
It’s time for the dollar store chains to address the presence of hazardous chemicals in their products comprehensively, by adopting chemical management policies based on best practices identified by sustainability experts and by other retailers.

## CHAPTER SEVEN

# ESSENTIAL ELEMENTS OF A CORPORATE CHEMICAL POLICY



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**T**he best corporate policies to address chemicals of concern in products include several common elements:

- KNOW what chemicals are in products and supply chains;
- DISCLOSE those chemicals publicly;
- NAME priority hazardous chemicals for replacement;
- IDENTIFY alternatives that are effective and safer;
- REPLACE harmful chemicals with proven safer alternatives.

To assess the major dollar store chains' chemical management practices, we compared publicly available information on their policies, and the policies of Walmart and Target,

### **“WHAT IS MEASURED, IMPROVES.”**

*Management Guru Peter Drucker*

to the “Five Essential Practices for Retailers, Brand Owners and Suppliers,” a framework developed by the Coming Clean Workgroup for Safe Markets that builds on the BizNGO Principles of Safer Chemicals.<sup>71</sup> (For a summary of the Five Essential Practices, see Appendix B.) The principles of good chemicals management policy emphasize the need for disclosure of chemical information and informed substitution practices for the replacement of hazardous chemicals in products with safer alternatives.

Table 1 compares Dollar General, Dollar Tree, Family Dollar, and 99 Cents Only to the chemical management policies of Walmart and Target, using the following questions drawn from the Five Essential Practices.

1. Does the company have a publicly available chemical management plan that establishes a goal of reducing and eliminating chemicals of concern and includes metrics and timeframes to measure progress?
2. Does the company know and disclose the chemical ingredients in its products (including packaging)?
  - a. Does the company require disclosure of chemicals from suppliers to the retailer or a third party on behalf of the retailer?
  - b. Does the company require or encourage suppliers to disclose chemical ingredients online and/or on product packaging?
3. Has the company publicly identified a set of chemicals of concern for reduction or replacement with safer alternatives?
4. Does the company conduct, or require suppliers to conduct, “alternatives assessments” of chemicals of concern to identify safer alternatives and ensure informed substitution?

5. Has the company committed to continuous improvement, including public reports on its progress in implementing its chemical management plan?

While Walmart’s and Target’s policies both have some weaknesses, both companies have taken the initiative to adopt publicly available policies that include most of the elements of good corporate chemical management systems and identify broad groups of chemicals for action through specific processes.

None of the four major dollar store chains have any publicly available plan or policy to comprehensively address chemical hazards in the products they sell, even in their “house” brands over which they have full control.

Given this reality, it is not surprising that new testing of products purchased at the four largest dollar store chains for just a few toxic chemicals found some disturbing results. (See page 4.)

**TABLE 1**  
**Comparison of Publicly Available Chemical Management Policies Based on the “Five Essential Practices for Retailers, Brand Owners and Suppliers”**

| Essential Practice  | Dollar General | Dollar Tree | Family Dollar | 99-Cents Only | Walmart | Target |
|---|----------------|-------------|---------------|---------------|---------|--------|
| 1. Public chemical management plan with metrics and timeframes?           | No             | No          | No            | No            | Yes     | Partly |
| 2. Disclosure of chemical ingredients in multiple product categories:     |                |             |               |               |         |        |
| a. From suppliers to the retailer?  | No             | No          | No            | No            | Yes     | Yes    |
| b. To consumers online or on packages?                                    | No             | No          | No            | No            | Yes     | Yes    |
| 3. Chemicals of concern publicly identified for reduction or elimination? | No             | No          | No            | No            | Partly  | Yes    |
| 4. Conduct or require alternatives assessment and informed substitution?  | No             | No          | No            | No            | Partly  | No     |
| 5. Continuous improvement and public reporting?                           | No             | No          | No            | No            | Yes     | Yes    |

Source: Information publicly available on the relevant corporate websites, including the Walmart Policy on Sustainable Chemistry in Consumables and the Target Sustainable Product Standard.



## CHAPTER EIGHT

# OUR RECOMMENDATIONS: COMMON-SENSE SOLUTIONS

Successful strategies to replace harmful chemicals in everyday products with safer alternatives are already well documented, and are already being implemented by leading retailers, manufacturers, and some states and municipalities. What has been missing in the discount retail sector—with the exception of a few important but limited actions by some chains—has been sustained focus on this issue at the top corporate leadership level and comprehensive plans of action to identify and phase out harmful chemicals across supply chains.

Common-sense actions can begin to protect dollar store employees, customers, and their families from some of the most hazardous chemicals, while positioning discount retailers as sustainability leaders committed to safe products and vibrant local economies.

### DISCOUNT RETAILERS SHOULD:

- Immediately remove children’s products found to contain regulated phthalates and lead from store shelves, and from storage and distribution systems.
- Commit to phase out phthalates, lead, and PVC plastic (vinyl) from all products they sell.
- Adopt comprehensive corporate chemical management policies based on the “Five Essential Practices” (see page 26) to identify, disclose, and remove hazardous chemicals (starting with the Hazardous 100+) from their supply chains and from all products in their stores, beginning with their house brands.
- Build relationships with local and regional manufacturers and vendors of safer products to support vibrant local economies while improving product safety.

### LOCAL, STATE, AND FEDERAL GOVERNMENTS SHOULD:

- Ensure that discount retailers comply with all relevant laws and regulations.
- Adopt public policies (such as Maine’s Kid-Safe Products Law and Washington’s Children’s Safe Products Act) that require manufacturers and retailers to disclose hazardous chemicals in products, research alternatives, and remove hazardous chemicals when alternatives are available, effective, and safer.
- Expand or enact restrictions on toxic phthalates to include all products that can expose children and women of childbearing age to these highly hazardous chemicals.

### FAMILIES AND COMMUNITIES SHOULD:

- Exercise individual purchasing power by buying more locally made products, and buying less-toxic products when available on the shelves of dollar stores.
- Communicate their need for safe products free of harmful chemicals to store managers, corporate leadership, and government officials, by joining local and national efforts advocating for nontoxic products.
- Get involved in local environmental and economic justice organizations.

## RESOURCES

### FOR BUSINESSES

**American Sustainable Business Council**—Offers policies and practices that can help the economy become more sustainable. <http://asbcouncil.org>

**BizNGO**—A unique collaboration of businesses and environmental groups working together for safer chemicals & sustainable materials. <http://bizngo.org>

**Chemical Footprint Project**—A tool for benchmarking companies as they select safer alternatives and reduce their use of chemicals of high concern. <http://www.chemicalfootprint.org>

**Clean Production Action**—Designs and delivers strategic solutions for green chemicals, sustainable materials and environmentally preferable products. <http://cleanproduction.org>

**Green Chemistry and Commerce Council**—A cross sectoral, business-to-business network of companies and other organizations working collaboratively to advance green chemistry across sectors and supply chains. <http://greenchemistryandcommerce.org>

**GreenScreen® for Safer Chemicals**—A method for comparative chemical hazard assessment. <http://www.greenscreenchemicals.org>

**Guide to Safer Chemicals**—A hands-on-guide that charts pathways to safer chemicals in products and supply chains. <http://bizngo.org/safer-chemicals/guide-to-safer-chemicals>

**Hazardous 100+ Chemicals**—Recognized by at least two governmental authorities to be hazardous, or they pose hazards similar to chemicals on an authoritative list. <http://saferchemicals.org/chemicals>

**Meeting Customers' Needs for Chemical Data: A Guidance Document for Suppliers**—[http://www.greenchemistryandcommerce.org/downloads/GC3\\_guidance\\_final\\_031011.pdf](http://www.greenchemistryandcommerce.org/downloads/GC3_guidance_final_031011.pdf)

**Pharos Project**—An independent and comprehensive database for identifying health hazards associated with building products. <https://www.pharosproject.net>

**SUBSPORT Substitution Support Portal**—A free-of-charge, multilingual platform for information exchange on alternative substances and technologies. <http://www.subsport.eu>

### FOR FAMILIES AND COMMUNITIES

**GoodGuide**—A comprehensive, authoritative resource for information about the health, environmental and social performance of consumer products and companies. <http://www.goodguide.com>

**HealthyStuff.org**—Includes test results for over 5,000 products and ranks them according to chemical hazards. <http://www.healthystuff.org>

**Environmental Working Group's Skin Deep Cosmetics Database**—Includes more than 70,000 cosmetic and personal care products. <http://www.ewg.org/skindeep>

**Workgroup for Safe Markets Resources Page**—Links to over fifty resources on chemicals, health, and products. <http://safemarkets.org/resources-to-promote-safer-chemicals-and-products>

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## APPENDIX A METHODS

Products were purchased at retail locations of Dollar General, Dollar Tree, Family Dollar, and 99 Cents Only in California, Kentucky, Maine, New Mexico, Texas, and West Virginia and shipped to [HealthyStuff.org](http://HealthyStuff.org) in Ann Arbor, Michigan for testing. Researchers selected products based on our research interests and consumer interest. The sampling was intended to represent a diverse group of products, but was not random or necessarily designed to be representative of all products on the market.

HealthyStuff.org analyzed the products using two spectroscopic methods, High Definition X-ray Fluorescence (HDXRF) and Fourier Transform Infrared Spectroscopy (FTIR). HDXRF and FTIR are non-destructive methods that allow the user to rapidly screen for toxic chemicals in consumer products. XRF technology is widely used by both product manufacturers and government regulators, including by the CPSC, to test consumer products for hazardous metals and other chemical elements. The elemental composition of the materials reveals the presence of potentially hazardous chemicals, such as metals, and also allows researchers to infer the possible presence of toxic chemicals or materials, including brominated flame retardants (BFRs), polyvinyl chloride (PVC) and possibly phthalate plasticizers. We have translated the research results into a HealthyStuff.org product rating system to allow users to easily compare the chemical levels of a variety of consumer products.

*The ratings included in this report do not provide a measure of health risk or chemical exposure associated with any individual product, or any individual element or related chemical. HealthyStuff.org ratings provide only a relative measure of high, medium, and low levels of concern for several hazardous chemicals or chemical elements in an individual product in comparison to criteria established in the site methodology.*

There are a number of chemicals of concern that cannot be detected by XRF technology. XRFs, like all test methods, have limitations.

The samples were first analyzed with HDXRF for elements such as lead, cadmium, chlorine, bromine, arsenic, mercury, tin, and antimony. Next, FTIR was used to determine which samples contained vinyl plastic (polyvinyl chloride). Thirty-eight identified vinyl plastic products were then tested for phthalates by a third party CPSC-certified laboratory according to CPSC Test Method CPSC-CH-C1001-09.3, which uses gas chromatography/mass spectrometry.

The XRF methods used, background materials on the XRF, and limitations in the XRF methodology are detailed here: <http://www.healthystuff.org/about.methodology.php>

## APPENDIX B

# FIVE ESSENTIAL PRACTICES FOR RETAILERS, BRAND OWNERS AND SUPPLIERS

## Transitioning to Safer Chemicals and Materials Through Increased Disclosure of Chemical Information and Informed Substitution of Hazardous Chemicals

Government mandates, consumer demand, and pressure from public health advocates are increasingly pushing brand owners, retailers and suppliers to identify and eliminate hazardous chemicals and materials in the products they make and sell. Companies that phase out hazardous chemicals position themselves as innovators and consumer-friendly, while reducing reputational and financial liabilities and reporting requirements. Unfortunately, substitutes for phased out chemicals are far too often not disclosed, and substitutes for hazardous chemicals have often not been comprehensively screened for health and environmental hazards. These failures diminish the public's faith that reformulated products are actually safer, and leave companies exposed to new liabilities and new government or consumer demands.

These **Five Essential Practices** will ensure that brand owners, suppliers, and retailers transition away from hazardous chemicals of concern by ensuring that any substitutes have been fully screened for health and environmental hazards and disclosed to consumers and governments:

1. Retailers, brand owners and suppliers will establish a goal of reducing and eliminating the use of chemicals and materials of concern in products and manufacturing processes, and replacing them with alternatives that are transparently safer. Their publicly available chemicals management plans will include metrics and clear timeframes to measure continual progress towards this goal. As a priority, retailers and brand owners will identify relevant chemicals of high concern in products and supply chains, volume of those chemicals, and set goals for reducing both the number and volume of these chemicals.
2. Retailers and brand owners will know and publicly disclose the chemical ingredients in their products, product packaging and manufacturing processes. They will do this by requiring their suppliers to give full chemical disclosure including of fragrances, additives, contaminants, raw materials, colorants, flavorings and chemical by-products and they will make this information publicly available online and/or on product packaging. A good first step is to disclose all chemicals of high concern in products including those under proprietary agreements.
3. Retailers, brand owners and suppliers will identify chemicals and materials in their products and/or supply chains for chemicals of concern for substitution with safer alternatives that have undergone comprehensive hazard screening. The hazard profile of a chemical will be determined using comprehensive human health and environmental endpoints and all data gaps for chemical information will be clearly stated.
4. Retailers, brand owners and suppliers will conduct or require alternatives assessment for chemicals of concern as set out in the Business-NGO [Principles of Alternatives Assessment](#). Alternatives will include a wide range of options ranging from simple elimination to informed substitution for safer chemical, material and non-chemical alternatives.
5. Retailers, brand owners and suppliers will commit to continuous improvement in eliminating all chemicals and materials of concern in their supply chain and will support innovation and public policies that

promote green chemistry, sustainable product design and manufacturing processes that protect human health and the environment. Retailers, brand owners and suppliers will publicly report on their progress in transitioning to safer chemicals and materials on their websites and in their shareholder reports.

A comprehensive description of the Five Essential Practices, including methods, measures, and tools, is available from the [Coordinators of the Workgroup for Safe Markets](#).

These Five Essential Practices were developed jointly by partners in the [Workgroup for Safe Markets](#), including: Breast Cancer Fund, Center for Food Safety, Center for Environmental Health, Clean and Healthy New York, Clean Production Action, Commonweal, Healthy Building Network, International Campaign for Responsible Technology, Learning Disabilities Association of Maine, Natural Resources Defense Council, Safe Minds, Safer Chemicals Healthy Families, and Women's Voices for the Earth.

# A DAY LATE AND A DOLLAR SHORT

Discount Retailers Are Falling Behind on Safer Chemicals



Major retail and manufacturing brands are protecting their customers' health and reducing the risk of fines, lost sales, and reduced market share by responding to the increasing demand for safer products. Smart companies are adopting chemical management policies to identify, disclose, and replace chemicals of concern in the products they make or sell with safer alternatives.

The four largest dollar store chains—Dollar General, Dollar Tree, Family Dollar and 99 Cents Only—operate over 21,500 U.S. stores, with annual sales of more than \$36 billion. These chains are in a unique position to benefit the health and welfare of many communities of color and low-income communities where they operate, and also grow their own businesses, by providing safer products. But so far they have failed to follow their competitors—such as Walmart and Target—by adopting broad action plans to identify and phase out hazardous chemicals.

Which dollar store chain will seize the opportunity to become the leader in providing nontoxic products and best positioned to thrive in the competitive discount sector?

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