



1700 Diagonal Road, Suite 650
Alexandria, VA 22314
Ph: 703-647-4609
www.bottledwater.org

January 21, 2016

Nick Visser
Associate Green Editor
nick.visser@huffingtonpost.com

cc:
Ryan Grenoble
News Editor
ryan.grenoble@huffingtonpost.com

Arianna Huffington
Editor-in-chief
arianna@huffingtonpost.com

Dear Mr. Visser,

I am contacting you regarding a July 29, 2013, Huffington Post Green article, "[Plastic Water Bottles Causing Flood of Harm to Our Environment](#)," that recently resurfaced via social media. When it was first published on Huffington Post Green, we immediately reached out to Mr. Schriever and provided him with the detailed information below, however, no correction was ever made to the story and he never responded to our concerns.

I would ask that you take down the article's URL due to its several significant inaccurate and misleading claims that misinform consumers about bottled water.

People choose bottled water for a variety reasons. Many consumers are focusing on healthful choices for themselves and their families, and they know that safe, convenient, refreshing bottled water has zero calories and is the healthiest option on the shelf. They also appreciate the reliable, consistent quality of bottled water. And, despite continued efforts by activist groups to discourage people from drinking bottled water, consumption and sales of bottled water are increasing as consumers make their voices heard in the marketplace.

However, despite the bottled water industry's size, the amount of water actually sold is relatively tiny, compared to tap water volumes. To put it in context, while the entire U.S. bottled water market is nine billion gallons, New York City goes through that amount of tap water in one week.

Annually, the entire U.S. beverage industry makes up less than less than 0.03 percent of all water use. Annual bottled water production accounts for less than 0.02 percent of the total groundwater withdrawn in the United States each year. In fact, at 57 billion gallons per day, the largest user of groundwater is actually the agriculture industry. That amount equals 68 percent of total groundwater extracted in 2010.

FDA Regulation of Bottled Water

Bottled water is comprehensively regulated by the U.S. Food and Drug Administration (FDA) as a packaged food product and it provides a consistently safe and reliable source of drinking water. By federal law, the FDA regulations governing the safety and quality of bottled water must be at least as stringent as the U.S. Environmental Protection Administration (EPA) standards that govern tap water. And, in some very important cases, bottled water regulations are substantially more stringent.

The FDA management of the bottled water program is based out of the FDA/Center for Food Safety and Applied Nutrition (CFSAN), located in College Park, Maryland. In addition to staff directly responsible for oversight of bottled water, CFSAN has over 800 employees, including highly specialized professionals such as chemists, microbiologists, toxicologists, food technologists, molecular biologists, pharmacologists, nutritionists, and physicians.

While these individuals and their staffs oversee regulatory enactment and enforcement of the bottled water industry, significant work is done by both FDA regional offices in the United States and the states themselves. Inspections and enforcement all happen in these locations, not in College Park. All 50 states have delegation agreements with FDA, meaning that when they inspect a bottled water plant (or ANY food processing facility) they act with the full authority of the FDA.

Safety and Quality of Bottled Water

Regarding the quality and safety of bottled water, all bottled water products - whether from groundwater or public water sources - are produced utilizing a multi-barrier approach. From source to finished product, a multi-barrier approach helps prevent possible harmful contamination to the finished product as well as storage, production, and transportation equipment. Many of the steps in a multi-barrier system are effective in safeguarding bottled water from microbiological and other contamination.

Further, bottled water is one of the few food products that FDA also subjects to two extra sets of requirements in addition to the general food Good Manufacturing Practices (GMPs) -- one prescribing bottled water Good Manufacturing Practices, and the other imposing specific bottled water standards of identity and quality. FDA's GMPs for bottled water apply to every aspect of production, from source protection, all the way through processing, to finished water sampling for purity prior to final bottling. FDA has established standards for more than 90 substances pursuant to the Standard of Quality (SOQ) for bottled water. Most FDA bottled water quality standards are the same as EPA's maximum contaminant levels (MCL) for public water systems. The few differences are usually the result of the substance not being found in bottled water or the substance is regulated under FDA food additives program.

Over and above FDA's fully protective requirements, IBWA's Code of Practice provides detailed specifications for plant construction and design, sanitary facilities, equipment, process controls and operations, and personnel qualifications.

Consumers who choose to drink bottled water can rely on its consistent record of safety and quality. In a 2009 hearing before the U.S. House of Representatives Subcommittee on Oversight and Investigations, an FDA official testified that the agency is aware of no major outbreaks of illness or serious safety concerns associated with bottled water in the past decade. At that same hearing, the Government Accountability Office (GAO) made public its report on bottled water, which found that based on a survey of water quality and health protection officials in all 50 states and the District of Columbia there was no evidence that bottled water caused any illnesses during the previous five years. (*United States Government Accountability Office Report on Bottled Water, GAO-09-610, June 2009*)

In contrast, EPA researchers estimate that 16.4 million cases of acute gastrointestinal illness (vomiting and diarrhea) per year are caused by tap water year (*Messner M., et al., Journal of Water and Health, 2006; 4(Suppl 2):201-40*).

Bottled Water from Municipal Sources

You also refer to purified bottled water as “*repackaged tap water*.” It is important to note that purified bottled water is not just tap water in a bottle, as the above statement implies. Once the municipal source water enters the bottled water plant, several processes are employed to ensure that it meets the purified standard of the U.S. Pharmacopeia 23rd Revision. These treatments can include ozonation, reverse osmosis, distillation, or de-ionization. The finished water product is then placed in a bottle under sanitary conditions and sold to the consumer.

If a bottled water product's source is a public water system and the finished bottled water product does not meet the FDA Standard of Identity for purified water, the product label must disclose the public water system source.

IBWA supports a consumer's right to clear, accurate and comprehensive information about the bottled water products they purchase.

All packaged foods and beverage products, including bottled water, have extensive labeling requirements, including a statement of the type of water that is in the container, compliance with the applicable definitions in the FDA Standards of Identity, ingredient labeling, name and place of business of the manufacturer, packer or distributor, net weight, and, if required, nutrition labeling.

In addition, almost all bottled water products also have a phone number and/or website address on the label. This contact information allows consumers to get any additional information that they may want that might not already be on the label. This might include the source, treatment, and quality information.

Disclosures, such as those required by EPA in Consumer Confidence Reports (CCRs) for public water systems, are not required of any food or beverage product. These products must meet all applicable safety standards and must be manufactured according to FDA regulations. However, bottled water companies voluntarily provide consumers with access to information about their products.

Consumers have multiple choices in brands of bottled water. That is not the case with their public water system. Consumers cannot make a choice of which municipal water is piped into their homes. If a bottled water company does not satisfy a consumer's request for more information, that consumer can, and should, choose another brand.

Container Safety

You also call into question the safety of PET plastic bottled water containers. All plastics used for bottled water containers, including PET plastic bottles, commonly small, portable 16.9 (half-liter) and 24 ounce sizes, are safe and reliable for food contact use. PET is used in a variety of packaging for many foods, including everything from peanut butter, soft drinks, and juices to beer, wine, and spirits. PET is approved as safe for food and beverage contact by the FDA and similar regulatory agencies throughout the world, and has been for over 30 years.

Referring to the safety of bottled water, you specifically state that, *"all the majority of evidence shows that it's [bottled water] worse for you."* The link you provide (<http://health.usnews.com/health-news/family-health/articles/2008/04/16/study-of-chemical-in-plastic-bottles-raises-alarm>) to support this statement actually leads to a 2008 article about claims of bisphenol A (BPA) in reusable polycarbonate plastic containers. The article does not even mention bottled water, and even more important is the fact that BPA is never actually present in PET plastic.

Even for three- and five-gallon polycarbonate bottled water containers that contain BPA, regulatory agencies in several countries and the FDA have ruled favorably on the safety of BPA. The consensus among these international regulatory agencies is that the current levels of exposure to BPA through food packaging and does not pose a health risk. In fact, On June 4, 2013, the FDA clearly confirmed the safety of BPA, stating that, "based on FDA's ongoing safety review of scientific evidence, the available information continues to support the safety of BPA for the currently approved uses in food containers and packaging."

(<http://www.fda.gov/Food/IngredientsPackagingLabeling/FoodAdditivesIngredients/ucm355155.htm>)

Water Use

Even with continuing growth and increased consumption, bottled water still has the smallest water and energy use footprint of any packaged beverage. The results of a 2014 IBWA benchmarking study (<http://bit.ly/1SIBi54>) show that the amount of water and energy used to produce bottled water products in North America is less than all other types of packaged beverages.

On average, only 1.32 liters of water (including the liter of water consumed) and 0.24 mega joules of energy are used to produce one liter of finished bottled water.

When it comes to overall water use, the bottled water industry is actually a small and efficient water user. Bottled water uses only 0.01 percent of all water used in the U.S.

In addition, according to the Beverage Marketing Corporation (BMC), nearly all of the bottled water sold in the U.S. is sourced domestically. Imported bottled water accounts for only 1.5 percent of the U.S. market.

A Small Environmental Footprint

The bottled water industry is a strong supporter of our environment and our natural resources. In fact, bottled water's environmental footprint is the lowest of any packaged beverage according to a life cycle assessment conducted by Quantis in 2010.

In 2009, IBWA commissioned a life cycle inventory (LCI) by Franklin Associates to determine the environmental footprint of the United States bottled water industry. The results show that the bottled water industry has an extremely small environmental footprint.

Greenhouse Gas Emissions

- The PET small pack and home and office delivery (HOD) bottled water industries combined emit 6.8 million tons of CO₂ eq. a year, which is equivalent to 0.08 percent of total United States emissions.
- The carbon footprint for a 500 ml PET soft drink bottle is reportedly 240 grams CO₂ eq., and the carbon footprint for a 500 ml PET diet soft drink bottle is reportedly 220 grams CO₂ eq. At 111 grams CO₂ eq. per 500 ml equivalent basis, small pack bottled water generates 46 percent less CO₂ eq. compared to those soft drinks.

Energy Use

- The production, packaging, and transportation of HOD and small pack bottled water consumed in the U.S. in 2007 required 107.4 trillion BTU. Thus, process and transportation energy use for the bottled water industry was 0.07 percent of total U.S. primary energy consumption.
- Of the 107.4 trillion BTU used in 2007 for bottled water, 102.6 trillion was for small pack water (0.067 percent of the total energy use in the U.S. in 2007) and 4.8 trillion for HOD water (0.003 percent of the total energy used by the U.S. in 2007).

Solid Waste

- Based on data reported by IBWA members for PET small pack and HOD water, the total weight of packaging materials used for bottled water packaging in 2007 was 1.64 million tons.
- After adjusting for recycling of containers and packaging, the net amount of bottled water packaging disposed of in landfills was 1.08 million tons.
- At 1.08 million tons, bottled water packaging discards account for 0.64 percent of the 169 million tons of total U.S. municipal solid waste discards in 2007.

Additionally, your claim that 17 million barrels of oil are used annually to produce bottled water containers is incorrect. The PET plastic used in single-serve bottled water containers is made using naphtha, a petroleum byproduct, not barrels of virgin oil.

From an environmental standpoint, when people choose a bottle of water instead of any other canned or bottled beverage, they are choosing less packaging, less energy consumption, and less use of natural resources. What's more, recycling the bottle can cut that impact by an additional fifty percent, if it is re-used to replace virgin PET.

Recycling Rates Continue to Increase

All PET bottled water containers are 100 percent recyclable. And, according to the National Association for PET Container Resources (NAPCOR), now at 37.04 percent, the recycling rate for single-serve PET plastic bottled water containers more than doubled between 2003 and 2013. In fact, NAPCOR finds that plastic bottled water containers are the most frequently recycled PET beverage container in curbside recycling programs.

The industry also strives to reduce the amount of plastic in each bottled water container. According to the Beverage Marketing Corporation (BMC), between 2000 and 2014, the average weight of a 16.9-ounce (half-liter) single-serve PET plastic bottled water bottle has declined 51 percent to 9.25 grams. This has resulted in a savings of 6.2 billion pounds of PET resin since 2000.

Data derived from EPA figures demonstrates that plastic water bottles make up less than one-third of one percent of the U.S. waste stream. And, of all the plastics produced in the United States, PET plastic bottled water packaging makes up only 0.91 percent – less than one percent.

Flawed Study Cited

The now 17 year-old National Resources Defense Council (NRDC) study referred to in the article has been extensively rebutted and shown to be disingenuous and inaccurate.

The NRDC surveyed more than 1,200 bottles of bottled water, looking for roughly 57 contaminants. Throughout all of their analysis, the NRDC found not one instance of contamination that would raise a legitimate health concern. For example, the NRDC report's lengthy discussion of heterotrophic plate count (HPC) bacteria is both misleading and completely irrelevant to the safety of bottled water. HPC is found in all water and many food products, and has been studied extensively by EPA and FDA.

The NRDC report is an extensive initiative to find fault with the bottled water sold in the United States, and a dispassionate review reveals that NRDC failed to accomplish this objective. The fact is, and the report's findings reflect, that bottled water is among the most highly regulated food products by the FDA under the Federal Food, Drug and Cosmetic Act (FFDCA) ("*FFDCA*," 21 U.S.C. s. 301 et seq.).

Bottled Water Pricing

As a popular retail food product, bottled water is available at many differing price points. When calculating the differences in cost between tap and bottled water, critics typically use retail prices from convenience or drug stores, where bottled water prices are typically higher. However, according to

BMC, the average wholesale price per gallon of domestic non-sparkling bottled water was \$1.22 in 2014. BMC also notes that research shows consumers most often tend to buy bottled water in bulk from supermarkets or large discount retailers, as they often prefer to purchase bottled water in cost-saving volume.

The Healthy Beverage Choice

Water, including bottled water, is a key element in reversing the obesity epidemic currently facing the United States. People want convenience in their busy lives, so a majority (70 percent) of what they drink comes out of a package. Bottled water is already making a difference, as people switch from sweetened, caloric drinks. Replacing just one 12-ounce sugared beverage with a bottle of water each day can trim more than 50,000 calories a year from a person's diet. That's a real contribution to a healthier lifestyle.

People should be drinking more water, whether it comes from a bottle, a filter, or the tap – but that choice should be theirs. Bottled water must therefore be available wherever packaged beverages are sold. When people want a packaged beverage or have special needs, having easy access to bottled water has real value for both health and safety.

From a safety standpoint, bottled water protects people and can even save lives. When tap water is disrupted by anything from a power outage to a pipe breach to a natural disaster (e.g., floods, hurricanes, tornados, earthquakes, or wildfires), bottled water provides a necessary and reliable source of safe drinking water. In addition, the sealed container helps ensure quality. In fact, federal health officials recommend bottled water for people with weakened immune systems.

This article misinforms consumers in a way that could deter them from consuming bottled water -- one of the safest, healthiest and environmentally friendly packaged beverages on the shelf. Given the lack of response to our original communication with Mr. Schriever, I request that you take down this story's URL so that it does not continue to mislead consumers about bottled water.

Additionally, I would welcome the opportunity to discuss with you any of the above points, or any other bottled water-related issues.

Sincerely,

(sent electronically)

Chris Hogan
Vice President of Communications
International Bottled Water Association
703-647-4609
chogan@bottledwater.org