Have you ever been out in the wilderness and had to rely on natural sources of water? If you have then you know that it is a bad idea to consume still water that's been sitting in a pond or a lake. The lower the elevation, the higher the chance of contracting a stomach bug. It's prudent to treat any water from a stream or lake with an iodine tablet, but here's the catch. Water that's been treated with iodine looks far less appealing than the sparkling water that nature has offered up to you. It's hard not to take a sip of it; though, in the end, you'll be by your toilet regretting your life.

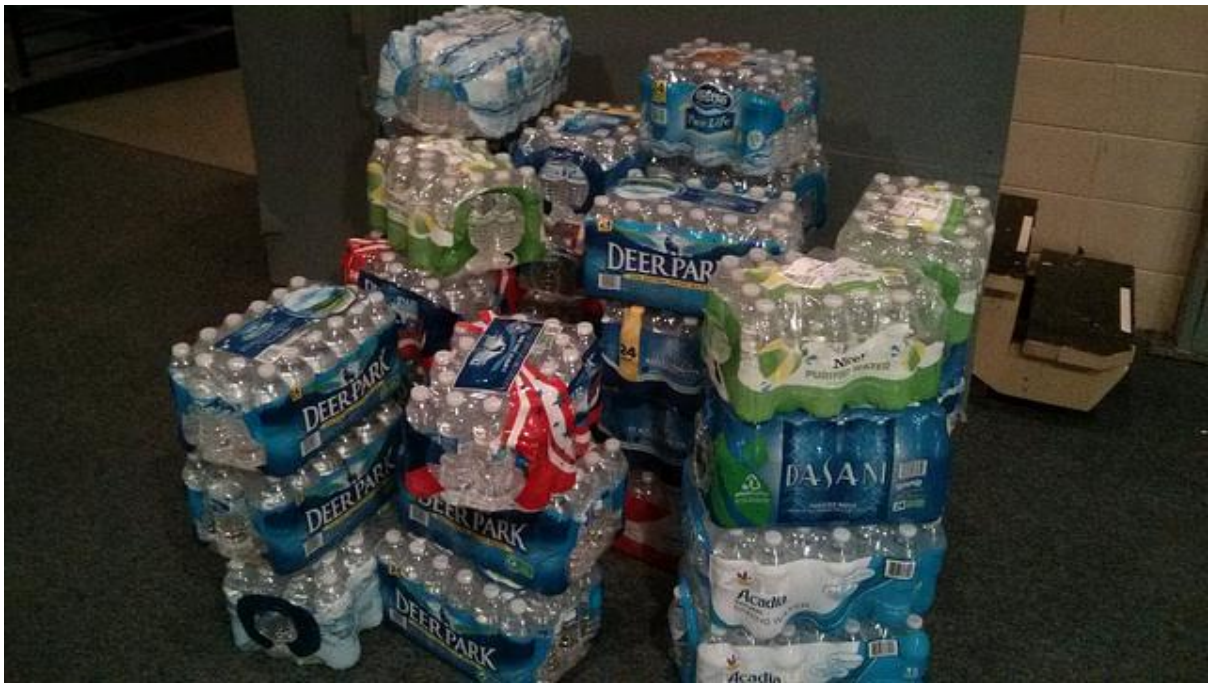
Watercolor, or the lack-there-of, has an effect on people's perception of its cleanliness and drinkability. That's why bottled water manufacturer's know how that their brand's success relies on consistently providing customers with transparent and colorless products.

But it looks so fresh and drinkable! Image Credit: Flickr User **tobo**

Perception of Cleanliness and Safety Is Essential for Bottled Water Manufacturers

When the public perceives that its water supply is not safe[1] , it's good business for the bottled water industry. Sales of bottled water spiked when **Flint became aware of its contamination**[2]. As fracking stirred fears of water contamination in Pennsylvania (spurred by an image of burning tap water in *Gasland*), residents began subsisting entirely on bottled water, for eating, for cooking, and even for showering. People buy bottled water because it is *safe*, and it is *clean.*

As a result, bottled water manufacturers have a vested interest in maintaining the public perception that their water is clean and safe. If contamination is perceived or discovered in a brand–if a customer noticed that one particular case of water was more yellow than others–that brand's credibility would be in serious jeopardy. That's why bottled water manufacturers rely on transmission spectrophotometers to ensure that their water seems safe to drink. As every company producing bottled water is essentially selling the same product—water is water—the strength of a company's bottled water line is entirely dependent on brand credibility and customer loyalty. To endanger either is to endanger the entire product line. By testing the color and haze of their water before it is bottled and distributed, manufacturers can ensure their credibility.



Bottled water must maintain an impression of cleanliness and safety to remain competitive. Image Credit: Flickr User **Techmsg** (CC BY 2.0)

Vista Ensures Water Color And Haze Conforms to Quality Standards

Transmission spectrophotometers assess the color of transparent or translucent liquids by passing light through a sample and measuring it on the other side. Like the human eye, they record color as a function of the full spectrum of visible light. Any tint in the water can be rapidly detected. From there, the issue can be isolated, the root cause discovered, and the process corrected. This ensures that all water leaving the bottling plant is "water white."

Of course, color is not the only indicator of water quality. Clarity is of equal importance. Any particulate matter affecting the transparency of water will be noticed by customers. Whether or not these particulates pose health hazards, the sight of them alone will drive customers to a clearer

brand of water. Naturally, bottlers employ haze measurement instruments as well as spectrophotometers to ascertain the quality of their water.

Traditionally, these have been separate instruments, requiring quality control technicians to subject each sample to two separate tests. However, HunterLab has recently introduced the Vista, a transmission and haze spectrophotometer, which is the first instrument capable of measuring color and haze simultaneously. By measuring both at once, this instrument cuts measurement time in half frees up valuable benchtop space in the laboratory and reduces the ongoing costs of ownership by halving maintenance costs. To learn more about how the Vista can improve the quality assurance processes of your bottled water plant, contact the experts at HunterLab.

1. "America's Tap Water: Too Much Contamination, Not Enough Reporting, Study Finds." 2017, https://www.nytimes.com/2017/05/04/us/tapwater-drinking-water-study.html?module=WatchingPortal&region=c-column-middle-span-region&pgType=Homepage&action=click&mediaId=thumb_square&state=standard&contentPlacement=19&version=internal&contentCollection=www.nytimes.com&contentId=https%3A%2F%2Fwww.nytimes.com%2F2017%2F05%2F04%2Fus%2Ftapwater-drinking-water-study.html&eventName=Watching-article-click&_r=0
2. "Flint water crisis fast facts," 2017, http://www.cnn.com/2016/03/04/us/flint-water-crisis-fast-facts/