

# [Hw #18](https://assignbuster.com/hw-18/)

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Difference between the Primary and the Secondary Drinking Water Standards Environmental Protection Agency (EPA) is a United States agency that determines the standards for drinking water. These standards are categorized as the National Primary and National Secondary Drinking Water standards. Primary drinking water standards outlines the Maximum Contaminant Level as well as Maximum Contaminant Level Goal for specific water contaminants that may have adverse health effects on public health and are anticipated to be present in water. Primary drinking water standards therefore set standards for permissible contaminants such as microorganisms’ levels, disinfection products and byproducts, Organic and inorganic chemicals and radionuclide’s levels (EPA, 5). These standards are legally enforceable standards and must be adhered to.
Secondary drinking water standards on the other hand are non mandatory water quality standards for up to 15 contaminants and outlines secondary maximum contaminant levels. Unlike Primary Drinking water Standards, these standards are established by EPA to provide guidelines to help in managing the aesthetic quality of public water systems and are not enforceable and include guidelines for aspects of water quality such as taste, odor and color. Unlike Primary Drinking Water standards, Secondary Drinking Water contaminants are considered to present no risk to human health. The effects of these contaminants are grouped in three categories; aesthetic effects, technical effects and cosmetic effects and include: aluminum, color, chloride, fluoride, Iron, Copper, corrosivity, pH, manganese, sulfate, zinc, silver, forming agents and total dissolved solids (Johnson, 1521). Secondary drinking water standards therefore provide guidance to the public water systems on removing these chemicals to levels below which people will not notice.
Summary of the Article “ The Tap Water Is Legal but May Be Unhealthy”
The federal law regulating tap water in United States of America has been in use for the past 35 years without review with respect to emerging contaminants thus poses serious health risks. While more than 60, 000 chemicals are used within US, only 91 contaminants are regulated despite the fear that many chemicals are carcinogenic even at low concentrations. This has resulted into the exposure of over 62 million Americans to drinking water that did not meet guidelines. Research has also shown that some contaminants that are regulated pose lesser risk than those that are not regulated by EPA (Duhigg, 1). Officials such as Dr. Pankaj Parekh, the director of water quality division for the city of Los Angeles have also faced criticism from the residents as they try to go beyond hat is legally required. However, researchers and water experts have also complicated the whole issue by arguing that these toxic contaminants when consumed at extremely low doses over long period pose few risks and cost of removing such minute concentrations from water does not equal benefits.
Several studies have confirmed evidences suggesting that millions of American fall sick every year after drinking contaminated water which includes, cancer, birth defects and stomach upsets. Moreover, EPA which has the ultimate responsibility for safe water standards has also agreed to various research findings that conclude that many Americans drink water that do not meet standard. Arsenic concentrations that are associated with cancer have also been detected in many communities including Scottsdale, Ariz.; Tex., El Paso and Reno, Nev (Duhigg, 2). In this regard, any contaminations of the tap water that does not violate the law is not paid attention to hence innocent Americans are subjected to toxic chemicals. Due to existing gaps in the legislation, leaders in Los Angeles have asked congress to amend laws governing the main regulator’s way of assessing chemicals and cushion the agency against outside pressures.
While the discourse continues, there has been accumulation of toxic contaminants over the years since the passing of safe drinking water act in 1974. This law was passed when only 20 substances were regulated and the number of regulated contaminants increased to 91 in 2004. However, there has been no review since then thus the rate of accumulation of contaminants has increased and many have been associated with cancer according to EAP and other government scientists (Duhigg, 4). Another issue is the bromides that are regulated by the safe drinking water act but only tested when the water leaves the treatment plant. Studies have confirmed high risk concentrations though they don’t violate the law. There is increasing pollution of the water resources with new pollutants that need to be included in the current standards and be regulated.
The Environmental Protection Agency (EPA) has made efforts since the identification of contaminant, perchlorate that posed higher risk than the previously known risks. Led by Dr. Peter W. Preuss who headed EPA from 2004, they wanted to enforce tougher regulations for those companies polluting the environment. However this was faced by tougher opposition and lobbying of the law makers and up to date, safe drinking water act do not regulate perchlorate and other many substances analyzed by Dr. Preuss’ department and found to pose risk. Moreover, the department has noted that there are still tens of thousands of chemicals that have not been assessed thus they cannot write laws against them. Nonetheless, the head of EPA has announced reforms that are geared at protecting the urgency’s scientists like Dr. Preuss from outside pressures.
The effects of water pollution are evident throughout Los Angeles despite the fact that there exist regulations to standardize drinking water. Studies and laboratory tests presented in the summary above shows that tap water contain toxic chemicals that are associated with kidney and liver damage as well as cancer and neurological disease. In this regard, it is clear the law regulating drinking water that was reviewed in 2000 is outdated and there exists a legal gap that predisposes Americans to high risk of contaminated water that could lead to dangerous health risks. EPA should therefore analyze a host of different chemicals and continually review primary drinking water standards to ensure safe and high quality water is delivered to the people.
Works Cited
Duhigg, Charles. " That Tap Water Is Legal but May Be Unhealthy." The New York Times. The New York Times, 16 Dec. 2009. Web. 12 Nov. 2014. .
EPA. " National Primary and Secondary Drinking Water Regulations: Analytical Methods for Chemical and Microbiological Contaminants and Revisions to Laboratory Certification Requirement." Water: Drinking Water Standards. United States Environmental Protection Authority, 6 Mar. 2012. Web. 12 Nov. 2014. .
Johnson, Branden B. " Public Views on Drinking Water Standards as Risk Indicators." Risk Analysis: An International Journal 28. 6 (2008): 1515-1530.