

# Personal health risk

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Personal Health Risk al Affiliation) Personal Health Risk I have established toxic air pollutants and arsenic in water as health risk to my life. The risk of toxic air pollutants is highest in my locality where it stands at 34. 45%. Toxic air pollutants emanate from natural sources or artificial sources that can harm the environment and human health where they cause cancer and reproductive health diseases (EPA, 2015). The presence of many manufacturing plants like Pepsi cola factory explains the high level of toxins in my locality. The release of toxic air pollutants from the industries into the environment can be through air, water, or land. FRITO-LAY INC released 347 lbs of toxins through the air (EPA, 2015). The ammonia chemical released represented 100% of total Air releases resulting from the fact that the company did not initiate any measures to prevent air pollution thus raising the level of toxins in my area (EPA, 2015).

I choose well water as my health risk. Well water contains Arsenic compounds that pose a health risk to people who consume water from the well. I identified arsenic in well water as my health hazard from the United States Environmental Protection Agency (EPA). Indeed, EPA defines arsenic as a naturally occurring compound that is odorless and tasteless but harmful to human health. EPA established that about 56 million people in America were drinking well water with arsenic at unsafe levels (Natural Resources Defense Council, 2015). Arsenic in ground water emanates from human activities, manufacturing activities, or natural activities. EPA considers higher levels of arsenic as a ground water pollutant that derives long term and short-term effects. EPA advises citizens using well water to monitor its arsenic levels before consumption. EPA regulates arsenic in ground water establishing

health and environmental-based standards through the maximum contaminant level (MCL), at 0.010 mg/L or 10 ppb (EPA, 2013).

In identifying arsenic in drinking water as my health hazard considered arsenic in drinking water as a risk since it would cause harmful effects to my health. Indeed, well water can cause short-term health effects like skin cancer, kidney failure, skin diseases, and harms the nervous systems (Natural Resources Defense Council, 2015). To identify arsenic in drinking water as a hazard, I followed EPA risk assessment module that included establishing the magnitude of arsenic present in water where arsenic is the dominant public-health problem for drinking water in America (EPA, 2012). I also established my level of contact with the arsenic where the many water wells in my locality and the continued use of well water exposes me to the effects of arsenic in water. I assessed the inherent toxicity of the arsenic to establish the harmful effects it poses to my health where higher levels of arsenic found in ground water sources are detrimental.

Various factors increase my exposure and susceptibility to arsenic in well water and its short-term effects. Since water supply in my area is mainly well water, I always interact with the sources of higher levels of arsenic in groundwater. Indeed, my area has insufficient piped water that forces me to use well water. Piped water also has considerable amounts of arsenic. Moreover, failure to test drinking water for arsenic exposes me to arsenic in well water. However, I can take measures to reduce this health risk. I can change the source of water from groundwater to other alternatives like buying water. I can also collaborate with colleagues and water system managers to ensure that everybody seeks to remove or reduce arsenic water pollution. I can also

initiate testing on our well water to ensure that I monitor arsenic levels with a view of keeping them low.

## References

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