



City of Phoenix
WATER SERVICES DEPARTMENT

Q&A
THMS
(Trihalomethanes in Drinking Water)
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1. What are THMs?

THMs are formed when chlorine added to our tap water for disinfection purposes reacts with naturally occurring organic materials in our source waters.

2. Has Phoenix complied with regulatory standards?

Yes. The city of Phoenix has met all THM maximum contaminant level requirements and takes all regulatory standards very seriously because our job is to help protect the health of our customers. Phoenix does not determine those standards, but is required to test for them and comply with them by the Environmental Protection Agency.

3. How is compliance determined?

Compliance with the THM MCLs is currently based on a system wide running annual average, not individual results, as determined by the EPA. The EPA recently issued new drinking water rules that will result in changing the MCL for THMs to a locational running annual average starting in the year 2013. The evolution of such rule changes is much the same as many other consumer products. Water Services is planning considerable investment in treatment process in advance of the rule change. Plant technology and water quality improvements to help to minimize THM's will be complete within the next few years and will cost about \$300 million.

4. What is Phoenix doing to minimize THMs?

The city is proactively flushing water lines at 500 locations to reduce water aging...up to twice a week in hot spots. Phoenix also utilizes proactive disinfection management, system-wide flow of water assessment, THM monitoring every two weeks and future changes to our treatment process

5. Why would some areas of the city have higher THM levels than other areas?

Levels of organics in some of Phoenix's source waters have been high due to forest fires and vegetation die offs in the watershed, as well as high temperatures of the water, the length of time the water is in the distribution lines and areas with low demand.

6. Should residents be concerned about THM levels?

The health effects of THMs in humans are not fully known. There is evidence that ingesting large amounts of THMs may cause liver, kidney and intestinal cancer in experimental animals. There may be an increased risk of liver or kidney cancer in humans after 70 years of high THM exposure. Essentially, a resident would have to drink two liters of water that is impacted with high levels of THMs every day for 70 years to reach a level of concern. And, high levels of THMs are sporadic. A THM hot spot

now may not have been one ten years ago and we are working to have no hot spots in the future. The potential health impact of high THM levels is based upon long term exposure. For more information about THM's and your water, review the most recent version of the [Phoenix Water Quality Report](#).