



City of Phoenix
WATER SERVICES DEPARTMENT

Q&A Perchlorate

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Background: The city of Phoenix conducted Perchlorate monitoring in three consecutive years from 2002 through 2004 and found no detectable levels of perchlorate in the well water and only low levels of Perchlorate in a limited number of surface water samples. Phoenix meets or exceeds all regulatory requirements for its tap water.

1. Where is Perchlorate found?

Perchlorate may be found in some supplies of well water and surface water.

2. Where does Perchlorate come from?

Perchlorate is the primary ingredient in solid fuel used for rockets, missiles, and fireworks. Perchlorate salts are also used on a large scale as a component of air bag inflators.

3. Is it safe to drink water containing Perchlorate?

Phoenix meets or exceeds all regulatory requirements for its tap water. The Arizona Department of Health Services has established a recommended health-based guidance level of 14 parts per billion (ppb). Drinking water at or below this concentration is believed to be safe for consumption. Currently, EPA is developing a drinking water standard for Perchlorate and Phoenix will meet this standard.

4. What about swimming or showering?

Perchlorate is not well absorbed through the skin, therefore showering and swimming in water containing low levels of Perchlorate should not be hazardous.

5. Is there Perchlorate in my Phoenix tap water?

The city conducted perchlorate monitoring in three consecutive years from 2002 through 2004 and found no detectable levels of perchlorate in the well water and only low levels of perchlorate in a limited number of surface water samples. In 2004, testing of water from all of Phoenix's wells in use showed no detectable levels of perchlorate. Ninety percent of 392 samples for perchlorate collected throughout the distribution system showed no detectable levels. The highest perchlorate level found in the remaining ten percent of the distribution system samples was 5.4 ppb, well below the recommended health-based guidance level of 14 ppb. Sampling in 2003 found no detectable perchlorate in Phoenix's surface water and in 2002 only two of 73 samples had detectable levels of perchlorate, the highest of which was 5.2 ppb.

6. How can Perchlorate affect me?

In the body, Perchlorate interferes with iodine uptake into the thyroid gland. Such an effect decreases production of thyroid hormones, which are needed for prenatal and postnatal growth and development, as well as for normal body metabolism.

7. What other procedures take place to protect my drinking water?

Phoenix performs more than five million of measurements and tests each year, at the treatment plants, groundwater wells, and throughout the distribution system to ensure your safety.