

## **What is perchlorate? What are some standards for drinking water containing perchlorates?**

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Perchlorate is a man-made material that has been used in association with high-performance rocket fuels. It has been found recently in municipal water supplies in several areas of the country as the result of leaks from storage tanks.

Although studies exist showing adverse health effects from exposure to extremely high levels of perchlorate, the risks resulting from exposure to very low levels of perchlorate are not known but appear to be quite low. In fact, the U.S. Environmental Protection Agency has not yet set a Maximum Concentration Level (MCL) for this pollutant despite several years of study.

The Massachusetts Department of Environmental Protection also has not yet set legal exposure limits for perchlorate but a decision early in 2005 is apparently likely.

For comparison, California, which usually has quite conservative pollutant exposure regulations, has decided that it is safe to drink water containing 6 parts per billion (ppb) of perchlorate. (To get an idea of how low these levels are, 1 ppb would be equivalent to one drop of ink in an Olympic-size swimming pool.)

Some Massachusetts officials are apparently pushing for an even more stringent safety guideline at 1 ppb. Such a level would be unreasonable and impractical, however, since the best available analytical equipment has a detection limit of 1 ppb.

Original tests of water from the two Mount Greylock Regional High School wells showed levels between 5 and 11 ppb, but more recent tests indicate levels that are below 5 ppb and appear to be declining. Purification technology is currently available that effectively removes perchlorate pollution from drinking water, particularly at very low levels.