

**DEFINITIONS:**

Maximum contaminant level (MCL) – the highest level of a contaminant allowed in drinking water; the US EPA considers concentrations below this level acceptable for drinking water.

Maximum contaminant level goal (MCLG) – the level of a contaminant in drinking water where there is no known or expected risk to human health. For probable human carcinogens, this level is typically set at the one in one hundred thousand or one in a million excess cancer risk: a lifetime consumption of two liters of water at this level per day is expected to result in no more than one additional case of cancer.

Volatile organic compound (VOC) – chemicals that are poorly soluble in water and easily evaporate into the air; many are human-made and used in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants; they are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents; at high enough levels, many are toxic to human health and are known or suspected human carcinogens (substances with the ability to cause cancer).

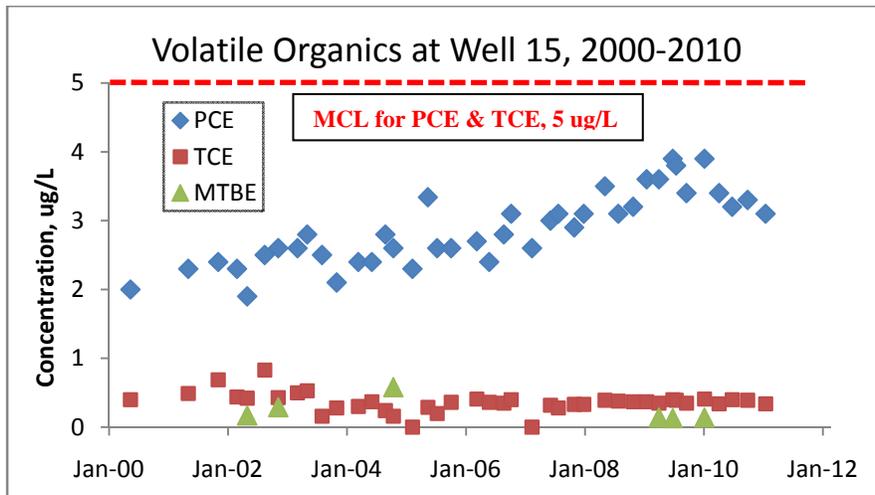
**CONTAMINANTS:**

PCE = tetrachloroethylene

- ❖ Other synonyms: perchloroethylene, perc, tetrachloroethene, perclene, perchlor
- ❖ Common uses: dry cleaning agent and metal degreaser

TCE = trichloroethylene

- ❖ Other synonyms: Triclene, Vitran
- ❖ Common uses: metal degreaser; component of solvents such as paint removers, adhesives, and spot removers



## Excerpts taken from

[www.cityofmadison.com/water/documents/waterquality/Well15QualityReport.pdf](http://www.cityofmadison.com/water/documents/waterquality/Well15QualityReport.pdf)

## UNIT WELL #15

Drilled in 1965, Unit Well 15 has a pumping capacity of 2200 gallons per minute. It operates year-round and serves the East Washington corridor including Westchester Gardens, Mayfair Park, Bluff Acres, Carpenter-Ridgeway, Eken Park, and Emerson East neighborhoods. Well 15 also serves the High Crossing area located east of Interstate 90/94. In 2010, the well pumped 881 million gallons of water.

### *Hardness and Other Minerals*

Like all groundwater, water from Unit Well 15 contains calcium and magnesium that contributes to its hardness (406 mg/L [ppm] or 24 grains per gallon). Other naturally occurring constituents that are present in water from Well 15 can be found in the **2010 Inorganics** table.

### *Radionuclides*

Water from Well 15 was tested for radium-226, radium-228, and uranium in addition to other gross measures of radiation in the water. Combined radium measured 4.4 picocuries per liter (pCi/L) while uranium tested at 1.5 micrograms per liter (ug/L). These levels are below the maximum contaminant level (MCL) of 5 pCi/L combined radium and 30 ug/L uranium.

Naturally occurring, radioactive elements are found in rock, soil, water, and air. They derive from the creation of our planet and enter our bodies when we drink water, breathe air, and eat foods that contain them. Everyone is exposed to some level of radiation in everyday life. For example, uranium and thorium are found in rock and soil. In time, they decay to other elements including radium, which later decays to radon gas. Radon is the largest contributor to our daily exposure of radiation from the natural world. More information is available from the Agency for Toxic Substances and Disease Registry (**ATSDR**) and **Duke University**.

### *Additional Information*

Information on routine **water quality monitoring** activities, including current test results and links to additional resources, is available at **www.madisonwater.org**. In addition, you can sign-up to receive monthly updates on Madison drinking water quality or the water main flushing program on the **City of Madison** website. If you have questions about the information in this report or on our website, our staff would be happy to answer those questions. Please call the Water Quality hotline at 266-4654 weekdays from 7:30 a.m. to 4:00 p.m.

[www.cityofmadison.com/water/waterQuality/testing/](http://www.cityofmadison.com/water/waterQuality/testing/)

<http://www.cityofmadison.com/water/waterQuality/myWells.cfm>