



In the December 28, 2010 issue of the Water Quality update:

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**Well Status Report**

- All seasonal wells are now out of service for the winter. They include Wells 6, 8, 10, 17, 23, 27, and 28. Lower winter demand is being met by the sixteen wells still in service.
- Seasonal wells are typically brought back into service beginning in March or April of each year. More information will be posted to this listserv later in the spring.

**Water Quality Test Results – October/November 2010**

**MICROBIOLOGY** – In October and November, Water Utility staff collected 760 samples from Water Utility facilities and representative locations in the distribution system. The samples were tested for coliform bacteria – indicators of potential water contamination. During the period, five samples (two from the City County Building and one each from Well 19, Well 28, and Well 30) tested positive for coliform bacteria; however, follow-up samples did not show the presence of the bacteria. None of the samples tested positive for *E. coli*.

**IRON & MANGANESE** – One or more samples were collected from eight wells in October and/or November and tested for iron and manganese. At elevated levels, these minerals can cause staining of plumbing fixtures or result in yellow, orange, or brown colored water. Test results are shown in the table below.

|                  | October 2010 |              | November 2010 |              |
|------------------|--------------|--------------|---------------|--------------|
|                  | Mn (ppb)     | Iron (ppm)   | Mn (ppb)      | Iron (ppm)   |
| Unit Well 7      | 28           | 0.393        | n/s           | n/s          |
| Unit Well 15     | 5.7          | 0.013        | n/s           | n/s          |
| Unit Well 19     | 44           | 0.204        | 46            | 0.199        |
| Unit Well 23     | 31           | 0.088        | n/s           | n/s          |
| Unit Well 24     | 31           | 0.205        | 27            | 0.205        |
| Unit Well 25     | 9.2          | 0.063        | n/s           | n/s          |
| Unit Well 28     | 21           | 0.173        | n/s           | n/s          |
| Unit Well 30     | 18           | 0.302        | 15            | 0.220        |
| <b>Standard*</b> | <b>50</b>    | <b>0.300</b> | <b>50</b>     | <b>0.300</b> |

\* Secondary Maximum Contaminant Level (SMCL) - non-enforceable guideline for aesthetic effects (color, taste, or odor)

VOLATILE ORGANICS MONITORING – Six wells, including Wells 9, 11, 14, 15, 18, and 25, and Tower #225 were sampled in October or November for volatile organic compounds (VOC), man-made contaminants that include cleaning solvents and degreaser agents. Each Madison well is tested annually while some wells are tested more frequently due to previous VOC detections. Complete year-to-date results are available on our [website](#).

## **Hexavalent Chromium**

Hexavalent chromium, also called chromium (VI) or chromium-6, was widely reported by the Environmental Working Group, a consumer advocacy group, as being found in Madison tap water. Based on the level detected, Madison was among the top five cities tested. The result was based on a single sample taken from an unknown location under unknown circumstances.

Given what we know today, we have no reason to believe that there is any risk to the public from drinking Madison tap water. Our extensive testing confirms that we meet all current federal and state drinking water standards.

The utility will initiate an investigation, beginning in January, to confirm the concentrations of total chromium in all Madison wells. Total chromium measures chromium-6 in addition to the other forms of chromium. Initially, three or four wells will be sampled, both before and after chlorination, and tested for total chromium and hexavalent chromium. In addition, the utility will assess whether internal plumbing contributes to chromium levels in tap water.

The results of the initial phase of the investigation will guide future testing, which will include testing for hexavalent chromium at all Madison well. Currently, the utility is trying to identify a certified drinking water laboratory capable of detecting hexavalent chromium at concentrations below 1 part per billion (ppb).

The utility annually tests water from each of its wells for total chromium. Test results for 2010 showed a range of total chromium from <0.8 to 2.7 ppb. These levels are well below the federal safe drinking water limit of 100 ppb. Total chromium is regulated by EPA as a primary drinking water contaminant with a maximum contaminant level (MCL) of 100 ppb; however, the agency is reviewing new health data to determine whether the regulatory limit should be lowered. There are no current federal or state regulations governing hexavalent chromium.

Our [website](#) provides information about chromium with [links](#) to other resources. We will update the site when new information becomes available and with test information discussed above. In addition, you can view [total chromium](#) data for the wells that serve your location.

In summary, we will conduct additional testing to understand the occurrence of chromium-6 in Madison drinking water, and we will be closely following the science as to the anticipated health effects at the levels found in Madison water. Of course, if we do find unsafe levels we will take immediate action to protect the public.

## **Contact the Water Utility**

Do you have questions about your water? Do you have a water quality concern at your home or place of work? Is there other information you would like to see in future drinking water quality updates or on our website? For answers to these and other questions or to provide us feedback,

please contact the Water Utility at 266-4654, [water@cityofmadison.com](mailto:water@cityofmadison.com), or through our website at <https://www.cityofmadison.com/water/askUs.cfm>.

### **Subscribe to the Drinking Water Quality Listserv**

People who want to receive regular updates on Madison's drinking water quality can subscribe to this e-mail listserv at <https://my.cityofmadison.com/>.

Registration is simple and provides access to dozens of City of Madison e-mail lists including Drinking Water Quality (this one) and Water Main Flushing, as well as departmental messages from Metro Transit, City Parks, Public Health, and Police.

Once registered for a “My Account”, click on the check box for “Drinking Water Quality” under the Water Utility heading.

Please contact me if you need assistance.

Sincerely,  
Joseph Grande  
Water Quality Manager  
Madison Water Utility

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