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Water Utility to Increase Chlorine Levels

The Board of Water Commissioners approved a standard operating procedure earlier this week that would slightly raise chlorine levels at Madison wells. The current standard is to maintain a chlorine level of 0.2 mg/L in water leaving most wells and 0.3 mg/L at three specific wells in order to achieve a minimum level of 0.1 mg/L everywhere in the distribution system. The new policy requires the water utility to maintain chlorine levels leaving all wells as close as possible to 0.3 mg/L and to take action to remove a well from service if the level of chlorine leaving the well drops below 0.15 mg/L. Corrective action would also be taken if the chlorine level leaving a well exceeded 0.55 mg/L and a well would be shut down if the level exceeded 4.0 mg/L. The new policy will be implemented beginning Monday, June 25.

Chlorine is typically added to drinking water systems to ensure that microbes such as bacteria and viruses cannot survive in water. Although the water utility is not required to chlorinate the water, the Madison Board of Water Commissioners has consistently endorsed the decision to do so and the Board action earlier this week reaffirmed its commitment to chlorinating Madison's drinking water at a level that protects human health and provides an adequate margin of safety. In addition, the new standard will satisfy requirements of a federal groundwater rule that the utility must comply with by the end of 2009.

As chlorine levels are gradually increased over the next week, some customers might notice an increase in the smell or taste of chlorine in the water. This is normal. However, if a persistent and excessive odor or taste of chlorine is detected in drinking water, customers should call the utility at 266-4654 to report the problem and have it investigated.

For individuals sensitive to chlorine, pitcher-type and faucet-mount units that include activated carbon (charcoal) filters can effectively reduce chlorine levels in drinking water. Alternatively, water drawn into a pitcher in the evening and set out overnight will have reduced chlorine in the morning as the chlorine gas dissipates overnight.

Water Board Approves Abandonment of Well 3

On Tuesday, the Madison Board of Water Commissioners approved the immediate abandonment of Well 3. The near east side well is the oldest well in the Madison water system and has been plagued with problems of iron, manganese, and increasing levels of carbon tetrachloride. These water quality issues at the well led to its shutdown in September 2006.

Prior to the staff recommendation of well abandonment, utility officials completed a review of the water supply serving the east side to determine if there would be sufficient supply to meet emergency demand (fire flow, extreme drought, etc.) over the next five years. The utility plans to have a replacement well online in 2012. The analysis showed that there would be sufficient water supply, even without Well 3, if the Water Utility follows through with the 5-year capital improvement plan previously adopted by the Water Board.

The capital improvements, at a cost of \$13.9 million through 2011, need to be completed in order to assure an adequate water supply until the replacement well is constructed. All of the projects were scheduled for completion in that timeframe whether Well 3 was abandoned or not.

The utility will begin the process of permanently abandoning the well, and hopes to complete the process by the end of the year.

Water Board Accepts the 2006 Manganese Monitoring Study Report

On Tuesday, the Water Board accepted the 2006 Manganese Monitoring Study Report. Of the 2075 water samples collected as part of the monitoring program, a majority (91%) tested below the aesthetic standard of 50 ppb manganese. Samples that exceeded 50 ppb were more likely to have been collected from areas served by higher manganese producing wells such as Wells 3, 8, and 29. Few samples (13) tested above the lifetime health advisory level of 300 ppb. Locations that initially tested above this threshold routinely had significantly lower manganese levels upon resampling. Finally, unidirectional flushing was shown to reduce manganese levels at the tap in the Well 10 service area; there was a 35% reduction in the average manganese level of post-flush samples compared with pre-flush samples. In addition to being attached to this update, the report is available on our website, www.madisonwater.org.



East Isthmus Drinking Water Series Update

The third and final meeting in the East Isthmus Drinking Water Series, originally scheduled for June 7th, was postponed due to the threat of severe weather. The meeting has been rescheduled for July 19th from 6-8 pm at 329 North Street. The meeting's theme

will be water conservation and infiltration. Meeting updates can be found on our website, www.madisonwater.org.

East Isthmus Replacement Well Project Update

An advisory working group, with elected officials and citizen representatives from east side neighborhoods, has been formed to help assist in planning public meetings and other aspects of the public involvement process for the replacement of Well 3. The initial meeting was held on May 31st and was facilitated by Anne Forbes of Partners in Place. Several meetings have been planned over the next few months in which participants will review technical information on the replacement well siting criteria and content development for project newsletters and website. In addition, the group will help prepare for the first public meeting, which will likely take place in early September. Additional information and project updates are expected to be available on our website, www.madisonwater.org, in early July.

Water Utility Tests Three Additional Wells for Pesticides

In April and May, the Water Utility tested Wells 6, 8, and 17 for the presence of agricultural pesticides and their metabolites (breakdown products of the pesticides). None of the three wells had measurable levels of any pesticide or breakdown product.

The testing is voluntary and is being performed by the Water Utility to better understand which contaminants are found in its source water and at what levels. Since November 2006, twenty of Madison's twenty-three active wells have been tested for agricultural chemicals. The remaining three wells (Well 10, 27, and 29) will be tested when they come back on-line later this year.

All twenty wells were tested for the pesticides acetochlor, alachlor, atrazine, cyanazine, metolachlor, metribuzin, and simazine as well as the pesticide metabolites acetochlor ethanesulfonic acid (ESA), acetochlor oxanilic acid (OA), alachlor ESA, alachlor OA, metolachlor ESA, metolachlor OA, de-ethyl atrazine, deisopropyl atrazine, and diamino atrazine. The Department of Agriculture, Trade, and Consumer Protection (DATCP) Bureau of Laboratory Services in Madison analyzed all groundwater samples.

Previously, Wells 11, 13, 14, 15, 16, and 26 were found to have trace levels of alachlor ESA ranging from 0.2-0.4 parts per billion (ppb). Alachlor is a pre-emergent herbicide used for the control of grass and other weed species in corn. Soil bacteria convert the parent compound to alachlor ESA, a chemical that is more soluble than alachlor and more likely to leach into groundwater. Alachlor ESA is found in monitoring wells and private wells at a greater frequency and often at higher concentrations than the parent compound. Alachlor was widely used in corn-producing regions of Wisconsin for the past 30 years; however, its use has been declining recently.

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