Update on "Getting the Lead Out"

Information for City of Ann Arbor Drinking Water Customers From the City of Ann Arbor Water Treatment Plant - Fall 2004

Several drinking water systems in the country have recently been in the media due to issues with lead in drinking water. Therefore, we wanted to take this opportunity to inform our Ann Arbor customers that we have consistently complied with the Federal and state drinking water regulations on lead.

In this update, we are providing information on commonly asked questions. We also routinely provide information on lead in our *Annual Report on Drinking Water Quality*, which is mailed in late June to all of our customers. If you did not receive a copy of this report, you may request one from the contact information provided below. We welcome any questions or input.

Does the City of Ann Arbor Drinking Water comply with the EPA and MDEQ Lead and Copper Regulation? Yes. We have consistently complied with this regulation. Due to our consistently low-test results, we are on a triennial monitoring schedule with the next round of sampling due in the summer of 2005.

What are the regulatory requirements for lead in drinking water? Understanding that the presence of lead in drinking water is due to the 'corrosivity' of water, this regulation takes a statistical approach to determining if lead is a system wide problem or a problem in specific homes. The regulation sets a system 'action level' of 15 ug/l (or ppb/ parts per billion) and specifies where and when samples must be collected and tested. Ninety percent of the required samples must be less than this action level to comply with this regulation. If greater than ten percent of the samples are above this action level, then utilities must modify their treatment practices to reduce the lead level and implement a public education program. The City of Ann Arbor has never exceeded this action level. Ann Arbor had corrosion control practices in place before this regulation was implemented and we are continuing those practices.

Where are samples collected for testing per this regulation? For a system of our size this regulation requires the initial testing of 150 individual homes. These homes must be ones that are most likely to have lead. "At risk" homes are those with copper plumbing installed after 1982 but before 1988. These homes have lead solder. Lead solder was banned after 1988 so plumbing after that date does not have a significant lead source. Older homes with lead solder are not tested under this regulation as lead leaching from solder declines over time. As the pipes age, the lead concentrations decrease. Homes that were tested and had lead levels greater than 15 ug/l were given follow-up sampling, a full house plumbing review and recommendations on how to reduce lead exposure using flushing of the affected faucet or house. The regulation also requires testing of lead service lines (the water line that runs from the water main in the street into your house at the meter). The portion of such lines owned by the City are either copper or iron. Ann Arbor has never used lead lines in the water system. To our knowledge lead lines were not used in buildings/ residences lines either, but the City does not have records for this privately owned plumbing.

What is the concentration of lead in the City of Ann Arbor's drinking water? The water leaving our treatment plant and distributed through our water mains is free of lead. Therefore, the only occurrence of lead is in homes where the customer's plumbing may contain a lead source.

What are the major sources of lead in Ann Arbor? Lead in drinking water comes from prolonged contact between a lead source and the water. In Ann Arbor, based on our test results, it appears that the main source of such lead comes from new brass water faucets. Currently, brass may contain up to 8% lead. This amount of lead in faucets will be reduced under future regulations. We have infrequently seen levels of lead above the action level in individual homes. These levels are intermittent and often associated with faucets. Ann Arbor has a limited number of small lead fittings where a home's service line connects to the water main. Though we have detected no contribution of lead leaching from these fittings, these fittings are being replaced as part of our routine water

(continued on next page)

(continued from previous page)

main replacement program. Water meters also have brass parts that come in contact with the water. Over the next two years the City's Automatic Meter Reading project is replacing older meters with new technology water meters, which use only trace amounts of lead in the metal-less than one quarter of one percent.

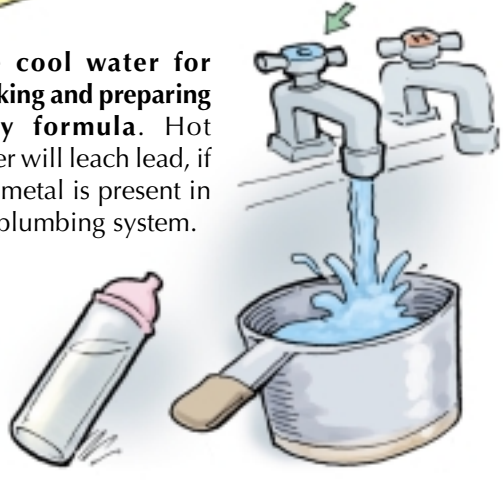
Why is lead a concern? At high levels, lead can pose health problems for pregnant women, infants and young children. Lead can disrupt the normal development of the nervous system in young, growing bodies. The two easy steps described below will virtually eliminate the potential for lead in drinking water.

What can I do to reduce lead in drinking water?

The solutions are simple and cheap.

Turn on your cold-water faucet and run the water for 20-30 seconds before consuming. Since lead only occurs when the water has been unused in a home for a period of time, flush the water line for 30 seconds after extended periods of non-use (6+ hours), such as first thing in the morning—and after work, if no one has used the plumbing throughout the day.

Use cool water for cooking and preparing baby formula. Hot water will leach lead, if this metal is present in the plumbing system.



How can I get my drinking water tested for lead? If you are concerned with the potential for lead in your drinking water, we encourage you to contact the Ann Arbor Water Plant at 994-2840 or email water@ci.ann-arbor.mi.us. We would be happy to talk with you about potential lead sources and arrange for testing if desired. You may also get a list of certified labs for analysis of lead from the MDEQ at (517) 780-7876 or on the web at http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156-36940—,00.html and click on the chemistry link.

Testing for lead in tap water can provide variable results from the same house over time. Among the highest test results of lead in water test found in the sampled 150 Ann Arbor 'at-risk" homes (those with copper plumbing installed between 1982-1988), could have a noticeable lead reading one day, and a much lower reading for subsequent tests. Likewise, a 'non-detect' reading one time may have different lead results from a future test. The major factors for lead in drinking water appear to be the *length of time* the water is allowed to remain undisturbed in the pipes and the *age* of the copper plumbing or brass faucet. Allowing the drinking water to flow for 30 seconds through a faucet will virtually eliminate the lead in the water. The purge water is fine for washing and plant watering and does not need to be 'wasted.'

What is involved in lead testing? If you elect to test the lead in your drinking water, you will need to pick up a sample bottle and instructions from the Water Plant at 919 Sunset Road. To collect a sample, do not use the water in the house for 6-8 hours. Then fill the bottle completely with cold water from a sink (usually the kitchen). Return the sample bottle and paperwork to us within 7 days of sample collection.

What does lead testing cost? The City does not charge for lead testing for our customers. Ann Arbor's Water Treatment Plant is a MDEQ Drinking Water Certified Lab for lead analysis.

CONTACT INFORMATION:

Ann Arbor Water Plant
919 Sunset Road
Ann Arbor, MI 48103
Phone: (734) 994-2840
Email: water@ci.ann-arbor.mi.us
Web: www.a2gov.org