2012 Water Quality Report for Marion County Rural Water District

This report contains important information regarding the water quality in our system. The source of our water is ground water. All of the water is purchased. Purchased water comes from Knoxville Water Works and Pleasantville Water Works. Our water quality testing shows the following results:

Contaminant	MCL	MCLG		Compliance	Date	Violation	Source
			Type	Value & (Range)			
Copper (ppm)	AL=1.3	1.3	90 th	0.131 (ND – 02.66)	9/30/2012	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15	0	90 th	9.70 (ND – 40) 1 sample(s) exceeded AL	9/30/2012	No	Corrosion of household plumbing systems; Erosion of natural deposits
950 – DISTRIBUTION SYSTEM – KNOXVILLE							
Chlorine (ppm)	MRDL=4.0	MRDLG=4.0	RAA	3.0 (0.29 – 4.6)	12/31/2012	No	Water additive used to control microbes

^{*}Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- Maximum Contaminant Level (MCL) The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLFs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG) The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- ppb parts per billion
- ppm parts per million
- pCi/L picocuries per liter
- N/A Not applicable
- ND Not detected
- RAA Running Annual Average
- IDSE Initial Distribution System Evaluation
- Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Residual Disinfectant Level Goal (MRDLG) The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum Residual Disinfectant Level (MRDL) The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- SGL Single Sample Result
- TCR Total Coliform Rule

GENERAL INFORMATION

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Marion County Rural Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains some or all of its water from another public water supply. It is a consecutive water supply, where an originating parent supply provides drinking water to one or more downstream supplies.

SystemAquifer NameOriginal Supply IDKnoxville Water WorksCambrian-OrdovicianIA6342036City of PleasantvilleCambrian-OrdovicianIA6377046

CONTACT INFORMATION

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact Marion County Rural Water District at 641-842-3304.

PURCHASED WATER INFORMATION

Our water system purchases water from the systems shown below. Their water quality is as follows:

6342036 – KNOXVILLE WATER WORKS

CONTAMINANT	MCL	MCLG	COMPLIANCE		DATE	VIOLATION	SOURCE
			Туре	Value & (Range)		Yes/No	
Copper (ppm)	AL=1.3	1.3	90 th	0.0849 (ND - 0.0956)	9/30/2010	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15	0	90 th	0.00 (ND – 8)	9/30/2010	No	Corrosion of household plumbing systems; Erosion of natural deposits
950 – DISTRIBUTION SYSTEM							
Chlorine (ppm)	MRDL=4.0	MRDLG=4.0	RAA	3.7 (1.3 – 5.3)	9/30/2012	No	Water additive used to control microbes
01 – FINISHED AFTER WATER TREATMENT							
Combined Radium (pCi/L)	5	0	SGL	3.18	7/20/2012	No	Erosion of natural deposits
Sodium (ppm)	NA	NA	SGL	144	10/6/2010	No	Erosion of natural deposits; Added to water during treatment process

6377046 - PLEASANTVILLE WATER WORKS

				DATE	VALUE &		
CONTAMINANT	MCLG	MCL	TYPE	SAMPLED	RANGE	VIOLATION	SOURCE
							Corrosion of household plumbing
Lead (ppb)	0	AL=15	90th	9/30/2012	<0.0025	No	systems; erosion of natural deposits
				2012RAA	0.7		Water additive used to control
Chlorine (ppm)	MRDLG=4.0	MRDL=4.0	RAA	12/31/2012	(0.65-0.79)	No	microbes
					.936		Corrosion of household plumbing
Copper (ppm)	1.3	AL=1.3	90th	9/30/2012	0.279-1.00	No	systems; Erosion of natural deposits
Alpha emitters						Exceeded	
(pCi/L)	0	15	SGL	12/5/2011	19.6	MCL	Erosion of natural deposits
Combined					5.6	Exceeded	
radium (pCi/L)	0	5	RAA	12/31/2012	(3.15-6.9)	MCL	Erosion of natural deposits
							Erosion of natural deposits; Added to
Sodium (ppm)	N/A	N/A	SGL	5/30/2012	186	No	water during treatment process
							Runoff from fertilizer use; Leaching
Nitrate [as N]							from septic tanks, sewage; Erosion of
(ppm)	10	10	SGL	12/31/2012	1	No	natural deposits
Total							
Trihalomethanes							By-products of drinking water
(ppb) [TTHM]	N/A	80	SGL	7/27/2010	2.14	No	chlorination
							Discharge of drilling wastes;
							Discharge from metal refineries;
Barium	2	2	SGL	5/30/2012	0.0112	No	Erosion of natural deposits
							Water additive which promotes
							strong teeth; Erosion of natural
							deposits; Discharge from fertilizer
Fluoride	4	4	SGL	5/30/2012	1.7	No	application and aluminum factories

CONTAMINANT VIOLATIONS

Tested positive once for total coliform on 11/2/2012.

ADDITIONAL HEALTH INFORMATION

No additional health information.

OTHER VIOLATIONS

Alpha emitters and combined radium exceeded the MCL for 2012. Additional testing is being done each quarter for 2013. Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results we received on January 23, 2013, show that our system exceeds the standard, or maximum contaminant level (MCL), for Radium, Combined (226,228). The standard for Radium Combined (226,228) is 5 PCI/L. The average level of Radium, Combined (226,228) over the last year was 5.6 PCI/L.

What should I do? You do not need to use an alternative (e.g. bottled) water supply. However if you have specific health concerns, consult your doctor.

What does this mean? This is not an immediate risk. If it had been, you would have been notified immediately. However, some people who drink water containing Radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

What happened? What is being done? The Pleasantville Water Works will be backwashing water softeners more often. They will continue to test quarterly and anticipate resolving the problem within the year 2013. For

more information on the City of Pleasantville, please contact Shawn Breazeale at 515-848-3316 or City Hall at 108 W. Jackson St, Pleasantville, IA 50225.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by PLEASANTVILLE WATER WORKS PWSID #6377046.