

SOUTHWEST REGIONAL WATER DISTRICT CLARINDA WATER SUPPLY SERVICE AREA

A Consumer Confidence Report [CCR] is a report designed to inform a water system's consumers of the results of its testing, pursuant to the EPA SAFE DRINKING WATER ACT [SDWA] requirements. The 1996 Amendment to the SDWA requires that each water system complete and distribute such a report to its customers, no later than July 1 of this year and annually thereafter.

ANNUAL WATER QUALITY REPORT FOR 2014

The **Southwest Regional Water District** is pleased to provide to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve our water distribution system operation, water treatment process, and to protect our water resources. We are committed to ensuring the quality of your water. The **Southwest Regional Water District** is classified by the State of Iowa as a Grade III Water Distribution System and a Grade II Water Treatment Plant facility. Our water supplies are purchased from the City of Clarinda and the City of Red Oak. The Clarinda water source is water from the West Nodaway River. The City of Clarinda filters and treats the water through their new water plant. The Rural Water District then pumps from the Clarinda Water system into the 500,000 gallon elevated tank located 3 miles west of the City on Highway 2 and serves the East Service Area of our rural system. The Red Oak water source is from wells which draw from the Dakota Aquifer. The water is chlorinated and treated at each well site by Red Oak and then is re-chlorinated and pumped by the Water District into the 500,000 gallon elevated tank located 1 mile east of Red Oak off Highway 34. This supply provides service to the West Service Area of our rural water system. The **Southwest Regional Water District** system covers over 900 miles of water distribution pipeline in the counties of Page, Montgomery, Fremont, and Taylor in southwest Iowa and extends some service to users in Missouri. Today the rural water system has 1956 rural service connections and provides water service to ten communities.

If you have any questions about this report or concerning your water utility, please contact our Water District Superintendent Kevin Gowing at (712) 542-3259. Additional questions and comments can be addressed at our monthly District Board of Directors meetings held the first Thursday of each month. Meeting times are scheduled at 7:00 p.m. and held at the Water District's office at 516 South 8th Street in Clarinda. You can visit our website at www.swregional.net for a copy of both water district's Consumer Confidence Reports plus news and general information about the **Southwest Regional Water District**.

The **Southwest Regional Water District** routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1 to December 31, 2014. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk. We had two positive samples at the same location during our routine sampling schedule for coliform bacteria the week of October 2014. Upon receiving the results, followup samples at said location plus upstream and downstream locations from the positive site was sampled within 24 hours. The results came back as positive for coliform only at the original site, verifying a plumbing issue on the customers piping. The customer was notified and has taken corrective action.

2014 WATER QUALITY REPORT FOR SOUTHWEST REG WATER DISTRICT (CLARINDA)

This report contains important information regarding the water quality in our water system. The source of our water is surface water. All of the water is purchased. Purchased water comes from Clarinda Water Plant. Our water quality testing shows the following results:

CONTAMINANT	MCL-MCLG)	Compliance		Date	Violation Yes/No	SOURCE
		Type	Value & Range)			
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	82.85 (34-184)	12/31/2014	Yes	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	57.25 (27-137) 1 sample exceeded AL	12/31/2014	No	By-products of drinking water disinfection
Lead (ppb)	AL=15 (0)	90 th	9.00 (ND-35) 1 sample exceeded AL	2014	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90 th	0.1 (ND - 0.16)	2014	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching fom wood preservatives

950 – DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.3 (0.4 -2.8)	12/31/2014	No	Water additive used to control microbes
Total Coliform Bacteria	Presence of coliform bacteria in >5% of monthly samples	TCR	2 samples positive	10/16/2014 10/20/2014	Yes	Naturally present in the environment

**TEST RESULTS
FROM CITY OF
CLARINDA:**

CONTAMINANT	MCL (MCLG)	Compliance		Date	Violation Yes/No	SOURCE
		Type	Value & (Range)			
Lead (ppb)	AL=15 (0)	90 th	0.00 (ND – 3)	2013	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90 th	0.0705 (0.0037-0.102)	2013	No	Corrosion of household plumbing systems; Erosion of natural deposits
TTHM (ppb) [Total Trihalomethanes]	80 (N/A)	LRAA	56.00 (37-100)	12/31/2014	No	By-products of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	60 (N/A)	LRAA	33.00 (18-69)	12/31/2014	No	By-products of drinking water disinfection

950-Distribution System

Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.7 (0.7 -2.2)	12/31/2014	No	Water additive used to control microbes
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02-Nodaway River @plant #2

Barium (ppm)	2 (2)	SGL	0.123	04/03/2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	RAA	0.61 (0.500-0.700)	12/31/2014	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	17.8	04/02/2014	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	3.70 (0.800-3.700)	2014	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3 (3)	SGL	0.14	07/09/2012	No	Runoff from herbicide used on row crops
Turbidity (NTU)	N/A (N/A)	TT	0.24 (100%)	08/26/2014	No	Soil runoff
Total Organic Carbon (TOC) (ppm)	N/A	TT	5.68 (1.38-5.68)	03/01/2014	No	Soil runoff

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 MCLGs 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
- LRAA – Locational 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
- NTU – Nephelometric Turbidity Units

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 posed a health risk. More information about contaminants or 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. Southwest Regional 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>.

CONTAMINANT VIOLATIONS

Total Coliform. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. The District pursued this issue by flushing lines in the general area and resampled at the same location along with additional upstream and downstream sampling. The retake at the original failed site failed a second time proving it was an isolated location, not widespread. Immediate action was taken by the customer. Samples taken upstream and downstream all passed and the normal schedule for sampling continued.

Total Trihalomethanes. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. The District experienced one test result exceeding the Action Level (AL) during the last year. The District then implemented a complete water line flushing program every 90 days in the low water use areas. This scheduled line flushing which began in late 2014 has helped reduce the overall contact time that the chlorine is detained in the water which lowers the disinfection by product levels. Since implementation the District has seen significant improvement in test results. The District will continue to monitor test results quarterly to track progress.

Chlorite. Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some may experience anemia. Our water system violated the MCL Chlorite average between 5/01/2014 and 5/31/2014.

ADDITIONAL HEALTH INFORMATION

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

OTHER VIOLATIONS

In 2014 we received a public notice rule violation for failure to provide information to our customers regarding the Total Trihalomethanes (TTHM) MCL violation.

SOURCE WATER ASSESSMENT INFORMATION

The Southwest Regional Water District's water supply obtains its water from the West Nodaway River. The West Nodaway River was determined to be highly susceptible to contamination because contaminants can move through them quickly. Clarinda's water supply will be susceptible to contaminant releases from gas stations, landfills, livestock confinements, and agricultural activities.

A detailed evaluation of your source water was completed by the IDNR, and is available from Southwest Regional Water in Clarinda, IA at 1-712-542-3259.

OTHER INFORMATION

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

CONTACT INFORMATION

For questions regarding this information, please contact Kevin Gowing at 1-712-542-3259 during the following hours: 7:30-4:30.

Decisions regarding the water system are made at the District meetings held on the first Thursday of each month at 7:00 p.m. at 516 South 8th Street in Clarinda and are open to the public.