2018 Consumer Confidence Report Data ELK MOUND WATERWORKS, PWS ID: 61702641

Water System Information

If you would like to know more about the information contained in this report, please contact Mark D. Levra at (715) 556-4566.

Opportunity for input on decisions affecting your water quality

Board meetings are held on the first and third Wednesday of each month at 6:00 p.m. at the Elk Mound Village Hall, E206 Menomonie Street, Elk Mound, WI 54739.

Health 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 systems 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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source(s) of Water

Source ID	Source	Depth (in feet)	Status
1	Groundwater	280	Active
2	Groundwater	352	Active

To obtain a summary of the source water assessment please contact, Mark D. Levra at (715) 556-4566.

Educational Information

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally- occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Definitions

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.
MCL	Maximum Contaminant Level: 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.
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a

Term	Definition
	margin of safety.
MFL	million fibers per liter
MRDL	Maximum residual disinfectant level: 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.
MRDLG	Maximum residual disinfectant level goal: 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.
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
HAA5 (ppb)	H1	60	60	1	1		No	By-product of drinking water chlorination
TTHM (ppb)	H1	80	0	4.5	4.5		No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.4700	0 of 10 results were above the action level.	7/28/2017	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	5.00	0 of 10 results were above the action level.	7/28/2017	No	Corrosion of household plumbing systems; Erosion of natural deposits

Additional Health Information

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. Elk Mound Waterworks 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 www.epa.gov/safewater/lead.

Other Compliance

Uncorrected Significant Deficiencies

Deficiency Description and Progress to Date	Date System Notified	Scheduled Correction Date
2. The Village of Elk Mound EP 200 treatment plant sometimes operates beyond design capacity. The aerator at EP 200 is designed for 300 GPM and the Iron filter is also designed for 300 GPM, yet at times the system set points calls for Well 1 (270 GPM) and Well 2 (350) to run at the same time if the clear well level becomes too low. When this occurs, 620 GPM may be going through the device which is twice the design capacity of the treatment device. When this occurs, there is overflow of the aerator and flooding on the well house floor. This is potential for bacteriologically unsafe water to enter the clear well from flooding. Additionally, when Well 2 runs at 350 gpm the aerator is also operating beyond design, so the utility may need to throttle this well back to 300 gpm if it has not already. It is unknown if the two 300 gpm post clear well lift pumps ever operate at the same time sending 600 gpm through the iron filter device designed for 300 gpm. In addition to this the current set up/setting of the system SCADA system does not allow the operators the functionally to operate the plant as it should. Another item for concern here is the chemical feed is not flow paced and is operator controlled. With the switching operation of the wells automatically by the system, this requires chemical feed pump setting changes, and sometimes both wells operating at the same time, without operator control also requiring chemical feed pump setting changes. This impacts dosing and residual levels. Dosing levels need to be consistent as changing in dosing levels may have detrimental impacts on the distribution system. It is unknown if the two clear well pumps ever run at the same time, if they do the dosing changes for Fluoride would be an additional concern. Flow paced chemical feed pumps would be a potential solution to dosing issues, with several other options. The department is requesting the village provide the department a plan of action or timeline as to how they plan to correct or solve these issues. There may be several different possible solutions to this problem. Potential corrections likely involve an engineering firm with a required DNR plan review. The utility must respond within 90 days with a proposed timeline.	5/24/2018	12/31/2020

Actions Taken

The Village of Elk Mound is currently working with Cedar Corporation and The Wisconsin Department of Natural Resources to receive approval on correcting the described deficiency. The proposed correction would include the following:

Well House 1

1) Replace existing Electrical Service/Control Panel with a new Pump Control Panel.
2) Add Radio and antenna to allow for real time viewing and control via SCADA System.
3) Add Room Temperature Sensor.
4) Replace existing flow meter and flow switch.

Well House 2

1) Replace existing PLC (MicroLogix 1200)
2) Replace existing Clear Well level flow switches with new transducer and backup floats.
3) Replace existing well pump flow meter.
4) Replace existing booster pump flow meter.
5) Replace existing well pump flow switch.
6) Replace existing booster pump flow switch.
7) Replace existing chemical feed pumps with 4-20A flow paced pumps.
8) Add radio, antenna, and tower to allow for real time viewing and control via SCADA System.
9) Add room floor flood sensor.
10) Add room temperature sensor.
11) Add VD to existing well pump. This will allow Well #2 to be slowed down as needed.

Ground Reservoir

1) Add 50’ self-supporting antenna tower.
2) Add control panel with PLC for reservoir level and radio communications.
3) Trench in conduit from bottom of hill to reservoir for control panel power and future communication cabling. Distance of 725’.

Public Works Building

1) Install dedicated power circuit for radio panel and computer.
2) Computer and monitor with all updated requirements.
3) Mount antenna on side of building.
4) Wonder Ware – Wonder Works – reporting software to generate WDNR reports.

All items in the project proposal listed above are being planned to be installed by year end 2019 to insure meeting the deficiency correction deadline of 12/31/2020.