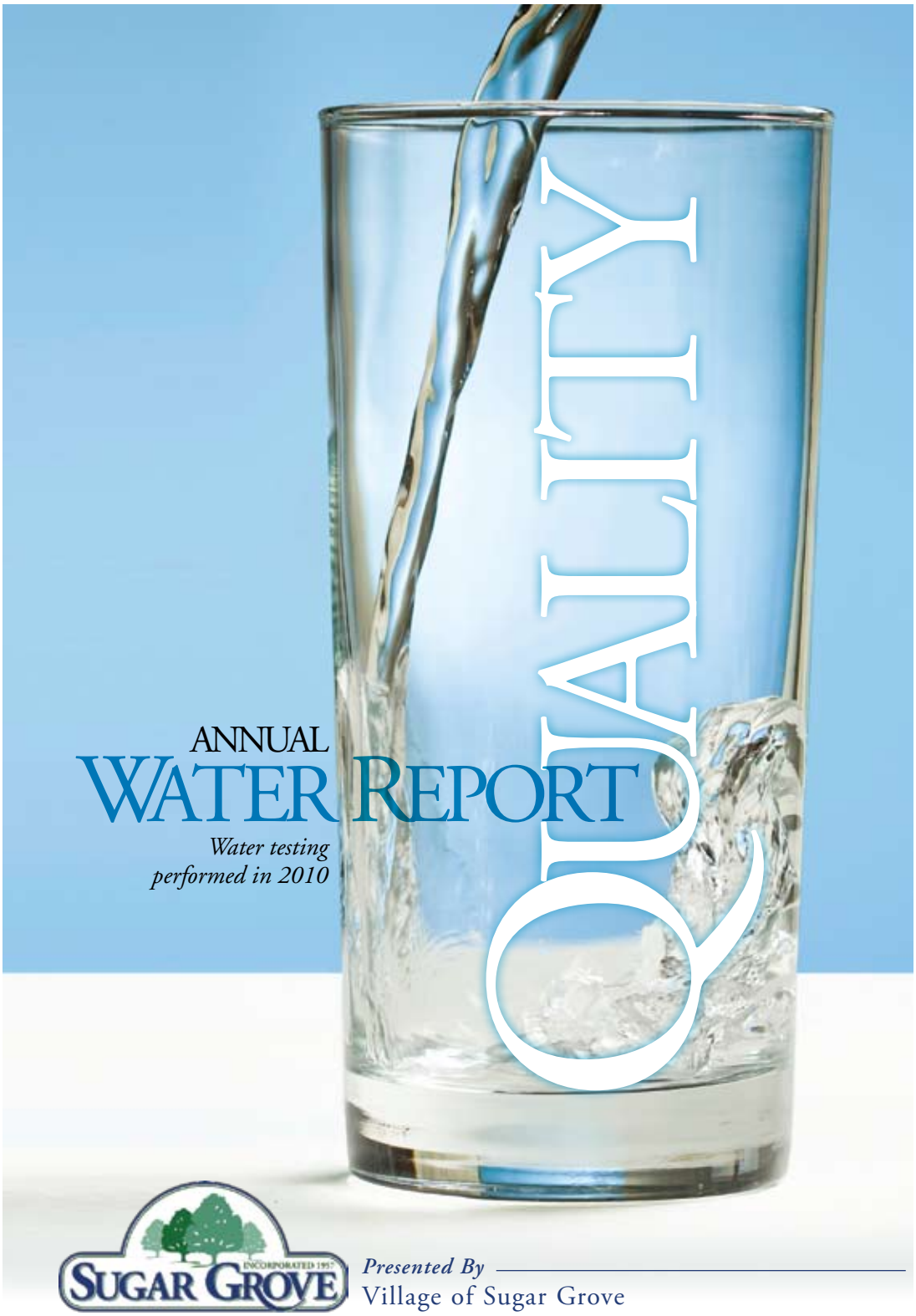


ANNUAL WATER REPORT

Water testing performed in 2010

SUGAR GROVE
INCORPORATED 1957

Presented By
Village of Sugar Grove

PWS ID#: 0890850

Quality First

Once again we proudly present our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2010. We are pleased to tell you that our compliance with all State and Federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best-quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Where Does My Water Come From?

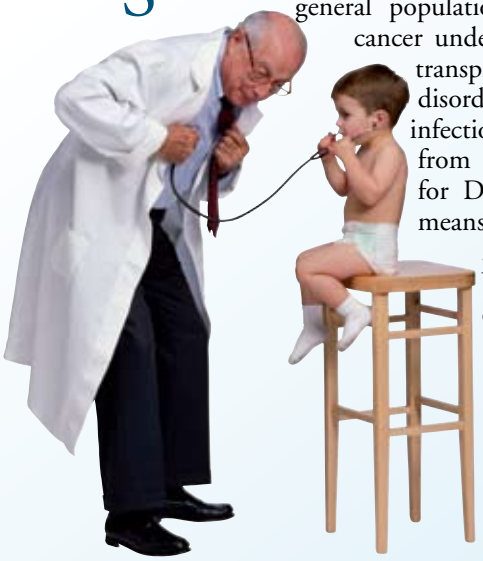
The source of drinking water used by Sugar Grove is groundwater. The Village of Sugar Grove (Facility #0890850) has eight active community water supply wells: Wells #2, #4, #5, #7, #8, #9, #10 and #11 (Illinois EPA #20108, #20110, #20088, #00737, #01400, #01473, #01678, and #01679, respectively). They supply approximately 1 million gallons per day to 3,900 services (a population of approximately 10,000 individuals). Wells #2 , #5 and #7 are shallow wells. Well #4 is a deep well, and Wells #8, #9, #10 and #11 are deep wells with ion-exchange treatment facilities.

How Is My Water Treated and Purified?

The Village of Sugar Grove currently pumps water from three shallow wells and five deep wells. Chlorine is added to the Village of Sugar Grove's water system to prevent bacterial contamination. In addition, fluoride is added to help promote healthy teeth. In 2008, the Village completed construction of its third ion-exchange water treatment facility. Ion exchange is a simple chemical process in which the source water is passed through a resin (natural zeolite bed or manufactured synthetic resin) to replace the positively charged ions in the water with ions of similar charge fixed to the resin matrix. Hardness, radium, and other polyvalent cations are removed from the water by exchanging hardness and radium ions for sodium ions contained in the resin. When the resin is exhausted, the regeneration process replaces the calcium, magnesium, radium, and any other ions in the resin with sodium ion in the brine solution. The resin is then rinsed and the spent brine solution is discharged to the sanitary sewer system.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.



Source Water Assessment

To determine Sugar Grove's susceptibility to groundwater contamination, the following documents were reviewed: a Well Site Survey, published in 1989 by the Illinois EPA; and a Source Water Protection Plan prepared for the Village of Sugar Grove by Engineering Enterprises, Inc., published in March of 2000.

Our community's source water has low susceptibility to VOC and SOC contamination. The basis for this determination included no detection of any quantifiable levels of VOCs or SOCs in the finished water and no potential sources of VOCs or agricultural land use within the recharge areas. Also, as a result of monitoring conducted at the wells and entry point to the distribution system, the land use activities, and the source water protection initiatives by the Village, the Sugar Grove community water supply's source water has a low susceptibility to IOC contamination. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that Sugar Grove's community water supply wells have a low susceptibility to viral contamination.

If you would like a copy of the Source Water Assessment Program, please call the Public Works Department at (630) 466-7508, ext. 10.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Questions?

For more information about this report or for any questions relating to your drinking water, please call Tony Speciale, Director of Public Works, at (630) 466-7508. Additional information can be obtained from the Village of Sugar Grove's website at www.sugar-grove.il.us.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Why do I get this report each year?

Community water system operators are required by Federal law to provide their customers an annual water quality report. The report helps people make informed choices about the water they drink. It lets people know what contaminants, if any, are in their drinking water and how these contaminants may affect their health. It also gives the system operators a chance to tell customers what it takes to deliver safe drinking water.

Why does my water sometimes look "milky"?

The "milky" look is caused by tiny air bubbles in the water. The water in the pipes coming into your home or business is under pressure, so gasses (the air) are dissolved and trapped in the pressurized water as it flows into your glass. As the air bubbles rise in the glass, they break free at the surface, thus clearing up the water. Although the milky appearance might be disconcerting, the air bubbles won't affect the quality or taste of the water.

How can I keep my pet's water bowl germ free?

Veterinarians generally recommend that water bowls be washed daily with warm, soapy water — normally when you change the water. Scour the corners, nooks, and crannies of the water dish using a small scrub brush. In addition, once a week put water bowls into the dishwasher to sanitize them with hot water. In most situations, disinfectants like bleach are not needed; warm, soapy water is all you need to keep your pet's water clean and safe.

How much water is used during a typical shower?

The Federal Energy Policy Act set a nationwide regulation that limits shower heads to a maximum flow of 2.5 gallons per minute (GPM). Shower heads made before 1980 are rated at 5 GPM. Since the average shower is estimated to last 8.2 minutes, the old shower heads use 41 gallons of water while the newer, low-flow shower heads use only about 21 gallons.

How many contaminants are regulated in drinking water?

The U.S. EPA regulates over 80 contaminants in drinking water. Some states may choose to regulate additional contaminants or to set stricter standards, but all states must have standards at least as stringent as the U.S. EPA's.

What's a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information, review the Cross-Connection Control Manual from the U.S. EPA's Web site at http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm. You can also call the Safe Drinking Water Hotline at (800) 426-4791.

Community Participation

Village Board meetings are held on the first and third Tuesday of each month beginning at 6:00 p.m. at Village Hall, 10 Municipal Drive, Sugar Grove, Illinois.

Lead and Drinking Water

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. We are responsible for providing high-quality drinking water, but we 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.

Vulnerability Waiver

Due to favorable monitoring history, aquifer characteristics, and inventory of potential sources of contamination, our water supply was issued a vulnerability waiver renewal. No monitoring for VOCs and SOCs was required between January 1, 2008, and December 31, 2010.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of each substance was present in the water. The State requires us to monitor for certain substances less often than once per year because the concentrations of the substance do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2010	15	0	5	0.37–5.5	No	Erosion of natural deposits
Barium (ppm)	2010	2	2	0.0328	0.0328–0.0328	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2010	[4]	[4]	1	0.79–1.15	No	Water additive used to control microbes
Chromium (ppb)	2010	100	100	5.3	5.3–5.3	No	Discharge from steel and pulp mills; Erosion of natural deposits
Combined Radium (pCi/L)	2010	5	0	5	1.55–6.2	No	Erosion of natural deposits
Fluoride (ppm)	2010	4	4	0.98	0.98–0.98	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	2010	10	10	2.68	ND–2.68	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	1.1	1.1–1.1	No	By-product of drinking water disinfection
Total Coliform Bacteria (# positive samples)	2010	1 positive monthly sample	0	1	NA	No	Naturally present in the environment
Uranium (ppb)	2008	30	0	0.9834	0.9834–0.9834	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2008	1.3	1.3	0.6656	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

STATE REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Iron[1] (ppm)	2010	1.0	NA	3.02	0.0505–3.02	No	Erosion from naturally occurring deposits
Sodium[2] (ppm)	2010	NA	NA	106	106–106	No	Erosion of naturally occurring deposits; Water softener regeneration

[1] Iron is not currently regulated by the U.S. EPA. However, the State has set an MCL for supplies serving a population of 1,000 or more.
[2] Sodium is not currently regulated by the U.S. EPA. However, the State has set an MCL for this contaminant for supplies serving a population of 1,000 or more.

Definitions

AL (Action Level): The concentration of a contaminant that triggers treatment or other required actions by the water supply.

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 margin of safety.

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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).