

# BEST MANAGEMENT PRACTICES AND OTHER SOURCE WATER PROTECTION INFORMATION

This guide emphasizes the protection of the source of our drinking water and groundwater surrounding our wells. All of our water resources must be protected to preserve the quality of life for ourselves and future generations.

*CITY OF WALKER*

WELLHEAD PROTECTION

- **Guide to Wellhead Protection and Best Management Practices**
- **Locating, Disclosing and Sealing unused Wells**
- **Subsurface Sewage Treatment System**



## GUIDE TO WELLHEAD PROTECTION

This guide is for people living and working near a public water supply well and within its wellhead protection area. A wellhead protection area is the land area surrounding a well that can range a few hundred feet from the well to more than a mile. A wellhead protection area can include a few dozen to over a thousand residential and business properties.

Public water supply wells include city wells, mobile home park wells, school wells, church wells and restaurant wells. These wells typically pump 500 to 200,000 gallons of water out of the ground each day. Groundwater pollution has been found in wells throughout Minnesota which is the reason wellhead protection is being implemented by the City of Walker.

The safety of public water supplies is monitored by the Walker Water Works Department, Environmental Services Department and the Minnesota Department of Health. Most public water supply wells produce safe drinking water. Some require treatment to remove naturally occurring contaminants (e.g. radium and arsenic) or pollutants (e.g. residential/industrial chemicals, pesticides, etc.)

A wellhead protection area is established by first determining the "capture zone" where groundwater is drawn into the well within the (10) years. Then, the circular capture zone is used to draw the boundaries of a Drinking Water Supply Management Area (DWSMA) based on property lines, roads and other landmarks.

It's not too late to prevent pollution after it's in the well. A public water supplier with polluted wells may have to find an alternative source of water for the community. It makes sense to protect the water that we have instead of finding unpolluted water from somewhere else. Residents living near a public water supply well (inside the wellhead protection area) have a special responsibility for the protection of their community's drinking water supply.

DON'T WORRY, IT'S NOT THAT DIFFICULT. And you have partner –Walker Water Works – to help you and answer your questions.

Wellhead protection is as simple as good stewardship of our natural resources. Most residents are already practicing good habits that prevent land and water pollution. Residents inside a wellhead protection area have another reason. And for their efforts we owe them our gratitude.

The following pages summarize information for all residents to control pollution source on their property and preserve our natural resources.

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### Household Hazardous Waste:

Many household products contain the same chemicals that are strictly regulated in industrial and commercial businesses. Products that pose a significant hazard to our environment are typically flammable, corrosive, toxic, poisonous, or can cause health problems. The combined volume of these residential hazardous chemicals in a neighborhood can meet or exceed that of a business.

Household hazardous waste becomes pollution only when mishandled. When disposed in garbage, down the drain, or on the ground they can pollute soils, groundwater and nearby drinking water supply wells. Residents are encouraged to choose the least hazardous product (that gets the job done) in a quantity that will be used up. Residents that have extra, unwanted hazardous products must recycle or dispose of the excess in a safe way.

City of Walker/Cass County residents may drop off their hazardous waste collection at the various locations in the County. There is no charge to residents that use this service. Bring identification, such as a driver's license, as proof of residency.

### Can I bring materials to the HHW Center at any time?

No. You will need to call 1-888-910-2425, ext. 2, or 218-587-3455 for an appointment.

Small businesses may qualify for another program to help them with hazardous waste disposal. Call the HHW number above for more details.

<b>Cass County Household Hazardous Waste Facility</b> <b>Phone: 1-888-910-2425, ext. 2, or 218-587-3455.</b> <b>Please leave a message. Your call will be returned.</b>	
Drop-off Center Location: Cass County Solid Waste Transfer Station, 2 miles north of Pine River on Hwy 371.	Household Hazardous Waste (HHW) is accepted <b>by appointment only</b> . Please call for an appointment.

### What to bring to the HHW Facility:

Chemical products that have signal words on the labels such as Caution, Warning, Danger, Poison, Flammable, Combustible, and Corrosive.

These products include automotive, lawn and garden, home improvement and household cleaners. Examples include old gas, engine degreasers, old paint and paint products, pesticides, pool chemicals, stains, varnish, tar, oven cleaners, aerosol products, mothballs, glues, and drain cleaners.

Used motor oil and oil filters do not need to go through this program. Bring these items to any of the Cass County solid waste transfer sites at any time. Some area service stations and hardware stores also accept waste oil. Check with stores in your area for details.

### Construction and Demolition Debris

This includes materials such as concrete, asphalt, shingles, wood, bricks, and glass. Contact the Cass County Environmental Service Department for additional disposal information: 218-547-7241, 218-547-7428, or 1-800-910-2425.

Construction and demolition debris roll-off service is available from several area waste haulers. Contact the haulers for rates and service.



(adapted from *Septic System Owner's Guide, U of M Extension Service, 1997*)

Do not put hazardous chemicals down the drain into septic systems. Septic systems don't treat hazardous chemicals. Instead, they pass through the septic tank and drainfield polluting groundwater.

Onsite septic systems use natural processes to treat typical domestic sewage (e.g. bathroom, kitchen and laundry). We need good treatment of domestic wastewater to remove pollutants before it reaches lakes, rivers and groundwater. Homes that have a septic system must be monitored and maintained to operate well.

A residential septic system typically has 1) a septic tank that collects waste oils and solids; and 2) a drainfield that distributes the liquid portion of wastewater into soils (soil treatment) where natural chemical and biologic processes remove pollutants.

Properly constructed, a septic system will treat and remove pollutants from domestic wastewater. Septic systems are expensive to design and construct but simple to maintain. Properly maintained, a septic system will operate for a long time.

### Maintain Your Septic System

**Tank Maintenance.** The septic tank MUST be periodically cleaned (pumped) to remove sludge and floating scum buildup. A state licensed septic pumper should clean your septic tank. Septic tanks should be cleaned every two years. Never go more than 36 months between cleanings.

**Water Use and Overloading.** By controlling water use and making wise disposal decisions, you can avoid major problems. Use low-flow water fixtures and repair leaky faucets/toilets to keep water use volumes with your systems capacity. Keep trash (e.g. cigarette butts, personal hygiene products, medications, meat, fats, oils, coffee grounds) out of your septic system.

**Feeders, Cleaners and Other Additives.** Don't be misled. There is no quick fix or substitute for proper operation and regular maintenance. Do not use starters, feeders, cleaners and other additives.

**Household Hazardous Waste.** Septic systems are designed to treat typical kitchen and bathroom wastes. Flammable, corrosive, toxic and poisonous materials (household hazardous wastes) should NEVER enter a septic system – it will pollute groundwater. Refer to Cass County’s hazardous waste page. [http://www.co.cass.mn.us/esd/solid\\_waste/hazardous\\_waste.html](http://www.co.cass.mn.us/esd/solid_waste/hazardous_waste.html)

**Drainfield Maintenance.** Nothing heavier than a rider lawnmower should be driven on any part of the septic system. Snow should not be compacted over the septic system because it drives frost down into the soils freezing the wastewater.

To view the Septic System Owner’s Guide, visit University of Minnesota Extension website at [www.extension.umn.edu](http://www.extension.umn.edu).



### Maintaining the Sanitary Sewer System

The Public Works Division is responsible for maintaining and operating the City of Walker’s sanitary sewer system which involves daily inspection and maintenance of city lift stations, inspection of sanitary sewer lines and removal of system blockages when they occur. Because the City cannot prevent the inappropriate disposal of

items into the sewer system, even with routine maintenance and inspection it is impossible to prevent all sewer blockages and back-ups.

### How to Prevent Sewer Backups

Property owners can do many things to prevent their service from backing up.

- **Grease:** Cooking oil should be poured into a heat-resistant container and disposed of in the garbage after it cools, not down the drain. Some people assume that washing grease down the drain with hot water is satisfactory. This grease goes down the drain, cools off, and solidifies either in the drain, the property owner's service, or in the sewer main. When this happens, the line eventually clogs.
- **Sewer Root Control:** The continual flow of nutrient-filled water found in sewer pipes attracts tree roots. Roots growing along pipes exert significant pressure on pipes. These roots may push into and around gasket connection points which may expand and break seals. Root infiltration can cause a blockage to the service resulting in sewage backup in your home and damage to your property.
- **Tips for Controlling Roots:**  
The conventional method of removing roots by a professional drain cleaning service involves cutting or tearing of roots to solve an immediate problem or stoppage, but this method does not retard the growth or destroy the roots outside the pipe. This is similar to pruning the bushes and shrubs surrounding your residence. An annual chemical root control program is an effective preventive maintenance measure. A product that foams with the addition of water is the most effective means of coating the roots and pipe surfaces. These products may be purchased from your local hardware store or home center.
- **Only Flush Down Toilet Paper!**  
The Sanitary Sewer crew regularly cleans and maintains the sewer system in Walker. They are finding cleaning products in backups and lift station pumps. Many cleaning products are advertised as “flushable” when, in fact, toilet paper should be the only “cleaning product” flushed. When we say only toilet paper, we mean **ONLY** toilet paper; **NOT** dental floss, ‘flushable’ wipes, Q-tips,

feminine hygiene products, etc. Please assist the City of Walker Sanitary crew by disposing of cleaning products in the trash and not the sewer system. If you have further questions, please call Public Works at 218-547-5504.

### **Why is grease a problem?**

Large amount of oil and grease in the wastewater cause trouble in the collection system pipes. It decreases pipe capacity and, therefore, requires that piping systems be cleaned more often raising cost for all taxpayers. Oil and grease also hamper effective treatment at the wastewater treatment plant. Grease may not appear harmful but it congeals and causes nauseous mats on the surface of settling tanks, digesters, and the interior of pipes and other surfaces which may cause shutdown of wastewater treatment units.

### **Jetting a Line**

The City of Walker, when necessary will hire a company to televise, inspect, and locate debris that might be clogging sewer lines. Employees inspect and "jet" a line and vacuum larger debris from the sewer system main line when necessary. Sewer lines are cleaned on a sectional basis.

### **Private Property Drain/Line Cleaning**

Call Public Works at 218-547-5504 if you have questions about drain/line cleaning. Sometimes roots from private sections of line are pushed into a main sewer line, which can sometimes cause problems for others.



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### **Proper Well Maintenance**

(adapted from EPA web page on basic information)

Protect your own well area. Be careful about storage and disposal of household and lawn care chemicals and wastes. Good farmers and gardeners minimize the use of fertilizers and pesticides. Take steps to reduce erosion and prevent surface water runoff. Regularly check underground storage tanks that hold home heating oil, diesel, or gasoline. Make sure your well is protected from the wastes of livestock, pets, and wildlife.

### **Lawn and Garden Chemicals**

(parts of this are adapted from Turf, Lawn and Garden Care: Management Ideas for Wellhead Protection, MDA, Aug. 1, 2001)

Use of lawn and garden chemicals (fertilizers and pesticides) in a wellhead protection area can be a pollution risk to the public well by exceeding recommended application rates and poor timing of application. Plus, you can actually reduce the growth and quality of grass and plants!

When caring for lawns and gardens, there is often the misconception that "if a little is good, a lot must be better." Misunderstanding turf and lawn growth cycles leads to poor timing of fertilizer and pesticide application, wastes chemicals, and pollutes water bodies.

Most lawn and garden chemicals include directions for use to efficiently and efficiently apply the chemical without polluting. It's that simple.

There are many types of pollutants that find their way into storm drains. Some common pollutants found in storm sewers and creeks include: **Animal waste, Litter, Motor oil, Yard clippings, Fertilizers and pesticides, Soapy car wash water, Eroded sediment from construction projects.**

It's important to remember that any type of surface water runoff, not just rainfall, can run into the storm sewer and collect in the stormwater management system. For example, when you wash your car on the driveway, that water, dirt, and grime ends up in the system. That's why we need to be careful with what we put into the storm sewers as traces of all this material can end up in the stormwater system and our local waterways.

**1. Remember: Only rain belongs in the drain!**

Don't dump anything down storm drains. Be sure to clear away leaves and debris.

**2. Wash your car over your lawn or gravel.**

This allows the ground to neutralize the soap and grime from your car rather than sending it directly to our creeks and streams. Use biodegradable or non-toxic soap that is phosphate-free. You can also take your car to a commercial car wash where wastewater is either recycled or treated.

**3. Keep your car well-maintained.**

Fix any fluid leaks promptly and make sure to clean up any spills.

**4. Consider disconnecting your downspouts.**

You can plant a rain garden to absorb stormwater runoff. You can also use a rain barrel to help collect runoff from your roof and gutters to be used on your lawn and garden.

**5. Use lawn or garden chemicals sparingly.**

Choose organic alternatives when possible and check the weather forecast to avoid applying them before a storm.



### Home Fuel (heating) Oil Tanks and Bulk Storage of Chemicals

(adapted from Heating Oil Underground Storage Tanks, MPCA, September 2008)

Aboveground and underground residential storage tanks may be found in many wellhead protection areas. The Minnesota Pollution Control Agency estimates that there are more than 50,000 above and underground storage tanks in Minnesota. A petroleum or chemical storage tank is not a pollution hazard unless a leak or spill releases the chemical.

Commercial and industrial storage tanks are regulated. Residential storage of fuel oil (of less than 1,100 gallons) and other chemicals on residential properties is not regulated to control pollution. However, heating oil tanks contain flammable material that is regulated under the Minnesota Fire Code for fire protection and safety.

A reason that homeowners are not regulated for pollution prevention is that the typical home has only small quantities of hazardous materials or wastes. However, the bulk storage of chemicals for a “home business” (e.g. manufacturing kitchen cabinets for sale) can be a hazard if commercial standards of chemical containment and spill cleanup are not employed. Operation of a home business must comply with state law and City Ordinances. Contact your city building official for more information.

Home fuel oil tanks are used instead of other natural gas or electric utilities because it is unavailable or more expensive. Homeowners that switch from a fuel oil tank to liquid petroleum (LP gas) or purchase natural gas will often have some fuel oil remaining in the tank. Tanks no longer in use should have the contents emptied so that the eventual decay of a tank doesn't release pollutants into the soils and groundwater.

It's important for tank owners to prevent such tank releases because it may be determined to be a leak site regulated by the Minnesota Pollution Control Agency requiring a cleanup by a contractor. Contact the City of Walker for more information.

### **Residential Storm Water Pollution Prevention of Lakes, Rivers and Groundwater**

(adapted from Pollution Prevention – Residential Practices, MN Storm water Manual, MPCA, November, 2005)

Rain (and snow) delivers clean water to our area. It's up to us to keep it clean as it flows off of our roofs, driveways, streets and parking lots – into ponds, creeks, lakes, rivers, and groundwater.

Homes and residential property typically make up a large part of wellhead protection areas. The potential for pollution from one home cannot compare with a manufacturing plant or many other businesses. However, the combined impact of many homes may be greater.

The following are simple, low cost home practices that protect and improve the quality of water by minimizing pollutants including sediment, nutrients, metals, bacteria, trash, oil and toxins.

- Fertilizer and Pesticide – Reduce the need for fertilizer and pesticides by practicing natural lawn care and planting native vegetation.
- Litter and Animal Waste Control – Properly dispose of pet waste and litter.
- Yard Waste – Keep yard wastes (e.g. grass, leaves, etc.) from running off into ditches, storm sewers, and ponds by composting. Avoid accumulation of yard waste on driveway and on streets.
- Household Hazardous Wastes – If you can't use up the flammable, corrosive, toxic, and poisonous chemicals that are collecting in your home – then *clean house* and drop them off at Cass County Household Hazardous Waste Facility.
- Alternative Product Use – Consider using products that are less harmful and methods that reduce pollution of our natural resources.
- Washing Cars and Equipment – Use phosphorus-free detergents and non-toxic cleaning products, or use a commercial car wash. (Commercial car wash facilities must comply with operation standards for pollution prevention.)
- Driveway Sealcoats - There are two varieties of driveway sealcoats: 1) asphalt-based and 2) coal tar-based. The coal tar sealant is more durable but has been identified as the source of a cancer-causing class of chemicals called polycyclic aromatic hydrocarbons (PAHs). PAHs have been found in creeks, lakes and fish. If you must seal your driveway, choose an asphalt-based sealcoat.
- Reduce Sidewalk/Driveway Deicing Chemicals – Manually clear your sidewalk and driveway before using deicer. Less deicer is need and effective in smaller amounts when snow is removed. Store deicer properly to prevent leakage.
- Emptying Swimming Pools - High chlorine swimming pool water should be drained across lawn before reaching gutters or storm sewers. The pool water should be held for a week or more without adding chlorine before spreading on lawn.

- Plants Protect Water Quality – Pollutants are typically attached to soil particles. Plants (e.g. grass, trees, brush, etc.) keep storm water from washing soil particles into storm sewers, ditches and ponds that collect (sediment) and clog these waterways. Use vegetation to cover and stabilize exposed soil to prevent sediment wash off.

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## LOCATING \* DISCLOSING \* SEALING

### UNUSED (ABANDONED) WELLS

\*This section provides City of Walker residents, businesses and property owners with information regarding unused (abandoned) wells for the protection of our drinking water resources. Minnesota Statutes (Chapter 103I) establishes the Minnesota Department of Health (MDH) as the authority regarding well construction, maintenance and sealing. For more information regarding the Minnesota well management program contact the MDH Well Management Section at 800-383-9808.

It comes as a surprise to many residents and businesses that they may have an old well on their property.

The homes and businesses of the City of Walker get their water from Municipal wells and water mains. The unused wells are simply forgotten or abandoned.

The typical municipal well withdraws large volumes of groundwater. Old abandoned wells have been identified as a pathway for pollution to reach the groundwater and nearby drinking water wells from being polluted.

In 1989 the Minnesota Legislature passed the Groundwater Protection Act to strengthen State and Local programs that protect groundwater and our health including:

- Requiring the seller of a property to disclose to the buyer (and the MDH) the existence and “status” of all wells on their property (MN Stat., section 103I.235).
- Requiring unused (abandoned) wells be sealed by a state licensed well contractor that will prepare a Well and Boring Sealing Record for the well owner and file with the MDH (MN Stat., section 103I.301).

All abandoned wells in Minnesota are required to be sealed to protect groundwater. Abandoned wells near a public well are a hazard to the drinking water supply of a community (e.g. a city well, mobile home park well, school well, etc.).

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### Locating Lost Wells on a Property

A well is a drilled, bored or dug hole into the ground to access groundwater. A well pipe (or well casing) extends to an aquifer (e.g. sand, gravel or sandstone saturated with water). A water-supply well provides drinking water or can be used for other purposes such as lawn watering, crop irrigation, livestock watering, commercial/industrial purposes, etc.



A “sand-point”, also known as a “drive-point”, is typically a well with a 1-1/4 to 2-inch diameter steel casing with a pointed well screen attached to the bottom. The well is driven into the ground by pounding down until water is encountered but usually not more than 25 to 30 feet deep. State laws and rules for drilled wells also pertain to sand-point wells. Sand-point wells are typically installed by the property owner who must record the well with the Minnesota Department of Health (MDH). The typical life of a house well is 30 to 50 years before it must be replaced. Properties with a long history may have more than one well. Large commercial/industrial facilities and farm properties are more likely to have multiple wells to serve multiple buildings, barns, irrigation, and other purposes.

### Well Probability Test

To determine the probability that a well was drilled to serve a constructed building: compare the date that the building was constructed (found in city building or county property tax records) with the date that water service was made available to the property (found in city utility records). Construction of a home or other building would include drilling a well on the property if municipal water (or other public supply) was not available.

### Visual Evidence

A well search starts with visual inspection of the property for physical evidence (listed below). Abandoned (unused) wells often appear as 1 ¼ inch to 6-inch diameter steel pipe in or above the ground; the floor of a basement; in a basement offset vault; or a well pit. Newer wells may be made of plastic pipe. Older wells (before 1974 well code) were not uniform construction and often buried. If a building was remodeled or expanded the building may be built over or around the well. A well buried outside the building foundation may be indicated by a water pipe that extends through a basement all from the well. Look for:

- Well pipe visible above ground, concrete slab, or through basement floor.
- Evidence of a well, such as circular ring in cement or patch in the floor.
- Basement offset (small room off of basement, often under steps).
- Glass block or patch in step or concrete (access for well below).
- Pit in yard or basement (covered with wood, concrete, or steel; well may be at the bottom of pit or the pit may be a dug well).
- Water supply pipe or patched hole through basement floor or basement wall (typically on the same side of the building as a buried well).
- Water system components (i.e., pressure tank, pump, or evidence of former components, like “shadow” lines on floor or wall).
- Electrical components (wiring through basement floor/wall, control box).
- Low spot in yard, circular depression.
- Outbuildings (may be well house).
- Additions, false walls, paneling which may “hide” well.

### Individuals Familiar with Property

People familiar with the property may be able to point to “lost” wells. Ask:

- Property owner and previous property owners.
- Neighbors, relatives or acquaintances who may know about wells on the property. \*Neighboring wells may also give a clue as to well location, depth, and construction.
- Contractors (well drillers, pump installers, plumbers, remodelers) who have worked on property.
- Inspectors (well, plumbing, building, septic system).
- Current or former employees, maintenance personnel.

## Records Search

Since 1975, well contractors (drillers) and home owners constructing a well were required to file a well construction report with the MDH Well Management Section. Older wells may be recorded in government or other agency documents. Sources of well records include:

- Owner's records (e.g. well repair bill) or information written on well pressure tank, control box, or well room wall.
- MDH Well Management Section records 651-201-4600; <http://www.health.state.mn.us/divs/eh/wells/>
- County Well Index of construction records at <http://www.health.state.mn.us/divs/eh/cwi/index.html>
- Find out if a sealing record is on file for the property.
- Review Well Disclosure Certificates at <http://www.health.state.mn.us/divs/eh/wells/disclosures/>
- City and township. Building and utility records may indicate the location of wells on a property. For subdivisions (neighborhood development) the developer may have used a uniform well location and construction process (builder and well contractor) for each house recorded in plat.
- Sanborn Fire Insurance maps and Fire Underwriters Inspection Bureau maps (of commercial and industrial properties) available at MN Historical Society.
- Old photographs of the property, Cass County Surveyor, County plat books and Topographic maps

## Well Contractor (Physical) Search

If a well cannot be located by the property owner, using the methods described above, a search by a well contractor may be necessary. Well contractors (drillers) are experienced and knowledgeable of the common methods used to locate and construct a well as construction codes, materials, equipment and methods have changed over time. The property owner that employs a well contractor to locate a lost well should also consult with the MDH Well Management Section to establish that their effort to locate the well is sufficient – if the well cannot be found. Keep all your records of your search to document costs and effort to locate lost wells.

Equipment to conduct a more detailed well search

- Metal locators and magnetometers
- Tape measure or “snake” to follow building pipes to well
- Sondes, pipe locators, and tracers.
- Ground-penetrating radar.
- Excavation equipment including shovels, hammers, chisels, and backhoe.
- Small rotary hammer or corer, bits, extensions and vacuum.

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## Well Disclosure for Property Sellers and Buyers

(adapted from What You Should Know About Wells at Property Transfer, MDH, 10/19/2010 and Well Disclosure – Providing Important Information About Wells on Your Property, MDH, 7/1/2008)

When a real estate property (e.g. home, farm, factory, field) is sold or transferred, Minnesota Statutes section 103i.235, requires the seller to disclose the number and the status of all wells on the property including a sketch map showing the location of each well. For the disclosure, the status of a well can only be: “in use,” “not in use,” or “sealed.”

If a seller does not disclose a known well, or the seller does not properly disclose the known status of a well to the buyer, the seller may be liable to the buyer for costs related to sealing the well and reasonable attorney fees if an action against the seller is commenced within six years after the closing of the sale of the property.

If there is known to be a well on the property, but the well location is not known, a reasonable effort must be made to find the well. First, check with the MDH to see if there is a well sealing record. If the well has been properly sealed and recorded, it is not necessary to excavate and locate that well. However, if there is no documentation that the well has been properly sealed, the property owner should search for the well (see *Locating Lost Wells on a Property*, above).

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## Sealing Unused Wells

(adapted from Minnesota Department of Health of Health fact sheet, 11/20/2008)

By law, a well must be sealed if: 1) the well is not in use, and does not have an MDH maintenance permit, 2) the well is contaminated, 3) the well has been improperly sealed in the past, 4) the well threatens the quality of the groundwater, or 5) the well otherwise poses a threat to health or safety.

A well used only to water your lawn is “in use.” Minnesota laws do not require a well which is in use to be sealed. Your well is considered to be “in use” if you use it on a regular (seasonal) basis. If you sell or transfer the property, the well will have to be disclosed to the buyer at that time.

**Only a licensed well contractor may seal a well.** *Don't try to seal a well yourself.* Licensed well contractors have the necessary equipment and expertise to seal your well properly. Most important the contractor will prepare and file the necessary records with the MDH that prove you have met your obligation to properly seal the well according to law.

Licensed well contractors are found in the Yellow Pages under *Well Drilling and Service*. The MDH has a list of licensed contractors on their web site: <http://www.health.state.mn.us/divs/eh/wells/lwc/>

**How a well is sealed.** Before sealing the well, the contractor will remove any pumping equipment that may still be in place and remove any debris or other obstructions from the well. The well is then sealed by preparing and pumping an approved grout mixture from bottom to the top. The MDH Well Management Section will monitor the process with the well contractor and verify that the well is properly sealed according to the Minnesota Well Code (MN Rule 4725).

When the job is done, the contractor will submit a *Well and Boring Sealing Record* to you and the MDH. Keep it in a safe place. It provides proof that the well has been properly sealed, and no longer poses a hazard.

**The cost of sealing a well** can vary considerably. For shallow, small diameter wells – like those found at some homes and many lake cabins – the cost typically ranges from \$400 to \$900. Deeper, larger wells will cost more to seal. Access to the well, special geological conditions, debris in the well, and depth and diameter of the well will affect the cost of well sealing.

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## SSTS Practitioner and Homeowner Information

(adapted from the Minnesota Pollution Control website section SSTS Practitioner and Homeowner Information)

This section contains information for SSTS practitioners and homeowners on septic systems and onsite sewage treatment, system options, requirements for inspections, system operation and maintenance, and what to do when taking a septic system out of service (abandonment).

Minn. Stat. §115.55, subd. 6, requires a property seller disclose, in writing, to the buyer how sewage generated at the property is managed. This applies whether the sewage goes to a permitted facility, or to an on-site SSTS.

The disclosure must be made by delivering a written statement to the buyer or transferee that: the sewage goes to a facility permitted by the agency, or the sewage does not go to a permitted facility, is therefore, subject to applicable requirements, and describes the system in use, including the legal description of the property, the county in which the property is located, and a map drawn from available information showing the location of the system on the property to the extent practicable. Additionally, if the seller or transferor knows that an abandoned SSTS exists on the property, the disclosure must include a map showing its location. In the disclosure statement, the seller or transferor must indicate whether the SSTS is in use and, to the seller's or transferor's knowledge, in compliance with applicable sewage-treatment laws and rules

A SSTS disclosure is different than a compliance inspection. A disclosure describes, to the best of the property owner's knowledge, the location of a SSTS on the property and what condition it is in. A compliance inspection is conducted by a specifically trained and licensed individual to determine if the SSTS is in compliance with state regulations. A disclosure is *not* a compliance inspection and cannot be used as a substitute.

While state regulations do not require a compliance inspection prior to property transfer, many local ordinances, especially in shoreland areas may have this requirement. Always check with your Local Government Unit (LGU) first to see if they have this requirement. Additionally, lending institutions may require compliance inspections for some properties.

Unless the buyer or transferee and seller or transferor agree to the contrary in writing before the closing of the sale, a seller or transferor who fails to disclose the existence or known status of an SSTS at the time of sale, and who knew or had reason to know of the existence or known status of the system, is liable to the buyer or transferee for costs relating to bringing the system into compliance with the SSTS rules and for reasonable attorney fees for collection of costs from the seller or transferor. This action must be commenced within two years after the date on which the buyer or transferee closed the purchase or transfer of the real property where the system is located.