DRINKING WATER SOURCE PROTECTION

The Charleston WCD has updated their Drinking Water Source Protection Plan in an effort to protect our community water supply from contamination. While not all of you live within our drinking water source protection zones, some of you do. However, if all of us follow the suggestions listed below, all ground water is less likely to be contaminated. Fact Sheets are also provided on this website. Please call the District Office with questions.

Septic Systems

- Do not use garbage disposals. Garbage disposals add massive amounts of solids to the septic tank and are a leading factor of clogged systems
- Do not dispose of disposable diapers, sanitary napkins, paper towels, colored toilet paper or tissues in the septic system. These wastes do not decompose.
- Do not put fat, grease, or oil (including cooking oil) down the drain. These items can pass through the septic tank and clog the leaching field.
- Pump out septic systems every three to five years.
- Conserve water. The less water used, the longer the retention period in the tank and the more solids and bacteria can decompose. Install water saving devices.
- Do not use enzymes or acid for treating your septic tank.
- Avoid extreme peak flows by spacing out laundry loads, bathing, and dish washing.
- Do not put chemicals into the septic tank for the purpose of maintaining or de-clogging the leach field. There are no known chemicals, yeasts, bacteria, enzymes or other substances capable of eliminating or reducing the sludge and scum so that periodic pumping is unnecessary. Many of these cleaners contain highly concentrated organic solvents that are not biodegradable and pose a serious threat to ground water.
- Do not dispose of pesticides, disinfectants, acids, medicine, paint thinners and other household hazardous wastes in the septic system. These wastes will kill the helpful bacteria in the tank and may contaminate ground water.

Fertilizers

- Minimize the use of chemical fertilizers.
- Water lawns normally after fertilizing rather than waiting for a rainstorm.
- Allow grass clippings to remain on the lawn.
- Mow high (about 2 inches), mow often, and use sharp blades.
- Water deeply but not too often.
- Remove thatch build-up when it gets over 1 inch.

Insect Sprays and Weed Killers

- Special precautions should be taken when disposing of empty containers. Rinse the container three times with water and use the rinse water in the same manner the

original product was intended. Then wrap the container securely in plastic and dispose of it in the trash. Unused products should be taken to a solid waste facility.
- Minimize the use of chemical products and use only as directed.
- Consider using less toxic alternative products.
- Consider "co-planting" using companion plants that act as natural deterrents to pests.
- Use plant guards, such as paper or tin barriers to deter insects.
- Consider using traps of various kinds to trap pests.
- Hand pick weeds as much as possible or use weed killers in limited spot applications.
- Use heavy mulching around plants to deter weed growth.

Household Hazardous Waste

- The best way to handle household hazardous materials is to completely use the product before disposing of the container. If this is not possible, then the next alternative is to return unused portions to your community household hazardous waste clean-up day. Keep products in their original package with all labels intact. If the container is leaking, place it in a thick plastic bag.
- Pack the products in a plastic-lined cardboard box to prevent leaks and breakage.
- Do not flush household hazardous waste down the toilet.
- Do not pour household hazardous waste down the sink.
- Do not pour household hazardous waste down a storm drain.
- Do not pour household hazardous waste on the ground.
- Read label precautions and follow directions for safe use.
- Recycle/dispose of empty containers properly.
- Share what you can't use with friends or neighbors.
- Store properly.
- Use recommended amounts; more is not necessarily better.
- Use the child-resistant closures and keep them on tightly.

Livestock, Poultry, and Horse Waste

- Animal waste contains many pollutants that can contaminate surface and ground waters used as drinking water sources. Probably the greatest health concern associated with livestock, poultry, and horse wastes is pathogens. Many pathogens found in animal waste can infect humans if ingested. Organisms like Cryptosporidium, Giardia lamblia, and Salmonella can induce symptoms ranging from skin sores to chest pain. E. coli, which causes diarrhea and abdominal gas, has been the source of disease outbreaks in several States. Particularly virulent strains of E-coli can cause serious illness and even death. Cryptosporidium is of particular concern because it is highly resistant to disinfection with chlorine. This protozoan causes gastrointestinal illness that lasts 2 to 10 days in healthy individuals but can be fatal in people with weakened immune systems. Cryptosporidium was responsible for more than 50 deaths and an estimated 403,000 illnesses after contaminating a Milwaukee drinking water supply. Runoff from cow manure application sites was a suspected source of the Cryptosporidium.
- Don't let runoff through animal waste accumulation areas flow off of your property.
- Establish a vegetative buffer zone down slope to detain and absorb waste.

- Any manure that has accumulated in piles should be periodically hauled off and spread out on pasture or crop land.

Agricultural Cropland

- Pesticides must be used in strict accordance with label instructions ("the label is the law").
- The chemical in fertilizer that can most easily pollute ground water is a form of nitrogen called nitrate. Nitrate moves readily in soil to the ground water strata. The best way to prevent the movement of nitrate into the ground water is to apply no more nitrogen than crops can use during the time that the plants are growing.

Domestic Wells

- A domestic well is considered a potential contamination source because it can be a conduit for contamination to enter the ground water. Therefore, please do not use or dispose of toxic chemicals around your well.
- Pesticides should be used in accordance with label instructions and fertilizers should be used in accordance with recommended application rates. Unused wells should be properly capped and abandoned.

Thank you for your efforts in protecting one of our community's most valuable resources. By working together, we can ensure that the Charleston WCD continues to have a safe and adequate supply of water for many years to come. If you would like to review our Drinking Water Source Protection Plan, it is available. Please contact the District.