

RANDOLPH TOWN  
Updated Source Protection Plan

Field Street Well WS002

November 28, 2018

PO Box 127 Randolph, UT 84064

435-793-3185

Prepared by:  
Lana Peart, Randolph Town  
Mike Osborn, Rural Water Association of Utah

## **EXECUTIVE SUMMARY**

Basically there are no changes to the Drinking Water Source Protection Plan for the Randolph well. The Implementation Schedule and Recordkeeping Sections have been updated. Designated person has changed and has been updated.

### **1.0 INTRODUCTION**

#### **1.1 System Information:**

Water System Name: Randolph Town  
Water System Number: 17005

Address: PO Box 127  
Randolph, UT 84064

435-793-3185  
[randolph@allwest.net](mailto:randolph@allwest.net)

#### **1.2 Source Name:**

Source Name: Randolph Field Street Well

Source Number – WS002  
Type: Well

#### **1.3 Designated Person**

Name – Scott Ferguson  
Address: PO Box 127  
Randolph, UT 84064

Phone Number – 435 702-0104  
[wyoferg@gmail.com](mailto:wyoferg@gmail.com)

### **2.0 DELINEATION REPORT**

There are no changes

### **3.0 INVENTORY OF POTENTIAL CONTAMINATION SOURCES**

There are no changes

### **4.0 IDENTIFICATION AND ASSESSMENT OF CURRENT CONTROLS**

There are no changes

### **5.0 MANAGEMENT PROGRAM FOR EXISTING POTENTIAL CONTAMINATION SOURCES**

Best Management practices and Fact Sheets will be provided to the appropriate entities. . The system will contact the county road agency in charge of the maintenance of the canyon roads and request to be informed of any spills along the roads. The system will also advise the county that use of herbicides within the spring's protection area is not advised

### **6.0 MANAGEMENT PROGRAM FOR FUTURE POTENTIAL CONTAMINATION SOURCES**

If a new PCS is identified within the protection areas for the **SPRINGS OR WELL**, the system agrees to:

Contact each PCS as it moves into the protection areas

Determine whether it is actually a PCS

If it is, add it to your inventory

Identify and assess its controls, and

Plan and implement land management strategies, if the PCS is not adequately controlled.

### **7.0 IMPLEMENTATION SCHEDULE**

Plans are to have letters and Fact Sheets sent out to all entities by April 2019.

### **8.0 RESOURCE EVALUATION**

Randolph Town is financially secure, they have zero financial liabilities and have no plans as of now to incur any loans. They have all of the financial resources to make sure that the source protection plan can be implemented.

## **9.0 RECORDKEEPING SECTION**

Best Management Practice letters referred to in Section 5 is included in this update. All records will be kept in Town offices and updated as needed.

## **10.0 CONTINGENCY PLAN**

There are no changes

## **11.0 PUBLIC NOTIFICATION**

This requirement has been completed by Randolph Town with complication of their CCR.

## **WAIVERS**

Randolph Town currently has Reliably & Consistently waivers for VOCs and pesticides for these springs. These waivers need not be addressed in source protection plan updates.



## Randolph Town

20 South Main

PO Box 127

Randolph, Utah 84064

March 1, 2019

Dear Neighbors:

Subject: Drinking Water Source Protection

The Randolph Town has completed a Drinking Water Source Protection Plan in an effort to protect our public water supply from contamination. The plan reveals that various Horse Properties, and Septic Systems are located within our protection zones. Please be aware that any accidental spills involving toxic chemicals, or biological waste materials could threaten the water quality of our well. Additionally, the use of herbicides within source protection zones is also a threat to the water quality of this source. We ask that you exercise caution when using any chemical and keep the following management practices in mind:

**Accidental spills should be cleaned up in accordance with the information in appropriate material safety data sheets and local, state, and federal regulations. If a spill of hazardous material should occur, we request that you notify us at the phone number below so we can assess its potential impact on the quality of this well. Following Manufacturer Specifications concerning the application of herbicides is also encouraged. Livestock waste: if you could please use these guidelines.**

- Don't let runoff through animal waste accumulation areas flow off of your property.
- Establish a vegetative buffer zone downslope 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.

Thank you for helping us protect our valuable water resource. By working together we can ensure that the continues to provide a safe and adequate supply of water to all of our community for many years to come. If you would like to review our Drinking Water Source Protection Plan, it is available. Please contact us at 435-793-3185, if you have any questions or concerns about this letter.

Sincerely,  
Randolph Town



Randolph Town  
20 South Main  
PO Box 127  
Randolph, Utah 84064

March 1, 2019

Kris Peterson  
UDOT Region 1  
166 W. Southwell St.  
Ogden, Ut 84044

Dear Mr. Peterson:

Subject: Drinking Water Source Protection

The Randolph Town has completed a Drinking Water Source Protection Plan in an effort to protect our public water supply from contamination. The plan reveals that State roads are located within our source protection zones. Please be aware that any accidental spills involving toxic chemicals, biological waste, or radioactive materials could threaten the water quality of our well. Additionally, the use of herbicides within source protection zones is also a threat to the water quality of this source. We ask that you exercise caution when using any chemical and keep the following management practices in mind:

**Accidental spills should be cleaned up in accordance with the information in appropriate material safety data sheets and local, state, and federal regulations. If a spill of hazardous material should occur, we request that you notify us at the phone number below so we can assess its potential impact on the quality of this well. Following Manufacturer Specifications concerning the application of herbicides is also encouraged.**

Thank you for helping us protect our valuable water resource. By working together we can ensure that the Randolph Town continues to provide a safe and adequate supply of water to our Residential community for many years to come. If you would like to review our Drinking Water Source Protection Plan, it is available. Please contact us at 435-793-3185, if you have any questions or concerns about this letter.

Sincerely,  
Randolph Town



## Partnership for the Environment

*Utah Department of Environmental Quality*

### Fertilizer Fact Sheet

#### What Are The Potential Hazards?

Fertilizer applied to plants during crop, lawn, and garden maintenance may leach into the ground water and cause contamination. The main constituent in fertilizer is usually nitrogen. If the nitrate level of drinking water is too high, infants, up to the age of six months, can develop a fatal disease called blue baby syndrome (methemoglobinemia). Drinking water that contains 10 milligrams of nitrate-nitrogen per liter of water exceeds the drinking water standard and should not be used, especially for infant formula. Proper storage, application, and watering procedures should be included in fertilizer best management practices to prevent contamination of ground water.

#### Storing Fertilizers

The less fertilizer you buy, the less you will have to store. Therefore, only purchase the amount and kind of fertilizer that you need.

- ☐ Fertilizer should be stored in locked, dry cabinets.
- ☐ Keep fertilizer and pesticides on separate shelves.
- ☐ Don't store fertilizer with combustibles, such as gasoline or kerosine, because of explosion hazards.

#### Application Precautions

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 the crops, grass, garden plants, shrubs, or trees can use during the time that the plants are growing.

- ☐ Calibrate your spreader and sprayer to keep from applying too much fertilizer.
- ☐ Load fertilizer spreaders on the driveway or other hard surfaces so any spills can easily be swept up. Fertilizer that spills should be swept up and applied to the lawn or garden at the right time and amount. This allows the fertilizer to grow plants instead of washing off into the storm drain system and ultimately contaminating nearby streams and lakes.
- ☐ If you are using liquid fertilizer on your turf, add fertilizer to the spray tank while on the lawn. This way, if you spill the fertilizer, it will be used by the plants and not run off into the storm drain system.
- ☐ Do not spray or apply fertilizer near irrigation wells. Wells are conduits to the ground water.

#### Application Rates For Lawns

Utah State University's Extension Service recommends the following for Utah lawns: "It is important to fertilize on a regular basis every four to six weeks to maintain an attractive lawn. Begin



when lawns start to green in the spring, mid to late April. Earlier applications may cause a lawn to become greener faster, but may also increase spring disease problems. Summer applications of nitrogen fertilizer will not burn lawns, if you apply them to dry grass and water immediately. Fall applications are important for good winter cold tolerance, extended fall color, and fast spring green-up. A complete fertilizer containing nitrogen, phosphorus and potassium should be applied in the fall every three to four years. This will prepare the lawn for winter conditions and allow the phosphorus to penetrate into the root zone by the next growing season.

For a well-kept lawn in Utah, apply 1 pound of available nitrogen per 1,000 square feet each four to six weeks throughout the growing season. The following chart indicates how much of various fertilizer will supply one pound of nitrogen."

%N on Label	Pounds of Fertilizer Per 1000 Square Feet
12-15	7-8
18-21	5-5 ½
24-28	3 ½-4
30-34	3-3½
45-46	2-2 ¼

## Types of Plants

One of the best ways to protect your ground water is to use plants that are drought-tolerant and that are adapted to your area. Drought-tolerant or low-water-use plants can continue to survive once they are established, even during times of little rainfall. Because you do not have to water these plants, there is less chance that nitrate and pesticides will be carried with the water through the soil and into the ground water.

If low-water-use plants are not practical, then try to use medium water use plants. Water these plants only when they begin to show drought stress. Some plants will wilt when they are drought-stressed, while other plants will show marginal leaf burn.

## Watering

Over-watering plants can cause excess water to move through the soil. This water can flush fertilizer away from the root zone of your plants and into the ground water. The best way to avoid over-watering is simply to measure how much you are adding. Contact your county Extension Service to determine the best way to calculate how much water your plants need and how to measure the amount you are applying.

## For More Information, Contact:

Division of Drinking Water, Source Protection Program - (801) 536-4200  
Department of Agriculture - (801) 538-7100  
Environmental Hotline - 1-800-458-0145  
Sonja Wallace, Pollution Prevention Coordinator - (801) 536-4477



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*Utah Department of Environmental Quality*

### Septic Tank/Drainfield System Fact Sheet

#### **What Are The Potential Hazards?**

Septic systems can contaminate ground water if they are misused, improperly maintained, or improperly constructed. The major contaminant discharged from septic systems is disease-causing germs. These germs (bacteria and viruses) - can cause many human diseases. Another contaminant discharged from septic systems is nitrogen in the form of nitrate. If the nitrate level of drinking water is too high, infants, up to the age of six months old, can develop a fatal disease called blue baby syndrome (methemoglobinemia). Additionally, if toxic chemicals are disposed in a septic system, they can percolate through the drainfield and into the ground water.

#### **How Does A Septic Tank/Drainfield System Work?**

The basic septic system is composed of a septic tank followed by a drainfield. Wastewater flows out of the house and into the septic tank through the building sewer pipe. Once in the septic tank, most solids in the wastewater settle to the bottom of the tank to form a sludge layer. Other solids float and form a scum layer on top of the wastewater. Some decomposition of solid material takes place here, but the primary function of a septic tank is to trap solids and prevent them from entering the drainfield.

Wastewater treatment is restricted to a rather thin zone of unsaturated soil underlying the drainfield. Many of the harmful bacteria and microbes are filtered out as the wastewater passes through this soil. Some of the smaller microbes (viruses) and nutrients such as phosphorus and some forms of nitrogen are trapped and held (adsorbed) by soil particles. Once the effluent reaches the groundwater table, little treatment occurs. Soils can differ markedly in their pollutant removal efficiency. The ability to which soil can remove pollutants in the wastewater determines how many impurities will eventually reach the groundwater beneath the drainfield.

#### **Site Evaluation And Construction**

Current rules require a comprehensive evaluation of the soil and ground water before a septic system can be permitted for construction in a given location. This evaluation must be reviewed and approved by the local health department. The rules require that the bottom of the drainfield trenches be placed at least 12 inches (preferably 24 inches) above the water table. Additionally, there must be adequate amounts of unsaturated soil beneath the trenches to allow sufficient treatment of the wastewater.

#### **Site Considerations**

- ☐ Trees and deep-rooted shrubs should be as far away from the system as possible.
- ☐ Keep the water that runs off of foundation drains, gutters, driveways, and other paved areas away from the drainfield of your septic system.



- ☐ Keep the soil over the drainfield covered with grass to prevent soil erosion.
- ☐ Don't drive vehicles over the system.
- ☐ Don't cover the tank or drainfield with concrete or asphalt and don't build over these areas.

## **Proper Disposal Practices**

- ☐ Use only a moderate amount of cleaning products and do not pour solvents or other household hazardous waste down the drains.
- ☐ Garbage disposals should not be used because they tend to overload the system with solids. If you have one, you should severely limit its use.
- ☐ Do not pour grease or cooking oil down the sink.
- ☐ Do not put items down the drain that may clog the septic tank or other parts of the system. These items include cigarette butts, sanitary napkins, tampons, condoms, disposable diapers, paper towels, egg shells, and coffee grounds.

## **Water Conservation**

There are limits to the amount of wastewater a septic system can treat. If you overload the system, wastewater may backup into your home or surface over your drainfield. Problems caused by using too much water can occur periodically throughout the year or be seasonal. For example, the soil beneath your drainfield is wetter in the spring than it is in the summer and its capacity to percolate wastewater is somewhat diminished. If you wash all your laundry in one day, you may have a temporary problem caused by overloading the soil's capacity to percolate wastewater for that day. To reduce the risk of using too much water, try the following:

- ☐ Use 1.6 gallons (or less) per flush toilets.
- ☐ Fix leaking toilets and faucets immediately.
- ☐ Use faucet aerators at sinks and flow reducing nozzles at showers.
- ☐ Limit the length of your shower to 10 minutes or less.
- ☐ Do not fill the bathtub with more than 6 inches of water.
- ☐ Do not wash more than one or two loads of laundry per day.
- ☐ Do not use the dishwasher until it is full.

## **Septic Tank Cleaning**

It is recommended that the solids that collect in your septic tank be pumped out and disposed at an approved location every three to five years. If not removed, these solids will eventually be discharged from the septic tank into the drainfield and will clog the soil in the absorption trenches. If the absorption trenches are clogged, sewage will either back up into the house or surface over the drainfield. If this happens, pump the tank will not solve the problem and a new drainfield will probably need to be constructed on a different part of the lot.

### **For More Information, Contact:**

Division of Drinking Water, Source Protection Program - (801) 536-4200  
 Division of Water Quality - (801) 538-6146  
 Sonja Wallace, Pollution Prevention Coordinator - (801) 536-4477  
 Environmental Hotline - 1-800-458-0145



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# Pesticides Fact Sheet

### What Are The Potential Hazards?

Pesticides applied to plants during crop, lawn, and garden maintenance may leach into the ground water and cause contamination. Proper storage, mixing, application, spill cleanup, watering, and disposal procedures should be included in pesticide best management practices.

### Storing Pesticides

The fewer pesticides you buy, the fewer you will have to store. Therefore, only purchase the amount and kind of pesticide that is needed. Pesticides should always be stored in sound, properly labeled, original containers. *Sound containers are the first defense against spills and leaks.*

- ☐ Ensure that there are no holes, tears, or weak seams in the containers and that the label is readable.
- ☐ Pesticides should be stored in locked, dry cabinets.
- ☐ Be sure to store dry products above liquids to prevent wetting from spills.
- ☐ Storage and mixing areas should not be located near floor drains of any kind.
- ☐ Storage facilities should have secondary containment, such as a berm or dike, which will hold spills or leaks at:
  1. 10% of the total volume of the containers, or
  2. 110% of the volume of the largest container, whichever is larger.

### Mixing Pesticides

- ☐ Mix pesticides on an impermeable surface, such as concrete, so any spills will be contained.
- ☐ Mix only the amount that you will use:
  1. Measure the total square feet you intend to treat.
  2. Read the label on the pesticide container and follow the instructions. (These are often given in terms of amount of pesticide to use per thousand square feet.)
  3. By properly measuring and calculating, there should be little or no pesticide left in the spray tank when the job is finished and it will be applied at the recommended rate.

### Applying Pesticides

Pesticides are used to kill or control weeds (herbicides), insects (insecticides) and fungi (fungicides) that attack plants. Some of these pesticides can move through the soil and into the ground water. Guidelines for the safe use of pesticides are listed below:

- ☐ Be willing to accept a low level of weed, insect, and plant disease infestation.



- Use pesticides only when absolutely necessary.
- Identify pests correctly. Use the proper pesticides.
- Read and follow the directions printed on the container labels. Remember, *the label is the law*.
- Calibrate your spreader and sprayer to keep from applying too much pesticide.
- Do not spray or apply pesticides near irrigation wells. Wells are conduits to the ground water.
- Do not spray or apply pesticides near your walks and driveway. This prevents them from washing off into the storm drain system.

## **Cleaning Up Spills**

- Dry formulated pesticide spills should be swept up and applied to crops, lawns, and gardens at the rate specified on the label.
- Liquid pesticide spills should be soaked up using absorbent material (such as, soil, sawdust, and cat litter). The contaminated absorbent material should then be put in a sealed container and taken to a household hazardous waste collection site.

## **Watering**

Over-watering your plants can cause excess water to move through the soil. This water can carry pesticides that can contaminate the ground water. The best way to avoid over-watering is simply to measure how much you are adding. Contact your county Extension Service to determine the best way to calculate how much water your plants need and how to measure the amount you are applying.

## **Disposing of Pesticides**

If the pesticide was properly measured and mixed, there should be little or no spray left in the tank. The little that may be left can be safely sprayed over the area that was treated until it is gone. Disposal of "empty" pesticide containers and unused pesticides should be handled as follows:

- If you are using liquid pesticides, rinse the container three times. Be sure to pour the rinsing into your sprayer and not down a drain or onto the ground. Containers which have been emptied and rinsed can be discarded in the trash.
- Unused pesticides in their original containers can be recycled at household hazardous waste collection sites.

## **For More Information, Contact:**

Division of Drinking Water, Source Protection Program - (801) 536-4200  
 Department of Agriculture - (801) 538-7100  
 Environmental Hotline - 1-800-458-0145  
 Sonja Wallace, Pollution Prevention Coordinator - (801) 536-4477





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### Household Hazardous Waste Fact Sheet

#### What is Household Hazardous Waste?

Many hazardous products and chemicals such as cleaners, oils and pesticides are used in the home every day. When discarded, these products are called household hazardous waste (HHW). HHWs are discarded materials and products that are ignitable, corrosive, reactive, toxic or otherwise listed as hazardous by the EPA. Products used and disposed of by a typical residence may contain more than 100 hazardous substances including:

- |   |  |
|---|--|
| <input type="radio"/> Batteries                   | <input type="radio"/> Medicines                              |
| <input type="radio"/> Cleaners                    | <input type="radio"/> Motor oil and automotive supplies      |
| <input type="radio"/> Cosmetics                   | <input type="radio"/> Paints, thinners, stains and varnishes |
| <input type="radio"/> Fluorescent light bulbs     | <input type="radio"/> Polishes                               |
| <input type="radio"/> Glues                       | <input type="radio"/> Swimming pool chemicals                |
| <input type="radio"/> Heating oil                 | <input type="radio"/> Smoke detectors                        |
| <input type="radio"/> Insecticides and pesticides | <input type="radio"/> Thermometers                           |
| <input type="radio"/> Ink                         | <input type="radio"/> Fuel                                   |

#### HHW is a Serious Threat

The U.S. Environmental Protection Agency estimates the average American household generates 20 pounds of HHW each year. As much as 100 pounds of HHW can accumulate in the home and remain there until the resident moves or undertakes a thorough "spring cleaning."

Since the chemicals found in HHW can cause soil and groundwater contamination, generate hazardous emissions at landfills and disrupt water treatment plants, it is important to dispose of HHW properly. Many solid waste treatment facilities are currently required to screen for HHW to avoid operating under restrictive hazardous waste laws. Furthermore, many communities may be required to establish a HHW collection program in order to qualify for permits to manage storm water.

#### Safe Handling Tips

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.

Household hazardous waste clean-up days are for household wastes only. No industrial or commercial wastes and no containers larger than five gallons are accepted. Explosives, radioactive

material and medical wastes are also unacceptable.

HHW can be dangerous to people and pets who come in contact with them. HHW can endanger water supplies, damage sewage treatment systems, and cause other environmental damage. Only use the products as directed. **DO NOT:**

- ☐ Flush HHWs down the toilet
- ☐ Pour HHWs down the sink
- ☐ Pour HHWs down a storm drain
- ☐ Pour HHWs on the ground

Contact your local health department or the Division of Solid and Hazardous Waste to determine whether your community has a household hazardous waste collection program.

## Identify HHW

Reduce the amount of potentially hazardous products in your home and eliminate what you throw away by following these easy steps:

### 1. Before you buy:

- ☐ Read the labels and be aware of what they mean.
- ☐ Look for these words on labels; they tell you what products may need special handling or disposal.

Caution  
Combustible  
Corrosive  
Danger  
Explosive

Flammable  
Poison  
Toxic  
Volatile  
Warning

- ☐ Select a product best suited for the job.
- ☐ Buy only what you can use entirely.

### 2. After you buy:

- ☐ 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.

## For More Information, Contact:

Division of Solid & Hazardous Waste - (801) 538 - 6170  
Division of Drinking Water, Source Protection Program - (801) 536-4200  
Environmental Hotline - 1-800-458-0145  
Sonja Wallace, Pollution Prevention Coordinator - (801) 536-4477