



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

SEP 27 2019

2019 SEP 27 AM 10:40

FILED
EPA REGION VIII
HEARING CLERK

Ref: 8ENF-W-SD

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Ronald Abernathy, Owner
Atlantic City Mercantile
100 East Main
Atlantic City, Wyoming 82520

Re: Administrative Order issued to Ronald Abernathy regarding Atlantic City Mercantile Public Water System, PWS ID #WY5600432, Docket No. **SDWA-08-2019-0047**

Dear Mr. Abernathy:

Enclosed is an Administrative Order (Order) issued by the United States Environmental Protection Agency under the authority of section 1414(g) of the Safe Drinking Water Act, 42 U.S.C. § 300g-3(g). Among other things, the Order alleges that you, as owner and operator of the Atlantic City Mercantile Public Water System (System), have violated the National Primary Drinking Water Regulation (Drinking Water Regulation) at 40 C.F.R. part 141. EPA is issuing this Order because our previous compliance assurance efforts have not been effective in returning the System to compliance with the Safe Drinking Water Act.

The Order is effective upon the date received. Please review the Order and within 10 business days provide the EPA with any pertinent information you believe the EPA may not have (e.g., any monitoring that may have been done but not submitted, any updates to the number of service connections and/or individuals served). If the EPA does not hear from you, the EPA will assume this information is correct.

If you comply with the Order, the EPA may close the Order without further action. Failure to comply with the Order may lead to civil administrative penalties and/or a federal court injunction ordering compliance.

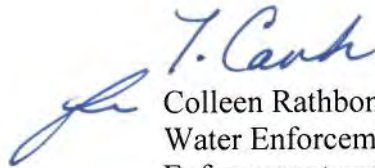
The Small Business Regulatory Enforcement and Fairness Act (SBREFA) may apply to this situation. Enclosed is a small business information sheet, outlining compliance assistance resources available to small businesses and small governments, in case these are relevant. SBREFA does not eliminate the responsibility to comply with the Order or the Drinking Water Regulation. Also enclosed are several templates and fact sheets to assist you in addressing the outstanding violations.

If you have any questions or to request an informal conference with the EPA, please contact Steven Latino via email at latino.steven@epa.gov, or by phone at (800) 227-8917, extension 6440, or (303) 312-6440. Any questions from your attorney should be directed to Matthew Castelli, Assistant Regional

Counsel, via email at castelli.matthew@epa.gov or by phone at (800) 227-8917, extension 6491, or (303) 312-6491.

We urge your prompt attention to this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "C. Rathbone", with a stylized flourish to the left.

Colleen Rathbone, Chief
Water Enforcement Branch
Enforcement and Compliance Assurance Division

Enclosures

cc: WY DEQ/DOH (via email)
Fremont County Commissioners (travis.becker@fremontcountywy.gov)
Melissa Haniewicz, EPA Regional Hearing Clerk

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

2019 SEP 27 AM 10:40

IN THE MATTER OF:

Ronald Abernathy,
Atlantic City Mercantile
PWS ID #WY5600432

Respondent.

)
) Docket No. **SDWA-08-2019-0047**
)
) **ADMINISTRATIVE ORDER**

FILED
EPA REGION VIII
HEARING CLERK

1. This Order is issued under the authority vested in the Administrator of the United States Environmental Protection Agency (EPA) by section 1414(g) of the Safe Drinking Water Act (Act), 42 U.S.C. § 300g-3(g), as properly delegated to the undersigned official.
2. Ronald Abernathy (Respondent) is an individual who owns and operates the Atlantic City Mercantile Public Water System (System), which provides piped water to the public in Fremont County, Wyoming for human consumption.
3. The System is supplied by a groundwater source under the direct influence of surface water, accessed via one well. The water is treated by two cartridge filters and UV disinfection. Sodium hypochlorite is added as a final disinfection step. An 80-gallon retention vessel is in-line following chlorination in order to provide contact time. Service lines distribute the treated water to the saloon, restaurant, and four cabins. The EPA sent Respondent a letter with the determination that the System's source water is groundwater under direct influence of surface water on June 26, 2002.
4. The System has approximately five service connections and regularly serves an average of approximately 52 individuals daily at least 60 days out of the year. Therefore, the System is a "public water system" as defined in section 1401(4) of the Act, 42 U.S.C. § 300f(4), and 40 C.F.R. § 141.2. The System is also a "transient, non-community water system" as defined in 40 C.F.R. § 141.2.
5. Respondent is subject to the Act and 40 C.F.R. part 141 (Drinking Water Regulation). The Drinking Water Regulation is an "applicable requirement" as defined in section 1414(i) of the Act, 42 U.S.C. § 300g-3(i).
6. The Drinking Water Regulation includes monitoring requirements. The EPA has sent Respondent annual notifications of the specific monitoring requirements that apply to the System.

VIOLATIONS

7. Respondent is required to complete corrective action of significant deficiencies in accordance with an EPA-approved corrective action schedule. 40 C.F.R. § 141.723(d). Respondent received a letter from the EPA on December 11, 2017, which detailed significant deficiencies, and the EPA approved a schedule for the System to complete the corrective actions by June 12, 2018. Respondent failed to complete all corrective actions by June 12, 2018, and therefore violated this requirement.
8. Respondent is required to develop a written total coliform sample siting plan that identifies sampling sites and a sample collection schedule that are representative of water throughout the

distribution system by March 31, 2016, and submit it to the EPA for review. 40 C.F.R. § 141.853(a)(1). Respondent failed to submit a sample siting plan to the EPA and therefore violated this requirement.

9. Respondent is required to report total coliform analytical results to the EPA no later than (1) the first 10 days following the month in which the result is received, or (2) the first 10 days following the end of the required monitored period, whichever is earlier. 40 C.F.R. § 141.31(a). Respondent failed to report monitoring results for total coliform in January 2018 to the EPA within this time period and, therefore, violated this requirement.

10. Respondent is required to notify the public of certain violations of the Drinking Water Regulation and, within 10 days after completing public notice, provide a copy of the public notice to the EPA. 40 C.F.R. §§ 141.201-141.211. Respondent failed to notify the public of the violation cited in paragraph 7, above or failed to submit a copy to the EPA, and, therefore, violated this requirement.

11. Respondent is required to report any failure to comply with any Drinking Water Regulation to the EPA within 48 hours (except where the Drinking Water Regulation specifies a different time period). 40 C.F.R. § 141.31(h). Respondent failed to report the violations cited in paragraphs eight and nine, above, to the EPA and therefore violated this requirement.

ORDER

Respondent is ordered to perform the following actions upon Respondent's receipt of this Order (unless a different deadline is specified below):

12. Within 120 days of receipt of this Order, Respondent shall complete corrective action of the following significant deficiencies and notify the EPA within 30 days after their completion. Respondent shall provide sufficient evidence to the EPA, including photographs, of the corrective actions. Thereafter, Respondent shall complete corrective action of significant deficiencies as required by 40 C.F.R. § 141.723(d) and notify the EPA of their completion within 30 days.

- i. Turbidimeter must be calibrated quarterly using a primary standard: At the time of the survey, the turbidimeter was not being routinely calibrated and the calibration standards on site had expired in September 2008.
- ii. Inadequate filtration design or operation: The differential pressure across the final cartridge filter must be monitored and recorded daily, and the filter must be changed out before the manufacturer's recommended limits are reached. The current treatment system does not have pressure gauges to monitor the pressure drop across the final cartridge filter.
- iii. Inadequate filtration design or operation: The cartridge filter currently being used as the final filtration barrier does not have an absolute micron rating and had not been certified for *Cryptosporidium* removal. The system must begin using a different final filter cartridge that meets these requirements.
- iv. Inadequate Treatment Process Monitoring for Surface Water Treatment Plants: During the sanitary survey, a chlorine residual value of 0.57 mg/L was measured by the surveyor using a Hach digital colorimeter. The system operator reported a residual of 0.3 mg/L for a sample that was collected concurrently. This represents a variation in measurement of more than

- 50%, which is unacceptable. The system must begin using a digital colorimeter that utilizes an EPA approved analytical method in order to eliminate analytical error.
- v. Inadequate design or operation (CT): Based on calculations included in the sanitary survey report using conservative values for unknown variables, the required level of virus inactivation may not be achieved by the time the water reaches the first user. The system must ensure adequate inactivation by conducting weekly disinfection calculations using actual operating data for one year. If the system is unable to demonstrate the required 4 log inactivation of viruses by adjusting the flow rate or chlorine residual, it is possible that modifications to the system design will be necessary.
 - vi. The treatment plant is not being operated to prevent inadequately treated water from being sent to the distribution system: During the survey, the operator demonstrated a lack of operational understanding of turbidity monitoring and reporting requirements, chlorination /disinfection theory, how to determine whether adequate inactivation is achieved, measurement of system flow rates and chlorine dosages, and other technical knowledge needed to ensure adequate treatment of microbial contaminants. The system operator must be provided with sufficient training or a contract operator with an appropriate WY DEQ operator license must be employed.
 - vii. No Emergency Response Plan: A system specific emergency response plan must be provided.

13. Within 30 days of receipt of this Order, Respondent shall develop a written total coliform sample siting plan and submit it to the EPA for review. The plan must identify all buildings that are served water by the water system, sampling sites (both routine and repeat), and a sample collection schedule that is representative of water throughout the distribution system, as required by 40 C.F.R. § 141.853(a)(1). A template can be found at <https://www.epa.gov/region8-waterops/revised-total-coliform-rule-sample-siting-plan>.

14. Unless a different reporting requirement is specified by the Drinking Water Regulation or this Order, Respondent shall report monitoring results to the EPA within the first 10 days following either (1) the month in which the result is received or (2) the end of the required monitoring period as stipulated by the EPA, whichever is shortest. 40 C.F.R. § 141.31(a).

15. Within 30 days after receipt of this Order, Respondent shall notify the public of the violation cited in paragraph 7, above. Templates and instructions are available at: <https://www.epa.gov/region8-waterops/reporting-forms-drinking-water-systems-wyoming-and-tribal-lands-epa-region-8#pn>. Within 10 days after providing public notice, Respondent shall submit a copy of the notice and certification to the EPA. Thereafter, following any future violation of the Drinking Water Regulation, Respondent shall comply with any applicable public notice provisions of 40 C.F.R. part 141, subpart Q.

16. Respondent shall report any violation of the Drinking Water Regulation to the EPA within 48 hours of the violation occurring, as required by 40 C.F.R. § 141.31(b). However, if a different time period for reporting is specified in this Order or the Drinking Water Regulation, Respondent shall report within that different period.

17. Respondent is ordered to comply with all provisions of the Act and the Drinking Water Regulation, including but not limited to each requirement cited above.

18. If Respondent (a) leases or sells the System to another person or entity, or (b) contracts with or hires any other person or entity to operate the System, Respondent shall, within ten days, provide a copy of this Order to the lessee, purchaser, or contractor and notify the EPA in writing of the change. In either of these circumstances, Respondent shall remain obligated to comply with this Order.

19. Respondent shall send all reporting and notifications required by this Order to the EPA at:

Email: R8DWU@epa.gov, and latino.steven@epa.gov

GENERAL PROVISIONS

20. This Order shall be binding on Respondent, his assigns and heirs, and any person (e.g., employee, contractor, or other agent) acting in concert with Respondent.

21. This Order shall not constitute a waiver, suspension, or modification of any requirement of the Act or the Drinking Water Regulation. Issuance of this Order is not an election by the EPA to forgo any civil or criminal action.

22. Violation of any part of this Order, the Act, or the Drinking Water Regulation may subject Respondent to a civil penalty of up to \$57,317 (as adjusted for inflation) per day of violation, a court injunction ordering compliance, or both. 42 U.S.C. § 300g-3; 40 C.F.R. part 19; 84 Fed. Reg. at 2059 (February 6, 2019).

23. Respondent may seek federal judicial review of this Order pursuant to section 1448(a) of the Act, 42 U.S.C. § 300j-7(a).

Issued: September 27, 2019.



T. Cantu

Colleen Rathbone, Chief
Water Enforcement Branch
Enforcement and Compliance Assurance Division

U.S. EPA Small Business Resources Information Sheet

The United States Environmental Protection Agency provides an array of resources to help small businesses understand and comply with federal and state environmental laws. In addition to helping small businesses understand their environmental obligations and improve compliance, these resources will also help such businesses find cost-effective ways to comply through pollution prevention techniques and innovative technologies.

Office of Small and Disadvantaged Business Utilization (OSDBU)

www.epa.gov/aboutepa/about-office-small-and-disadvantaged-business-utilization-osdbu

EPA's OSDBU advocates and advances business, regulatory, and environmental compliance concerns of small and socio-economically disadvantaged businesses.

EPA's Asbestos Small Business Ombudsman (ASBO)

www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman or 1-800-368-5888

The EPA ASBO serves as a conduit for small businesses to access EPA and facilitates communications between the small business community and the Agency.

Small Business Environmental Assistance Program

<https://nationalsbeap.org>

This program provides a "one-stop shop" for small businesses and assistance providers seeking information on a wide range of environmental topics and state-specific environmental compliance assistance resources.

EPA's Compliance Assistance Homepage

www.epa.gov/compliance

This page is a gateway to industry and statute-specific environmental resources, from extensive web-based information to hotlines and compliance assistance specialists.

Compliance Assistance Centers

www.complianceassistance.net

EPA sponsored Compliance Assistance Centers provide information targeted to industries with many small businesses. They were developed in partnership with industry, universities and other federal and state agencies.

Agriculture

www.epa.gov/agriculture

Automotive Recycling

www.ecarcenter.org

Automotive Service and Repair

www.ecar-greenlink.org or 1-888-GRN-LINK

Chemical Manufacturing

www.chemalliance.org

Construction

www.cicacenter.org

Education

www.campuserc.org

Food Processing

www.fpeac.org

Healthcare

www.hercenter.org

Local Government

www.lgean.org

Surface Finishing

<http://www.sterc.org>

Paints and Coatings

www.paintcenter.org

Printing

www.pneac.org

Ports

www.portcompliance.org

Transportation

www.tercenter.org

U.S. Border Compliance and Import/Export Issues

www.bordercenter.org

EPA Hotlines and Clearinghouses

www.epa.gov/home/epa-hotlines

EPA sponsors many free hotlines and clearinghouses that provide convenient assistance regarding environmental requirements. Examples include:

Clean Air Technology Center (CATC) Info-line

www.epa.gov/catc or 1-919-541-0800

Superfund, TRI, EPCRA, RMP, and Oil Information Center

1-800-424-9346

EPA Imported Vehicles and Engines Public Helpline

www.epa.gov/otaq/imports or 1-734-214-4100

National Pesticide Information Center

www.npic.orst.edu or 1-800-858-7378

National Response Center Hotline to report oil and hazardous substance spills - <http://nrc.uscg.mil> or 1-800-424-8802

Pollution Prevention Information Clearinghouse (PPIC) -

www.epa.gov/p2/pollution-prevention-resources#ppic or 1-202-566-0799

Safe Drinking Water Hotline -

www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline or 1-800-426-4791

Toxic Substances Control Act (TSCA) Hotline

tsc hotline@epa.gov or 1-202-554-1404

Small Entity Compliance Guides

<https://www.epa.gov/reg-flex/small-entity-compliance-guides>

EPA publishes a Small Entity Compliance Guide (SECG) for every rule for which the Agency has prepared a final regulatory flexibility analysis, in accordance with Section 604 of the Regulatory Flexibility Act (RFA).

Regional Small Business Liaisons

www.epa.gov/resources-small-businesses/epa-regional-office-small-business-liaisons

The U.S. Environmental Protection Agency (EPA) Regional Small Business Liaison (RSBL) is the primary regional contact and often the expert on small business assistance, advocacy, and outreach. The RSBL is the regional voice for the EPA Asbestos and Small Business Ombudsman (ASBO).

State Resource Locators

www.envcap.org/statetools

The Locators provide state-specific contacts, regulations and resources covering the major environmental laws.

State Small Business Environmental Assistance Programs (SBEAPs)

<https://nationalsbeap.org/states/list>

State SBEAPs help small businesses and assistance providers understand environmental requirements and sustainable business practices through workshops, trainings and site visits.

EPA's Tribal Portal

www.epa.gov/tribalportal

The Portal helps users locate tribal-related information within EPA and other federal agencies.

EPA Compliance Incentives

EPA provides incentives for environmental compliance. By participating in compliance assistance programs or voluntarily disclosing and promptly correcting violations before an enforcement action has been initiated, businesses may be eligible for penalty waivers or reductions. EPA has two such policies that may apply to small businesses:

EPA's Small Business Compliance Policy

www.epa.gov/enforcement/small-businesses-and-enforcement

EPA's Audit Policy

www.epa.gov/compliance/epas-audit-policy

Commenting on Federal Enforcement Actions and Compliance Activities

The Small Business Regulatory Enforcement Fairness Act (SBREFA) established a SBREFA Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. If you believe that you fall within the Small Business Administration's definition of a small business (based on your North American Industry Classification System designation, number of employees or annual receipts, as defined at 13 C.F.R. 121.201; in most cases, this means a business with 500 or fewer employees), and wish to comment on federal enforcement and compliance activities, call the SBREFA Ombudsman's toll-free number at 1-888-REG-FAIR (1-888-734-3247).

Every small business that is the subject of an enforcement or compliance action is entitled to comment on the Agency's actions without fear of retaliation. EPA employees are prohibited from using enforcement or any other means of retaliation against any member of the regulated community in response to comments made under SBREFA.

Your Duty to Comply

If you receive compliance assistance or submit a comment to the SBREFA Ombudsman or Regional Fairness Boards, you still have the duty to comply with the law, including providing timely responses to EPA information requests, administrative or civil complaints, other enforcement actions or communications. The assistance information and comment processes do not give you any new rights or defenses in any enforcement action. These processes also do not affect EPA's obligation to protect public health or the environment under any of the environmental statutes it enforces, including the right to take emergency remedial or emergency response actions when appropriate. Those decisions will be based on the facts in each situation. The SBREFA Ombudsman and Fairness Boards do not participate in resolving EPA's enforcement actions. Also, remember that to preserve your rights, you need to comply with all rules governing the enforcement process.

EPA is disseminating this information to you without making a determination that your business or organization is a small business as defined by Section 222 of the Small Business Regulatory Enforcement Fairness Act or related provisions.

LT2ESWTR Failure to Take Corrective Action Within Required Time Frame
Public Notice

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Atlantic City Mercantile (PWS Name) Failed to Correct a Significant Deficiency Within Required Time Frame.

Our water system recently violated a drinking water requirement. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did (are doing) to correct this situation.

During a routine sanitary survey conducted on November 30, 2017 by the Environmental Protection Agency Region 8, the following significant deficiencies were identified:

Problems associated with the treatment system design and operation, as well as issues with ongoing treatment monitoring were identified.

According to the EPA's Long Term 2 Enhanced Surface Water Treatment Rule, we were required to take action to correct this deficiency. However, we failed to take this action according to the schedule we submitted to the EPA.

What should I do?

- There is nothing you need to do. You do not need to boil your water or take other corrective actions.

What does this mean?

This is not an emergency. If it had been, you would have been notified within 24 hours.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms, however, are not caused only by organisms in drinking water, but also by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What is being done?

(Describe corrective action) _____

We anticipate resolving the problem within (estimated time frame) _____

For more information, please contact (name of system contact) _____ at (phone number) _____
or (mailing address) _____

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by (system name) Atlantic City Mercantile.

Public Water System ID#: WY5600432.

Date distributed: _____

Instructions for LT2ESWTR Failure to Take Corrective Action Within Required Time

Template on Reverse

A system's failure to be in compliance with an EPA approved corrective action plan and schedule for a significant deficiency under the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) is a treatment technique violation and requires Tier 2 notification. You must provide public notice to persons served as soon as practical but within 30 days after you learn of the violation [40 CFR 141.203(b)]. You must issue a repeat notice every three months for as long as the violation persists. Your primacy agency may have more stringent requirements for treatment technique violations. Check with your agency to make sure you meet all requirements.

Community systems must use one of the following methods [40 CFR 141.203(c)]:

- Hand or direct delivery
- Mail, as a separate notice or included with the bill

Noncommunity systems must use one of the following methods [40 CFR 141.203(c)]:

- Posting in conspicuous locations
- Hand delivery
- Mail

In addition both community and noncommunity systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method [40 CFR 141.203(c)]. Such methods could include newspapers, e-mail, or delivery to community organizations. If you mail, post, or hand deliver, print your notice on your system's letterhead if available.

The notice on the reverse is appropriate for mailing, posting, or hand delivery. If you modify this notice, you must still include all required PN elements from 40 CFR 141.205(a) and leave the mandatory language unchanged (see below).

Mandatory Language

Mandatory language on health effects (from Appendix B to Subpart Q) must be included as written (with blanks filled in) and is presented in this notice in *italics* and with an asterisk on either end.

You must also include standard language to encourage the distribution of the public notice to all persons served, where applicable [40 CFR 141.205(d)]. This language is also presented in this notice in *italics* and with an asterisk on either end.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with LT2ESWTR treatment technique violations. Depending on the corrective action you are taking, you can use one or more of the following statements, if appropriate, or develop your own text:

- Although we did not meet our deadline, we are now in consultation with the state to develop a corrective action plan.
- The significant deficiency has been identified and addressed.
- We have implemented a short term plan to address the immediate issue while we pursue the long-term solution.

Repeat Notices

For repeat notices, you should state how long the violation has been ongoing and remind consumers of when you sent out any previous notices. If you are making progress with correcting the significant deficiency or addressing the fecal indicator-positive source sample, describe it. Alternatively, if funding or other issues are delaying corrective action, let consumers know.

After Issuing the Notice

Within ten days after issuing the notice, you must send to EPA a copy of each type of notice, along with certification that you have met all the public notice requirements.

Certification of Public Notification

I _____ certify that the attached public notification was issued
(PWS Operator/Responsible Party)

from _____ to _____
(Date) (Date)

The attached notice was issued by _____
(Method of delivery)

Signature _____ Date _____

EPA Region 8 –Significant Deficiency Correction Notice

Public Water System Name _____

Public Water System ID#

Public Water System Source Type: (circle one) Groundwater Surface Water Mixed

Instructions:

Please use this form to report the correction of sanitary survey significant deficiencies identified during your last sanitary survey. List the individual deficiencies and the date of correction below. Pictures of corrections or a brief description of each correction is required. Include the name of the facility (e.g., tank name, treatment plant, etc.) if applicable, and the correction date on any documentation you provide.

If a WY DEQ permit was required to make any of the significant deficiency corrections, please include the permit number on the specific correction line below.

[illegible]

I certify that the information submitted with this report is true and accurate.

Print Name _____

Signature

Date _____

Corrections described on attached Significant Deficiency Letter
Supportive Documentation Attached

Please submit this form to: Email: R8DWU@epa.gov
Fax: 1-877-876-9101

EPA Region 8 Revised Total Coliform Rule

Sample Siting Plan Instructions

Why do I need to develop a Revised Total Coliform Rule (RTCR) Sample Siting Plan?

The purpose of this plan is to specify where in the distribution system Routine and Repeat bacteriological samples will be collected to ensure they are representative of the water quality in your system. The original Sample Siting Plan must be kept on-site for use by sampling personnel. Beginning April 1, 2016, under the RTCR, every water system will be required to collect bacteriological samples monthly.

The RTCR requires every public water system to develop an RTCR Sample Siting Plan prior to April 1, 2016. These plans are subject to review and revision by EPA. You must include the following elements in your plan:

1. A list of sampling locations: (See blank sample plan chart and example Addendum C.)
 - You will need to indicate the sites for Routine and Repeat bacteriological monitoring in your distribution system; and
 - Any source water sampling sites if subject to the Ground Water Rule.
2. A map of the distribution system showing locations of your Routine and Repeat sample sites and your source water, as described in the Sample Siting Plan. You can use a diagram, distribution system map, aerial photo, etc. Clearly indicate if there are multiple distribution systems and if those distribution systems are connected to each other. Note: You cannot use the schematic that indicates your nitrate sampling point. (See sample plan map examples Addendum B.)

Where to submit your plan:

Send a copy of your RTCR sample siting plan via mail, e-mail, or fax to:

EPA Region 8
Drinking Water Program 8WD-SDA
1595 Wynkoop Street
Denver, CO 80202
Attn: RTCR Rule Manager
Fax: (877) 876-9101
Email: R8DWU@epa.gov

How to choose a laboratory:

Not all laboratories have been approved and certified to analyze for all the required drinking water contaminants. You must send your samples to a laboratory that is certified for the specific samples that you are submitting. For a list of certified labs, visit the EPA Region 8 website: <https://www.epa.gov/region8-waterops/general-sampling-information> and click the certified lab link.

General Requirements

Process for selecting sample sites and rotation:

Review the layout of your distribution system and choose RTCR sample sites that will represent each area of the distribution system if sampled on a monthly rotating basis throughout an entire year or open season. Be sure to take into account non-permanent sources (seasonal or interim). These sources need to be represented within your siting plan. If your water system has multiple (completely separated) distribution systems, you must select sample sites within each separate distribution system for each month you are serving water to the public. If you serve more than 4,901 people (collect 6 or more samples per month) you cannot collect all the samples on the same day. They must be collected at regular intervals throughout the month [40 CFR 141.853(a)(2)].

The Sample Siting Plan may need to be updated periodically to account for system changes (such as population changes, new housing or commercial development, new sources, change in operating season, change in treatment, etc). The plan should be reviewed annually and must be available during your sanitary survey to incorporate any changes. Submit any revisions to the EPA regional office as soon as they occur.

Routine Monitoring Requirement

Unless otherwise specified in your monitoring and reporting requirements, most systems will be placed on the monitoring schedule seen in **Addendum A** of this document.

Refer to the charts in Addendum B as examples for formatting the Sample Siting Plan. The following must be included in the plan (a blank chart is in Addendum C):

- Routine sampling location(s);
- Repeat sampling locations (only used if your Routine sample is TC+);
- Ground Water Rule (GWR) source sample location(s) for systems using groundwater sources. (Triggered GWR source sample(s) are only required if your Routine sample result is TC+. You must sample every groundwater source in use at the time of the TC+ Routine sample.)

Repeat Monitoring

After April 1, 2016, under the RTCR, systems must collect no fewer than **three** Repeat samples for each TC+ Routine sample. This requirement will apply to all systems.

- All Repeat samples need to be taken within 24 hours of notification of a TC+ Routine sample. If you cannot make this timeframe, you must contact EPA Region 8 within 24 hours to request an extension;
- One Repeat sample is required to be taken from the same tap as the original TC+ sample;
- One Repeat sample must be taken at a tap within five service connections upstream of the original TC+ Routine sample, and one must be taken at a tap within five service connections downstream of the original TC+ Routine sample.

Take note of your Routine sample locations. Can you take proper Repeat samples based on your current choices of Routine sampling sites? If not, you will need to reevaluate your Routine sites and choose another location. If you do not have a distribution system (i.e., hand pump),

upstream and downstream locations may not exist. In this case, you must collect multiple samples at the original location to count as Repeat samples.

Follow this same format of choosing representative Routine and Repeat sample locations (as shown in Addendum B) but expand as necessary if your system is required to take more than one sample per month (see Example #2). Seasonal systems only have to sample during their operating season (see Example #2).

Submitting Samples to the Laboratory:

- In order for EPA to confirm the locations of your samples and the types of samples (Routine, Repeat or Special), EPA encourages you to submit additional details about the sampling locations of your RTCR samples to the lab. Along with the lab's chain of custody form, you can use the "Source Water Sampling-Triggered Source Monitoring Sample Collection and Reporting Form" found on the EPA Region 8 website at: <https://www.epa.gov/region8-waterops/revised-total-coliform-rule-lab-sampling-form>

E. coli Testing and E. coli MCL Compliance Determination

Any TC+ sample result must automatically be analyzed for *E. coli* (EC) by your lab. Any EC+ Repeat sample or any TC+ Repeat sample following an EC+ Routine sample constitutes an *E. coli* MCL violation. All *E. coli* MCL violations are situations that require you to contact EPA Region 8 immediately and distribute public notice including a boil water order to your customers.

Groundwater source sampling:

Triggered Source Water Monitoring Requirement

Your system will need to conduct triggered source water sampling if you use a groundwater source and have a TC+ Routine sample result. Review your Monitoring and Reporting Requirements sheet to verify if source water monitoring is necessary under these conditions. If you need to conduct this monitoring, keep the following in mind:

- Within 24-hours of notification that a *Routine* RTCR distribution system sample is TC+, you must collect a raw water sample from each groundwater source that was in use at that time for every Routine TC+ sample (e.g., if you have three Routine TC+ samples, you will need to collect three source samples from *each* groundwater source). This sample must be analyzed for *E. coli*.
- You are encouraged to report this data to the lab using the "Source Water Sampling-Triggered Source Monitoring Sample Collection and Reporting Form" found on our website at:
<https://www.epa.gov/region8-waterops/wyoming-and-tribal-triggered-groundwater-source-sampling-form>
- If you need further assistance on the Ground Water Rule and the required steps after a Routine TC+ sample, please consult:
<https://www.epa.gov/region8-waterops/epa-region-8-drinking-water-unit-tech-tips-follow-unsafe-total-coliform-positive>

If the system received EPA Region 8 approval to use a sampling site that represents more than one groundwater source, please indicate that on the sample collection and monitoring form mentioned above that is submitted with your samples.

For instructions on how to properly label your RTCR and GWR samples please see the “RTCR and GWR Sample Labeling Instructions” form on the Region 8 website: <https://www.epa.gov/region8-waterops/rtc-and-gwr-sample-labeling-instructions>

Disinfectant (chlorine) residual monitoring:

If you disinfect, your system may need to conduct residual disinfectant monitoring in the distribution system for the Disinfection By-Product Rule and/or the Surface Water Treatment Rule. Review your Monitoring and Reporting Requirements sheet to verify if disinfectant monitoring is necessary. If you need to conduct this monitoring, keep the following in mind:

- The residual disinfectant must be measured at the same time and the same location as each total coliform bacteria sample.
- These measurements must be conducted in the field by a certified operator (or under the direction of the certified operator).
- Residual disinfectant measurements must be written on each total coliform sample slip when it is submitted to the laboratory.
- Ask your laboratory to forward this information to EPA along with the sample results.

Depending on the disinfectant used in the distribution system, ensure you are measuring the proper disinfectant residual:

- If chlorine is used, the disinfectant residual must be measured as free, total, or combined chlorine
- If chloramines are used, the disinfectant residual must be measured as total chlorine

Addendum A: **Required number of monthly Routine samples under the Revised Total Coliform Rule**

Sampling requirements for all water systems*:

Population served/day	Routine Samples/Month	Population served/day	Routine Samples/Month
25-1,000	1	8501-12900	10
1001-2500	2	12901-17200	15
2501-3300	3	17201-21500	20
3301-4100	4	21501-25000	25
4101-4900	5	25001-33000	30
4901-5800	6	33001-41000	40
5801-6700	7	41001-50000	50
6701-7600	8	50001-59000	60
7601-8500	9	59001-70000	70

* The number of required samples may be dependent on individual wells and distribution systems under your PWS ID. For instance, if you serve 500 people per day but you have two wells that each serve completely different distribution systems you will be required to monitoring each distribution system each month.

Addendum B: Examples of RTCR Sample Siting Plans

Example #1: Chart - Single Source/Single Distribution (Population ≤ 1000; 1 sample/month)

PWS Name: EPA Water System		PWSID: WY5600xxx	__1__ (#) Sample(s)/month
Month	Routine Sample Location	Repeat Sample Location	GWR sample location (any sources running at the time of a routine TC+)
January	Unit #11 (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Unit #14 (DIST)	
	(within 5 taps downstream)	3) Unit #8 (DIST)	
February	Unit # 22 (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Unit # 26 (DIST)	
	(within 5 taps downstream)	3) Unit # 17 (DIST)	
March	Unit # 4 (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Unit # 9 (DIST)	
	(within 5 taps downstream)	3) Unit # 1 (DIST)	
April	Unit #11 (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Unit #14 (DIST)	
	(within 5 taps downstream)	3) Unit #8 (DIST)	
May	Unit # 22 (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Unit # 26 (DIST)	
	(within 5 taps downstream)	3) Unit # 17 (DIST)	
June	Unit # 4 (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Unit # 9 (DIST)	
	(within 5 taps downstream)	3) Unit # 1 (DIST)	

Example #1: Map for a Single Source/Single Distribution PWS (Population ≤ 1000 ; 1 sample/month)



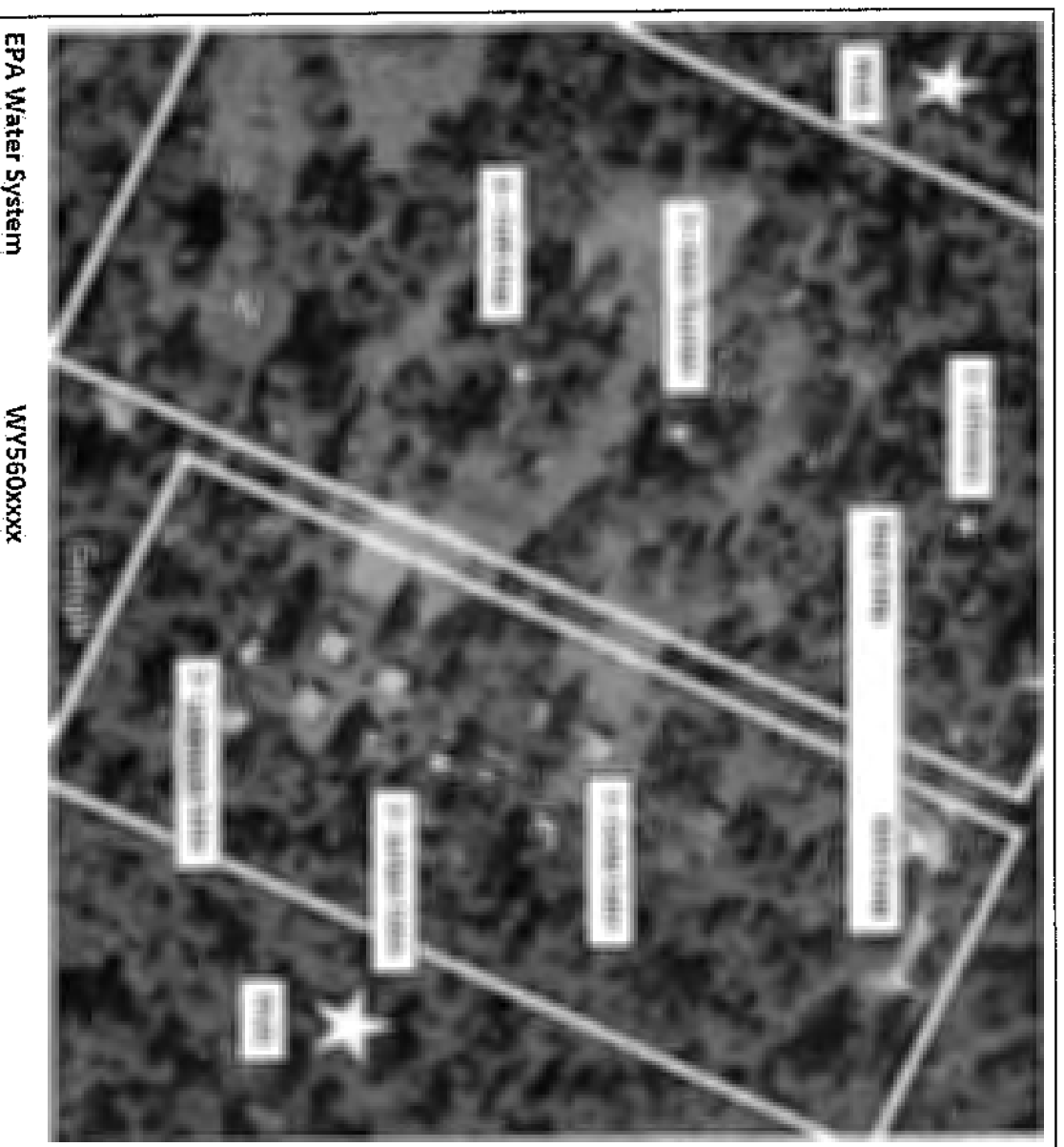
Example 2: Chart - Multiple Sources/Multiple Distribution (Population ≤ 1000 ; 2 samples/month)

PWS Name: EPA Water System		PWSID: WY5600xxx	2_ (#) Sample(s)/month
Month	Routine Sample Location	Repeat Sample Location	GWR sample location (any sources running at the time of a routine TC+)
Girls Camp Distribution System			
January	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		
February	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		

March	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		
April	CLOSED - Seasonal Startup	1) (Same as routine location)	Will complete Seasonal Startup Checklist in April
	(within 5 taps upstream)		
	(within 5 taps downstream)		
May	Juniper Cabin (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Cedar Cabin (DIST)	
	(within 5 taps downstream)	3) Lodgepole Cabin (DIST)	
June	Lodgepole Cabin (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Cedar Cabin (DIST)	
	(within 5 taps downstream)	3) Juniper (DIST)	
July	Cedar Cabin (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Juniper Cabin (DIST)	
	(within 5 taps downstream)	3) Lodgepole Cabin (DIST)	
August	Juniper Cabin (DIST)	1) (Same as routine location)	GW -1 (WL01)
	(within 5 taps upstream)	2) Cedar Cabin (DIST)	
	(within 5 taps downstream)	3) Lodgepole Cabin (DIST)	
September	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		
October	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		
November	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		
December	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		
Boys Camp Distribution System			
January	CLOSED	1) (Same as routine location)	

	(within 5 taps upstream)		
	(within 5 taps downstream)		
February	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		
March	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		
April	CLOSED - Seasonal Startup	1) (Same as routine location)	Will complete Seasonal Startup Checklist in April
	(within 5 taps upstream)		
	(within 5 taps downstream)		
May	Main Fountain (DIST)	1) (Same as routine location)	GW - 2 (WL02)
	(within 5 taps upstream)	2) Infirmary (DIST)	
	(within 5 taps downstream)	3) Craft Shop (DIST)	
June	Craft Shop (DIST)	1) (Same as routine location)	GW - 2 (WL02)
	(within 5 taps upstream)	2) Main Fountain (DIST)	
	(within 5 taps downstream)	3) Infirmary (DIST)	
July	Infirmary (DIST)	1) (Same as routine location)	GW - 2 (WL02)
	(within 5 taps upstream)	2) Craft Shop (DIST)	
	(within 5 taps downstream)	3) Main Fountain (DIST)	
August	Main Fountain (DIST)	1) (Same as routine location)	GW - 2 (WL02)
	(within 5 taps upstream)	2) Infirmary (DIST)	
	(within 5 taps downstream)	3) Craft Shop (DIST)	
September	CLOSED	1) (Same as routine location)	
	(within 5 taps upstream)		
	(within 5 taps downstream)		

Example #2: Map for a system with Multiple Sources/Multiple Distributions PWS (Population ≤ 1000 ; 2 samples/month)



Addendum C: Example form. Expand the following table as necessary. Feel free to detach and use this example form:

	PWS NAME:	PWS ID #:	
(sample/mo=)	<u>Routine sample location</u>	<u>Repeat sample locations</u>	<u>GWR sample location (any sources in use at the time of a routine TC+)</u>
January	1)	1) (same as routine location)	
		2)	
		3)	
February	1)	1) (same as routine location)	
		2)	
		3)	
March	1)	1) (same as routine location)	
		2)	
		3)	
April	1)	1) (same as routine location)	
		2)	
		3)	
May	1)	1) (same as routine location)	
		2)	
		3)	
June	1)	1) (same as routine location)	
		2)	

		3)	
July	1)	1) (same as routine location)	
		2)	
		3)	
August	1)	1) (same as routine location)	
		2)	
		3)	
September	1)	1) (same as routine location)	
		2)	
		3)	
October	1)	1) (same as routine location)	
		2)	
		3)	
November	1)	1) (same as routine location)	
		2)	
		3)	
December	1)	1) (same as routine location)	
		2)	
		3)	



EPA Region 8 Drinking Water Unit - Tips for WY and Tribal Systems How to Stay in Compliance with Monitoring Requirements

Check your Monitoring Schedule

- Monitoring and Reporting Requirements (Schedules) are emailed to you in February of each year. This schedule notes all contaminants your water system must monitor for, along with the required number of samples, sampling point location(s), frequency and timeframe.
- For more detailed info on your Monitoring Schedule, please refer to *"What You Need to Do Next with Monitoring Requirements"* which can be found at: <https://www.epa.gov/region8-waterops/quick-guide-drinking-water-monitoring-requirements-wyoming-and-tribal-lands-epa>
- Suggestions: Post your Monitoring Schedule on your bulletin board. Note when you must sample on your desk or wall calendar. Use a scheduler on your computer (like Outlook) to identify sampling dates and set reminders.
- If you misplace your Monitoring Schedule, a copy can be found on Drinking Water Watch (DWW) or call EPA for a replacement copy.
- **Work with your Certified Lab** - Once you receive your Monitoring Schedule, share it with your lab(s).
- Schedule what bottles you will need for the sampling required for the year and ask for extra Total Coliform Rule (TCR) sample bottles just in case you have a total coliform (TC) positive and need to take repeats or source samples for the Ground Water Rule. It saves time!
- Check to see if your lab will copy EPA when they email you your results. This will save you a step! But ultimately, you are responsible for making sure that EPA receives your sample results.
- **Check your email for messages from EPA.** Every month EPA sends out a reminder to the administrative contact (and others who request to be opted-in) of what chemical (including radiological) samples remain to be collected for the monitoring period.
- Use DWW to print out your chemical sample collection form for the pending requirements. It will contain information to help your lab understand what to test your samples for.

When to Sample and When to Report Results to EPA - ALWAYS sample as early in the month or monitoring period as you can – on a Monday if possible! This way, if a sample is lost or exceeds a holding time, you will still have time to collect another sample before the weekend or end of the month. This is a super easy way to avoid a violation.

- If the lab is not copying EPA on your sample results, send them in to EPA as soon as you receive them. This way you can avoid getting a violation for Failure to Monitor. **Tip:** TCR results are due by the 10th of the month following the month you sampled. For all other samples, send results to EPA as soon as you receive them from the lab.
- Samples results can be emailed to: r8dwu@epa.gov or faxed to: 1-877-876-9101

Where to Sample – Take your samples according to your Monitoring Schedule during the correct time period and at the correct location(s). Some samples must be collected at the entry point while others must be collected in the distribution system. Use your approved sampling/monitoring plans for distribution system samples!

Surface Water Treatment Rule – For compliance guidance, please refer to the EPA Region 8 SWTR Fact Sheet located at: <https://www.epa.gov/region8-waterops/swtr-fact-sheet-epa-region-8-may-2018>

Total Coliform Rule

- Anytime you have a *E.coli* (EC+) sample you must call EPA IMMEDIATELY at 1-800-227-8917 and ask to speak with the RTRC Manager. Then take repeat TCR samples, as well as Ground Water Rule source sample(s) (if applicable).
- If you have a TC Positive but an E. Coli Negative, follow the 5 steps outlined in "Follow-up to an Unsafe/Total Coliform Positive Sample Tech Tip", which can be found at: <https://www.epa.gov/region8-waterops/addressing-total-coliform-positive-or-ecoli-positive-sample-results-epa-region-8>
- Avoid sampling at new faucets or newly repaired faucets, leaky faucets, outdoor faucets or those faucets connected to softeners, hot water heaters, or pressure tanks; setting down the bottle lid or exposing the inside of the lid or bottle to anything other than the sample water (do not rinse or remove powder); and rushing your sample collection. The TCR samples must be taken at specified locations throughout the distribution system as designated by your sampling plans.

Disinfection Byproducts Rule (DBPR)

- Sample according to your approved monitoring plan – you can also find what month(s) you are required to monitor and locations on your Monitoring Schedule.
- Submit your sample results and your LRAA forms (applicable to quarterly sampling) as a package as soon as you receive the results from your lab.
- Complete and submit the TTHM HAA5 OEL Calculator, which can be found on Drinking Water Online at: <https://www.epa.gov/region8-waterops/reporting-forms-drinking-water-systems-wyoming-and-tribal-lands-epa-region-8#dbpr2> , together with your compliance reports if the TTHM or HAA5 MCL is exceeded during any quarter.

Nitrates – This is an acute contaminant. If your nitrate sample result is over 10 mg/L you must take a confirmation sample within 24 hours and call EPA IMMEDIATELY at 303-312-6791.

Lead and Copper Rule

- Be sure to check your Monitoring Schedule, as lead and copper samples must be collected during certain months. Also, be sure to follow your lead and copper sample siting plan when collecting samples. You must collect samples from approved locations. If you don't have to sample this year, your Monitoring Schedule will tell you that.
- Always collect a first-draw sample from a tap where the water has been standing in the pipes for at least 6 hours. Avoid sample locations that have been vacant for weeks or months. The goal is to sample at homes and taps in these homes that are routinely used. Always follow your monitoring plan.

Other Rules - Check your sample results as soon as you receive them from the lab. If you see any sample has exceeded an MCL or *E. coli* positive, contact EPA immediately.

Drinking Water Online - This is where you can find the link to DWW and general info, including: emergencies, what to do if you lose pressure in your system, sanitary survey info, certified lab info, sampling and treatment techniques, reporting forms and instructions, rules and guidance and much more. Be sure to check this very helpful website: <https://www.epa.gov/region8-waterops>

Drinking Water Watch - This online system allows you view data we maintain about your water system(s). The information includes the following:

- size and type of population served
- contact information
- water system facilities, such as wells, intakes, treatment plant, storage tanks, and distribution
- treatment used
- monitoring schedules
- sampling results reported to EPA
- violations
- plus, even more...

The Public Access Version of DWW (DWWPUB) allows anyone who is interested to view much of the available information for each regulated Public Water System (PWS) in Wyoming and within EPA R8 Tribal Lands, without the need to register or remember passwords. The Public Access Version of DWW can be found at: <https://sdwiser8.epa.gov/Region8DWWPUB/default.jsp>

Emergencies (After Hours) - If you need to report an emergency (flooding or loss of your water source, contamination in your drinking water, loss of pressure in the distribution system, or anything else that could require immediate public notice), after hours call the Region 8 Emergency Hotline at 303-293-1788. Inform the operator that you are a drinking water system in EPA Region 8.