Consumer Confidence Report Rule

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MAP Virtual Conference

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The views expressed in this presentation are those of the author and do not necessarily reflect the views or policies of the U.S. Environmental Protection Agency.

Topics Covered in this Presentation

Part 1 – Rule requirements

a. Purpose, Applicability & Important Deadlines
b. Required Content
c. New Requirements for CCRs due in 2025

Part 2 – Report Development

a. Drinking Water Watch
b. CCR iWriter
c. Common Problems in this years' report

Part 3 - Report Delivery & Submission

Part 1 – Rule Requirements

What does the rule require you to do?

Purpose of the Rule

- Increased consumer knowledge
- Increased awareness of consumers to potential health risks
- An ability for consumers to make informed decisions to reduce potential health risks
- Increased dialogue between the utilities and consumers
- An opportunity to showcase your hard work

Applicability

- 40 CFR Part 141, Subpart O [141.151 – 141.155]
- Applies to all community water systems
  - Wholesalers
  - Consecutives
- Consecutive Systems
  - No other source: can provide a copy of the wholesalers' report to consumers.
  - Other water sources: the report must include wholesalers and the systems data

Important Deadlines

Deadline	Requirement
April 1	CWS that sells water to another CWS to deliver the information necessary for the buyer CWS to prepare their CCR of previous calendar year
July 1	Annual distribution of CCR to consumers and to EPA
October 1	Annual submission of proof of distribution to EPA or within 90 days after the distribution of CCR to consumers, whichever comes earlier

Content Requirements for the Report

Item	Description
1	Water System Information
2	Source(s) of Water
3	Definitions
4	Detected Contaminant Table/Water Quality Table
5	Information on detected contaminants Cryptosporidium, and Radon
6	Compliance with Other Drinking Water Regulations (Violations, Level 1 or 2 assessments, or Open Significant Deficiencies)
7	Variances and/or Exemptions
8	Required Additional Information

Item 1: Water System Information

- Water system name and PWS ID no. (WY56xxxxx)
- Name and telephone number of a contact person
- Information on public participation opportunities
- Information for non-English speaking populations, if appropriate
  - Rule of Thumb: If you serve >5-10% non-English speaking people, include additional language(s) or access to information for translation.

Item 2: Source(s) of Water

- Type of water
- Commonly-used name(s)
- General location of water source(s)
- Source water assessment information, if available:
  - Notice of availability of completed assessment
  - Information on how customers can obtain it
  - A brief summary of the system's susceptibility to potential sources of contamination

Item 3: Definitions

All reports must contain the following definitions

Item	Definition
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety
Contaminant	Any physical, chemical, biological, or radiological substance or matter in water.

Item 3: Definitions (contd.)

Reports must contain the following elements as applicable

Item	Definition
Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Item 3: Definitions (contd.)

Reports must contain the following elements as applicable

Item	Definition
Maximum residual disinfectant level (MRDL)	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum residual disinfectant level goal (MRDLG)	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Item 4: Detected Contaminants Table What to include?

- Reported values of detected regulated contaminant – highest & range
  - **Detected contaminant:** Regulated contaminant detected at or above its method detection limit (or reportable limit).
  - **Regulated contaminant:** Contaminants subject to an MCL, MRDL, AL, or TT.
  - **Unregulated contaminant:** Contaminants for which monitoring is required under Unregulated Contaminant Monitoring Regulation (UCMR) (40 CFR 141.40).
- Contaminant data for each service area
  - for each hydraulically independent distribution systems fed by different raw water sources

Item 4: Detected Contaminants Table What to include?

- Relevant MCL & MCLG or MRDL & MRDLG or AL
- Known source of detected contaminant
- Lead & Copper - 90% percentile value, **range of tap sampling results**
- Turbidity - highest monthly value, reasons for measuring turbidity, and the lowest monthly percentage of samples meeting the turbidity limits as applicable
- *E. coli* – Total number of *E. coli* positive samples
- Identify data indicating violation

Item 5: Other Monitoring

- Information on Cryptosporidium, Radon, and other contaminants
- A summary of the monitoring results, and
- An explanation of the significance of the result

Items 4 & 5: What do I report?

- Data from monitoring completed during the previous calendar year
- For contaminants monitored less than annually
  - Most recent data up to 5 years prior to the year the CCR covers
  - A brief statement explaining that the data presented is from the most recent monitoring done in compliance with the regulations

"The EPA allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or our system is not considered vulnerable to this type of contamination. Some of our data, though representative, are more than one year old."

Items 4 & 5: How to Report the Data?

- Present drinking water standards as numbers greater than or equal to 1.0 to enhance consumer understanding of their drinking water quality
- This is generally referred to as CCR units.

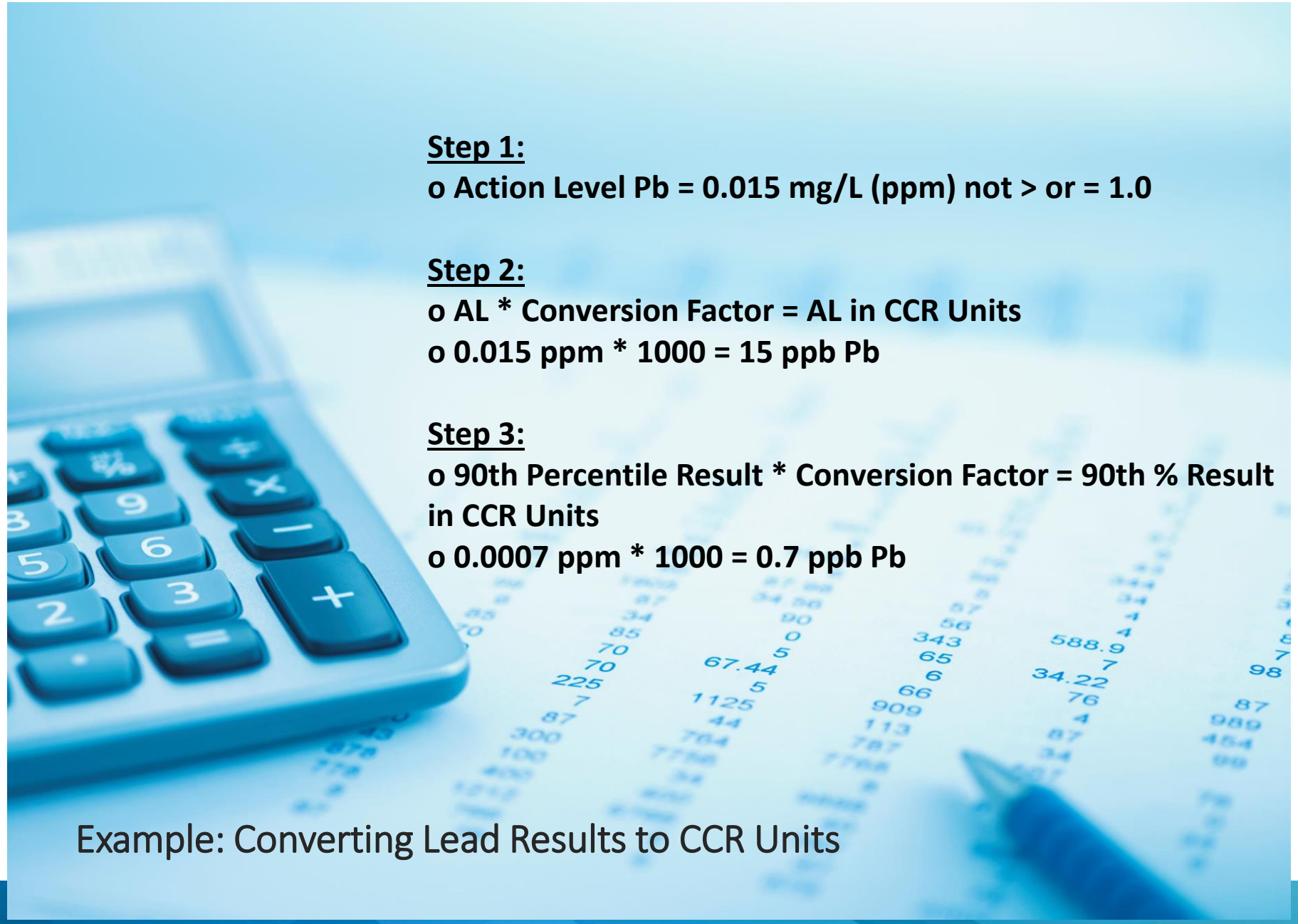
Common Reporting Units	What they are
Parts per Million (ppm)	Milligrams per liter (mg/L)
Parts per Billion (ppb)	Micrograms per liter (µg/L)

Items 4 & 5: Convert data to appropriate units

Step 1
Review Lab result and determine if standard (MCL, AL) is greater than or equal to 1.0

Step 2
Convert standard to CCR units by multiplying by a conversion factor

Step 3
Convert sample result to CCR units by multiplying by the same conversion factor



Step 1:

o Action Level Pb = 0.015 mg/L (ppm) not > or = 1.0

Step 2:

o AL * Conversion Factor = AL in CCR Units

o 0.015 ppm * 1000 = 15 ppb Pb

Step 3:

o 90th Percentile Result * Conversion Factor = 90th % Result in CCR Units

o 0.0007 ppm * 1000 = 0.7 ppb Pb

Example: Converting Lead Results to CCR Units

Where Can I Find More Information About CCR Units?

- Appendix A to Subpart O of the regulation (40 CFR 141)
- EPA Fact Sheet: "Converting Laboratory Units into Consumer Confidence Report Units" (EPA 816-F-15-001, July 2015)

Contaminant	MCL	To Convert, Multiply BY	MCL in CCR Units	MCLG in CCR Units	Major Sources	Health Effects
Arsenic (ppb)	0.010 ppm	1,000	10 ppb	0 ppb	Erosion of …	Some people …
Fluoride (ppm)	4 ppm	-	4 ppm	4 ppm	Erosion of …	Some people …

Item 6: Compliance with Other Drinking Water Regulations - Violations

- Include a clear indication of the violation in the detected contaminants table
- In a different area or a table, include:
  - the violation,
  - the length of the violation,
  - potential adverse health effects (must use the relevant language of Appendix A), and
  - action(s) taken to correct the problem

Item 6: Compliance with Other Drinking Water Regulations – Significant Deficiencies

- Include a Significant Deficiency (SD) if:
  - A ground water system receives a notice from EPA, and,
  - if the SD is not corrected by December 31st of the year covered by the CCR
- Items to report:
  - nature of SD,
  - date identified, and
  - information about the EPA-approved plan for correction - schedule, measures (interim and any completed), progress to date

Item 6: Compliance with Other Drinking Water Regulations – Level 1 or 2 Assessments

- Level 1 or 2 assessments not due to EC MCL violation
  - Standard Language
  - Number of corrective action(s) to be taken and completed
  - If all corrective actions not completed, then state that in the CCR
- Level 2 assessment due to EC MCL violation
  - Standard Language
  - Number of corrective action(s) to be taken and completed
  - If all corrective actions not completed, then state that in the CCR

Item 8 : Required Additional Information for All Reports

Explanation of Contaminants in Drinking Water

Both tap water and bottled water come from rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. The water can also pick up and transport substances resulting from the presence of animals or from human activity. These substances are also called contaminants.

To protect public health, the Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in tap water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Item 8 : Required Additional Information for All Reports

Explanation of Contaminants in Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by contacting the Environmental Protection Agency by calling the Safe Drinking Water Hotline (800-426-4791) or visiting the website *epa.gov/safewater.*

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791) or on EPA's website *epa.gov/safewater.*

Item 8 : Required Additional Information for All Reports

Explanation of Contaminants in Drinking Water

Contaminants are any physical, chemical, biological, or radiological substance or matter in water. Contaminants that may be present in source water include:

(A) ***Microbial contaminants,*** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) ***Inorganic contaminants,*** such as salts and metals, which can occur naturally in the soil or groundwater or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) ***Pesticides and herbicides,*** which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) ***Organic chemical contaminants,*** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

(E) ***Radioactive contaminants,*** which can occur naturally or be the result of oil and gas production and mining activities.

Item 8 : Required Additional Information for All Reports

Updated Language for Lead – Effective Reports submitted in 2025

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. [INSERT NAME OF SYSTEM] is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact [INSERT NAME OF SYSTEM and CONTACT INFORMATION]. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at *https://www.epa.gov/safewater/lead*.

Item 8 : Required Additional Information for Some Reports

Nitrate Health Effects Language - If detected above 5 g/L but below the MCL

Even though [NAME OF UTILITY] meets the EPA nitrate drinking water standard, also known as a Maximum Contaminant Level (MCL), if you are caring for an infant and using tap water to prepare formula, you may want to use alternate sources of water or ask for advice from your health care provider. Nitrate levels above 10 ppm pose a particularly high health concern for infants under 6 months of age and can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness. Symptoms of serious illness include shortness of breath and blueness of the skin, known as “blue baby syndrome.” Nitrate levels in drinking water can increase for short periods of time due to high levels of rainfall or agricultural activity, therefore we test for nitrate [INSERT APPLICABLE SAMPLING FREQUENCY]. The highest level for nitrate found during [YEAR] was [INSERT MAX NITRATE LEVEL per § 141.153(d)(4)(iv)] ppm.

Item 8 : Required Additional Information for Some Reports

Arsenic Health Effects Language - If detected above 0.005 mg/L and up to and including 0.010 mg/L

Arsenic is known to cause cancer in humans. Arsenic also may cause other health effects such as skin damage and circulatory problems. [NAME OF UTILITY] meets the EPA arsenic drinking water standard, also known as a Maximum Contaminant Level (MCL). However, you should know that EPA's MCL for arsenic balances the scientific community's understanding of arsenic-related health effects and the cost of removing arsenic from drinking water. The highest concentration of arsenic found in [YEAR] was [INSERT MAX ARSENIC LEVEL per § 141.153(d)(4)(iv)] ppb.

Optional information

- Explanation of the water treatment process
- Water conservation tips
- Any other information the system would like to tell consumers

New Requirements for 2025

- Range of tap sampling results for Lead and Copper.
- Updated health effects language for Lead
  - CCR iWriter has the updated language
- Lead Service Line Inventory
  - Information
  - Where is this information available publicly

Part 2 – Report Development

How to develop your report

Developing your CCR

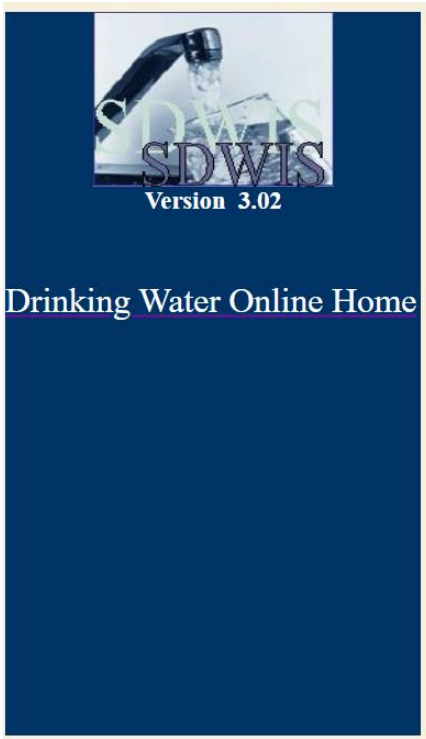
- Can use your own customized system
- Can use a contract lab
  - Remember you are responsible for accuracy of the report
- Develop using EPA tools
  - Drinking Water Watch (DWW)
  - CCR iWriter

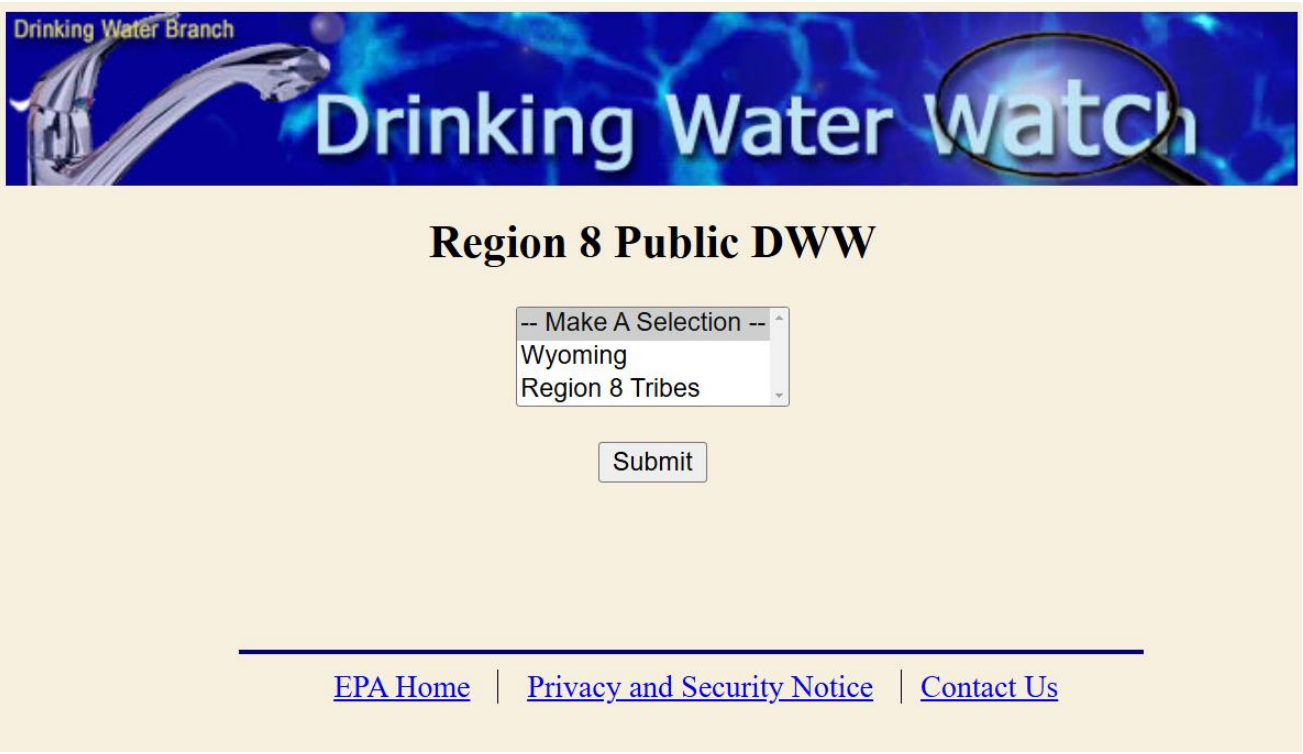
Drinking Water Watch (DWW)

- This is a good start
- Provides information on source water
- Information about detected contaminants
- List of violations, if any
- BUT
  - It does not include information on your wholesaler's data
  - Wholesaler is required to provide you a copy by April 1
  - Can run a report for your wholesaler too.

Drinking Water Watch (DWW) Report

Step 1: Go to DWW website and
Select Wyoming or Region 8 Tribes and click “Submit”





Drinking Water Watch (DWW) Report

Step 2: Click “Review Consumer Confidence Data”

Drinking Water Watch (DWW) Report

Step 3: Enter or Select the water system and CCR Year
Click “Generate Report

Drinking Water Watch Water Quality Data Table

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl2) (ppm)	4	4	.39	.2	.39	2020	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	7	2	7	2020	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	8	6	8	2020	No	By-product of drinking water disinfection
Inorganic Contaminants								
Nitrate [measured as Nitrogen] (ppm)	10	10	.3	NA	NA	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)	1	1	.3	NA	NA	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)	NA		1	NA	NA	2020	No	Erosion of natural deposits; Leaching
Microbiological Contaminants								
Total Coliform (RTCR)	NA	TT	NA	NA	NA	2020	No	Naturally present in the environment
Turbidity (NTU)	NA	0.3	.11	NA	NA	2020	No	Soil runoff
100% of the samples were below the TT value of .3. A value less than 95% constitutes a TT violation. The highest single measurement was . Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Synthetic organic contaminants including pesticides and herbicides								
Heptachlor epoxide (ppt)	0	200	0	NA	NA	2020	No	Breakdown of heptachlor
Hexachlorobenzene (ppb)	0	1	0	NA	NA	2020	No	Discharge from metal refineries and agricultural chemical factories
Lindane (ppt)	200	200	0	NA	NA	2020	No	Runoff/leaching from insecticide used on cattle, lumber, gardens
Volatile Organic Contaminants								
Chlorobenzene (monochlorobenzene) (ppb)	100	100	0	NA	NA	2020	No	Discharge from chemical and agricultural chemical factories
Toluene (ppm)	1	1	NA	NA	NA	2020	No	

Reminder: table only shows detected contaminants. Detected contaminant is any regulated or unregulated contaminant detected at or above its method detection limit (or reportable limit)

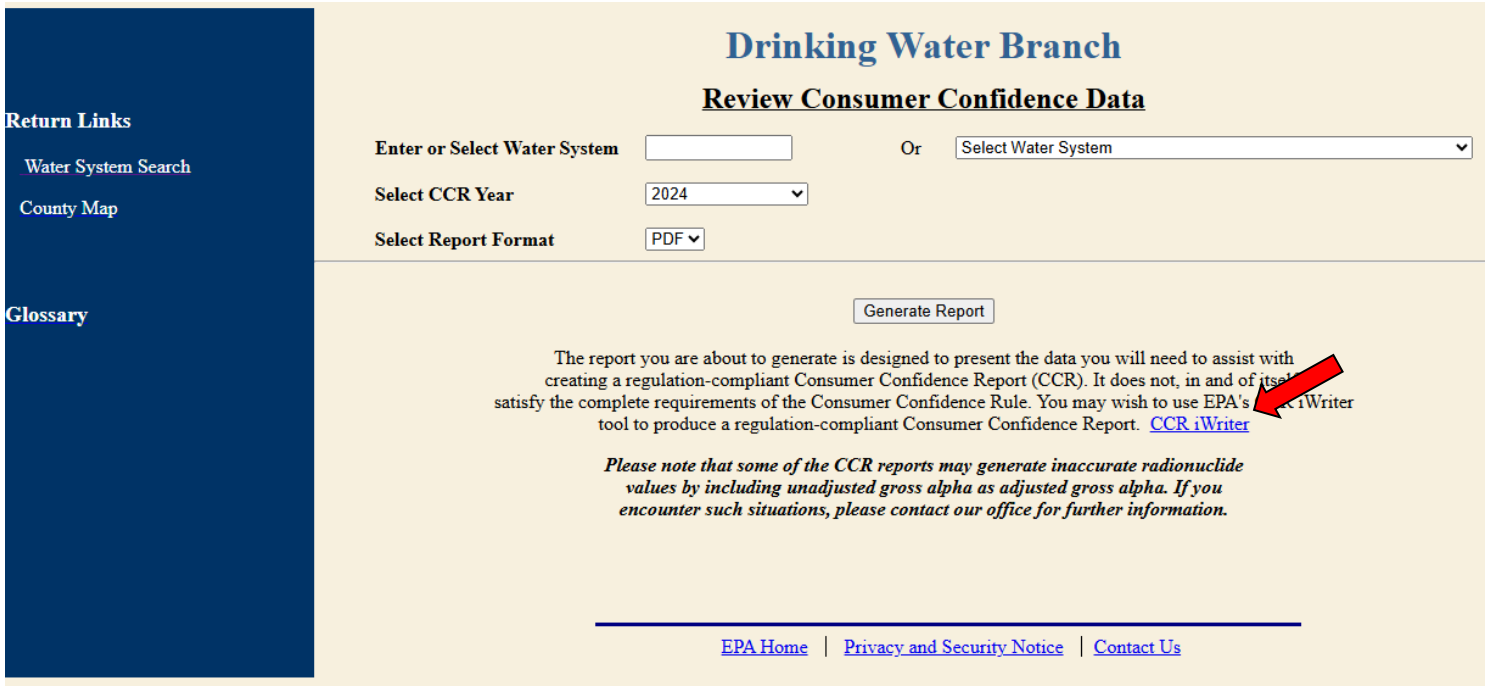
CCR iWriter

- Pro:
  - Provides regulation-compliant CCR
- Cons:
  - Must manually enter contaminant detection data
  - Need to enter information on violations, open SDs, or Level 1 or 2 Assessments.

CCR iWriter - How to get to it

Option 1: Type the url
https://ordspub.epa.gov/ords/safewater/r/safewater_ccr/ccr_iwriter/login_desktop

Option 2: Go from the DWW website

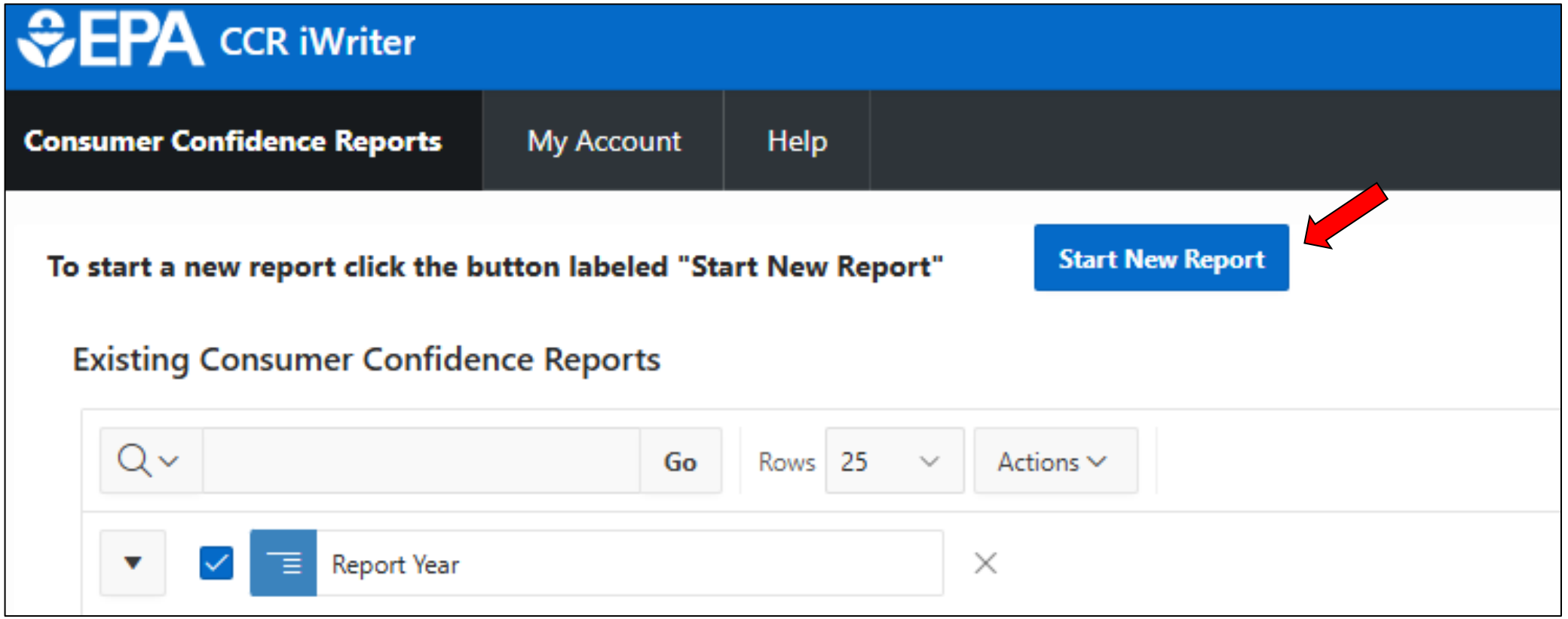


Develop CCR Report Using CCR iWriter

Step 1: Log in to your account or create a new one

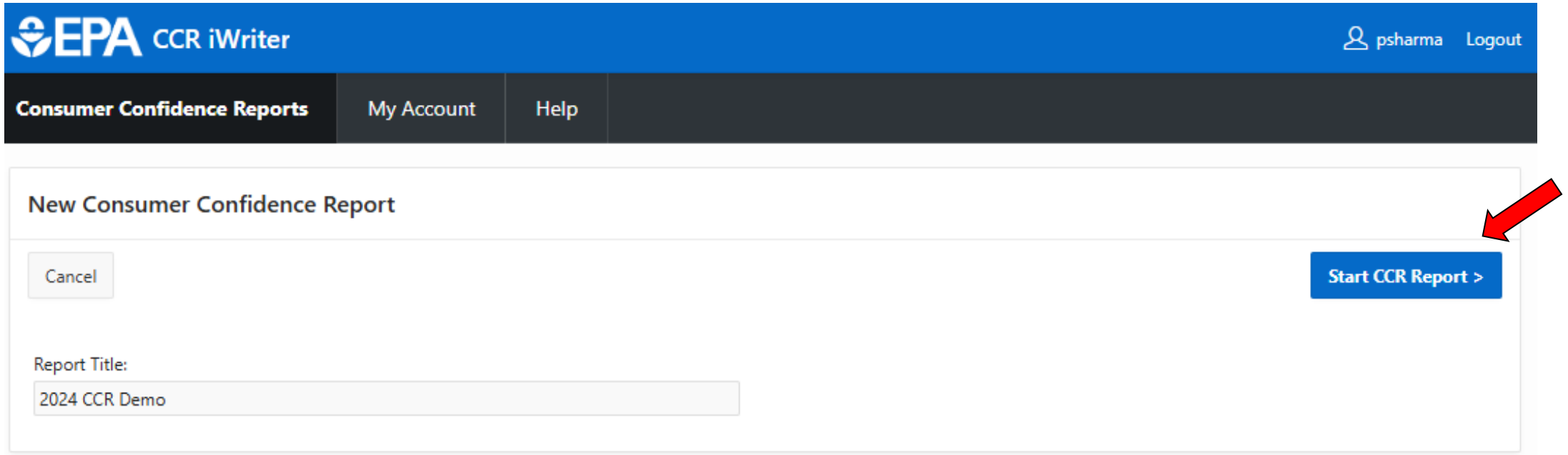
Develop CCR Report Using CCR iWriter

Step 2: Click “Start New Report” button



Develop CCR Report Using CCR iWriter

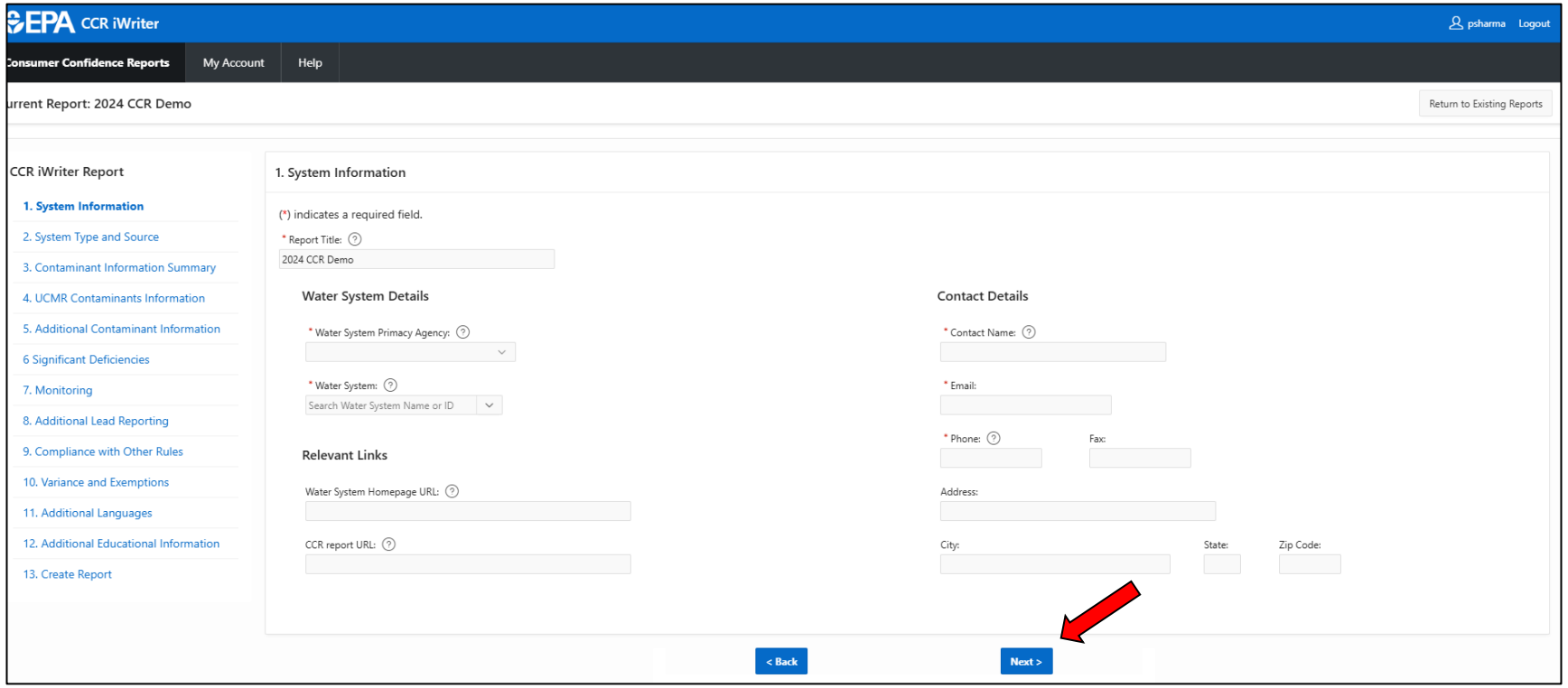
Step 3: On the next screen, give a title for your report
Click “Start CCR Report” button



Develop CCR Report Using CCR iWriter

Step 4: Enter information as required.

Navigate using the menu on the left or by clicking “Next”



Common Problems in Reports Submitted this Year

- Failure to include range of tap sampling results.
- Old Lead information language.
- No information on Lead Service Line Inventory or how it can be publicly accessed.
- Failure to include SDs open ad of 12/31/2024.
- Failure to include Level 1 or Level 2 assessment

Part 3 – Report Delivery & Submission

Report Delivery Requirements – Consumers

- Directly deliver a copy of the CCR to each customer by **July 1st**
  - Mail or hand deliver a paper copy
  - Mail a notification of the availability on a website by a direct link
  - Email a direct link or electronic version of the report
- Systems using electronic delivery method
  - CCR must be electronically available when the notification is made
  - Provide a paper copy of the CCR upon request
  - Maintain access for 3 years
- Make a “good faith” effort to reach non-bill paying consumers
  - Such as renters or workers

Report Delivery Requirements – Consumers

WY Systems Serving Less Than 10,000 Consumers

- Publish CCR in local newspaper or on internet website
- Inform the customers that the reports will not be mailed to the customers (if true) where the report is published
- Make paper copies of the report available upon request.

WY Systems Serving Less Than or up to 500 Consumers

- Provide direct notice (paper, email) that report is available
  - Mail, Door-to-door delivery, or Post in one or more location where customers can see it.
- Make paper copies of the report available upon request

Report Delivery Requirements – EPA

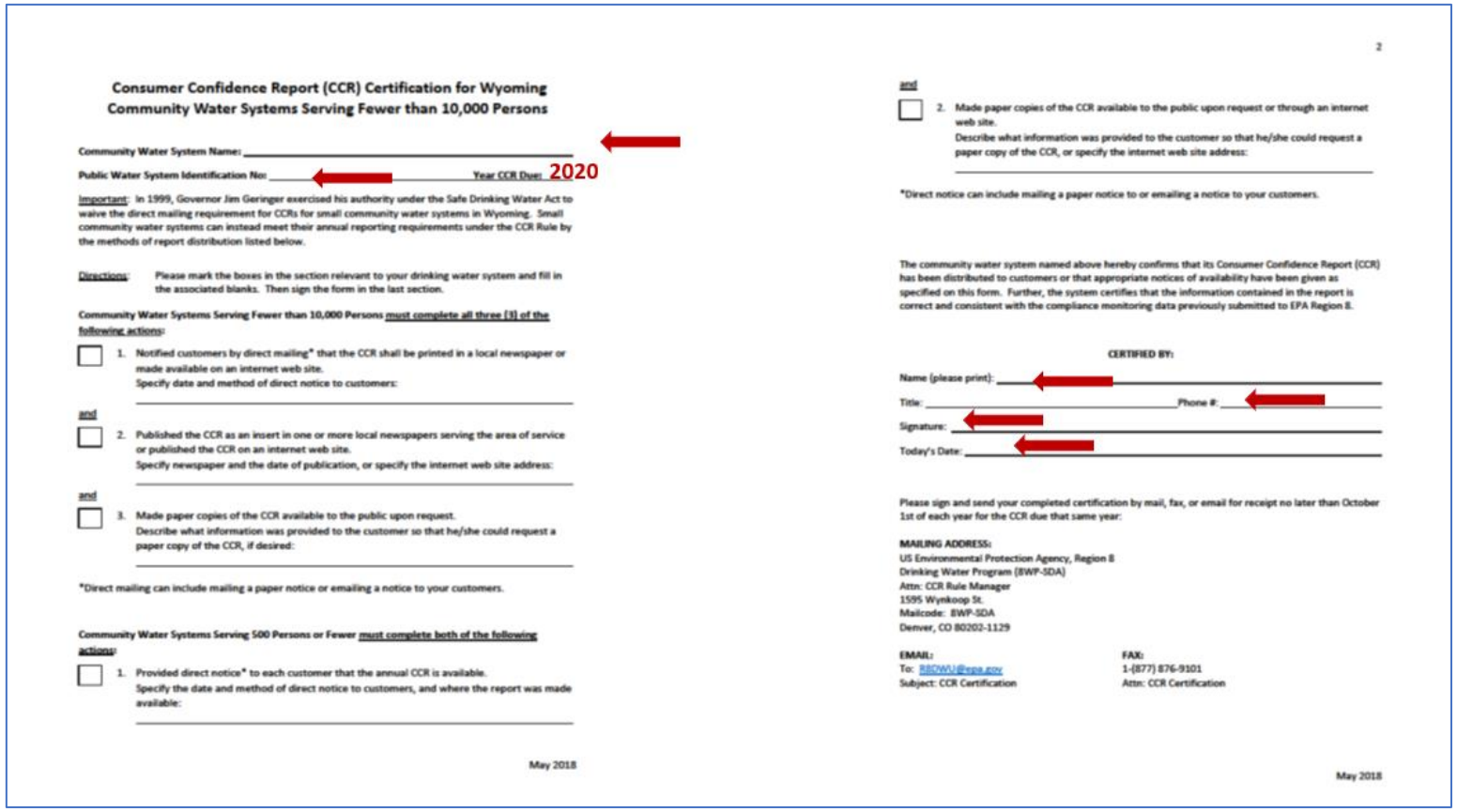
1. Email to R8DWU@epa.gov (Preferred method)
   - Include PWS Name, PWS ID#, and “CCR” in the subject line
2. Fax - (303) 312-7517
3. Mail

   Attn: CCR Rule Manager,
   1595 Wynkoop Street
   Mailcode: 8WD-SDR,
   Denver, CO 80202-1129

CCR Certification

- Must certify to EPA that the:
  - report has been distributed to customers, and
  - information is correct and consistent with the compliance monitoring data previously submitted to EPA
- How
  - Submit completed CCR Certification Form
  - https://www.epa.gov/region8-waterops/reporting-forms-drinking-water-systems-wyoming-and-tribal-lands-epa-region-8#ccr
- Which Form to use
  - One is for WY systems with more than 10,000 population and tribal systems
  - Another one for smaller systems.
- Do Not Use the form from the CCR iWriter

CCR Certification of Delivery



Consumer Confidence Report (CCR) Certification for Wyoming Community Water Systems Serving Fewer than 10,000 Persons

Community Water System Name: _____

Public Water System Identification No: _____ Year CCR Due: 2020

Important: In 1999, Governor Jim Geringer exercised his authority under the Safe Drinking Water Act to waive the direct mailing requirement for CCRs for small community water systems in Wyoming. Small community water systems can instead meet their annual reporting requirements under the CCR Rule by the methods of report distribution listed below.

Directions: Please mark the boxes in the section relevant to your drinking water system and fill in the associated blanks. Then sign the form in the last section.

Community Water Systems Serving Fewer than 10,000 Persons must complete all three (3) of the following actions:

☐ 1. Notified customers by direct mailing* that the CCR shall be printed in a local newspaper or made available on an internet web site.
Specify date and method of direct notice to customers: _____

and

☐ 2. Published the CCR as an insert in one or more local newspapers serving the area of service or published the CCR on an internet web site.
Specify newspaper and the date of publication, or specify the internet web site address: _____

and

☐ 3. Made paper copies of the CCR available to the public upon request.
Describe what information was provided to the customer so that he/she could request a paper copy of the CCR, if desired: _____

*Direct mailing can include mailing a paper notice or emailing a notice to your customers.

Community Water Systems Serving 500 Persons or Fewer must complete both of the following actions:

☐ 1. Provided direct notice* to each customer that the annual CCR is available.
Specify the date and method of direct notice to customers, and where the report was made available: _____

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and

☐ 2. Made paper copies of the CCR available to the public upon request or through an internet web site.
Describe what information was provided to the customer so that he/she could request a paper copy of the CCR, or specify the internet web site address: _____

*Direct notice can include mailing a paper notice to or emailing a notice to your customers.

The community water system named above hereby confirms that its Consumer Confidence Report (CCR) has been distributed to customers or that appropriate notices of availability have been given as specified on this form. Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to EPA Region 8.

CERTIFIED BY:

Name (please print): _____

Title: _____ Phone #: _____

Signature: _____

Today's Date: _____

Please sign and send your completed certification by mail, fax, or email for receipt no later than October 1st of each year for the CCR due that same year:

MAILING ADDRESS:
US Environmental Protection Agency, Region 8
Drinking Water Program (8WP-SDA)
Attn: CCR Rule Manager
1595 Wynkoop St.
Mailcode: 8WP-SDA
Denver, CO 80202-1129

EMAIL:
To: R8DWU@epa.gov
Subject: CCR Certification

FAX:
1-(877) 876-9101
Attn: CCR Certification

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Contact information & Additional Resources

Contact Information: Pragati Sharma, CCR Rule Manager

(303) 312-7285, Sharma.pragati@epa.gov

Resources:

1. Consumer Confidence Report https://www.epa.gov/ccr
2. Region 8 CCR Website https://www.epa.gov/region8-waterops/drinking-water-consumer-confidence-reports-wyoming-and-tribal-lands-epa-region-8
3. How water system comply with CCR Requirements https://www.epa.gov/ccr/how-water-systems-comply-ccr-requirements
4. Tools for Preparing a CCR https://www.epa.gov/region8-waterops/drinking-water-consumer-confidence-reports-wyoming-and-tribal-lands-epa-region-8#tools
5. Helpful resources for preparing CCR https://www.epa.gov/region8-waterops/helpful-resources-preparing-consumer-confidence-reports

Questions?

Thank you!