







Poll Question #2



Place of Employment

- ☐ Community water system
- lacksquare State drinking water program
- $\hfill \square$ Federal drinking water program
- □ Consulting/Technical assistance□ Academia
- ☐ Other

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Poll Question #3



What topics do you have questions on?

- ☐ CCR content Detected Contaminant Table
- $\hfill \square$ CCR content Required Heath Effects Language
- ☐ CCR format Best Practices
- ☐ CCR delivery methods
- ☐ CCR iWriter
- ☐ Other Please use the chat box to explain

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Disclaimer



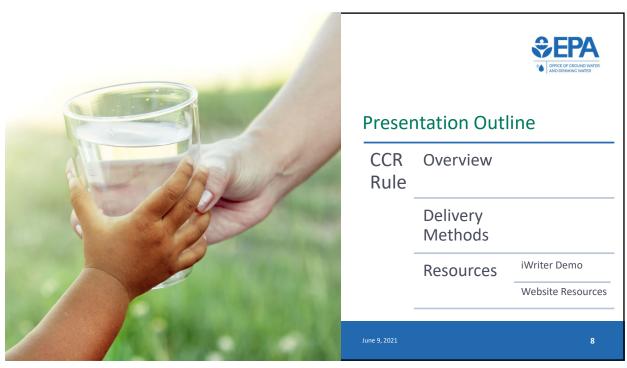
The examples included in this presentation are intended for discussion purposes only. Throughout this presentation, the terms "state" or "states" are used to refer to all types of primacy agencies including U.S. territories, Indian tribes, and EPA Regions. The statutory provisions and EPA regulations described in this document contain legally binding requirements. This presentation is not a regulation itself, nor does it change or substitute for those provisions and regulations. Thus, it does not impose legally binding requirements on EPA, states, or public water systems. This guidance does not confer legal rights or impose legal obligations upon any member of the public. While EPA has made every effort to ensure the accuracy of the discussion in this presentation, the obligations of the regulated community are determined by statutes, regulations, or other legally binding requirements. In the event of a conflict between the discussion in this presentation and any statute or regulation, this presentation would not be controlling.

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CCR Rule Requirements



- Purpose and applicability (§ 141.151)
- Effective dates (§ 141.152)
- Content of the reports (§ 141.153)
- Required additional health information (§ 141.154)
- Report delivery and recordkeeping (§ 141.155)

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Purpose and Applicability



The CCR Rule requires **community water systems** to deliver annual reports to their **customers**. These reports must contain information on the quality of the water delivered by the systems and characterize the risks (if any) from exposure to **contaminants** detected in the drinking water in an accurate and understandable manner. (§141.151)

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Effective dates



CWSs must deliver the CCR annually by July 1st (§ 141.152)



"Image from Microsoft Power Point 2010"

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- 1. Water system information
- 2. Source(s) of the water delivered
 - Type of water, commonly used name, and location
- 3. Definitions
- 4. Detected contaminants
 - · One or more adjacent tables
- 5. Cryptosporidium, radon, and other contaminants
- 6. Compliance with National Primary Drinking Water Regulations
- 7. Variances and exemptions
- 8. Additional required information

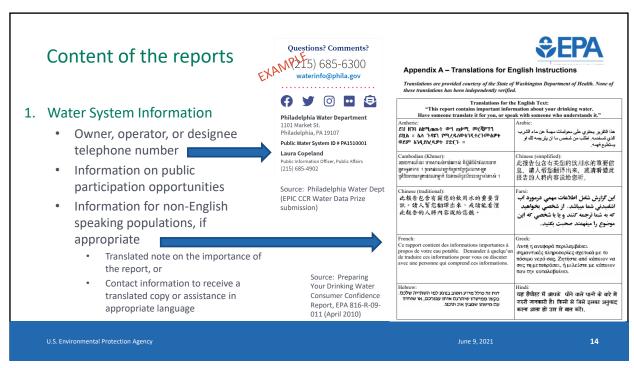
§ 141.153-154

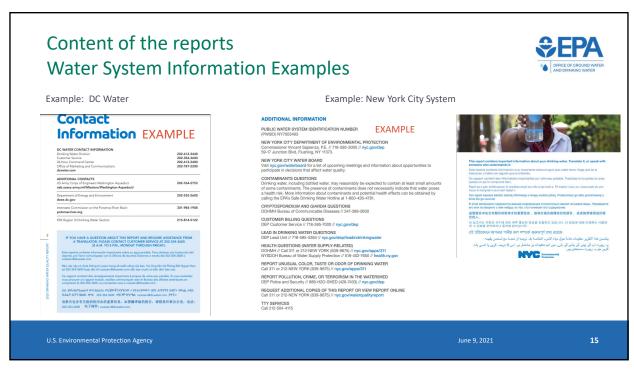
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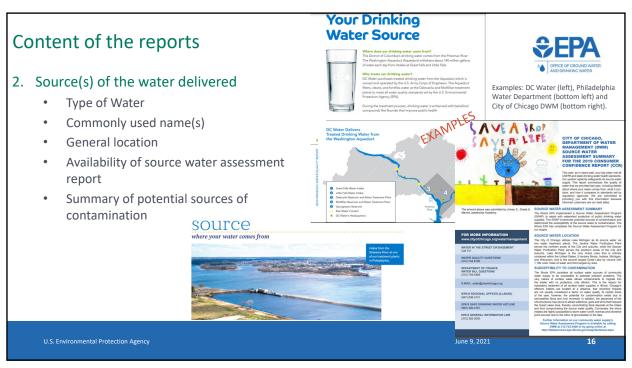
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3. Definitions

Each report **must** include the following definitions:

- 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.
- Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

As applicable:

- Variance and Exemptions
- Treatment Technique (TT)
- Action Level (AL)
- · Maximum residual disinfectant level (MRDL)
- Maximum residual disinfectant level goal (MRDLG)
- Level 1 Assessment
- Level 2 Assessment

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Content of the reports



- 4. Reporting Levels of Detected Contaminants
- · Must report monitoring data completed during the previous calendar year
 - For systems that monitor less frequently than annually or that have monitoring waivers - most recent sample results
 - Data >5 years old does not have to be reported
 - Must express in CCR units (same units as the MCL, expressed as a number equal to or >1.0)
- If no MCL, must indicate the TT or AL and include definition
- Must include likely source(s) of contaminant
- In general, report average or highest level detected and the range of detections

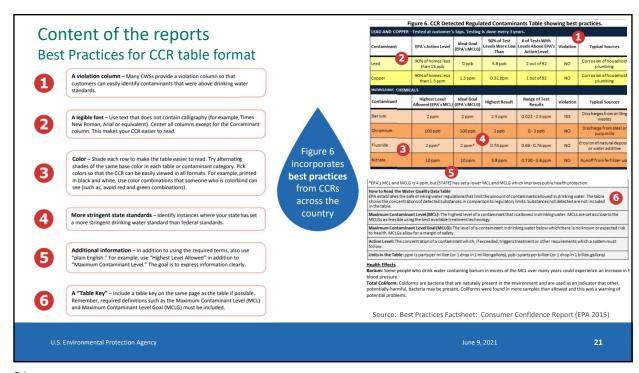
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Content of the reports **Reporting Levels of Detected Contaminants** When compliance is Reporting Requirements are... determined for... MCL, except turbidity and total Report range of detected levels and highest contaminant coliforms level used to determine compliance MCL based on annual or less Report range of detected levels and highest detected frequent basis level at any sampling point MCL based on RAA taken at a Report range and highest average monitoring location MCL for TTHM and HAA5 Report range of all samples for all locations and highest LRAA MCL based on a system-wide Report range and average RAA at all monitoring locations U.S. Environmental Protection Agency June 9, 2021

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Content of the reports Reporting Levels of Detected Contaminants	
When compliance is determined for	Reporting Requirements are
E. coli	Number of positive results
Total Coliform	Treatment Technique Level 1 or Level 2 assessment language
Turbidity under 141.13	Report the highest monthly value
Turbidity under 141.71	Report the highest monthly value; include explanation of measurement
Turbidity under 141.73, 141.173, 141.551	Report the highest single measurement and the lowest monthly percentage; include explanation of measurement.
Lead and Copper	90 th percentile value of the most recent round of sampling and the number of samples exceeding the AL
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Content of the reports



Unregulated Contaminant Monitoring Rule (UCMR) Data

UCMR does not apply to all CWSs

- All systems serving > 10,000 people and a representative sample of systems serving ≤ 10,000 people are required to
 monitor
- CCR must contain the average and range at which the contaminant was detected.
- Suggested Language:
 - Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The
 purpose of monitoring for these contaminants is to help USEPA decide whether the contaminants should
 have a standard.
- More information on UCMR can be found at:
 - https://www.epa.gov/dwucmr

Example: Unregulated Contaminants		
Contaminant	Average	Range
Manganese	0.7 μg/L	$ND - 0.7 \mu g/L$

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- 5. Cryptosporidium, Radon, and other contaminants
- If *Cryptosporidium* and/or Radon are <u>not detected</u>, the system is not required to discuss the monitoring or the results
- If *Cryptosporidium* and/or Radon <u>are detected</u> in either the source water or finished water, the following information must be included (separate from the detected contaminant table):
 - *Cryptosporidium* A summary of the results of the monitoring. You may choose whether to report the actual analytical results as a part of this summary.
 - Radon Monitoring results
 - Both An explanation of the significance of the results.

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Content of the reports



5. Cryptosporidium, Radon, and other contaminants

Other Contaminants

- EPA strongly encourages CWSs to report any results that may indicate a health concern (example: triclosan)
- Recommended that the report include:
 - Monitoring results
 - Explanation of the significance of the results noting the existence of a health advisory or a proposed regulation
- Resources for Information
 - EPA's Safe Drinking Water Hotline: safewater@epa.gov
 - EPA Website: https://www.epa.gov/ground-water-and-drinking-water

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5. Cryptosporidium, Radon, and other contaminants

EXAMPLE—*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Source: Preparing Your Drinking Water Consumer Confidence Report, EPA 816-R-09-011 (April 2010)

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Content of the reports



5. Cryptosporidium, Radon, and other contaminants

EXAMPLE--Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. (You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

Source: Preparing Your Drinking Water Consumer Confidence Report, EPA 816-R-09-011 (April 2010)

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6. Compliance with NPDWR

- Monitoring and reporting violations
- •Treatment technique violations
 - Filtration and disinfection requirements contained in the Surface Water Treatment
 - Lead and copper control requirements
 - · Acrylamide and Epichlorohydrin
 - Revised Total Coliform Rule
- •Violation of record keeping requirements
- •Violation of special monitoring requirements of sodium and UCMR
- •Violation of a variance, an exemption, or an administrative or judicial order.

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Content of the reports



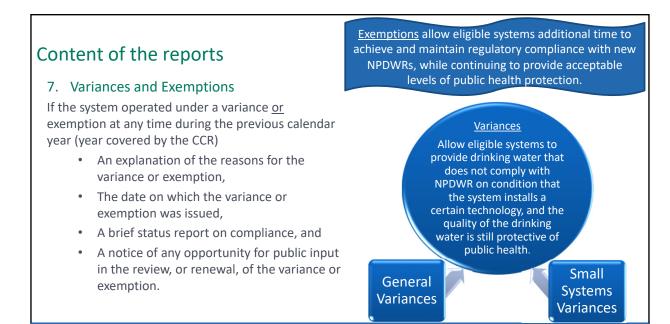
6. Compliance with NPDWR

Special Notice for systems required to comply with the Ground Water Rule

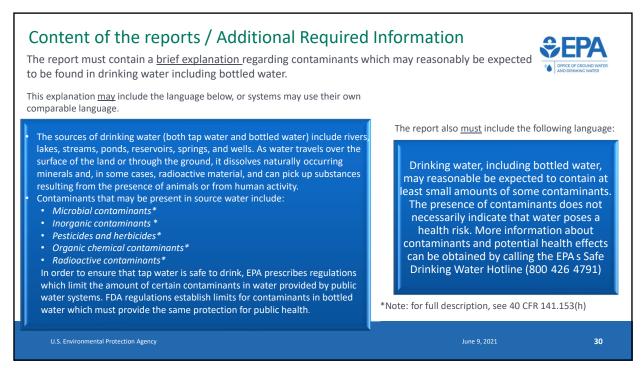
Uncorrected significant deficiencies

Fecal indicator-positive Ground Water Source sample

Example TT Violation Description of Violation Length of **Steps Taken to Correct Violation** Violation 2 WEEKS FAILED TO ON DECEMBER 10, 2012, STATE INSPECTION OF AS DIRECTED BY THE DEPARTMENT OF PUBLIC HEALTH. PROPERLY APPLY OUR WATER SYSTEM IDENTIFIED A WE TOOK IMMEDIATE ACTION TO RESOLVE THIS TREATMENT MALFUNCTIONING CHLORINE PUMP. AS A PROBLEM BY REPAIRING THE MALFUNCTIONING CHEMICALS RESULT, THE WATER FROM ONE OF OUR WELLS CHLORINE PLIMP REGULAR TESTING SINCE THE PLIMP (WELL 1) WAS NOT ADEQUATELY DISINFECTED WAS REPAIRED HAS DEMONSTRATED THAT WE ARE FOR 2 WEEKS. WE WERE UNABLE TO CORRECT ONCE AGAIN PROVIDING WATER THAT MEETS THE THE PROBLEM IN THE 2 WEEK TIMEFRAME GIVEN STATE'S STANDARDS FOR DISINFECTION TO OUR BY THE STATE. CUSTOMERS.



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Content of the reports Required Additional Health Information



Mandatory Vulnerable Population Language

• 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 (1-800-426-4791).

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Content of the reports

Informational Statement for certain levels of Arsenic, Nitrate & Lead



Systems with nitrate above 5 ppm (50 percent of the MCL), but below 10 ppm (the MCL):

 Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider. Systems with arsenic above 5 ppb (50 percent of the MCL), but at or below 10 ppb (the MCL):

While your drinking water meets EPAs standard for arsenic, it does
contain low levels of arsenic. EPAs standard balances the current
understanding of arsenic's possible health effects against the costs of
removing arsenic from drinking water. EPA continues to research the
health effects of low levels of arsenic, which is a mineral known to
cause cancer in humans at high concentrations and is linked to other
health effects such as skin damage and circulatory problems.

Note: Systems may write their own educational statements, but only in consultation with the Primacy Agency

All systems must include the following informational statement:

•If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [NAME OF UTILITY] is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

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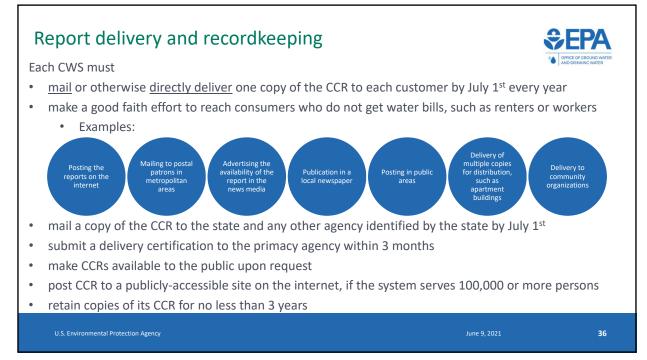
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Content of the reports 8. Additional Recommended Information Other Educational Information Source water protection tips Water and energy conservation tips Cost of making water safe to drink Efforts your system has made to promote "green infrastructure" A statement from the mayor or general manager Educational Information about taste and odor EPA's drinking water Website

DELIVERY AT HOME DATA **GLOSSARY** Why does my tap water smell like a How can I participate in protecting pool sometimes? our water supply? The smell of chlorine means your water is Keep trash out of our waterways. Make sure to put your safe and treated to remove harmful recyclable paper, metal, and plastics in a recycling bin, and organisms. You can reduce the smell by disposable gloves, masks, food waste, and other garbage in a keeping a pitcher of fresh water in the trash can, so they don't end up in our rivers and streams. refrigerator. This also reduces the earthy Don't flush anything but toilet paper - even "flushable" odor, sometimes produced by algae in the wipes. They don't dissolve like toilet paper, and can lead to rivers during spring. clogs, and backups, causing waste to flow into our homes and our streets. Can I replace a lead service line? Always properly recycle or dispose of household hazardous wastes. Don't flush them down the toilet or down Yes. If you don't want to contact a plumber directly, apply for the sink, and don't pour them into storm drains. Many storm our Homeowners Emergency Loan Program (HELP). A zerodrains flow directly to our streams and rivers. interest loan can cover the cost of replacement. Join a cleanup. Group cleanups help remove trash and litter Learn more & apply from our waterways. To learn about upcoming cleanups, keep an eye on the @PhillyH2O Blog and social media, email Also: PWD will replace lead service lines for free if they are discovered waterinfo@phila.gov, or call (215) 685-6300. during planned work on water mains.

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Consumer Confidence Report Rule Delivery Options January 2013 Memo (WSG 189)



January 2013 Memo (WSG 1	AND DRINKING WATER	
Approved CCR Delivery Methods		
CCR Delivery Method	Method Description	
Mail – Paper Copy	CWS mails a paper copy of the CCR to each bill-paying customer	
Mail – Notification that CCR is available on website	CWS mails to each bill paying customer a notification on CCR availability providing a direct URL to the CCR	
Email – Direct URL to CCR	CWS emails to each bill-paying customer a <u>direct</u> URL to the CCR on a publicly available site on the Internet.	
Email – CCR sent as an attachment to an email	CWS emails to each bill-paying customer the CCR as an electronic file email attachment.	
Email – CCR embedded image in an email	CWS emails to each bill-paying customer the CCR text and tables inserted into the body of an email	
Additional e-delivery that meets directly deliver requirements	CWS delivers CCR through a method that otherwise directly delivers to each bill-paying customer and in coordination with the state	

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Electronic "Direct Delivery"



- 1. The CWS must provide the CCR in a manner that is "direct."
 - URL provides a direct link ("one click") to the CCR
 - Customer communication (e.g., bill, bill insert, email) prominently displays the URL with a notice explaining the nature of the link.
- 2. If a CWS is aware of a customer's inability to receive a CCR by the chosen electronic method, it **must** provide the CCR by an alternative method allowed by the rule.
- 3. A CWS **must** prominently display a message and the direct URL in all mail notifications of CCR availability. The CCR must be posted when the URL is sent out to be considered direct delivery

Source: Consumer Confidence Report Rule Delivery Options, January 2013 Memo (WSG 189)

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E-Delivery Methods Not Considered Direct



- A customer must not have to navigate to another webpage to find any required CCR content if viewing the CCR on a website (e.g., address search engine.)
- Use of social media (e.g., Twitter or Facebook) directed at bill-paying customers does not meet the requirement to "directly deliver" since these are membership Internet outlets and would require a customer to join the website to read their CCR.
- The use of **automated phone calls** (e.g., emergency telephone notification systems) to distribute CCRs is not considered direct delivery, because the entire content of the CCR cannot be provided in the phone call.

Source: Consumer Confidence Report Rule Delivery Options, January 2013 Memo (WSG 189)

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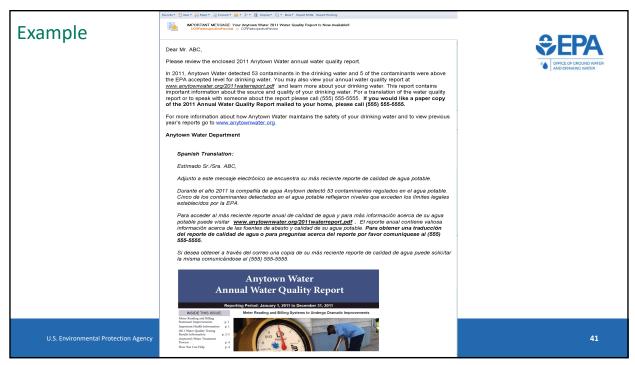
Important E-delivery Considerations

Important considerations and requirements with emails:

- The CWS **should** include a short statement to encourage readership.
- The subject line of the email should emphasize that the CCR is available.
- If the CWS is required to have a message in the CCR in another language according to the multilingual requirement of the CCR Rule, then they **should** consider including that statement in the email message as well.
- There **must** be a way for customers to request a paper copy of the CCR.
- If an email bounces back the CWS **should** resend the CCR through another allowable alternative method.



Source: Consumer Confidence Report Rule Delivery Options, January 2013 Memo (WSG 189)





CCR iWriter



What is the CCR iWriter?

The Consumer Confidence Report (CCR) iWriter is a **free** tool designed to help water suppliers create their CCRs according to the requirements for report content, format, and distribution given in the CCR Rule [40 CFR part 141 Subpart O]. This application takes users through all the sections of a consumer confidence report using a friendly graphical user interface, converts lab results into "CCR units", allows users to insert and edit Environmental Protection Agencies (EPA's) recommended educational and mandatory text, and customize report text for specific situations.

Reminder: Check with your state

Be sure to check with your state drinking water program since your state may have different requirements. For example, some states may have their own certification form, or additional guidance for meeting the multilingual requirement.

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Additional Resources for CCRs		
Guidance Documents		
CCR Rule: Quick Reference Guide	https://www.epa.gov/ccr/consumer-confidence-report-rule-quick-reference-guide	
Implementation Guides for States & CWSs (April 2010)	https://www.epa.gov/ccr/state-implementation-and-primacy-guidance-ccr	
Converting Lab Units into CCR units	https://www.epa.gov/ccr/converting-laboratory-units-consumer-confidence-report-units	
Best Practices Factsheet	https://www.epa.gov/ccr/best-practices-water-systems-preparing-consumer-confidence-reports	
CCR Electronic Delivery Memo & Attachment	https://www.epa.gov/ccr/how-water-utilities-can-electronically-deliver-their-ccr	
Find your local CCR	https://ofmpub.epa.gov/apex/safewater/f?p=136:102:::::	
Update "Find Your CCR" URL & contact info.	https://ofmpub.epa.gov/apex/safewater/f?p=136:104:	
CCR iWriter	https://ofmpub.epa.gov/apex/safewater/f?p=140:LOGIN_DESKTOP:::::	
Drinking Water Training	https://www.epa.gov/dwreginfo/drinking-water-training	

