OVERVIEW OF THE CCR RULE

INTRODUCTION

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 The Safe Drinking Water Act (SDWA) requires that drinking water quality information be made available to the public

- Two Rules:
 - Consumer Confidence Report (CCR) Rule
 - Public Notification (PN) Rule
- Why Care?
 - Consumer right-to-know and make personal health decisions
 - Increase dialogue and trust between water systems and consumers
 - Raise consumer awareness and appreciation for water treatment & delivery services

CONSUMER CONFIDENCE REPORT (CCR)

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- Brief Background
- Content Requirements
- Delivery Requirements
- CCR Rule Resources
- Demo of EPA on-line CCR Catalog
- Demo of CCRiWriter Tool

CCR RULE - BRIEF BACKGROUND

- Required under 1996 SDWA Amendments
- Rule based on recommendations from work group formed under National Drinking Water Advisory Council (NDWAC) as well as consumer focus groups
- Impacts All Community Water Systems (CWSs)
 - Mail or directly deliver one copy of CCR to customers and primacy agency by July 1st
 - Mail certification of compliance to primacy agency within 3 months (by October 1st)
 - Wholesalers must deliver data to consecutive systems by April 1st

Poll Question

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- Have you already started preparing your CY 2013 CCR?
 - Yes
 - No
 - The state prepares mine
 - A third party, other than the state, prepares mine

CONTENT REQUIREMENTS - 8 ITEMS

Item	Report Content Requirement
1	Water System Information
2	Source(s) of Water
3	Definitions
4	Detected Contaminant Table
5	Information on <i>Cryptosporidium</i> , Radon and Other Contaminants
6	Compliance with NPDWR
7	Variances and/or Exemptions
8	Required Additional Information

ITEM 1 - WATER SYSTEM INFORMATION

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- Telephone number of a contact person
- Information on public participation opportunities
- Information for non-English speaking populations, if appropriate

MULTILINGUAL REQUIREMENT

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Good Rule of Thumb: if the system serves >5-10% of non-English speaking people, include additional language(s) or access information for translation

- Where the state has not made a determination, at a minimum systems must provide:
 - Information in the appropriate language(s) regarding the importance of the CCR, or
 - A phone number or address where persons served may contact the water system to obtain a translated copy of the notice or to request assistance in the appropriate language



The State may provide more guidance on this matter.

ITEM 2 - SOURCE(S) OF WATER

19

- 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 assessment
 - A brief summary of the system's susceptibility to potential sources of contamination

ITEM 3 - DEFINITIONS

- Maximum Contaminant Level (MCL)
- Maximum Contaminant Level Goal (MCLG)
- Maximum Residual Disinfectant Level (MRDL)
- Maximum Residual Dsinfectant Level Goal (MRDLG)
- Treatment Technique (TT)
- Action Level (AL)
- Variances and Exemptions

ITEM 4 – TABLE OF DETECTED CONTAMINANTS

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- Key CCR Element
- Concise but informative presentation displaying concentrations of all detected contaminants
 - Regulated Contaminants (i.e. Subject to an MCL, MRDL, AL or TT)
 - Unregulated Contaminants as Specified in 40 CFR 141.40
 - Finished Water DBPs or Microbial Contaminants (except results for *Cryptosporidium* these results are displayed separately)

ITEM 4 – TABLE 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

ITEM 4 – TABLE OF DETECTED CONTAMINANTS

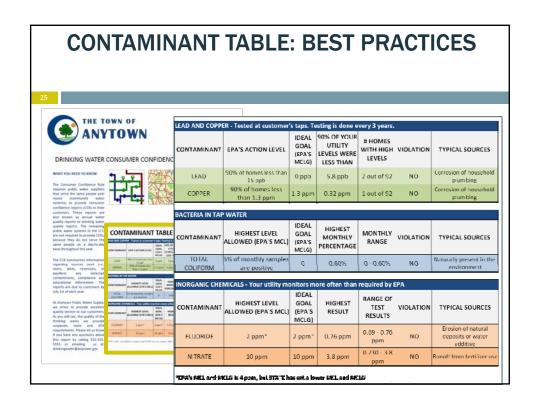
23

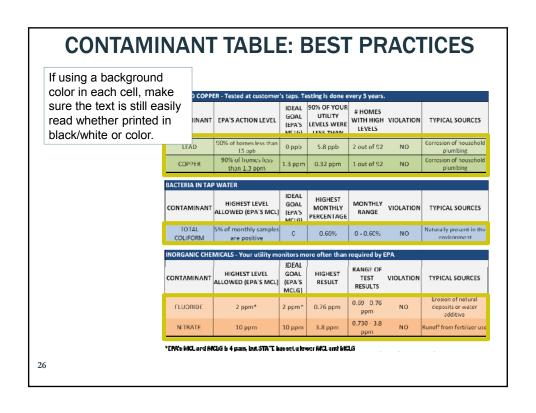
When compliance is determined by an	Reporting Requirements			
MCL, except turbidity and total coliforms	Report range of detected levels and highest contaminant level used to determine compliance			
MCL based on annual or less frequent basis	Report range of detected levels and highest detected level at any sampling point			
MCL based on RAA taken at A monitoring location	Report range and highest average			
MCL for TTHM and HAA5	Report range of all samples for all locations and highest <i>LRAA</i>			
MCL based on a system-wide RAA at all monitoring locations	Report range and average			

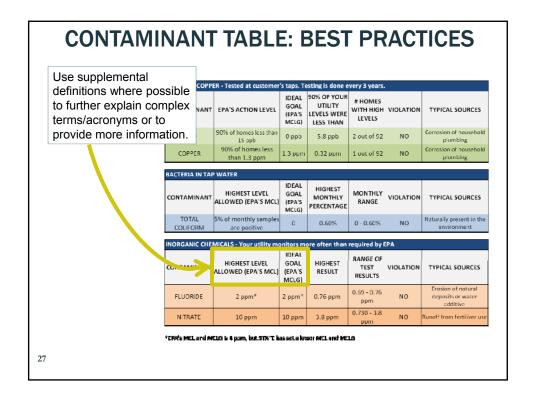
For detected unregulated contaminants collected under UCMR, report average and range

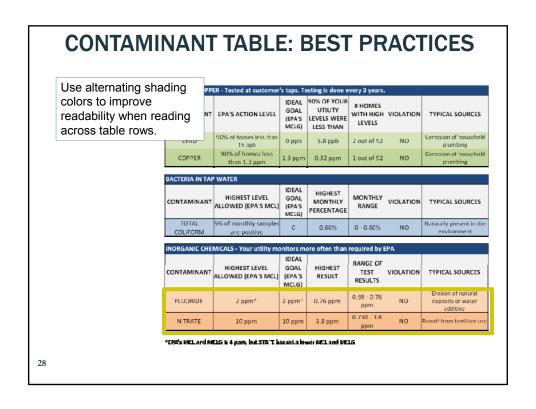
ITEM 4 – TABLE OF DETECTED CONTAMINANTS

When compliance is determined for	Reporting Requirements
Total coliform (<40 samples)	Report monthly number of positive samples
Total coliform (>40 samples)	Report highest monthly % of positive samples
Fecal coliform	Report the total number of positive samples
Turbidity under 141.13	Report the highest average monthly value
Turbidity under 141.71	Report the highest monthly value; include explanation of measurement
Turbidity under 141.73, 141.173, or 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

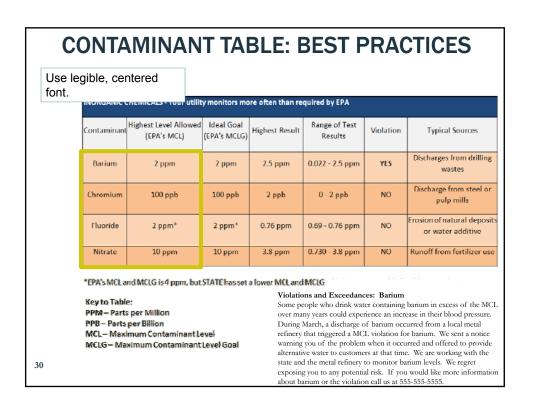








Include a Violation		COPP	ER - Tested at customer	's taps. Te	esting is done e	very 3 years		
if any sampling results		IINANT	EPA'S ACTION LEVEL	IDEAL GOAL (EPA'S MCLG)	90% OF YOUR UTILITY LEVELS WERE LESS THAN	# HOMES WITH HIGH LEVELS	VIOLATION	TYPICAL SOURCES
violated established MCLs.		D	90% of homes less than 15 ppb	0 ppb	5.8 ppb	2 out of 92	NO	Corrosion of household plumbing
WIGES.		ER	90% of homes less than 1.3 ppm	1.3 ppm	0.32 ppm	1 out of 92	NO	Corrosion of household plumbing
	BACTERI	CTERIA IN TAP WATER						
CONTAN		MINANT	HIGHEST LEVEL ALLOWED (EPA'S MCL)	IDEAL GOAL (EPA'S MCLG)	HIGHEST MONTHLY PERCENTAGE	MONTHLY RANGE	VIOLATION	TYPICAL SOURCES
	TOT COLIFI		5% of monthly samples are positive	0	0.60%	0 - 0.60%	NO	Naturally present in the environment
CONTAN		NIC CHE	MICALS - Your utility me	onitors m	ore often than	required by	PA	
		MINANT	HIGHEST LEVEL ALLOWED (EPA'S MCL)	GOAL (EPA'S MCLG)	HIGHEST RESULT	RANGE OF TEST RESULTS	VIOLATION	TYPICAL SOURCES
		RIDE	2 ppm*	2 ppm*	0.76 ppm	0.69 - 0.76 ppm	NO	Erosion of natural deposits or water additive
	NITE	ATE	10 ppm	10 ppm	3.8 ppm	0.730 - 3.8 ppm	NO	unoff from fertilizer use



CONTAMINANT TABLE: BEST PRACTICES Include a "Table Key" on the same page as the table, if possible. ed Ideal Goal Range of Test **Highest Result** Violation **Typical Sources** (EPA's MCL) (EPA's MCLG) Results Discharges from drilling Barium 2.5 ppm 0.022 - 2.5 ppm YES 2 ppm 2 ppm Discharge from steel or Chromium 100 ppb 100 ppb 2 ppb 0 - 2 ppb pulp mills Erosion of natural deposits 2 ppm* 2 ppm* 0.76 ppm 0.69 - 0.76 ppm NO or water additive 0.730 - 3.8 ppm Runoff from fertilizer use Nitrate 10 ppm 10 ppm 3.8 ppm NO *EPA's MCL and MCLG is 4 ppm, but STATE has set a lower MCL and MCLG Violations and Exceedances: Barium Key to Table: Some people who drink water containing barium in excess of the MCL PPM - Parts per Million over many years could experience an increase in their blood pressure. PPB - Parts per Billion During March, a discharge of barium occurred from a local metal refinery that triggered a MCL violation for barium. We sent a notice warning you of the problem when it occurred and offered to provide MCL - Maximum Contaminant Level MCLG - Maximum Contaminant Level Goal alternative water to customers at that time. We are working with the state and the metal refinery to monitor barium levels. We regret 31 exposing you to any potential risk. If you would like more information about barium or the violation call us at 555-555-5555.

an e	ations must xplanation ition.		ty monitors mo	ore often than re	quired by EPA		
VIOIE	Contaminant	(EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources
	Barium	2 ppm	2 ppm	2.5 ppm	0.022 - 2.5 ppm	YES	Discharges from drilling wastes
	Chromium	100 ppb	100 ppb	2 ppb	0 - 2 ppb	NO	Discharge from steel o pulp mills
	Fluoride	2 ppm*	2 ppm*	0.76 ppm	0.69 - 0.76 ppm	NO	Erosion of natural depos or water additive
	Nitrate	10 ppm	10 ppm	3.8 ppm	0.730 - 3.8 ppm	NO	Runoff from fertilizer us
	*EPA's MCL and MCLG is 4 ppm, but STATE has set a lower Key to Table: PPM — Parts per Million PPB — Parts per Billion MCL — Maximum Contaminant Level MCLG — Maximum Contaminant Level Goal				my years could experiment, a discharge of that triggered a MC you of the problem we water to customed the metal refinery	er containing eience an incre of barium occ L violation for when it occurs at that time to monitor ba al risk. If you	barium in excess of the M case in their blood pressure urred from a local metal or barium. We sent a notice urred and offered to provide we are working with the trium levels. We regret to would like more informat

CONTAMINANT TABLE: BEST PRACTICES

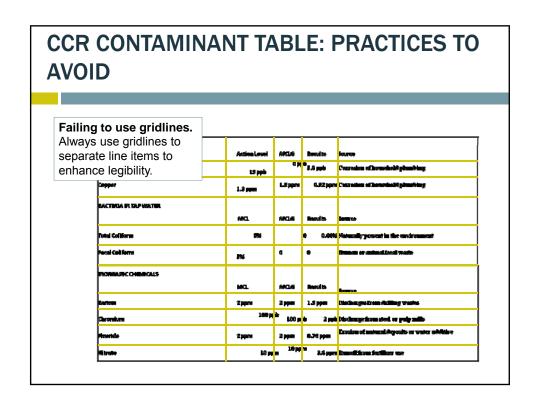
Include a "How to Read the Water Quality Data Table."

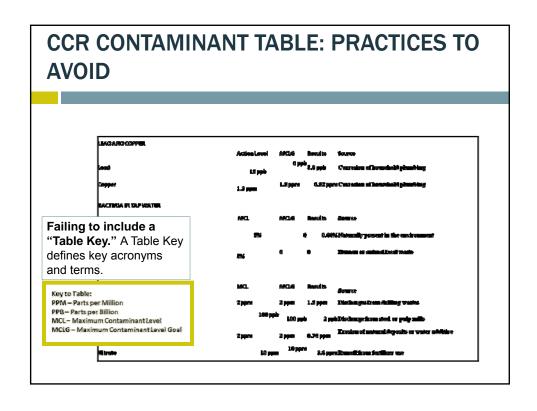
33

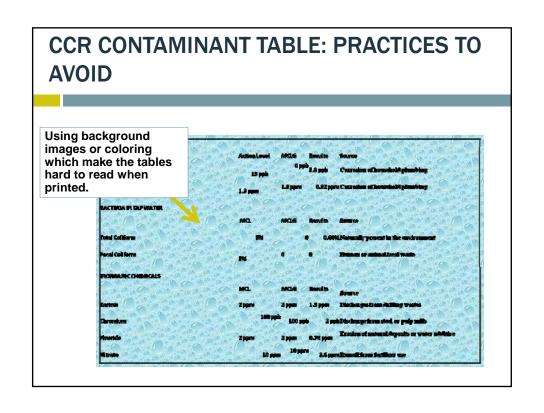
How to Read the Water Quality Data Table The EPA and State Drinking Water Program establish the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to the regulatory limits. Substances not detected are not included in the table. Maximum Contaminant Level (MCL) Units in the Table The highest level of a contaminant that is allowed in drinking water. ND or Non-detect – A level at which there is an inability to MCLs are set as close to the MCLGs as feasible using the best available detect an analyte because it is indistinguishable from the background signal. *pCi/L or Picocuries per liter - Radioactivity concentration unit. *ppb or parts per billion – One ppb corresponds to one penny in \$10,000,000. Maximum Contaminant Level Goal (MCLG) The level of a contaminant in drinking water below which there is no know or expected risk to health. MCLGs allow for a margin of safety. *ppm or parts per million – One ppm corresponds to one penny in \$10,000. Action Level (AL) The concentration of a contaminant which, if exceeded, triggers •NTU or Nephelometric Turbidity Units - A measure of the clarity of water. treatment or other requirements which a public water system shall follow. **QRAA or Quarterly Running Annual Average** – An ongoing annual average calculation of data from the most recent four quarters. MRDL or Maximum Residual Disinfectant Level - The highest level of a MRDLG or Maximum Residual Disinfectant Level Goal – The level of a disinfectant in drinking water below which there is no known or expected 90th Percentile - Represents the highest value found out of 90 percent of the samples taken in a representative group. If the 90th risk to health. percentile is greater than the action level, it will trigger a treatment r other requirements that a water system must follow N/A or Not Applicable - Does not apply to this subject or in this **TT or Treatment Technique** - A required process intended to reduce the level of a contaminant in drinking water.

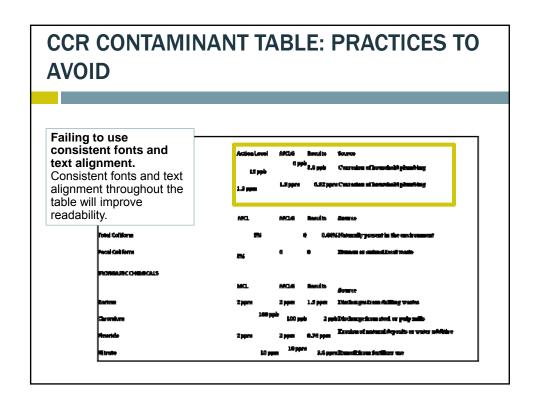
CONTAMINANT TABLE: BEST PRACTICES Identify instances where your state has a NORGANIC CHEMICALS - Your utility monitors more often than required by EPA requirement different than the EPA. Highest Level Allowed Ideal Goal Range of Test Highest Result ypical Sources (EPA's MCL) (EPA's MCLG) Results Discharges from drilling 0.022 - 2.5 ppm YES 2.5 ppm Barium 2 ppm 2 ppm Discharge from steel or Chromium 100 ppb 100 ppb 2 ppb 0 - 2 ppb pulp mills Erosion of natural deposits Fluoride 2 ppm* 2 ppm* 0.69 - 0.76 ppm NO or water additive 0.730 - 3.8 ppm NO Runoff from fertilizer use Nitrate 10 ppm 10 ppm 3.8 ppm *EPA's MCL and MELG is 4 ppm, but STATE has set a lower MCL and MCLG Violations and Exceedances: Barium Key to Table: Some people who drink water containing barium in excess of the MCL PPM - Parts per Million over many years could experience an increase in their blood pressure PPB - Parts per Billion During March, a discharge of barium occurred from a local metal refinery MEL-Maximum Contaminant Level that triggered a MCL violation for barium. We sent a notice warning you MELG - Maximum Contaminant Level Goal of the problem when it occurred and offered to provide alternative water to customers at that time. We are working with the state and the metal 34 refinery to monitor barium levels. We regret exposing you to any potential risk. If you would like more information about barium or the violation call

CCR CONTAMINANT TABLE: PRACTICES TO AVOID Anytown Water Consumer Confidence Report LEAD AND COPPER Action Level MCLG Results Source 0 ppb 5.8 ppb Corrosion of household plumbing 15 ppb Copper 0.32 ppm Corrosion of household plumbing 1.3 ppm ACTERIA IN TAP WATER MCL Results Total Coliform 0.60% Naturally present in the environment ecal Coliform NORGANIC CHEMICALS 1.5 ppm Discharges from drilling wastes Barium 2 ppb Discharge from steel or pulp mills 0.76 ppm Erosion of natural deposits or water additive 10 ppm 3.8 ppm Runoff from fertilizer use









Poll Question

- □ The most confusing part of creating the CCR is:
 - The detected contaminant table
 - The required health effects language
 - Trying to fit all the required information without overwhelming the customer
 - Nothing

ITEM 5 - CRYPTOSPORIDIUM, RADON, OTHER CONTAMINANTS

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- If Cryptosporidium and/or Radon <u>are not detected</u>, the system is not required to discuss the monitoring or the results
- If Cryptosporidium and/or Radon <u>are detected</u>, the system must provide a summary of monitoring results (OR THE ACTUAL RESULTS FOR RADON) and an explanation of the significance of the results (outside of the Table(s) of Detected Contaminants)
- Other Contaminants
 - EPA <u>strongly encourages</u> 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: 800-426-4791
 - EPA Website: http://water.epa.gov/drink/

ITEM 6 - COMPLIANCE WITH NPDWR

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- Monitoring and reporting violations
- Treatment technique violations
 - Filtration and disinfection requirements contained in the SWTR
 - Lead and copper control requirements
 - Acrylamide and Epichlorohydrin
- 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.

Health Effects Language can be found in Appendix A to Subpart O on EPA's Web site at www.epa.gov/safewater/ccr/regulations.html

ITEM 6 - COMPLIANCE WITH NPDWR

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Special Notice for Systems Required to Comply with the GWR

- Special Notice for Uncorrected Significant Deficiencies
- Special Notice for a Fecal Indicator-Positive Ground Water Source Sample

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

RECOMMENDATION FOR PRESENTATION OF TT VIOLATIONS IN CCR

TT VIOLATION	EXPLANATION OF THE TT VIOLATION	LENGTH OF THE VIOLATION	STEPS TAKEN TO CORRECT THE VIOLATION	HEALTH EFFECT LANGUAGE
Uncovered and untreated finished water reservoir	The finished water reservoir is uncovered and the discharge is not treated. We were required to address this situation by April 1, 2009.	14 months	We have hired an engineering firm to design a cover for the tank. We intend to have the tank covered by September 2010.	Inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.
Bin Classification Calculation	After conducting our source water monitoring for Cryptosporidium, we were required to calculate our Bin Classification by [date].	1 month	We have since calculated our bin classification and submitted this to the DEQ.	Inadequately treated water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.

ITEM 7 - VARIANCES & EXEMPTIONS

45

- Any system with a variance or exemption must include:
 - Explanation of the variance or exemption,
 - Date that the variance or exemption was issued,
 - Brief status report on compliance, and
 - A notice of opportunity for public input

ITEM 8 - ADDITIONAL INFORMATION

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- Drinking water/bottled water contaminant explanation
- Mandatory vulnerable population language
- Informational statements for certain levels of:
 - □ Arsenic if >5 mg/L, but ≤MCL
 - Nitrate if >5 mg/L, but < MCL</p>
 - □ Lead every CCR must include a lead informational statement

The additional educational health information statements can be found in *Preparing Your Drinking Water Consumer Confidence Report For Water Suppliers* on the CCR webpage.

DELIVERY REQUIREMENTS

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- Proper Delivery
 - Mail, or otherwise directly deliver (e.g., hand deliver or electronic delivery), one CCR to each customer by July 1st every year
 - In addition, make a "good faith" effort to reach non-bill paying consumers
 - Deliver the CCR to other agencies as prescribed by the primacy agency
 - Make the CCR available upon request
- □ >100,000 persons served
 - Must also post the CCR on the Internet

CCR DELIVERY METHODS AND APPROACHES

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2 Implementation Approaches

 Paper CCR Delivery with Electronic CCR Delivery Option Electronic Delivery
 with Paper CCR
 Delivery Option



Delivery Methods

- 1. Mail paper copy
- 2. Mail notification that CCR is available on website via a direct URL
- 3. Email direct URL to CCR
- 4. Email CCR sent as a file attachment
- 5. Email CCR embedded in the message
- 6. Additional electronic delivery that satisfies "otherwise directly deliver"



Poll Question

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- Will you be using electronic delivery for your CY 2013 CCR?
 - Yes
 - No
 - I will decide after the CCR Electronic Delivery webinar next week

DELIVERY REQUIREMENTS

- Mailing Waiver (signed into law by State's Governor or Tribal Leader)
 - <10,000 persons served</p>
 - Publish CCR in at least one local newspaper, and
 - Notify customers that CCR will not be mailed, and
 - Make reports available upon request
 - <500 persons served</p>
 - Notify customers that CCR is available upon request, and
 - Must provide notice by mail, door-to-door delivery or public posting

SUGGESTIONS FOR EFFECTIVE CCR COMMUNICATIONS

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- Picture of source water to encourage protection
- Map of service area
- Description of treatment process
 - Use visuals in addition to text, include the benefit of each step
- Describe how and why you test the water
- Preface report data with context and meaningful conclusions
- Introduce your operators/managers/engineers to the community
- Post your CCR on your website and link to EPA's on-line CCR Catalog
- Send bill stuffers ahead of time to let people know their CCR is coming and why it's important

Poll Question

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We use the CCR for:

- Delivering only the required information to my consumers.
- To tell consumers all the great things we are doing.
- A way to open dialogue between the CWS and the public.
- I use the template provided with no additional information.
- All of the above.

STAY TUNED

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- Revised Total Coliform Rule
 - CCR requirements

RESOURCES FOR CCR

- Three CCR Guidance Documents
 - □ CCR Rule: Quick Reference Guide
 - Preparing Your Drinking Water Consumer Confidence Report (April 2010)
 - Revised State Implementation Guidance for the CCR Rule (April 2010) http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/compliancehelp.cfm
- Consumer Confidence Report Rule Delivery Options Memo and Attachment
 - http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/regulations.cfm
- □ EPA's on-line CCR Catalog http://cfpub.epa.gov/safewater/ccr/index.cfm
- CCRiWriter Tool to create a basic CCR www.ccriwriter.com

