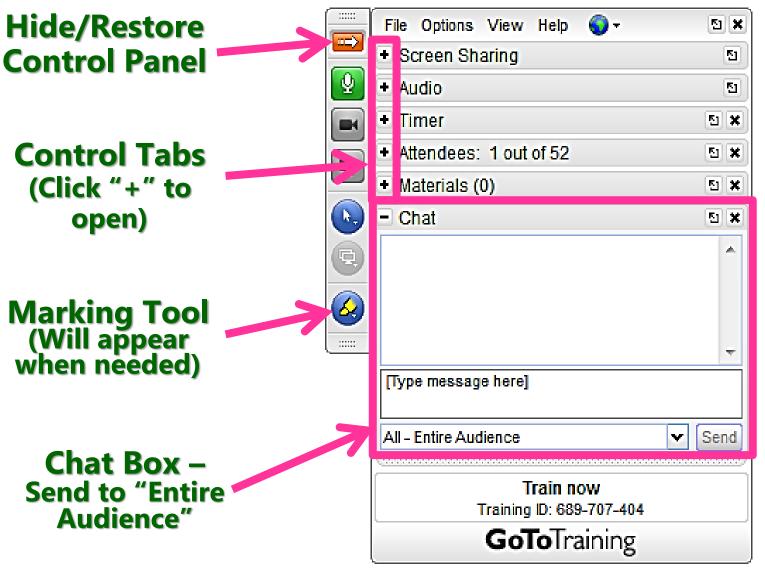
Having Audio or Tools difficulties?

Click on the Purple Flower and change your viewing format.

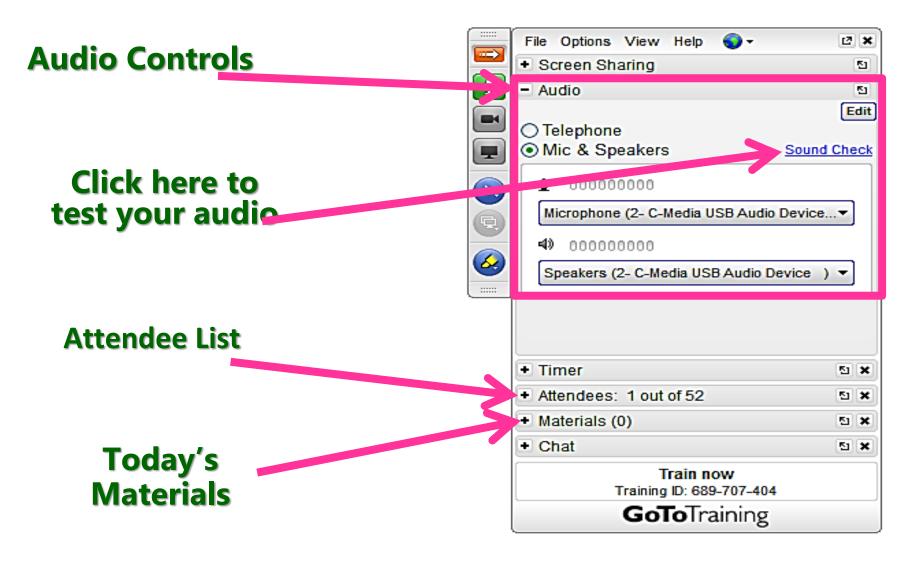
It may help!















#### Elements of the Site Sampling Plan and Public Water System Monitoring Schedule

**Tribal Response Workshop** 

#### **Rural Community Assistance Partnership, Inc.**

#### Western

Rural Community Assistance Corporation 916/447-2854 www.rcac.org

#### **Midwest**

Midwest Assistance Program 952/758-4334 www.map-inc.org

#### Southern

Communities Unlimited 479/443-2700 www.crg.org

#### Northeast

RCAP Solutions 800/488-1969 www.rcapsolutions.org

#### **Great Lakes**

WSOS Community Action Commission 800/775-9767 www.glrcap.org

#### Southeast

Southeast Rural Community Assistance Project 866/928-3731 www.southeastrcap.org

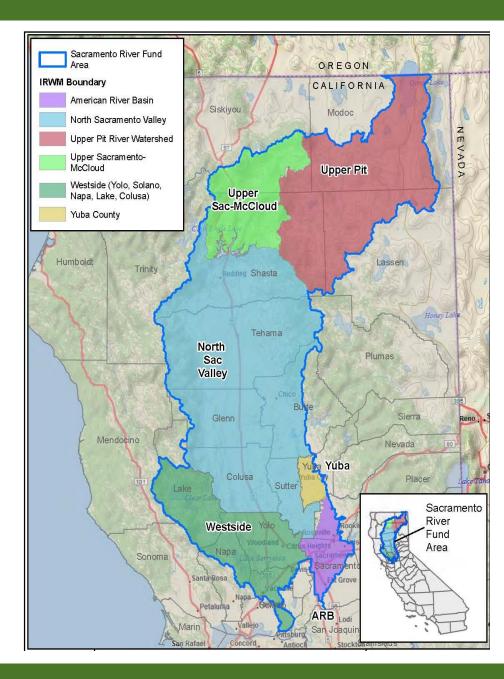


800/321-7227 www.rcap.org

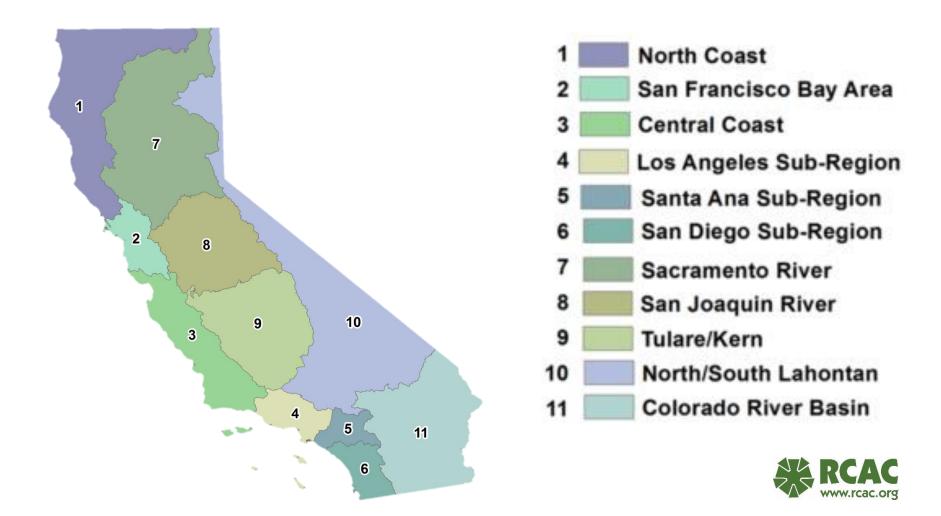


This Workshop is sponsored by the **Sacramento River Funding** Area Disadvantaged **Community Involvement** Program, a grant funded program supported by the **California Department of** Water Resources' Integrated **Regional Water Management Program** 

For more information on the DWR DACI-Program go to: <u>https://water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs/Proposition-1/DAC-Involvement-Program</u>



### **Prop 1 Funding Areas**



#### Sacramento River Funding Area Disadvantage Community Involvement Program

#### The goals of the SRFA-DACI-Program:

- 1. Engage DAC organizations, water purveyors and stakeholders in IRWM
- 2. Identify the water and wastewater management needs of DACs
- 3. Develop strategies and solutions for DAC water management needs.



This Workshop was developed to address key needs that have been identified for DAC communities and/or water providers in this region.

For questions on the SRFA DACIP Program and how to engage with your IRWM please contact: JoAnna Lessard (<u>joanna.Lessard@fishsciences.net</u>) or Katie Burdick (<u>katie@burdico.net</u>)



# **Todays Presenters**

David Hossli

- Technical Assistance Provider (RCAC)
- Phone: (805) 354-3672
- Email: DHossli@rcac.org

Sarah Bixler

- Technical Assistance Provider (RCAC)
- Phone: (916) 926-1468
- Email: <u>SBixler@rcac.org</u>



# Rural Community Assistance Corporation (RCAC)

#### Rural Community Assistance Corporation

- 3120 Freeboard Dr, West Sacramento, CA 95691
- Phone: 916-447-2854
- Website: www.rcac.org



### **RCAC Core Services**

- Community and Environmental Service
- Housing
- Loan Fund
- Training
- Community Leadership
- Tribal Utilities



### **Environmental Services**

- RCAC water, wastewater and solid waste technical assistance
- Building Rural Economies (BRE), community outreach and development solutions





# **Housing Services**

- RCAC affordable housing assistance
- Tribal Housing Excellence Academy (THE Academy), housing and development assistance on tribal lands
- Development Solutions, real estate development that support nonprofit organizations





# Training

- RCAC technical assistance in the field
- Water
- Wastewater
- Solid Waste
- Housing
- Community
- Other Various Topics





### **Classroom and online education**

 RCAC expands the knowledge base of the rural public through free education and training





### **Financing assistance**

 RCAC housing, environmental infrastructure or community facilities, and small business financing





# **Building communities**

 RCAC leadership development training





# Sampling water of public water systems

#### Topics today:

- Why and what are we sampling for in our water
- Rules and Regulations
- Monitoring Schedule
- Sample Site Plan
- Rules and sampling tips



# Water Sampling

- What are we sampling for?
- Initially: Quarterly? Sets a baseline.
  - Chemical, mineral, alpha, turbidity/pathogens
- Annually, or as required: Supports baseline
  - Chemical, mineral, alpha, turbidity/pathogens
- Monthly (if required by primacy or GWR)
  - Coliform/E.coli
- Daily = chlorine (and?)



# Water Sampling

- Coliform
- Nitrate, Nitrite
- IOC
- VOC
- SOC
- Radionuclides
- Lead and Copper



# Water Sampling

- How do we sample?
- Different bottles for each sample:
  - Clear glass, amber glass, clear/dark plastic
  - Acidified ("fixes" a sample so its composition doesn't change)
  - Air or no air bubble (VOC)
  - Ice chest or dash board of work truck?



# What is a Public Water System?

#### Community Water System

- At least 15 service connections or 25 year round residents
- Non-Community Water System
  - Non-Transient at least 25 of the same persons >6 months per year
  - Transient at least 25 persons daily at least 60 days per year



# **Primary Drinking Water Standards**

- Health related pathogen removal
- Establishes MCLs, monitoring, reporting & notification requirements
- Examples:
  - Coliform/E.coli
  - Turbidity (Nephelometric Turbidity Units, NTU)
  - Microorganisms



# **Secondary Drinking Water Standards**

- Aesthetics looks, smell, taste
- Establishes SMCL, monitoring, reporting & notification requirements
- Examples:
  - Iron & manganese
  - pH & corrositivity
  - Taste, odor & color



#### **Example of Water Quality - Nitrate & Nitrite**

#### Primary Drinking Water Standard Health Concern

Blue Baby Syndrome- Methemoglobinemia

#### Sources

- Fertilizers
- Human and Animal Waste
- Atmospheric Deposition



# Lead and Copper

#### Collected at Consumers Tap

- "First Draw"
- Source not used >6hr <12hr</p>
- 90<sup>th</sup> Percentile
- Pb MCL = 15 ppb
- Cu MCL = 1300 ppb



# Total Coliform Rule (TCR) now rTCR

- TCR approved by Congress, enacted in 1992
- The TCR <u>helps</u> protect water systems from microbial contamination
- TCR requires the water system to monitor for total coliform and E.coli bacteria
- TCR applies to all community and noncommunity water systems
- Total coliform = indicator organism



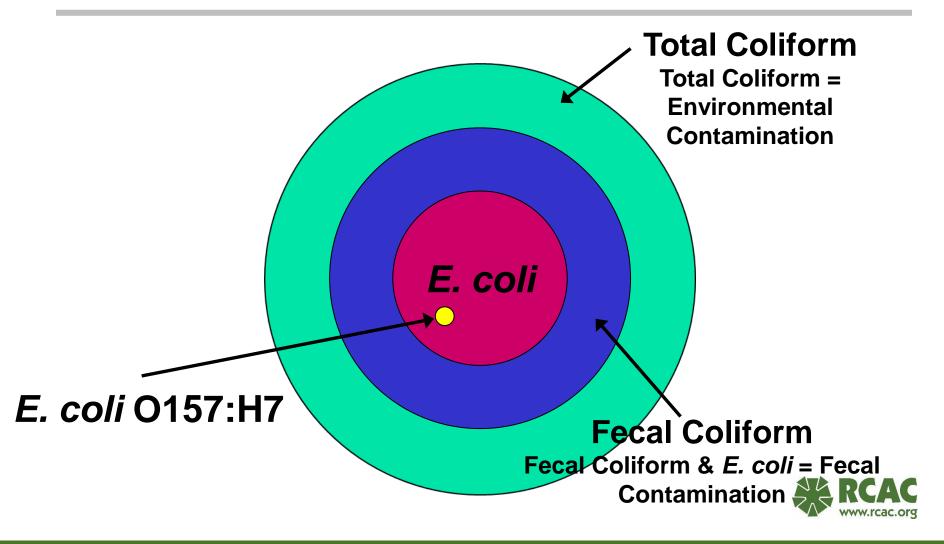
# Total Coliform Rule (TCR) now rTCR

Revised Total Coliform Rule

- Sets a MCL maximum contaminant level for *E. coli and total coliforms*
- Initates a Find and Fix approach to address fecal contamination
- It requires public water systems PWS to perform assessments to identify sanitary defects and fix them



### What is a Coliform?



# Stage 2 DBPR

- Became effective January 4, 2006
- Requires TTHM and HAA5 MCL compliance at each monitoring point in distribution system
  - No more averaging across distribution system
  - Identify DBP "hot spots"
- Initial Distribution System Evaluation
  - Will be used to determine compliance monitoring points



### What are DBP's?

- Chemical disinfectants react/combine with precursors in raw water creating carcinogens
- Trihalomethanes = chlorine + organics (TTHM)
- HAA5 = chlorine + organics/inorganics
- Bromate = bromide + ozone
- Chlorites = precursors + chlorine dioxide



# When Do I Sample?

#### Determine peak historical month

- Peak TTHM levels, or
- Peak HAA5 levels, or
- Month of warmest water temperature



# **Factors Affecting DBP Formation**

- Precursor concentration
- Disinfectant type and dose
- Water chemistry
- Water temperature
- Water age
- Biodegradation of HAAs



#### How to read and use PWS Monitoring Schedule



#### How to read and use PWS Monitoring Schedule

Public Water System Monitorin PWS Type: Community serving 35 people.	g Schedu	lle	PWS Classification Levels Treat Dist N/A Level	System Sourc	9/23/2019 Next 9/30/2022
Requirements	Last Result Received	Next Sampling Due Date	Following Sampling Due Date	Current Status Monitoring Frequency	Comments:
Contaminant Names	<u> </u>				L
Consumer Confidence Report					
Delivery and Certification of Annual Report to Customers	2018 CCR on 7/2/2019	July 1, 2020	July 1, 2021	Required Annually	Draft CCR will be provided by EPA before March 31. Send final CCR and Certification of Delivery to EPA by July 1
		July 1, 2020	July 1, 2021		EPA before March 31. Send
Delivery and Certification of Annual Report to Customers Revised Total Coliform Rule		July 1, 2020	July 1, 2021		EPA before March 31. Send final CCR and Certification of

#### DS001 Distribution

Asbestos					
Waiver Expires on: 12/31/2	028				
Asbestos	12/14/2000	12/31/2028	12/31/2037	Waiver, recertify by date shown	renew in 2028.
				Every 9 years	



#### How to read and use PWS Monitoring Schedule

DS001					
Stage 2 Disinfection By-Products	Samples requi	red within the mo	nth of August. S	amples outside th	his period will be invalid.
Total Trihalomethanes (TTHMs), Five Haloacetic Acids (HAA5)	8/22/2018	08/31/2021	8/31/2024	Monitor Once per 3 years	Sample in August Only.
				Every 3 years	

#### DS001 PWS# 0605077 distribution system

Lead, Copper 9/15/2017 9/30/2020 9/30/2023 Maximum Reduction Sample at approved sample sites, follow proper sampling protocol, provide lead results to sample site residents, certify delivery to EPA.	Lead & Copper	5 samples required between June 1 and Sept 30. Samples outside this period will be invalid.						
	Lead, Copper	9/15/2017	09/30/2020	9/30/2023	Reduction Every 3 years	sites, follow proper sampling protocol, provide lead results to sample site residents,		

#### EP001 Entry Point for well 3

Inorganics						
Waiver Expires on: 12/31/2024						
Barium, Thallium, Antimony, Cyanide, Cadmium, Beryllium, Chromium, Selenium, Mercury, Fluoride	12/16/2015	12/31/2024	12/31/2033	Waiver, sample by date (9 years)		
				Every 9 years		
Waiver Expires on: 12/31/2024						
Arsenic	5/31/2016	12/31/2024	12/31/2025	Annual Monitoring Groundwater		
				Every year		
Nitrate/Nitrite						
Nitrate [reported as Nitrogen]	12/6/2019	12/31/2020	12/31/2021	Reduced Monitoring	Sample every year	
				Every year		
					STA DCAC	



#### How to read and use PWS Monitoring Schedule

Public Water System Monitoring	g Schedu	le	PWS Classificatio		As of 02/11/2020
DWG Trees Community conding 25 noonlo			Treat Dist	System Source	e Type:Gw
PWS Type: Community serving 35 people.			N/A Level	Last Sanitary Survey	9/23/2019 Next 9/30/2022
Requirements	Last Result	Next	Following	Current Status	Comments:
-	Received	Sampling Due Date	Sampling Due Date	Monitoring	
Contaminant Names		Date	Due Date	Frequency	
Realisides and 800s					
Pesticides and SOCs Waiver Expires on: 12/31/2022					
Dioxin (2,3,7,8-TCDD)		12/31/2022		Waiver, recertify	No sampling required.
		12/31/2022			Renew waiver by
					12/31/2022
				Every 3 years	
Waiver Expires on: 12/31/2022					
PCBs [Polychlorinated biphenyls], Heptachlor epoxide,	12/28/1998	12/31/2022	12/31/2025	Waiver, recertify	No sampling required.
Heptachior, Methoxychior, Dalapon, Pentachiorophenol, Toxaphene, Atrazine, 2,4,5-TP (Silvex), Diquat, Benzo(a)pyrene,		1		by date shown	Renew waiver by
Simazine, Picloram, Oxamyl [Vydate], Hexachlorobenzene, Endrin, Chlordane, Endothall, Carboluran, Dinoseb, Di (2-				Europy 2 uppers	12/31/2022
ethylhexyl) phthalate, Di (2-ethylhexyl) adipate, Hexachlorocyclopentadiene, Lindane, Alachlor, 2,4-D				Every 3 years	
Waiver Expires on: 12/31/2022					
Glyphosate	2/25/2005	10/01/0000	12/31/2025	Mahar mentify	No compliant sequired
Gryphosate	2/25/2005	12/31/2022	12/31/2025		No sampling required. Renew waiver by
		'			12/31/2022
				Every 3 years	
Waiver Expires on: 12/31/2022					
Dibromochloropropane (DBCP), Ethylene Dibromide	4/28/1994	12/31/2022	12/31/2025		No sampling required.
		1		by date shown	Renew waiver by
				E and a second	12/31/2022
				Every 3 years	



#### How to read and use PWS Monitoring Schedule

Radionuclides					
Adjusted Alpha (Excl. Radon & U), Uranium (combined)	12/16/2015	12/31/2021	12/31/2027	results < 1/2MCL	
		l			
				Every 6 years	
Combined Radium 226/228	6/27/2011	12/31/2021	12/31/2027	results < 1/2MCL	
		l			
Sodium					
Sodium	8/22/2018	12/31/2021	12/31/2024	Groundwater	
				Every 3 years	
VOCs				·	
Waiver Expires on: 12/31/2022					
Toluene, Carbon Tetrachloride, Benzene, Trichloroethylene, p- Dichlorobenzene, Chlorobenzene, 1,1,2-Trichloroethane, 1,2,4-	4/13/2017	12/31/2022	12/31/2028	Waiver, GW,	Submit results for VOCs and
Trichlorobenzene, Dichloromethane, Styrene, trans-1,2- Dichloroethylene, 1,1-Dichloroethylene, Tetrachloroethylene, 1,2-		I		sample/recertify by date shown	recertify waiver by date shown
Dichloroethane, o-Dichlorobenzene, Ethylbenzene, 1,2- Dichloropropane, cis-1,2-Dichloroethylene, Vinyl Chloride, 1,1,1-				Every 6 years	
Trichloroethane, Xylenes					I]



#### Sample Site Plan



Public Water System Name	Oldsville		Active Entry Point ID#s	Entry Point Names	Active Source ID#s	Source Names
Public Water System ID#	123456789		EP001	Entry Point 1	GW001 & GW002	1Well 2Well
Classification	Community					
Population Served						
The technical assistance provider is:	David Hossli					
	805-354-3672					
Email	dhossli@rcac.org					
The Water System Operator is	Operator					
Phone	(XXX) XXX-XXXX					
Email	email@domain.com					
The EPA Program Manager is:						
Phone						
Email						
Primary Laboratory	best					
The laboratory contact is:	Lab Contact					
Phone	example	Upon Approv	al, all samplin	g must be conducted	according to this	olan.
Email	example			es and edits be neces proval, prior to samp		e-submit
Date Submitted 12/8/2016				ectronic, via email, us	-	
Date Approved 12/29/2016				,,,,,		
	Narrative SSP Monitoring Schedule	Sample siting plan	TCR Legend	PbCu Legend DBPR a	and Chem L 🕂 🗄	•



#### I Coliform Rule (RTCR), Ground Water Rule (GWR), Lead and Copper Rule (LCR), and Disinfection By-products Rule (DBPR) Distribution System Testing

Oldsville				
PWS ID: 123456789				
The <u>Oldsville Water System</u> is a small community water system presently serving commercial buildings and ( )residences. Water is supplied by two wells, Water system PWS# 123456789				
Oldsville water system operates as a community water system. Disinfection (CL2)Treatment occurs the point of entry to the water distribution system –PWS #123456789				
This plan is based on five (5) routine sampling sites in the distribution system (S1 through S12), as shown on the sampling diagram and in the list of sampling sites. The routine sites have been chosen on laterals near the dead ends of the service mains where there is also access to repeat samples at points within five taps on either side in case of a coliform-positive result. The repeat sites for each routine site are also shown on the diagram, as well as the list of sampling sites.				
Sampling Program				
The Safe Drinking Water Act, more specifically, The Revised Total Coliform Rule only requires that this system collect one coliform sample per month. The system has determined that collection of two routine coliform samples is in the best interest of providing safe water to tribal members. The required monthly routine samples will be taken at different routine sites each month as shown on the attached sampling site rotation schedule. These routine samples will be collected early in the week to allow time to collect repeat samples should a positive result occur. Sampling will also be planned for early (first or second week) in the month. These samples will be labeled <i>ROUTINE</i> on the sample bottles and chain-of-custody form, and transported to lab the same day, on ice, in a cooler. Sample results will be reported to				
Description of PWS     Narrative SSP     Monitoring Schedule     Sample siting plan     TCR Legend     PbCu	Legend	DBPR an	d Chem L 🔒	. (+)
	-			



	Α			B	
Oldsville 123456789					
Distribution System Monitoring Program					
Revised Total Coliform Rule (RTCR) – Under the RTCR, r routine") are required each month, rotating through establish epresentative water quality results throughout the system or on population served. See the attached map, site list and rot	ned sample sites each n ver the course of a year.	nonth to achieve			
Ground Water Rule (GWR) – Under the GWR this system collecting source water samples at all active wells in addition when a routine sample result is positive (label GWR). See "F	n to the usual repeat sa	mpling done			
Reporting to EPA - Any sample results collected under RT ollowing the month in which they were collected (or by the 1 sooner). Please email results to datamanager@epa.gov and	0th day after the end of				
			0		
Follow-up Actions in the Event of Positive Results - In the oup actions are triggered depending on whether the result(s) is positive for (1)Total Coliform (TC positive only), or for (2) E. Cossitive routine result of either type requires an immediate repelow for either of these two scenarios. Any questions about at or email to	s(are) coli (EC) positive sample esponse. Follow the ste	s. Any ps indicated	sitive several follow		
			within 24 hours		
C Positive Routine (Indicator Organism) – If Utility recein ake the following steps: a) Collect 3 Repeat samples for each TC positive at the foll		sitive routine sample(s);	Within 24 Hours		





~					11	1	J IN	L	INI IN
	COLIFORINI	BACTERIA COMPREHENSIVE SAM	IFLE STING	APPROVED by EPA on :					
	PWS NAME:	Oldsville		To satisfy Triggered Sour	ce Water monitorin	g. Raw Water S	Source (RWS)	) samples m	ust be taken
	PWS ID#:	123456789		sample tap at The system		-			
	DATE:	December 8, 2016		Triggered source water n	nonitoring must be	taken at the w	ells 1 and 2 P	WS#123456	789
	lf system dis	sinfects & is subject to DBPR, ind	clude field r	esults for chlorine residua	I on Chain of Custo	ody			
SAMPLING SITES TCF			TCR SAM	PLE SITING ROTATION					
Dot	SITE ID	SITE NAME	MONTH	SITE ID#					
•	TCR A	Routine-16089 17th AveHB	January	TCR A, TCR C, TCR-E					
•	TCR A-U	Repeat-16959 Hersey Ave-HB	February	TCR B, TCR D, TCR E					
•	TCR A-D	Repeat-16147 17th Ave-HB	March	TCR A, TCR C, TCR-E					
•	TCR A-RWS	GW001, GW002 PWS #0605136	April	TCR B, TCR D, TCR E					
•	TCR B	Routine-16670 Grass DrHB	Мау	TCR A, TCR C, TCR-E					
٠	TCR B-U	Repeat-16720 Grass DrHB	June	TCR B, TCR D, TCR E					
•	TCR B-D	Repeat-16624 Grass DrHB	July	TCR A, TCR C, TCR-E					
٠	TCR C-RWS	GW001, GW002 PWS #123456789	August	TCR B, TCR D, TCR E					
•	TCR C	Routine-16055 Hersey-Gym-deep sink	September	TCR A, TCR C, TCR-E					
•	TCR C-U	16085 Hersey-Rec Bldg-Deep Sink	October	TCR B, TCR D, TCR E					
•	TCR C-D	16083 Hersey Education Bldg-deep sink		TCR A, TCR C, TCR-E					
•	TCR C-RWS	GW001, GW002 PWS #123456789	December	TCR B, TCR D, TCR E					
•	TCR D	Routine-16635 Thomas RdHB							
•	<ul> <li>De</li> </ul>	scription of PWS Narrative SSP	Monitoring	Schedule Sample siting p	an TCR Legend	PbCu Legend	DBPR and	Chem L (	



В	С	D	EF	G	Н	1	J	K L
LEAD AND CO	OPPER SAMPLE SITING PLAN		_	APPROVED by EPA	on :	12/29/2016		
PWS NAME:	Oldsville							
PWS ID#:	123456789			Lead and C	opper samp	ling site tiers	cws	NTNCWS
DATE:	December 8, 2016					Tier 1	Single family homes with copper pipe and lead solder installed after 1982 and/or has a	Buildings with copper pipes and lead solder a installed after 1982 and/or has a lead service
						Tier 2	Buildings, including multi-family homes, wit copper pipes and lead solder installed after	
	LIST OF PbCu SAMPLING SITES			Samples are taken '	'first draw''	Tier 3	Single family homes with copper pipes and lead solder installed before 1983.	Does not exist
SITE ID#	SITE NAME	Tier		from taps that have been closed		Other	Sites throughout the system representing typical plumbing materials used in the	Sites throughout the system representing typical plumbing materials used in the
PbCu #1	16445 17th, Ave,Elder Ctr., restroom	Tier 1		overnight or at least	6 hours.			
PbCu #2	16476 Grass Rd.,home,kitchen	Tier 1						
PbCu #3	16711 Grass Rd., home, kitchen	Tier 1			Sar	mpling Guida	nce	
PbCu #4	16270 Alk Dr. , kitchen	Tier 1				faucet aerat	ors should not be removed for sampling	
PbCu #5	16835 Alk Dr.Ste.M, Power health clinic	Tier 1				faucets shou	Id not be flushed prior to starting the 6-hour n	ninimum stagnation period
PbCu #6	16681 Grass Rd. , kitchen	Tier 1				sample bottl	es should be wide-mouthed in order to samp	le at a higher flow rate
PbCu #7	16412 Jeff Rd. Kitchen	Tier 1				try to use on	y faucets that are used for drinking/food prepa	aration and faucets that have a separate hot and cold lin
PbCu #8	16835 Alk Dr., Adm Bldg. breakroom	Tier 1				taps with a s	ingle hot/cold line often contribute a small a	mount of hot water which can elevate lead and copper
PbCu #9	16125 Alk Dr. restroom	Tier 1						
PbCu #10	16055Hersey Ave.,rec center, restroom	Tier 1		(add more sites as i	necessary, o	opy rows to r	etain formatting and dropdown options)	LEAD BACKGROUND INFORMATION
De	escription of PWS Narrative SSP	Monitoring	Schedu	ule Sample siti	ng plan	TCR Legen	d PbCu Legend DBPR and Chem	Legend 🕂 : 🖣



4	В	С	D	E	F	G	Н		J	K	L
	Disinfection B	y-Products Rule and Chemical Rule	s	APPROVED by EPA on :	12/29/2016						
	PWS NAME:	oldsville									
	PWS ID#:	123456789									
	DATE:	December 8, 2016								Ţ	
	Stage 2 DBPR	SAMPLING SITES		Don't forget to report field re	esults for chlo	orine resid	ual with				
	SITE ID SITE NAME			each TCR result on Chain o	of Custody						
	Stage 2 DBPR	Routine-186,Hersey,Rec center-deep s	sink								
	Radionuclides,	IOCs, Arsenic, VOCs & SOCs sample	sites	This sampling will be con	nducted at t	he Entry I	Point for P	NS# 1234	56789		
	SITE ID	SITE NAME									
;											



#### **Rules and sampling tips**



#### When the results are in...

- If the results are negative;
  - It is your responsibility to send a copy to primacy agency. Don't depend on the lab
  - It is your responsibility to place the results in safe storage for 5 years
- If the results are positive...
- Repeat samples and public notification



#### What is Public Notification?

General Public Notification Requirements

- Who must give public notice?
- Type of notice required for each situation?
- Who must be notified?
- Requirements for Tier 1, 2, and 3 Public Notices
- Content Requirements for Public Notices
  - 10 required elements, Standard language



#### **Public Notification Rule**

- Delivery requirements for public notices
  - A minimum delivery method plus other steps "reasonably calculated" to reach persons served (all consumers of the system)
  - Examples of delivery methods:
    - Appropriate broadcast media
    - Posting of notice
    - Mail or hand delivery
- The rule also includes new, more specific, multilingual notice requirements



#### **Public Notification Rule**

#### Each public notice must address ten elements:

- 1) Description of the violation or situation
- 2) When the violation or situation occurred
- 3) Potential health effects
- 4) The population at risk
- 5) Whether alternate water supplies should be used
- 6) Actions consumers should take
- 7) What is being done to correct the violation/situation
- 8) When the system expects to return to compliance
- 9) Name, number, and business add. for more info
- 10) Standard distribution language



#### **Public Notification Rule**

- Consultation with EPA
  - Required for all Tier 1 violations
- Certification requirement
  - PWS certifies all PNR requirements were met
  - Certification must be sent to EPA within 10 days of providing public notice to consumers
- Recordkeeping requirement
  - PWS and EPA must keep copies of notice and certifications on file for three years



# Boil water notice or don't use/drink the water notice

- Why do we issue them
- When do we remove them
- Who can remove them
- Examples



# Required Information on Bacteriologic Sampling Form

- Type of sample
  - routine
  - repeat (give date of original positive and location of all four repeat samples)
     special
  - special
- Chlorine residual, if system is disinfected
- Name of the sampler



### Tips for Selecting Sample Sites

- Accessible
- Above "big dog" height
- Consider dedicated sample taps
- No leaking valves or packing
- No threaded hose bibs (when possible)
- Good flow control
- No bushes or vegetation
- Can be flushed vigorously



### **Other Sampling Tips**

- Check for chlorine residual
- Avoid swivel faucets
- Cold water ONLY
- Do not adjust flow during sampling
- Remove aerator if applicable
- Be very careful!
- Clean up your work place



#### Wrap it up...

- Replace cap securely on sample bottle
- Place in sealed plastic bag (optional)
- Place in ice chest
  - Ice should be in bag, or
  - Ice packs
- Ship to lab as needed, or
- Drive to lab
- Within 30 hours!



#### **QUESTIONS??**



