

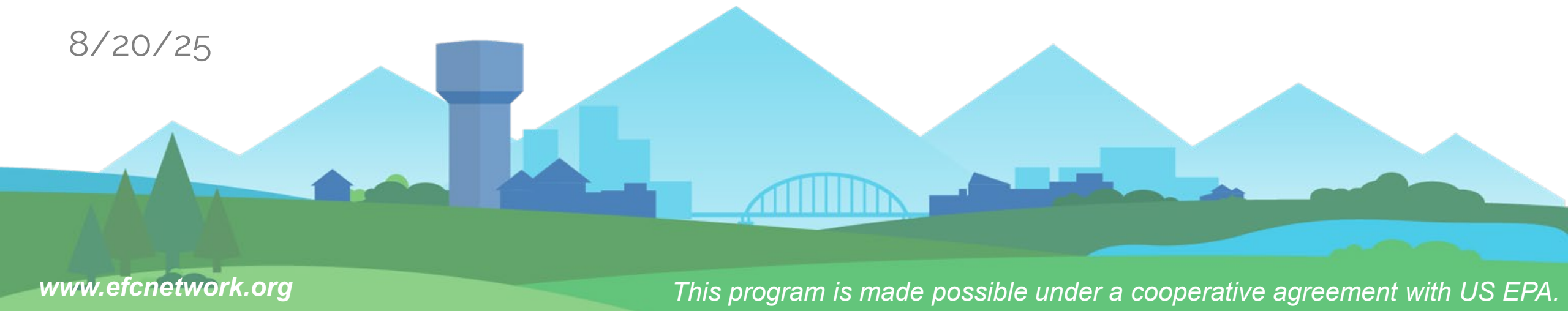


SOUTHWEST
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US Territories Water Operator Training Series

Session 5: Drinking Water Regulations

8/20/25



Michelle Olson

Water Utility Trainer and
Specialist

meolson@unm.edu



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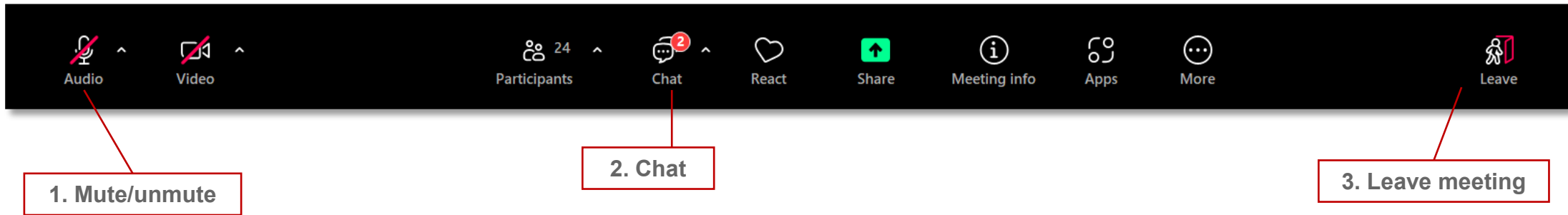


SCHOOL OF
ENGINEERING



This training series is funded by the US EPA

Attendee Meeting Controls



1. Mute/unmute

- Click the microphone icon to unmute yourself to speak (if you are not speaking, don't unmute)

2. Chat

- Click the chat icon and then use the dropdown next to send text instant messages to:
 - Everyone publicly: messages will be visible to all participants
 - Host only: messages will be sent only to the meeting host – Don't send a chat to only me; I won't have time to see it while presenting.
 - Any attendee directly: message will be sent to the selected meeting participant only

3. Leave meeting

- Click on the leave icon to exit the ZOOM Meeting

Schedule for 2025:

Date	Topic
6/25/25	Program Overview, Test Format, Study & Test Tips
7/9/25	Drinking Water System Overview - (Source, Treatment, & Distribution)
7/23/25	Basic Operator Math (+, -, /, x, Exponents and basic algebra)
8/6/25	Applied Operator Math (Areas, Volume, Pressure)
8/20/25	Drinking Water Regulations
9/3/25	Source Water Characteristics
9/17/25	Surface Water Intake Components, Well Components, and O&M
10/1/25	Disinfection 1: Chloramines, UV, Chlorine Dioxide, Chlorine
10/15/25	Disinfection 2: Chlorine Disinfection Application for Sodium Hypochlorite and Gas Chlorine (including storage and safety)
10/29/25	Disinfection 3: Distribution System Application, Residual Measurement, Evaluation & Adjustment,
11/12/25	Disinfection 4: Chlorine Disinfection Math
12/3/25	Surface Water Treatment 1: Coagulation, Flocculation, Sedimentation (including chemistry, process controls, operations)
12/17/25	Surface Water Treatment 2: Filtration

Links to recordings and material are available on our website at <https://swefc.unm.edu/home/op-cert-trainings/>

Hello
my name is

Safe Drinking Water Act (SDWA)

August 20, 2025

What is the Safe Drinking Water Act (SDWA)?

Quality

Treatment
Requirements

Monitoring
Requirements



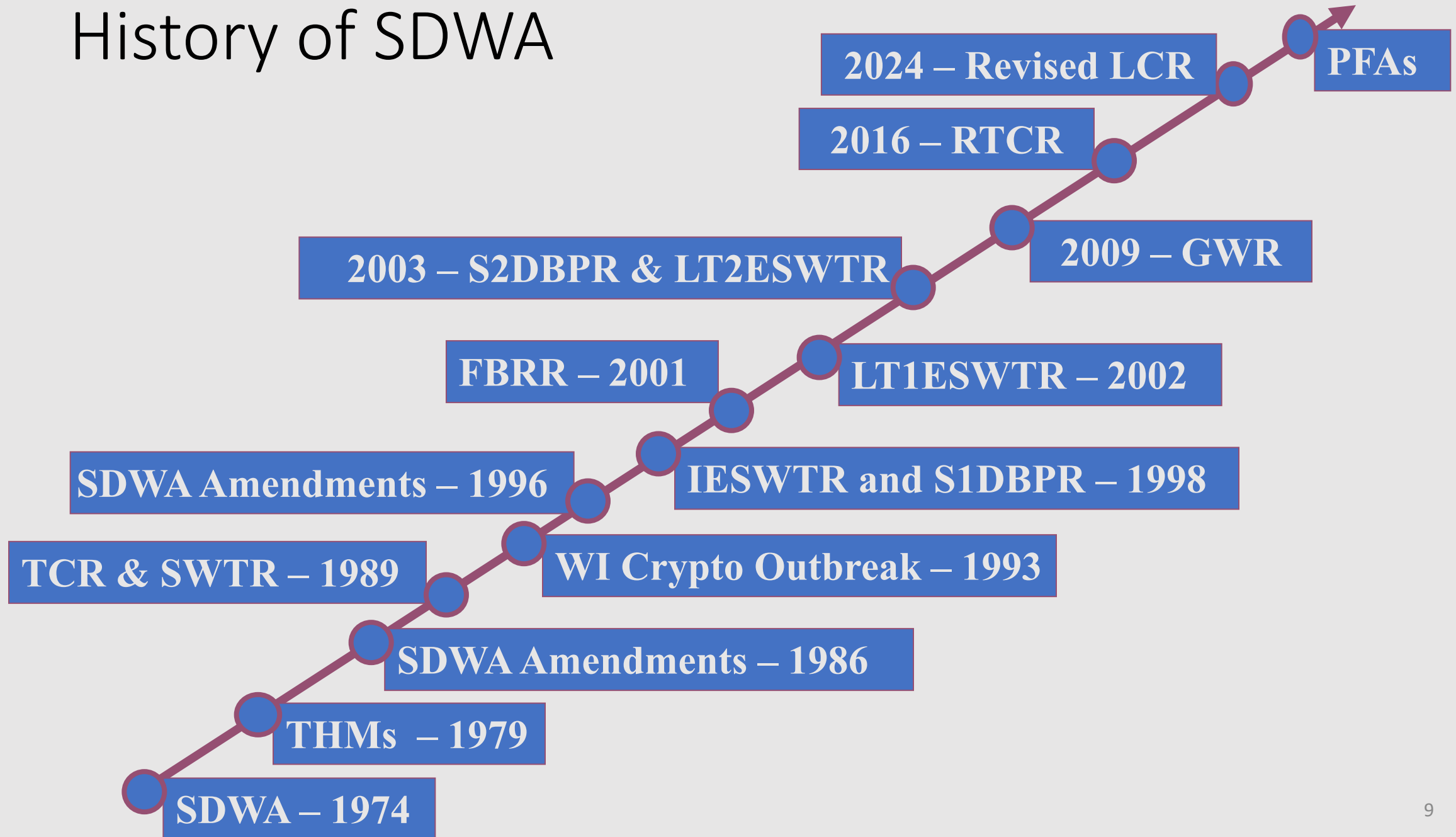
Standards

- Territories
- States
- Tribes
- Suppliers
- Localities

Purpose of SDWA

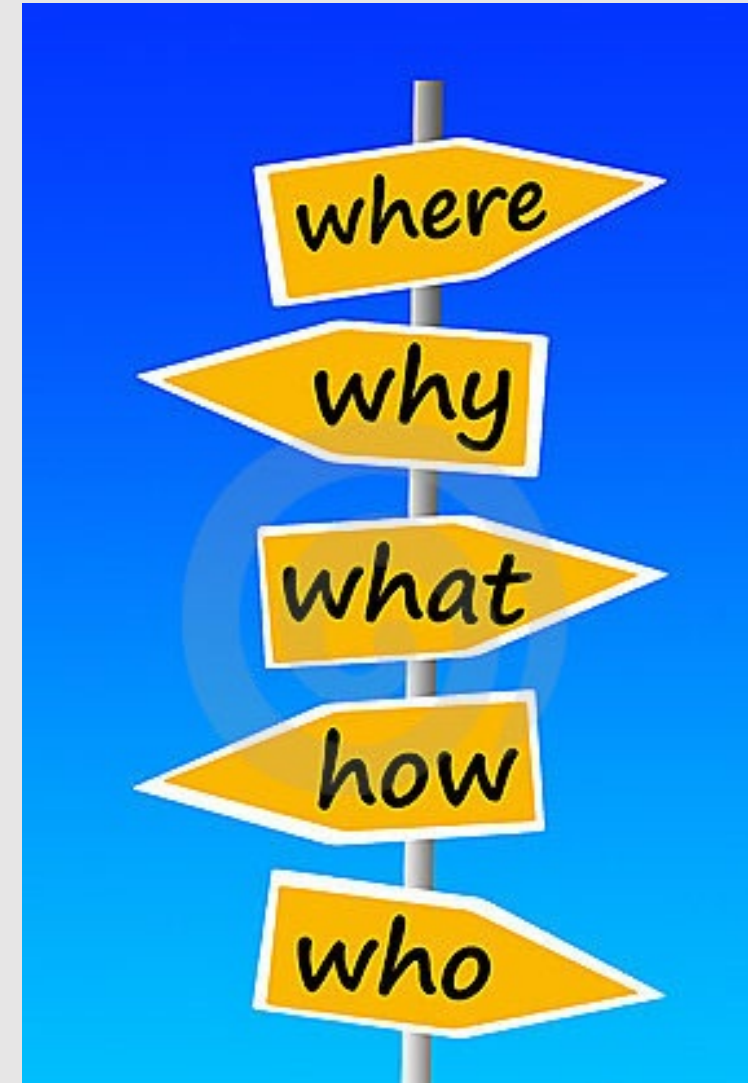
- Ensures the safe delivery of drinking water to consumers by a Public Water System (PWS).
- Protects the public from naturally occurring and human-made contaminants that may be found in drinking water.

History of SDWA



SDWA

- Defines Public Water Systems.
- Establishes Regulatory Programs.
- Establishes National Primary & Secondary Drinking Water Regulations.
- Requires Communication with Consumers.
- Outlines Prevention Approaches.

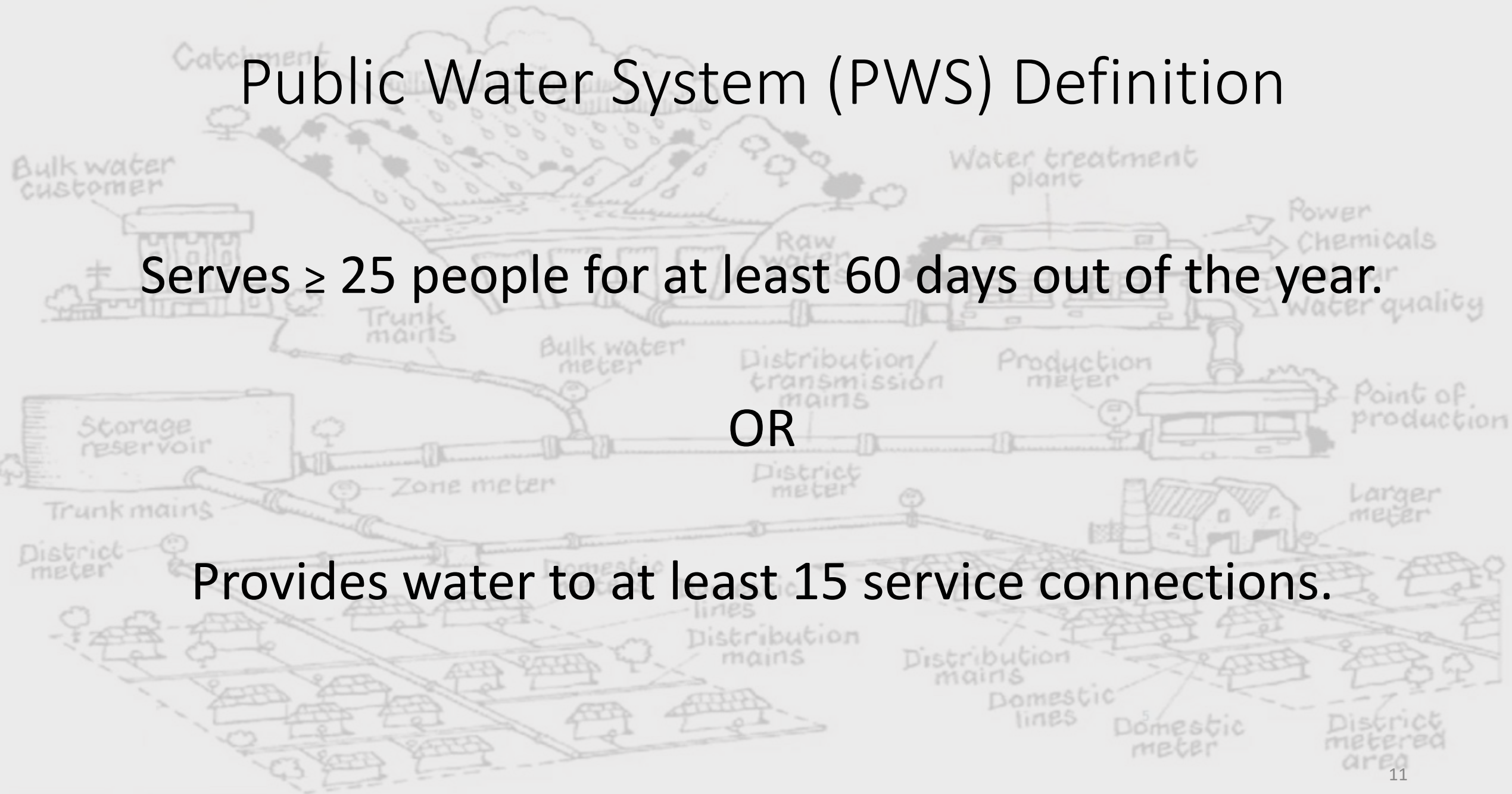


Public Water System (PWS) Definition

Serves ≥ 25 people for at least 60 days out of the year.

OR

Provides water to at least 15 service connections.



PWS Types



Community (C) – Serves at least 15 service connections or at least 25 residents year-round.

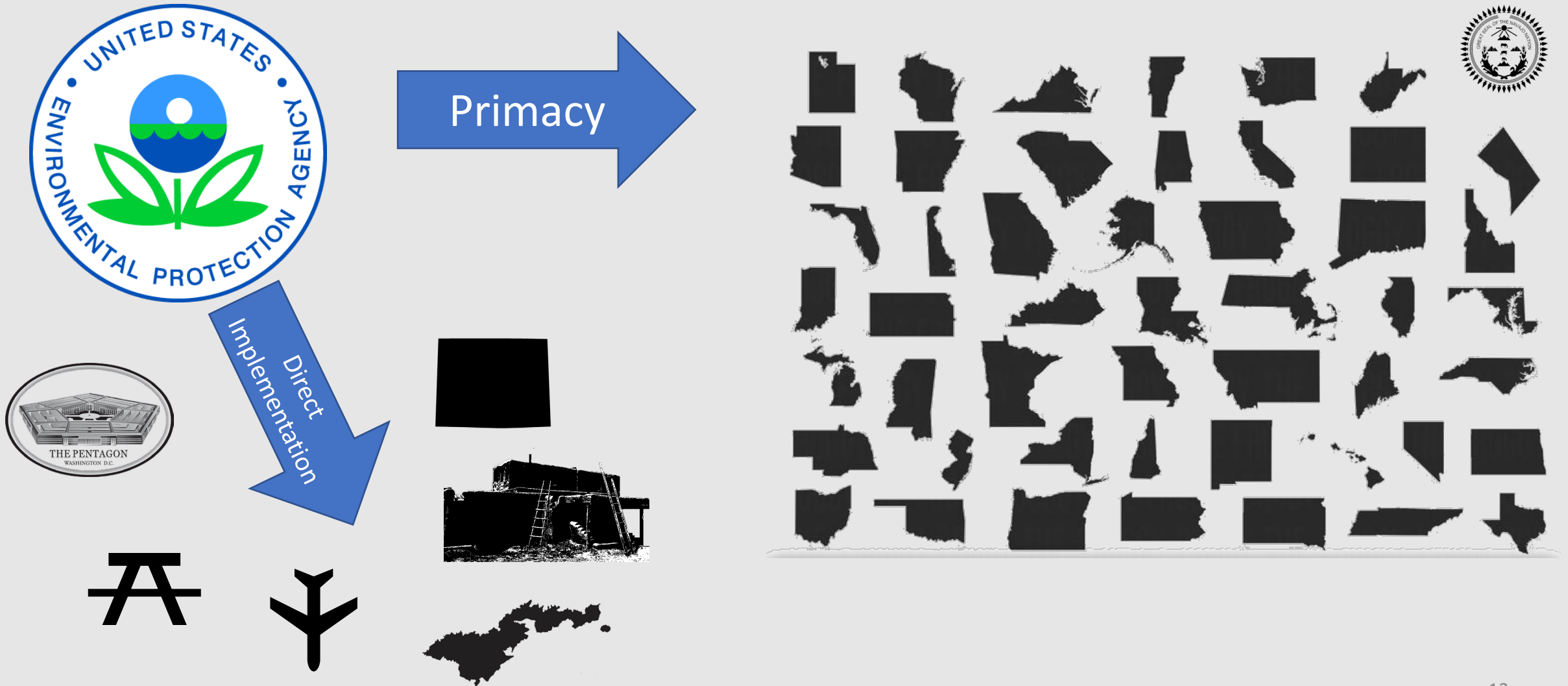


Non-Transient Non-Community (NTNC) – Serves at least 15 service connections or 25 of same people (not residents) for at least 6 months in the year (might not be year-round).

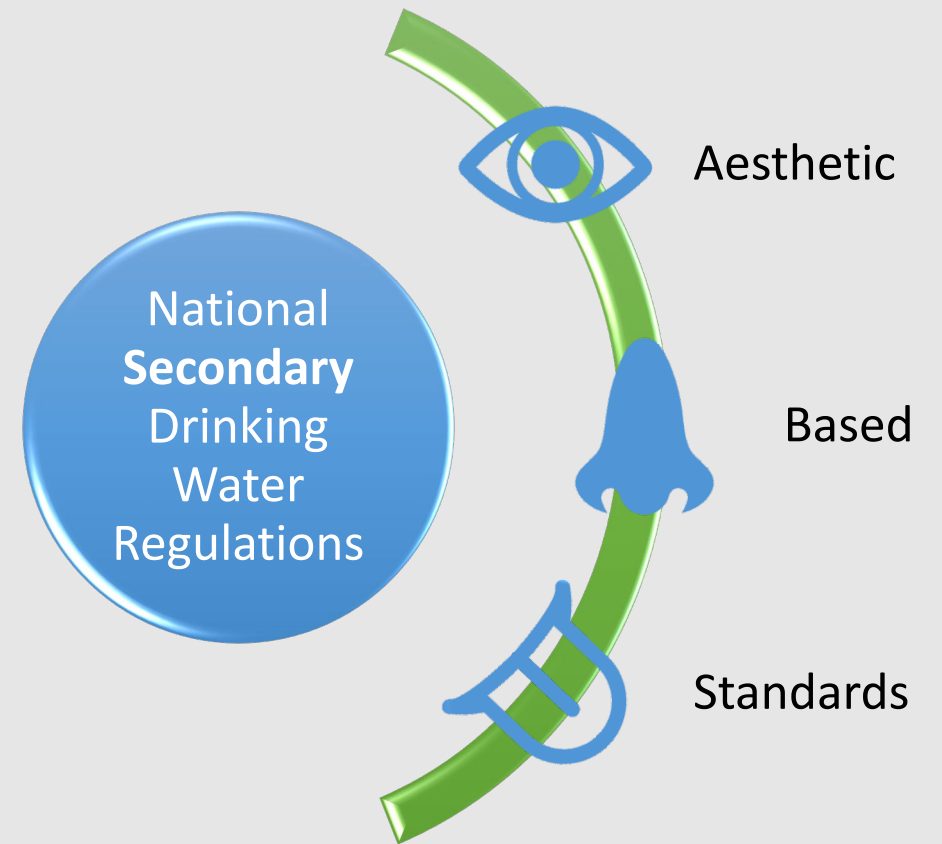
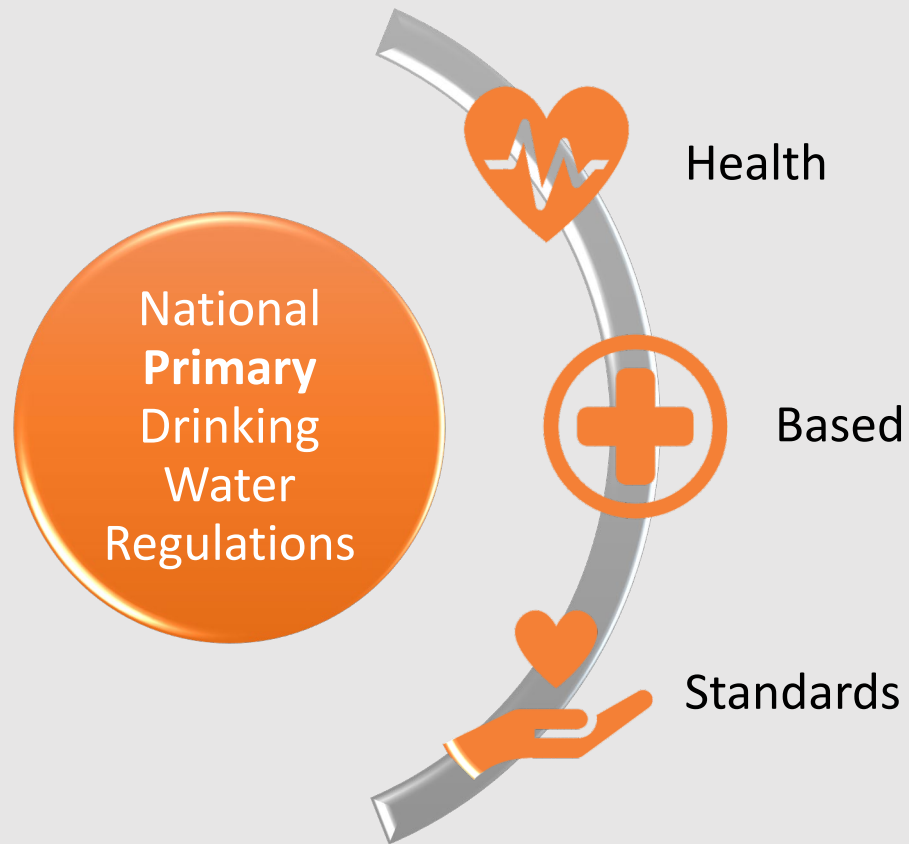


Transient Non-Community (TNC) – Serves at least 15 service connections or 25 people (not the same individuals) at least 60 days of the year.

SDWA Regulatory Programs



Drinking Water Regulations



Maximum Contaminant Level (MCL)

National Primary Drinking Water Regulations



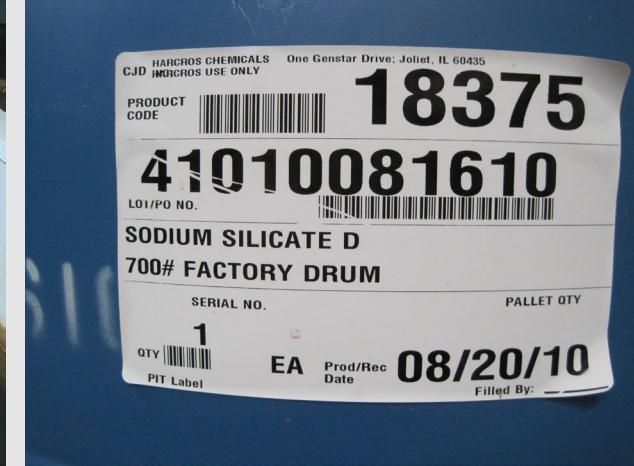
Contaminant	MCL or TT ¹ (mg/L) ²	Potential health effects from long-term ³ exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal (mg/L) ²
 Acrylamide	TT ⁴	Nervous system or blood problems; increased risk of cancer	Added to water during sewage/ wastewater treatment	zero
 Alachlor	0.002	Eye, liver, kidney, or spleen problems; anemia; increased risk of cancer	Runoff from herbicide used on row crops	zero
 Alpha/photon emitters	15 picocuries per Liter (pCi/L)	Increased risk of cancer	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation	zero
 Antimony	0.006	Increase in blood cholesterol; decrease in blood sugar	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	0.006
 Arsenic	0.010	Skin damage or problems with circulatory systems, and may have increased risk of getting cancer	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes	0
 Asbestos (fibers >10 micrometers)	7 million fibers per Liter (MFL)	Increased risk of developing benign intestinal polyps	Decay of asbestos cement in water mains; erosion of natural deposits	7 MFL
 Atrazine	0.003	Cardiovascular system or reproductive problems	Runoff from herbicide used on row crops	0.003
 Barium	2	Increase in blood pressure	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	2 15

National Primary Drinking Water Regulations



Treatment Techniques:

- May only be set if it is not “economically or technologically feasible to ascertain the level of the contaminant.”
- An enforceable procedure or level of technological performance that public water systems must follow to ensure control of a contaminant.



	Environmental Protection Agency Region 6		
	Drinking Water Program Coliform Bacteria Level 1 Assessment Form		
PWS ID#:		PWS Name:	City/Town:
System Type: COM ☐ NTNC ☐ TNC ☐			
Compliance Period (mm/yy):		Assessment Trigger Date:	Date Assessment Completed:
NOTE: Form to be completed based on data and documents available to the PWS and returned as soon as practical but no later than 30 days after the collection date of the sample that triggered the assessment			

National Primary Drinking Water Regulations



- Ground Water Rule (GWR)
- Filter Backwash Recycling Rule
- Long Term 1 (LT1) and Long Term 2 (LT2) Enhanced Surface Water Treatment Rule
- Chemical Contaminant Rule
- Radionuclides Rule
- Arsenic Rule
- PFAS
- Revised Total Coliform Rule (RTCR)
- Stage 1 & 2 Disinfectants and Disinfection By-Products Rule (D/DBPR)
- Lead & Copper Rule, Revisions, Improvements (LCR, LCRR, LCRI)

***Know the
Rules!***

National Secondary Drinking Water Regulations

NATIONAL SECONDARY DRINKING WATER REGULATION

National Secondary Drinking Water Regulations are non-enforceable guidelines regarding contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. However, some states may choose to adopt them as enforceable standards.

Contaminant	Secondary Maximum Contaminant Level
Aluminum	0.05 to 0.2 mg/L
Chloride	250 mg/L
Color	15 (color units)
Copper	1 mg/L
Corrosivity	Noncorrosive
Fluoride	2.0 mg/L
Foaming Agents	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Odor	3 threshold odor number
pH	6.5-8.5
Silver	0.10 mg/L
Sulfate	250 mg/L
Total Dissolved Solids	500 mg/L
Zinc	5 mg/L

Not enforceable by EPA

Individual Contaminant Monitoring Schedules Are Based On:



System Type
(C, NTNC, TNC)



Source Type
(GW, SW, GUDI)



Treatment
Type



Historical
Water
Quality
Results



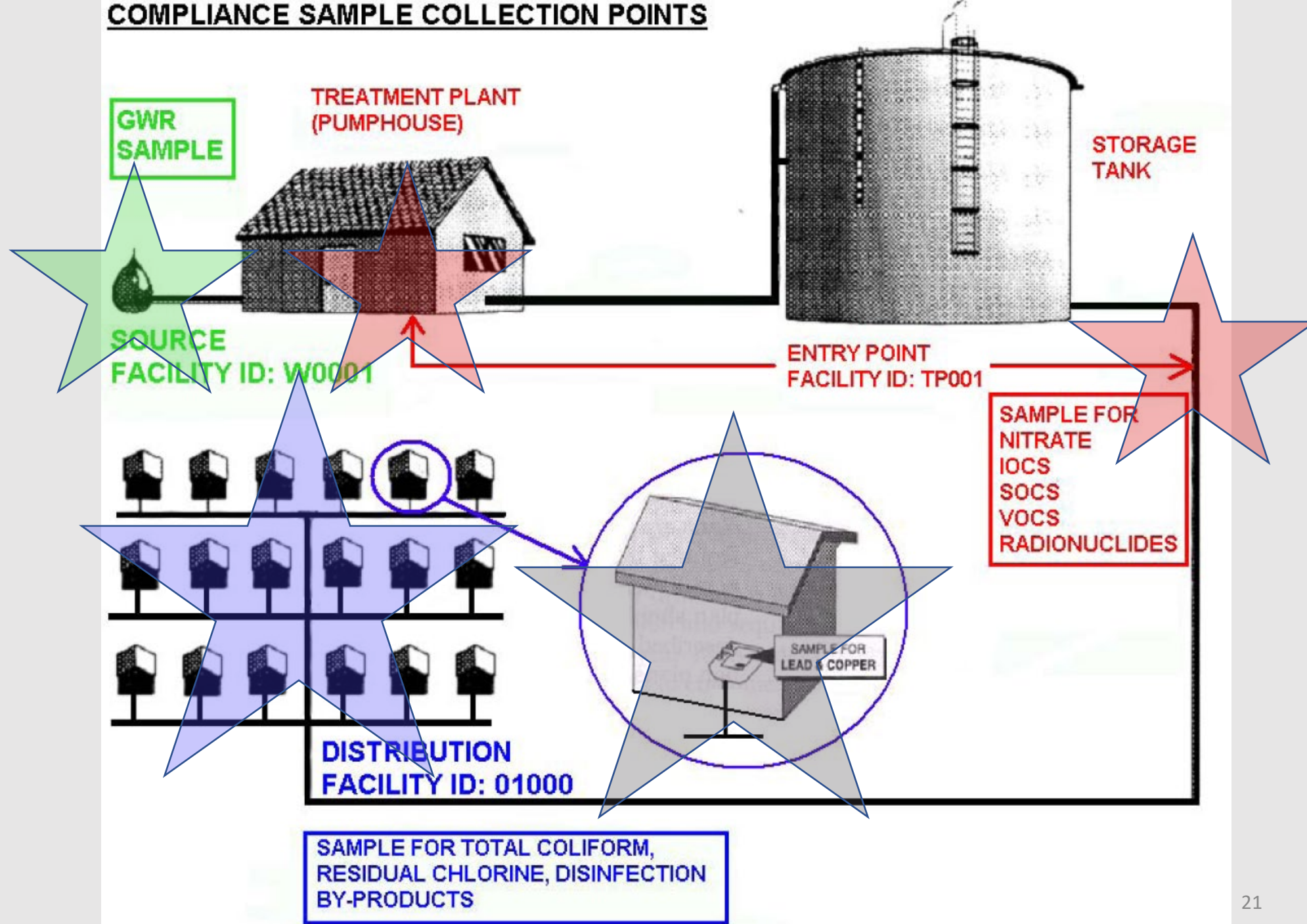
CHEMICAL Sampling Schedules

FACILITY ID: 01000		FACILITY NAME: DISTRIBUTION SYSTEM				
SAMPLE TYPE:	SAMPLE LOCATION:	SCHEDULE BEGIN DATE:	FREQ:	YEAR to SAMPLE:	WHEN TO SAMPLE:	NUMBER TO TAKE:
Stage 2 Disinfection By Products (TTHMs and HAA5s)	At sample sites in your Stage 2 DBPR sampling plan e.g. DBPMAx, DBP01.	1/1/2014	YR	2024	July	1
FACILITY ID: TP001		FACILITY NAME: 2 for TE Wells #1 & #2				
SAMPLE TYPE:	SAMPLE LOCATION:	SCHEDULE BEGIN DATE:	FREQ:	YEAR to SAMPLE:	WHEN TO SAMPLE:	NUMBER TO TAKE:
Nitrate & Nitrite	At the Entry Point.	1/1/2011	YR	2024	Anytime during the year.	1
Radionuclides (gross)	At the Entry Point.	1/1/2014	6Y	2024	Anytime during	1

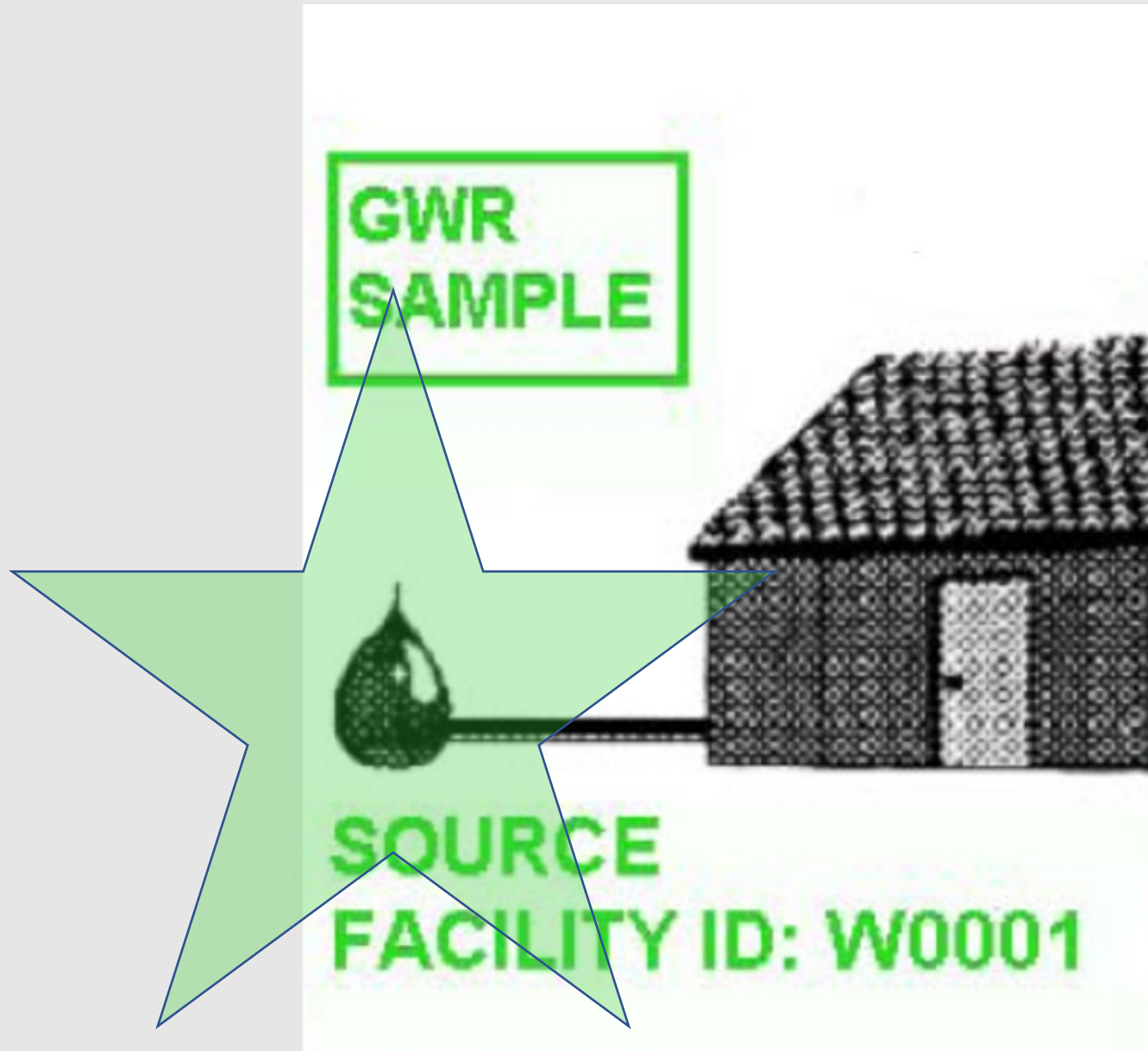
Requirements	Last Result Received	Next Sampling Due Date	Following Sampling Due Date	Current Status	Comments:
Contaminant Names				Monitoring Frequency	
EP001= TP001 Entry Point for Cl2 for TE WELLS #1 & #2					
Inorganics					
Mercury, Cyanide, Beryllium, Selenium, Thallium, Fluoride, Chromium, Cadmium, Barium, Antimony		12/31/2027	12/31/2036	Reduced Monitoring Every 9 years	
Nitrate/Nitrite					
Nitrate+Nitrite, Nitrite [reported as Nitrogen], Nitrate [reported as Nitrogen]		12/31/2025		Annual Monitoring Every year	
Pesticides and SOCs					
Heptachlor epoxide, Dalapon, 2,4,5-TP (Silvex), Toxaphene, Pentachlorophenol, PCBs [Polychlorinated biphenyls], Methoxychlor, Lindane, Heptachlor, Ethylene Dibromide, 2,4-D, Dibromochloropropane (DBCP), Chlordane, Carbofuran, Di (2-ethylhexyl) phthalate, Alachlor, Di (2-ethylhexyl) adipate, Atrazine, Oxamyl [Vydate], Benzo(a)pyrene, Dinoseb, Picloram, Dioxin (2,3,7,8-TCDD), Hexachlorocyclopentadiene, Hexachlorobenzene, Glyphosate, Endrin, Endothall, Diquat, Simazine		12/31/2025	12/31/2028	Reduced Monitoring Every 3 years	
Radionuclides					
Adjusted Alpha (Excl. Radon & U), Combined Radium 226/228, Uranium (combined)		12/31/2030	12/31/2036	Reduced Monitoring Every 6 years	

New Mexico Environment Department		UOCP Operator Lookup		Drinking Water Program	
County Map of NM		Water System Search		Help	
Water System Detail Information					
Water System No.:	NM3510701			Federal Type:	C
Water System Name:	ALBUQUERQUE WATER SYSTEM			Federal Source:	SW
Principal County Served:	BERNALILLO			System Status:	A
Principal City Served:	ALBUQUERQUE			Activity Date:	06-01-1977
Group Non-TCR Sample Schedules					
Facility	Begin End Date	Seas.	Init. MP Begin Dt	Req's	Analyte Group
10701118	01-01-2008 Continuous		01-01-2008	1 RT/6Y	NRAD - NEW RAD RULE
10701118	01-01-2023 Continuous		01-01-2023	1 RT/3Y	RHM - REG HEAVY METALS
10701118	01-01-2026 Continuous		01-01-2026	2 RT/3Y	RSOC - REGULATED SOCS
10701118	01-01-2011 12-31-2025		01-01-2011	1 RT/3Y	RSOC - REGULATED SOCS
10701118	01-01-2002 Continuous		01-01-2002	1 RT/3Y	VOC1 - VOLATILE ORGANICS
10701121	01-01-2008 Continuous		01-01-2008	1 RT/6Y	NRAD - NEW RAD RULE
10701121	01-01-2023 Continuous		01-01-2023	1 RT/3Y	RHM - REG HEAVY METALS
10701121	01-01-2026 Continuous		01-01-2026	2 RT/3Y	RSOC - REGULATED SOCS
10701121	01-01-2011 12-31-2025		01-01-2011	1 RT/3Y	RSOC - REGULATED SOCS
10701121	01-01-2020 Continuous		01-01-2020	1 RT/3Y	VOC1 - VOLATILE ORGANICS

SDWA Compliance Sampling Locations



A) Source Water Monitoring



Ground Water Rule

Purpose – To target ground water systems that have E.coli contamination in their wells.

- Requires sanitary surveys be conducted:
 - Once every 3-years for Community water systems.
 - Once every 5-years for Non-Community water systems.
- Requires individual wells to be sampled after a total coliform present sample or fecal positive (E. coli) present sample.



Surface Water Treatment Rule

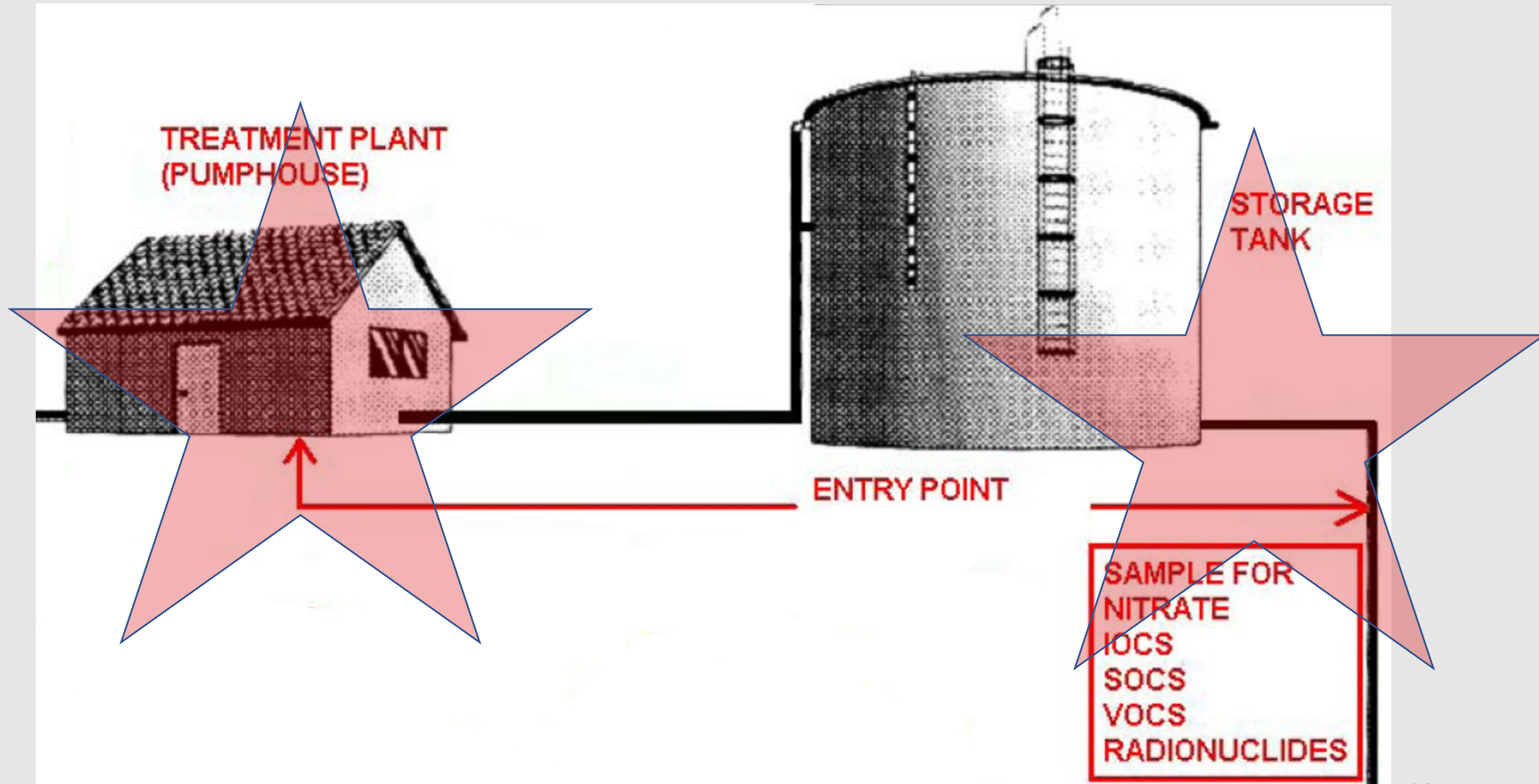
Purpose – To protect public health by reducing waterborne diseases caused by microbial pathogens in public water systems that use surface water or groundwater under direct influence of surface water (GUDI).

- Filtration of water
- Requires sanitary surveys be conducted:
 - Once every 3-years for unfiltered systems (rare).
 - Once every 5-years for filtered systems.

Surface Water Treatment Rule cont.

- Disinfection Requirements:
 - For the removal of protozoans and viruses.
 - Chlorine, chloramine, ozone, UV.
- Requires *Cryptosporidium* Monitoring (every 3-6 years)
- Sets Turbidity Standards
 - Filtered systems:
 - Turbidity must be ≤ 0.3 NTU in $\geq 95\%$ of monthly samples.
 - Maximum turbidity = 1 NTU at any time.
 - Unfiltered systems (rare, must meet strict criteria):
 - Continuous turbidity monitoring required.

B) Entry Point Monitoring



B) Entry Point Monitoring

Chemical and Radionuclides Rules

Purpose – To protect public health by monitoring for source water contaminants that may cause disease.

Representative of water served to all customers.

****Water is monitored before public consumption****

Chemical and Radionuclides

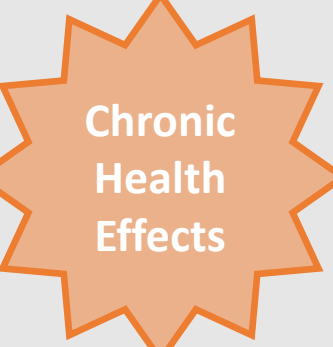


Acute
Health
Effects



Nitrates & Nitrites

- From septics, animals waste, fertilizer



Chronic
Health
Effects



Inorganic Contaminants (IOCs)

- Heavy metals, sodium, fluoride, cyanide, asbestos



Volatile Organics Contaminants (VOCs)

- Gasoline, brake fluid, oil, hydraulic fluid



Synthetic Organic Compounds (SOCs)

- Herbicides, pesticides, PCBs



Radionuclides (Gross Alpha & Beta, Rad 226/228, Uranium)

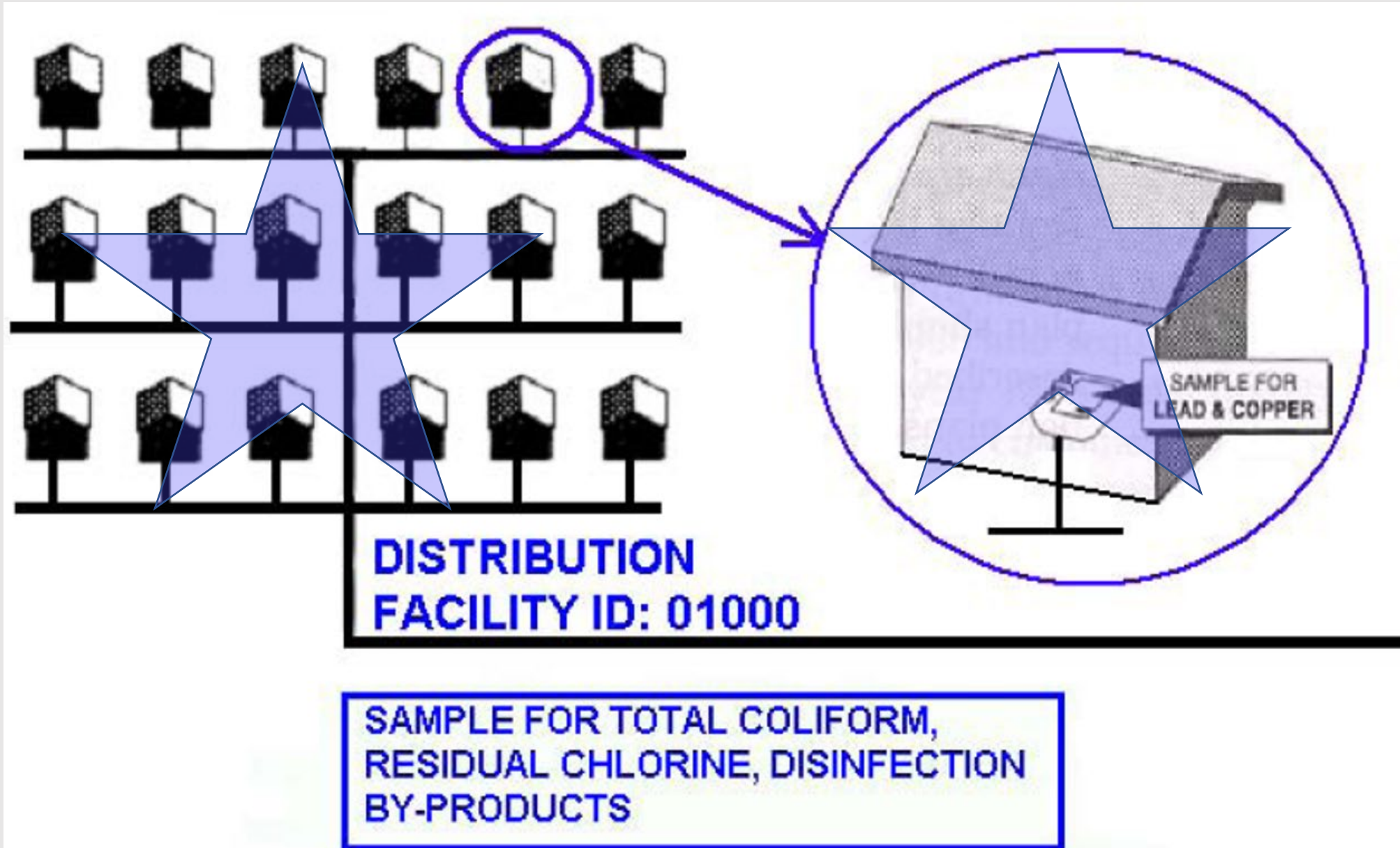
- Mining, naturally occurring, human-made sources



PFAS (HFPO-DA, PFBS, PFHxS, PFNA, PFOA, PFOS)

- Human-made sources

C) Distribution System Monitoring



C) Distribution System Monitoring

Purpose – To qualify water quality in the distribution system.

- ✓ Revised Total Coliform Rule (RTCR)
- ✓ Disinfectants/Disinfection Byproducts Rules (D/DBPR)
- ✓ Lead & Copper Rule (LCR, LCRR, LCRI)

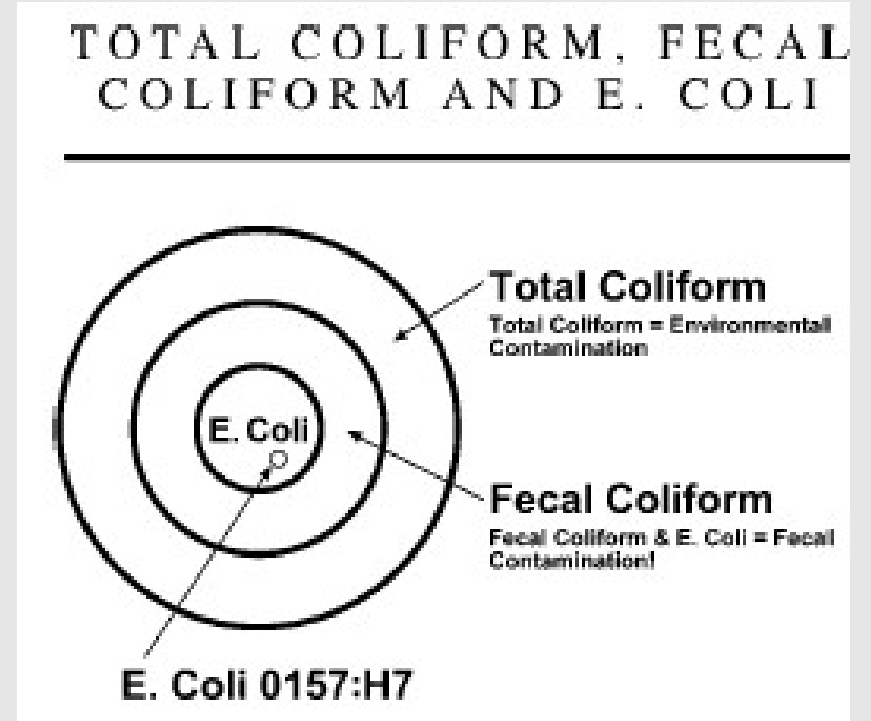
**Which Systems
Have to Sample?**

The Revised Total Coliform Rule (RTCR)



What are total coliforms?

- Found in air, soil, and the intestinal tracts of warm-blooded animals.
- Total coliform include all coliform bacteria:
 - Fecal Coliform (subset of total coliform)
 - E.coli (subset of fecal coliform)
- A group of mostly non-pathogenic bacteria.

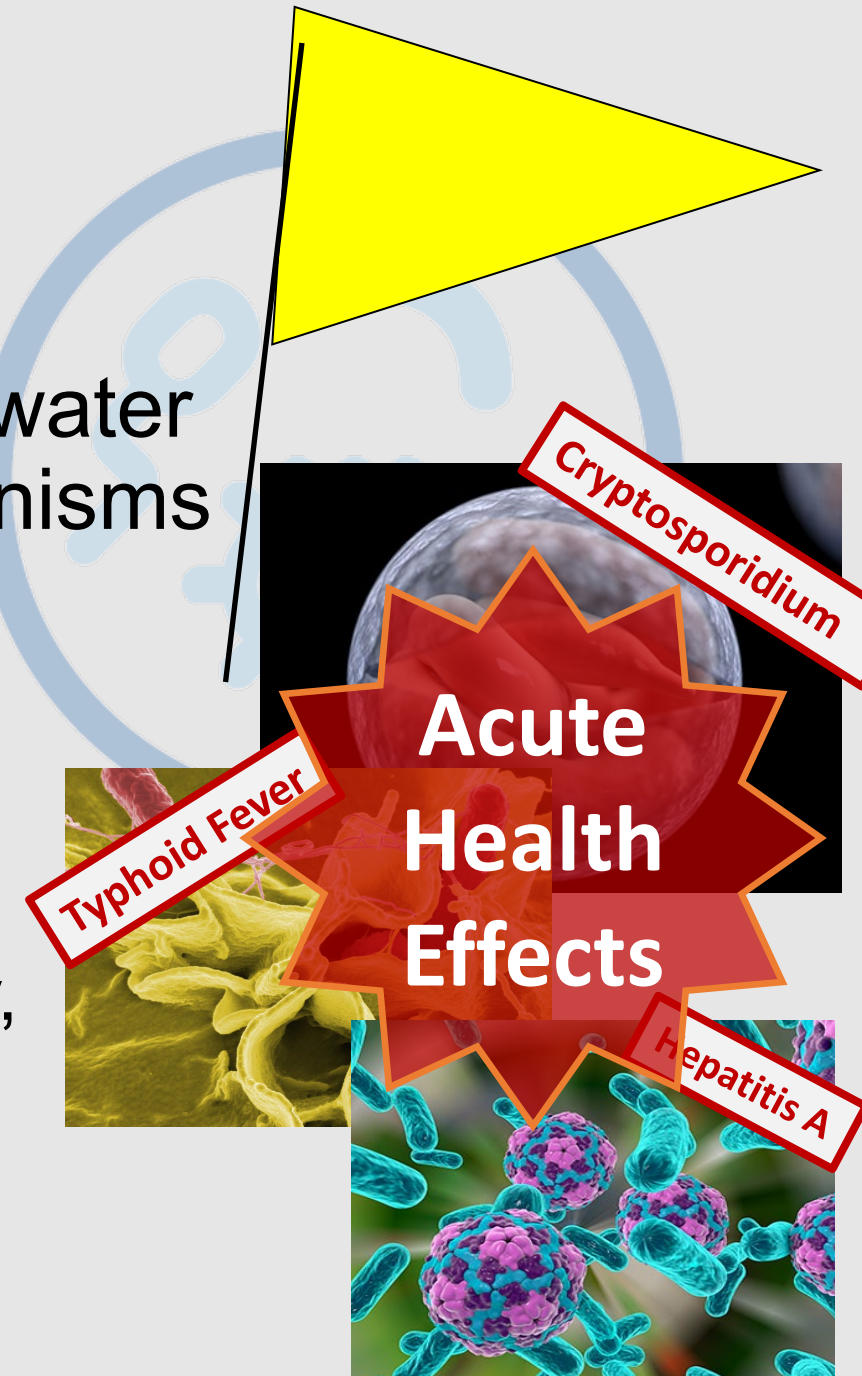


How do total coliforms act as an indicator?

The presence of coliforms indicate that the water may be contaminated with **pathogens** (organisms that can cause disease).

Types of **Pathogens**:

- Protozoans (Giardia and Cryptosporidium)
- Bacteria (Gastroenteritis, Bacillary Dysentery, Typhoid Fever, Cholera, and Tuberculosis)
- Viruses (Hepatitis A, Rotavirus, Norovirus)



Contamination

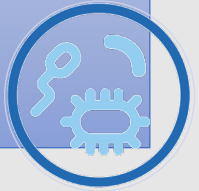
How can Pathogens enter our Drinking Water Systems?



Source
Contamination



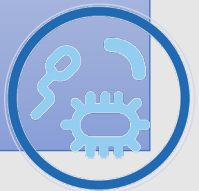
Treatment
Contamination



Distribution
Contamination



Storage
Contamination



RTCR Monitoring

2. Monitoring

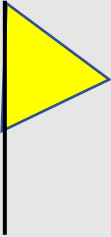
RTCR Key Provisions

- Number of routine samples based on size of population served.
- Routine samples collected monthly in distribution at representative sites, no exemptions.
- Sampling is done by the water system.

Public Water System ROUTINE Monitoring Frequencies					
Population	Minimum Samples/ Month	Population	Minimum Samples/ Month	Population	Minimum Samples/ Month
25-1,000*	1	21,501-25,000	25	450,001-600,000	210
1,001-2,500	2	25,001-33,000	30	600,001-780,000	240
2,501-3,300	3	33,001-41,000	40	780,001-970,000	270
3,301-4,100	4	41,001-50,000	50	970,001-1,230,000	300
4,101-4,900	5	50,001-59,000	60	1,230,001-1,520,000	330
4,901-5,800	6	59,001-70,000	70	1,520,001-1,850,000	360
5,801-6,700	7	70,001-83,000	80	1,850,001-2,270,000	390
6,701-7,600	8	83,001-96,000	90	2,270,001-3,020,000	420
7,601-8,500	9	96,001-130,000	100	3,020,001-3,960,000	450
8,501-12,900	10	130,001-220,000	120	≥ 3,960,001	480
12,901-17,200	15	220,001-320,000	150		
17,201-21,500	20	320,001-450,000	180		

*Includes PWSs which have at least 15 service connections, but serve <25 people.

What do the Results Mean?



Total Coliform

- Present or Absent (TC+ or TC -)

E. coli

- Present or Absent (EC+ or EC-)



Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SM 9223B TOTAL COLIFORM						Analyst: SMS
Total Coliform	Present	0		P/A	1	8/20/2019 5:37:00 PM
E. Coli	Absent	0		P/A	1	8/20/2019 5:37:00 PM
FIELD PARAMETERS						Analyst:
Residual Chlorine, Free	0.39			mg/L		

What if the Routine sample results are TC and/or EC “Present”?

PWS must collect 3 repeat samples for each positive routine sample within 24 hours of being notified.

- **Original** location.
- **Upstream** location within 5 service connections.
- **Downstream** location within 5 service connection



Following Month:

Collect the regular number of routine
samples

RTCR Assessments



**Find &
Fix**

- **Level 1 Assessment:** Evaluation of source water, treatment, distribution, and other operational practices that is completed by the system.
- **Level 2 Assessment:** Detailed evaluation conducted by EPA or an approved third party. Additional sampling, inspections, etc. . . could be required.

***PWSs adding a disinfectant to the drinking water during any part of the treatment process.**

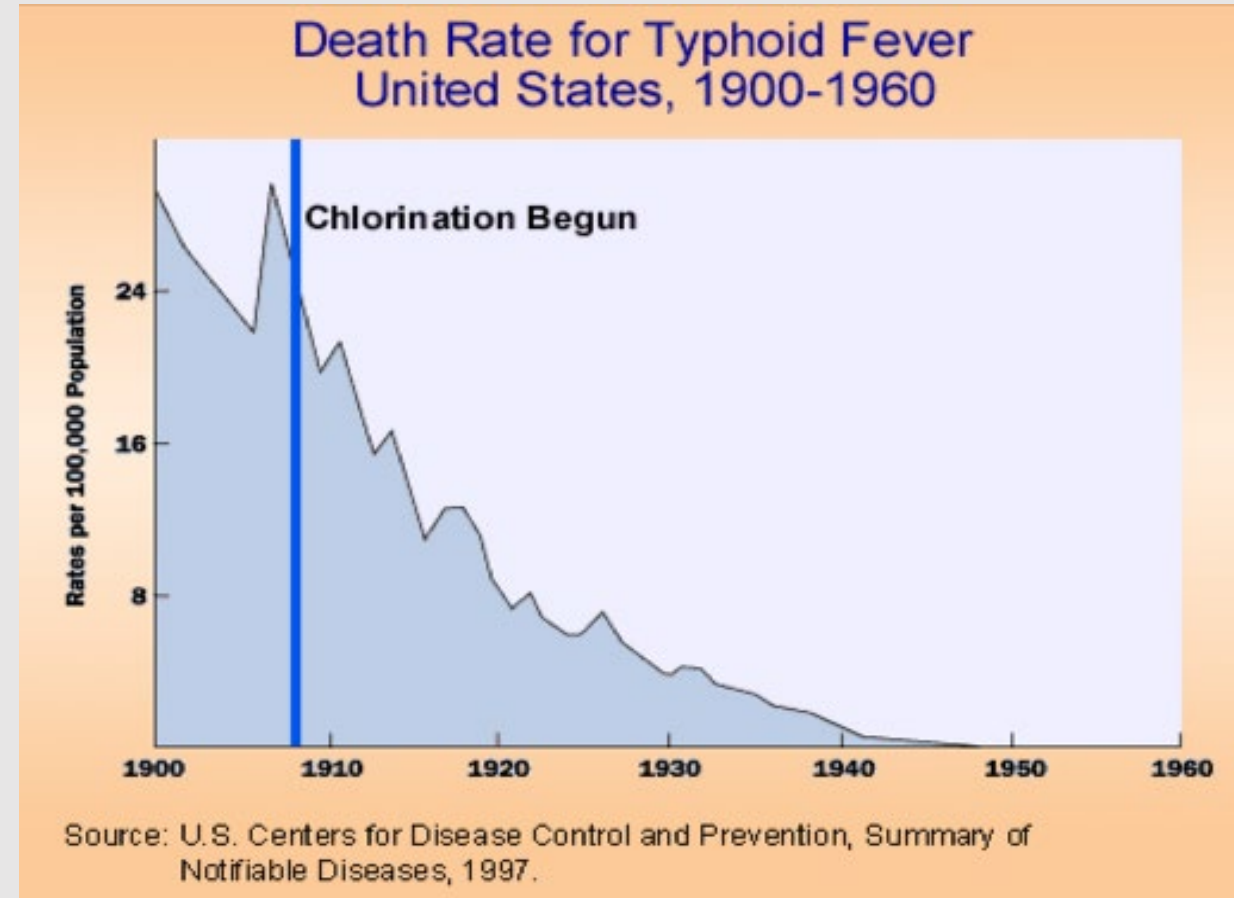
**Which Systems
Have to Sample?**

Disinfectants/Disinfection Byproducts Rule (D/DBPR)



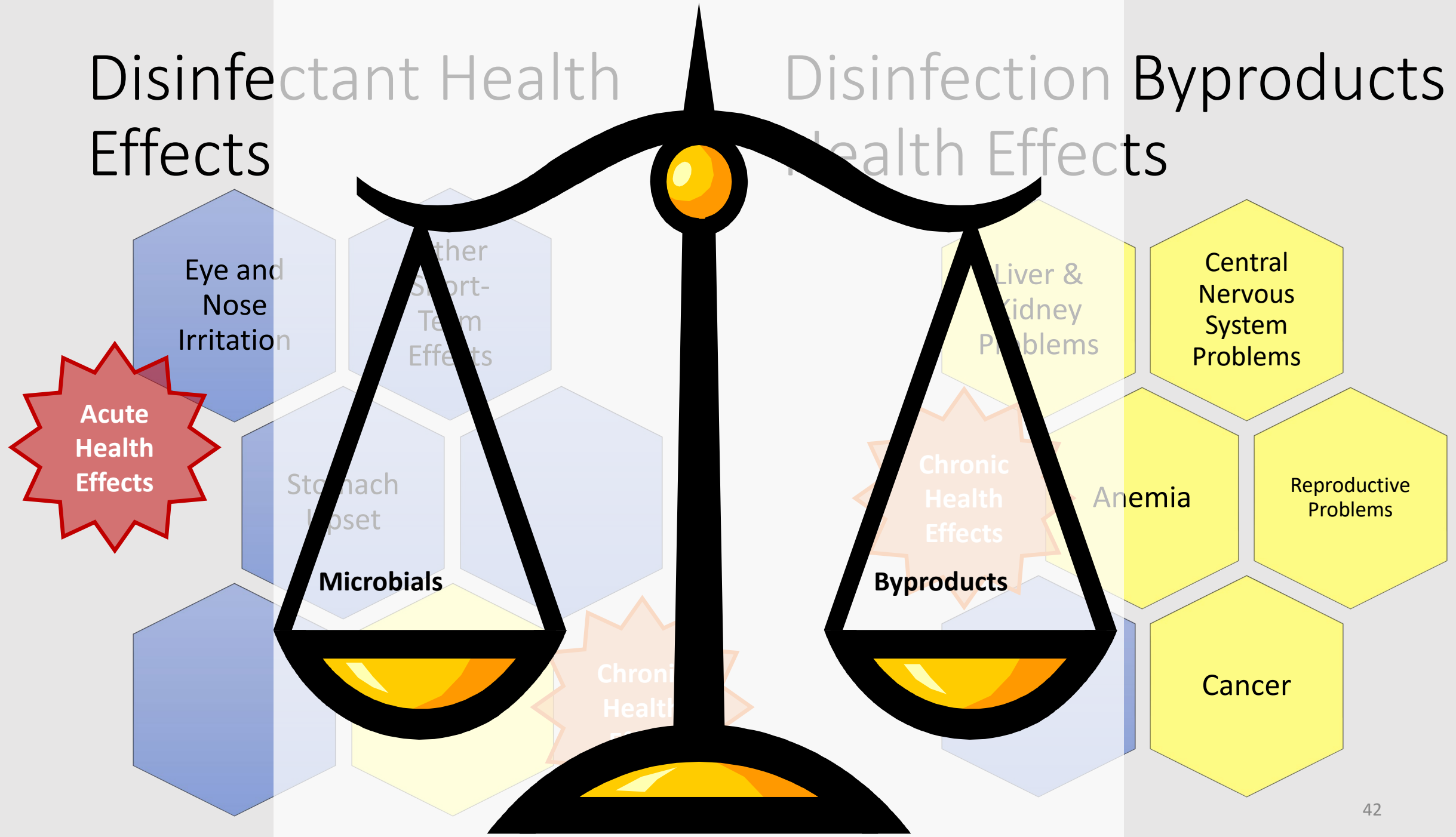
Public Health & Disinfection

- Disinfectants inactivate pathogenic microorganisms.
- Disinfectants react with substances naturally in water to form harmful Disinfection Byproducts (DBPs).
- Both Disinfectants and DBPs produce negative health effects when present in excessive levels.



Disinfectant Health Effects

Disinfection Byproducts Health Effects

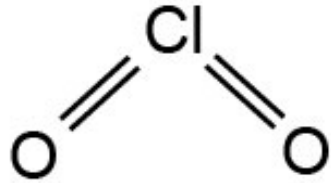


Types of Disinfectants

Most Widely Used



Chlorine



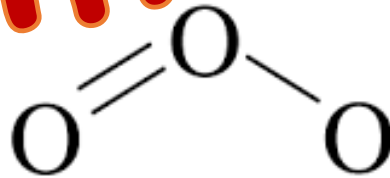
Chlorine Dioxide



Chloramines



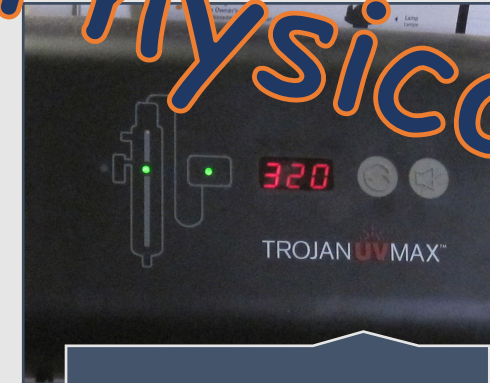
Bromine



Ozone

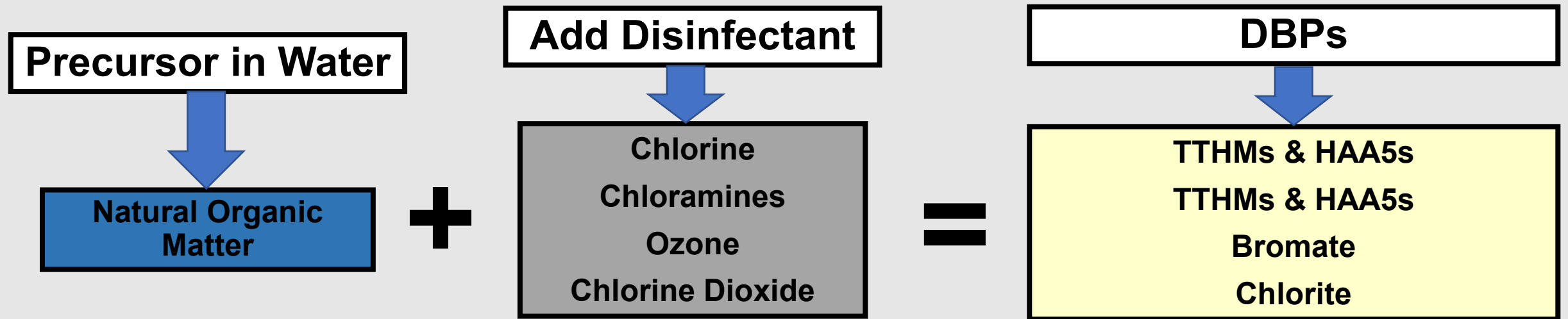
Chemical

Physical



Ultraviolet Light (UV)

Disinfection Byproducts Formation



Higher DBPs formation during the warmer months!

1.) Residual Disinfectant Level

- The amount of disinfectant left in the system after it has reacted with precursors in the water (free chlorine residual).

Maximum Residual Disinfectant Level (MRDL)

- Chlorine MRDL = **4.0 mg/L**
- Calculated based on a running annual average (RAA) of RTCR monthly samples.

Minimum Residual Disinfectant Level

- EPA recommends a minimum residual in distribution of 0.2 mg/L (required for surface water systems)



DBPs Maximum Contaminant Levels (MCLs)

- Trihalomethanes (THMs)
 - 4 containments
 - MCL = 0.080 mg/L
- Haloacetic Acids (HAA5)
 - 5 contaminants
 - MCL= 0.060 mg/L
- Chlorite (only if PWS uses chlorine dioxide)
 - MCL = 1.0 mg/L
- Bromate (only if PWS uses ozone)
 - MCL = 0.010 mg/L



THMs

**Which Systems
Have to Sample?**

The Lead & Copper Rule (LCR, LCRR, LCRI)



What are the Lead & Copper rules?



The OG Lead & Copper Rule (LCR)



The Lead & Copper Rule Revisions (LCRR)



The Lead & Copper Rule Improvements (LCRI)

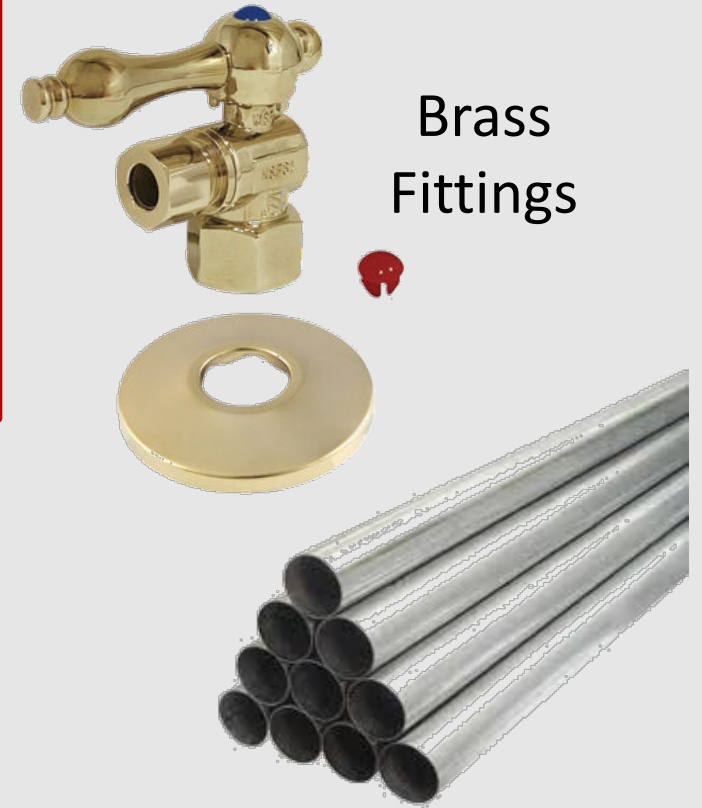
Sources of Lead & Copper in Drinking Water



Lead and Copper Pipes



**The corrosion of
household
plumbing and
fixtures**



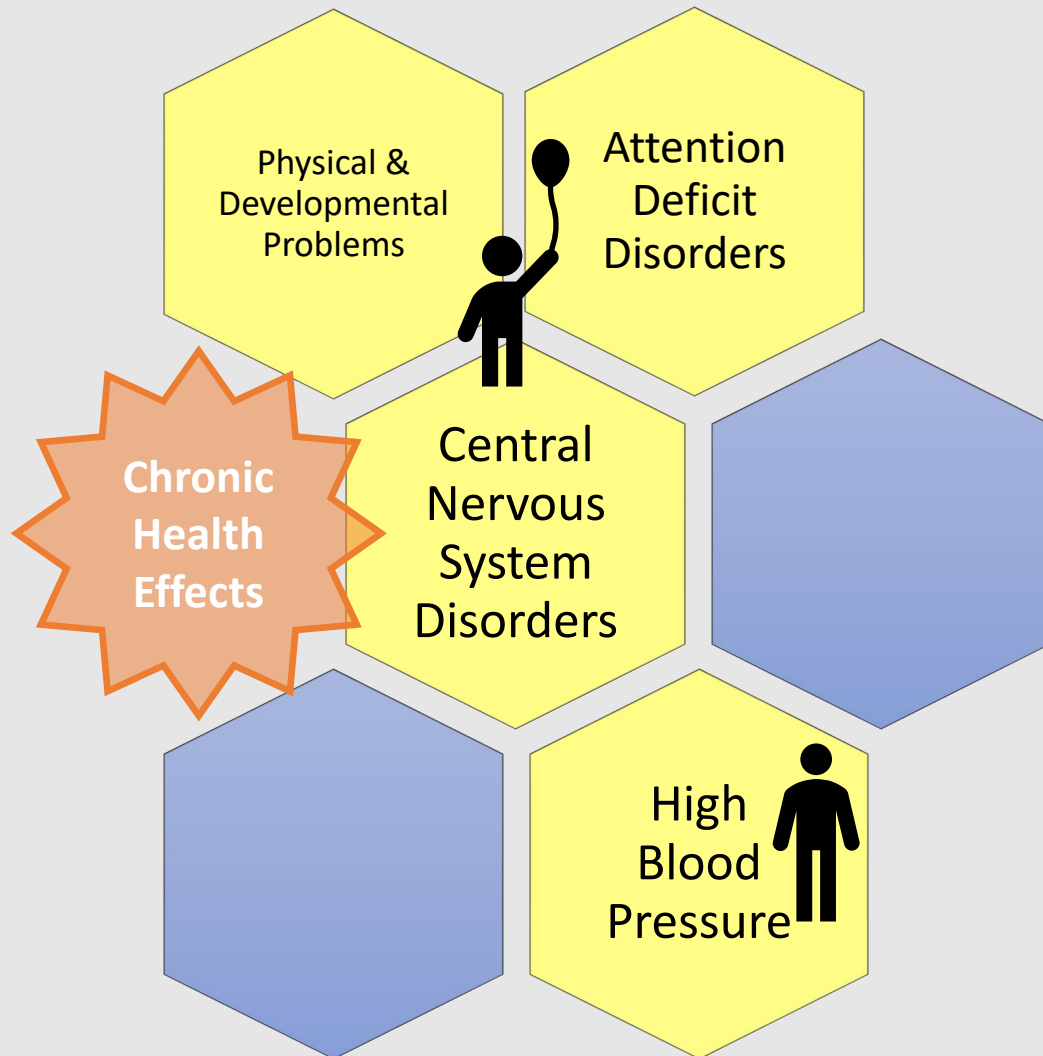
Brass
Fittings



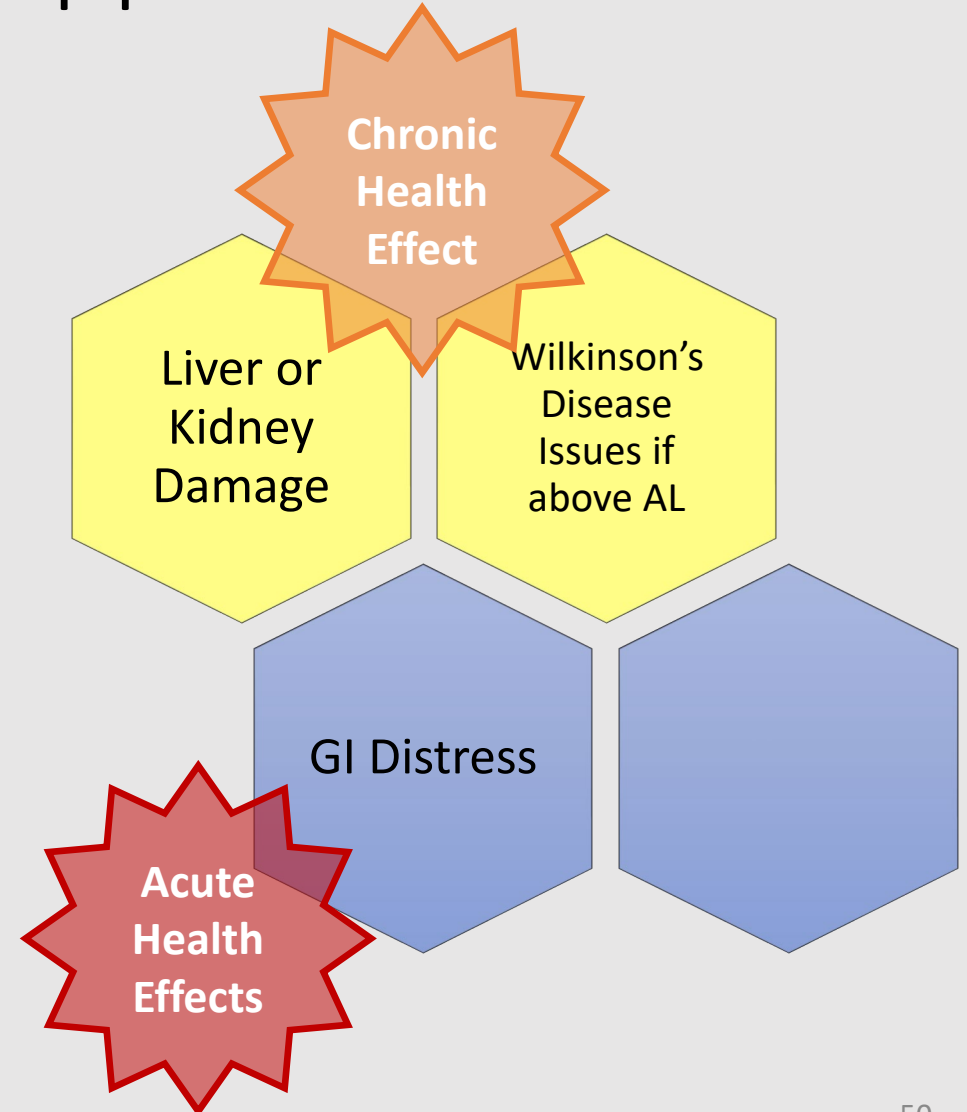
Lead Solder at
Pipe Joints

Galvanized Pipes
(in downstream
locations of LSLs)

Lead Health Effects



Copper Health Effects



Sampling for Lead & Copper

- Number of samples based on:
 - Population size;
 - Standard (6M) or Reduce (1/YR or 1/3YR) monitoring schedules.
- Those on reduce schedules must collected June-September.

Number of
samples
required (LCR
& WQP)



Lead and Copper Rule: A Quick Reference Guide

Table 1: Lead and Copper Tap and WQP Tap Monitoring

Size Category	System Size	Number of Pb/Cu Tap Sample Sites ³		Number of WQP Tap Sample Sites ⁴	
		Standard	Reduced	Standard	Reduced
Large	> 100K	100	50	25	10
	50,001 - 100K	60	30	10	7
Medium	10,001 - 50K	60	30	10	7
	3,301 - 10K	40	20	3	3
Small	501 - 3,300	20	10	2	2
	101 - 500	10	5	1	1
	≤ 100	5	5	1	1

³ With written State approval, PWSs can collect < 5 samples if all taps used for human consumption are sampled.

⁴ Two WQP tap samples are collected at each sampling site.

Where do we collect Lead & Copper samples?



**At Consumers Taps:
kitchen sinks
breakroom sinks
bathroom sinks**



NOT at an entry point (EP).
NOT when sample locations are inactive.
NOT at abandoned homes.



Samples are collected after at least a **6-hour** hold time.

Understanding Lead & Copper Sample Results

Action Levels (AL) - based on 90th percentiles

- Lead - **0.010 mg/L (ppm)**
- Copper - **1.3 mg/L (ppm)**

GOAL = **Zero** for Lead

*If 90% of sample results are at or below the AL value, no exceedance.



Understanding Lead & Copper Sample Results

Original Lead Results

Site A	0.001 mg/L
Site B	0.003 mg/L
Site C	0.002 mg/L
Site D	non-detect
Site E	0.006 mg/L
Site F	0.001 mg/L
Site G	0.001 mg/L
Site H	0.002 mg/L
Site I	0.022 mg/L
Site J	0.001 mg/L

Lead = 0.010 mg/L

Understanding Lead & Copper Sample Results

1. Order the results from highest to lowest

Original Lead Results

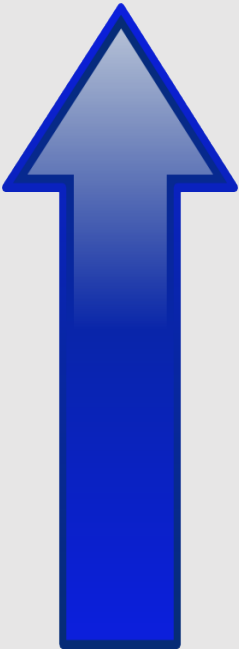
0.001 mg/L
0.003 mg/L
0.002 mg/L
non-detect
0.006 mg/L
0.001 mg/L
0.001 mg/L
0.002 mg/L
0.022 mg/L
0.001 mg/L



Reordered Results

0.022 mg/L
0.006 mg/L
0.003 mg/L
0.002 mg/L
0.002 mg/L
0.001 mg/L
0.001 mg/L
0.001 mg/L
0.001 mg/L
non-detect

Highest Value



Lowest Value

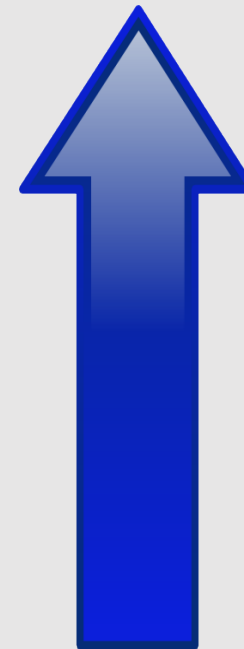
Understanding Lead & Copper Sample Results

2. Number the results with 1 being the lowest value, 2 being the next higher value on up

Reordered Results

10	0.022 mg/L
9	0.006 mg/L
8	0.003 mg/L
7	0.002 mg/L
6	0.002 mg/L
5	0.001 mg/L
4	0.001 mg/L
3	0.001 mg/L
2	0.001 mg/L
1	non-detect

Highest Value



Lowest Value

Understanding Lead & Copper Sample Results

3. Find the 90th percentile value

Lead = **0.010 mg/L**

of samples x 0.9

(Example: 10 samples x 0.9 = 9th sample)

If 10 samples = 9th highest sample

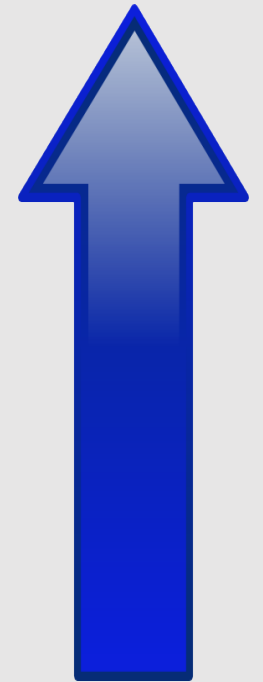
If 20 samples = 18th highest sample

If 5 samples = avg 4th & 5th samples

Reordered Lead Results

10	0.022 mg/L
9	0.006 mg/L
8	0.003 mg/L
7	0.002 mg/L
6	0.002 mg/L
5	0.001 mg/L
4	0.001 mg/L
3	0.001 mg/L
2	0.001 mg/L
1	0.001 mg/L

Highest Value



Lowest Value

What if an Action Level is Exceeded?

- Source water monitoring for Lead & Copper
- Water quality parameter (WQP) monitoring at EP & DS (compliance monitoring)
- Public education
- Determine optimal corrosion control treatment
- Lead service line replacement
- Under-sink fixture replacement

ALE

SDWA Requires Consumer Communication



Public Notification Rule

Notice of Lead Tap Water Results

Sample Location: _____ Date Collected: _____

Dear _____,

We would like to thank you for your participation in the lead tap monitoring program. Below is the lead result for the sample location listed above. Additional general information concerning lead in drinking water follows. For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at www.epa.gov/lead, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

If you need more information concerning this result, please call the _____ water system at _____ and ask for _____.

ONLY the statement that is checked below is applicable to your sample location.

____ Lead was NOT DETECTED at this sample location.

____ Lead was detected at _____ parts per billion (ppb). This result is BELOW the lead action level of 15 parts per billion.

____ Lead was detected at _____ parts per billion (ppb). This result is ABOVE the lead action level of 15 parts per billion.

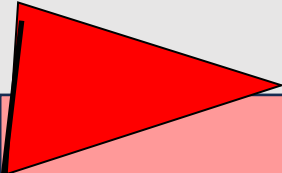
The 90 percentile value for lead for our water system was _____ µg/L (ppb).

What Does This Mean?
Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is 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.

If detected, your lead level may be due to conditions unique to your home, such as the presence of lead solder or brass faucets, fittings and valves that may contain lead. Our system works to keep the corrosivity of our water as low as possible (corrosive water can cause lead to leach from plumbing materials that contain lead) and there are actions you can take to reduce exposure. We strongly urge you to take the steps below to reduce your exposure to lead in drinking water.

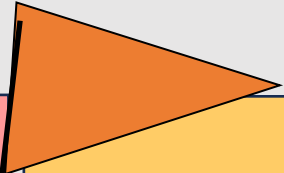
Should the current (or if in the future) lead 90 percentile for the community water supply exceeds the lead action level, you can rest assure that we are taking a number of steps to correct the problem. Such steps will or would include; monitor our source water, initiate controls to reduce the corrosivity of our

Public Notification (PN) Rule Types



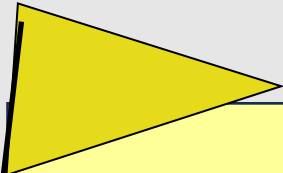
Tier 1: Most Severe

- Immediate health risk.
- Public Notice must be issued within 24 hours.
- Examples:
 - Boil Water Advisory (Ecoli +).
 - Nitrate exceedance (MCL=10mg/L).
 - Lead exceedance (AL=15ug/L).
 - TT violation.



Tier 2: Moderate Severity

- Potential health risk.
- Public Notice must be issued within 30 days.
- Examples:
 - Other MCLs not immediately affecting public health.
 - Improperly treated water (TT failure).
 - Failure to address deficiencies.



Tier 3: Important

- No immediate health risk.
- Public Notice must be issued within 1 year.
- Examples:
 - Administrative issues.
 - Monitoring and reporting violations.

SDWA Requires Consumer Confidence Report Rule



Consumer Confidence Report Rule

Record Keeping Rule

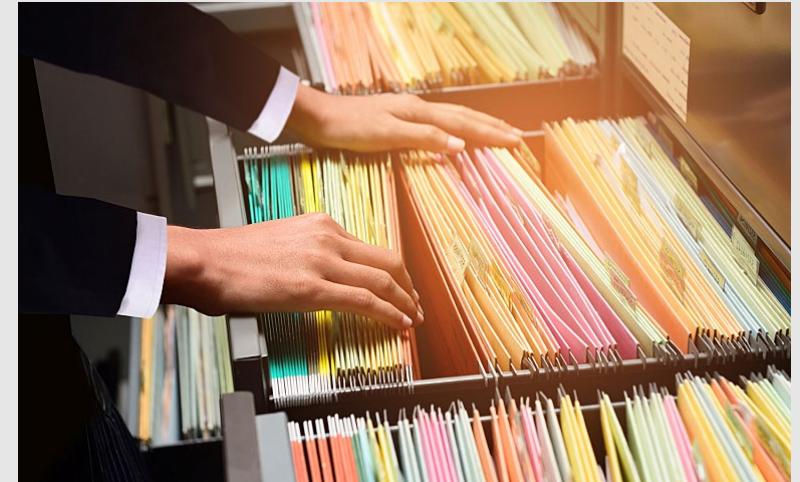
- Records include:
 - Test results
 - Mandates
 - Other records
- Records must be kept at or near the utility office (in close proximity).



Record Keeping Rule

- Different rules under SDWA require different record retention times.

Public Notices and CCRs:	3 yrs
Bacteriological & Turbidity:	5 yrs
Sanitary Survey Reports:	10 yrs
ChemRad & DBP analyses:	10 yrs
Lead and Copper:	12 yrs



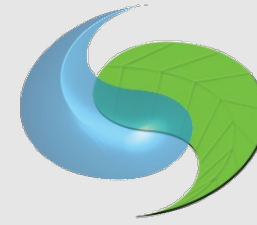
SDWA Summary

- Establishes federal standards for safe levels of contaminants in public drinking water systems.
- Includes measures to safeguard groundwater and surface water from contamination.
- Requires water systems to monitor, test, and report water quality to authorities and the public.
- The National Primary Drinking Water Regulations:
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-141>

Questions?



CONTACT US



SOUTHWEST
ENVIRONMENTAL
FINANCE CENTER

<http://swefc.unm.edu/>

Michelle Olson
meolson@unm.edu

Physical Address

SWEFC/Civil Engineering Dept.
MSC01 1070
1 University of New Mexico
Albuquerque, New Mexico 87131-0001