

# REGULATORY UPDATES: MCLS AND MONITORING REDUCTIONS


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1



# NEW REQUIREMENTS: QUICK OVERVIEW


2



## NEW REQUIREMENTS:

- New Regulated Contaminants:
  - 1,2,3-Trichloropropane (123-TCP): MCL = 0.030 µg/l (ppb)
  - Perfluorononanoic acid (PFNA): MCL = 0.013 µg/l (ppb)
- Sampling also required for
  - Ethylene dibromide (EDB): MCL = 0.05 ug/l
  - Dibromochloropropane (DBCP): MCL = 0.2 ug/l
  - These 2 compounds will no longer be automatically included in SOC waivers
- Radionuclide monitoring now required for nontransient noncommunity water systems (NTCN)

3



## MONITORING REQUIREMENTS


Required to Monitor

- All Community Water Systems
- All Non-Transient Non-Community Water Systems

Not Required to Monitor

- Transient Water Systems

4



## MONITORING START DATES:

- 1<sup>st</sup> Quarter 2019:
  - CWS ≤10K using groundwater
  - Non-Transient Non-Community Water Systems (including SW)
- 1<sup>st</sup> Quarter 2020:
  - CWS >10K
  - CWS using a surface water source (or GUI)

5



# 1,2,3- TRICHLOROPROPANE

## Future Monitoring

6

### 123-TCP MONITORING BASICS

- Uses the standardized framework for SOCs
- Initial monitoring of 4 consecutive quarters
- Future monitoring based on results of initial monitoring
  - If all results were non-detect (ND) may go to triennial
  - If there were detections continue quarterly until "Reliably & Consistently (R&C) below the MCL"
  - After R&C may go to annual with future options for triennial
- Waivers may be available for the 2026-2028 compliance period

7

### 123 TCP, EDB, DBCP FUTURE MONITORING: ALL 4 QUARTERS WERE ND FOR ALL ANALYTES

**FREQUENCY:**

What is the population served?

- ≤ 3,300 → One sample during each 3-year compliance period
- > 3,300 → Two quarterly samples (in the same year) in each 3-year compliance period

**TIMING:**

- NTNC: Sampling occurs in YR 3
- CWS ≤ 10,000: Sampling occurs in YR 2
- CWS > 10,000: Sampling occurs in YR 1

8

### TWO QUARTERLY SAMPLES (IN THE SAME YEAR) IN EACH 3-YEAR COMPLIANCE PERIOD....???

- 2 samples are required in different quarters
- We are requiring 1 in the first half of the year and 1 in the second
- You will see 2 schedules in DWW for both 123 TCP, and "EDB AND DBCP"
  - One with a Sampling Period of 1/1-6/30
  - One with a Sampling Period of 7/1-12/31

9

### WHAT THIS WILL LOOK LIKE ON DWW.....

Contaminant Groups							
Sample Point ID	Sample Point Name	Analyte Group	Schedule Starts	Schedule Ends	Sampling Period	Sampling Year	Requirements
TP001001	TREATMENT PLANT	EDB AND DBCP	01/01/2020	Continuous	7/1-12/31	2022	1 Sample(s)/Every 3Y
TP001001	TREATMENT PLANT	EDB AND DBCP	01/01/2020	Continuous	1/1-6/30	2022	1 Sample(s)/Every 3Y

Individual Contaminants							
Sample Point ID	Sample Point Name	Analyte Name	Schedule Starts	Schedule Ends	Sampling Period	Sampling Year	Requirements
TP001001	TREATMENT PLANT	1,2,3-TRICHLOROPROPANE	01/01/2020	Continuous	1/1-6/30	2022	1 Sample(s)/Every 3Y
TP001001	TREATMENT PLANT	1,2,3-TRICHLOROPROPANE	01/01/2020	Continuous	7/1-12/31	2022	1 Sample(s)/Every 3Y

10

### WHERE TO AFTER THE TRIENNIAL SAMPLING...?

```

    graph TD
      A[Were there detections?] -- No --> B[Continue with another round of sampling in 3 years (2023-2025)]
      A -- Yes --> C[Continue to conduct quarterly monitoring at each entry point]
      B --> D[Any detections?]
      D -- No --> E[The system is eligible to apply for a waiver in the 2026-2028 compliance period]
      D -- Yes --> C
  
```

11

### 123 TCP, EDB, DBCP FUTURE MONITORING: DETECTIONS FOUND FOR ANY OF THE ANALYTES

**R&C values (µg/l):**  
 123-TCP = 0.021,  
 EDB = 0.035,  
 DBCP = 0.14

```

    graph TD
      A[Quarterly monitoring at each entry point (Minimum of 4 consecutive qtrs.)] --> B[Determine R&C eligibility. System must request R&C Evaluation]
      B --> C{Was R&C reduction approved?}
      C -- No --> A
      C -- Yes --> D[Annual monitoring during the quarter with highest results. (If detects for multiple analytes, select quarter based on analyte with lowest MCL.)]
      D --> E{Three consecutive annual samples with no detections?}
      E -- No --> B
      E -- Yes --> F[The system is eligible to apply for a waiver in the 2026-2028 compliance period]
  
```

12

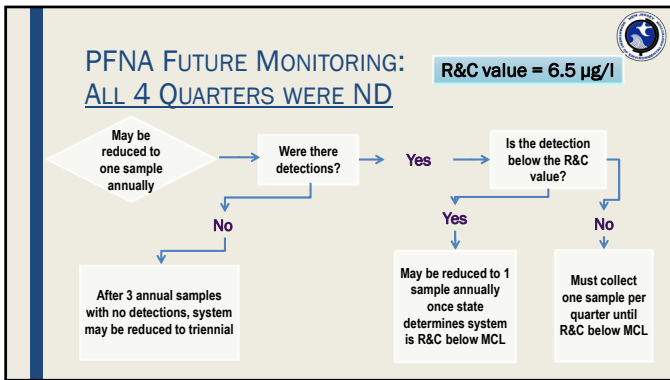
# PERFLUORONONANOIC ACID (PFNA) Future Monitoring

13

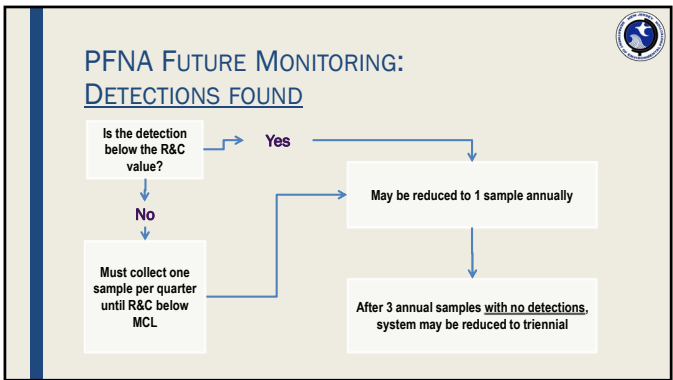
## PFNA: MONITORING BASICS

- Uses the standardized framework for VOCs
- Initial monitoring of 4 consecutive quarters
- Future monitoring based on results of initial monitoring
  - If all results were non-detect (ND) may go to annual
  - After 3 years with ND may go to triennial
  - If there were detections continue quarterly until R&C
  - After R&C may go to annual
    - If any results are >R&C value will return to quarterly
    - If 3 years in a row are ND then may go to triennial

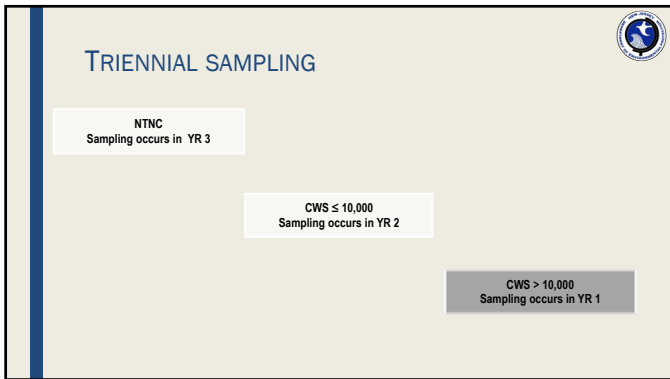
14



15



16



17

## NOTE: PFOA/PFOS

- Water systems have been encouraged to also report data for PFOA and PFOS
- If MCLs are adopted in the future, results submitted may be evaluated as “grandfathered data” and used to reduce monitoring frequency
- Evaluations for reductions for PFNA **may** also take into consideration PFOA and PFOS results

18

# RADIONUCLIDES

19

- ## NJ CHANGES TO FEDERAL RULE
- Must use 48 hour Rapid Gross Alpha test
  - Must sample all analytes at same frequency
  - Requires sampling at NTNC systems starting in 2019

20

## MAXIMUM CONTAMINANT LEVELS & REGULATORY DETECTION LIMITS

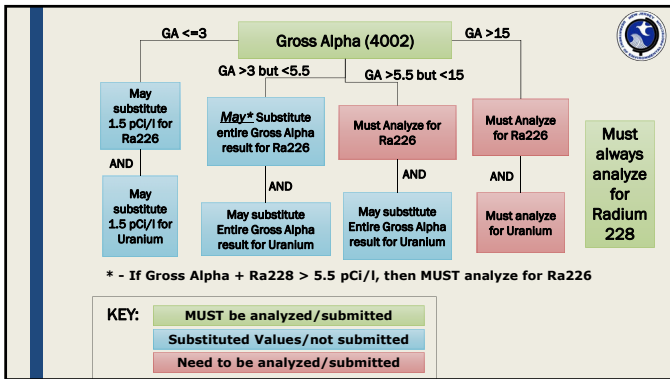
	MCL	RDL
<b>Adjusted Gross Alpha</b>	<b>15 pCi/L</b>	<b>3 pCi/L</b>
<b>Combined Radium</b>	<b>5 pCi/L</b>	
<b>Radium 226</b>		<b>1 pCi/L</b>
<b>Radium 228</b>		<b>1 pCi/L</b>
<b>Uranium*</b>	<b>30 µg/L</b>	<b>1 µg/L</b>

\*To convert to pCi/l: (x µg/l)/1000\*670.  
So 30 µg/l = 20.1pCi/l

21

- ## ROAD MAP/ANALYTE CODES
- **4002: Gross Alpha, Incl. Radon & U**
    - Including Radium & Uranium, excluding Radon
    - Value reported via E2
  - **4000: Gross Alpha, Excl. Radon & U**
    - "Adjusted Gross Alpha" Including Radium, excluding Radon & Uranium
    - What compliance is based on
  - **4020: Radium 226**
  - **4030: Radium 228**
  - **4010: Combined Radium**
  - **4006: Uranium**
- **Must always analyze for 4002 & 4030**
  - **Calculated Values:**
    - 4000 = 4002 - 4006
    - 4010 = 4020 + 4030
  - **Substitutions are allowed for:**
    - 4020
      - Only if GA<5.5
      - Make sure you don't exceed!
      - Will not be able to reduce to 9 years
    - 4006
      - Only if GA<15.5

22



23

- ## DATA DISPLAYED IN DWW
- |  |   |
|--|---|
| <p>Calculated Values</p> <ul style="list-style-type: none"> <li>■ Results are visible                     <ul style="list-style-type: none"> <li>- Combined Radium (4010)</li> <li>- Adjusted GA (4000) - ONLY if Uranium is analyzed</li> </ul> </li> </ul> | <p>Substituted Values</p> <ul style="list-style-type: none"> <li>■ Will not be visible (unless analyzed for)                     <ul style="list-style-type: none"> <li>- Radium 226</li> <li>- Uranium (4006)</li> <li>- Adjusted GA (4000)</li> </ul> </li> </ul> |
|--|---|

24

### ONLY ANALYZED FOR GA (4002) AND RADIUM 228

Analyte Name	Result*	Collection Date	Analytical Method
COMBINED RADIUM (-226 & -228)	1.5 PCI/L	08/19/2019 / 11:08	result calculated
GROSS ALPHA, INCL. RADON & U	<3 PCI/L	08/19/2019 / 11:08	ECLS-R-GA R8
RADIUM-228	<1 PCI/L	08/19/2019 / 11:08	904.0

**Analyzed for Uranium – SDWIS calculated 4000**

Contaminant Results			
Analyte Name	Result*	Collection Date	Analytical Method
COMBINED RADIUM (-226 & -228)	<1 PCI/L	10/03/2019 / 12:34	result calculated
COMBINED URANIUM	42.8 UG/L	10/03/2019 / 12:34	908.0
GROSS ALPHA, EXCL. RADON & U	16 PCI/L	10/03/2019 / 12:34	result calculated
GROSS ALPHA, INCL. RADON & U END COUNT	44.7 PCI/L	10/03/2019 / 12:34	ECLS-R-GA R8
RADIUM-226	<1 PCI/L	10/03/2019 / 12:34	903.1
RADIUM-228	<1 PCI/L	10/03/2019 / 12:34	RA-05

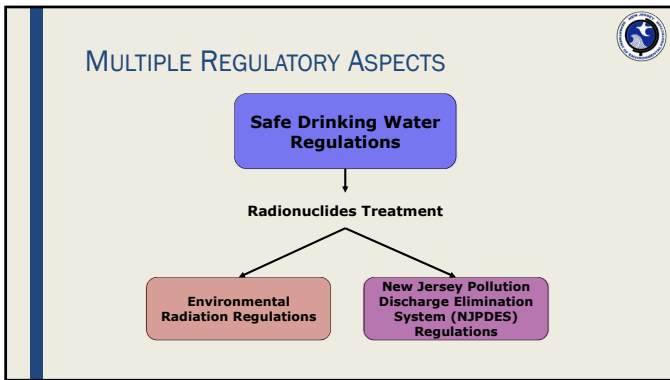
25

### RADS: FUTURE MONITORING FREQUENCY

Running Annual Average <sup>1</sup> :	Monitoring Period is:
< RDL	Once every 9 years <sup>2</sup>
≥ RDL & < 1/2 MCL	Once every 6 years
≥ 1/2 MCL & < MCL	Once every 3 years <sup>3</sup>
> MCL	Continue Qtr. monitoring

- 1: Monitoring will be based on analyte with highest value
- 2: Not if substituted values used for Ra226
- 3: If any result exceeded the MCL, sampling will be quarterly in 3 years

26



27

- ### FINAL THOUGHTS
- Systems with MCL exceedances or treatment will remain on quarterly monitoring
    - *Notify us if you have treatment*
  - We are beginning to evaluate monitoring schedules for those systems with 4 quarters of results
    - *Will evaluate remainder in mid-January*
  - Letters will be sent to all systems noting the revised schedules
    - *If you believe your schedule is incorrect contact us*
  - Coordinate closely with your lab
    - *Some schedules may not be changed until later in January*

28

# QUESTIONS?

29