



# WHAT'S AHEAD FOR 2019


New Jersey Department of Environmental Protection  
Division of Water Supply & Geoscience

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# WATER QUALITY ACCOUNTABILITY ACT


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## OVERVIEW

### WATER QUALITY ACCOUNTABILITY ACT (N.J.S.A. 58:31-1 ET SEQ.)

- Enacted July 21, 2017 and Effective October 19, 2017
- Applies to water purveyors with more than 500 service connections
- Approximately 300 purveyors
- Requirements have the ability to improve the safety, reliability, and administrative oversight of water infrastructure




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## TIMING

- Program is still under development
- We do not have supporting regulations at this time
- Email blasts will be sent ahead of all upcoming milestones with direction on how to proceed



*If you are not currently receiving updates, and would like to be included on the WQAA email blasts, please contact [chelsea.brook@dep.nj.gov](mailto:chelsea.brook@dep.nj.gov) or [brandon.carreno@dep.nj.gov](mailto:brandon.carreno@dep.nj.gov)*

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## RULEMAKING INITIATIVE


**Proposed Schedule**

- Stakeholder meeting - October 22, 2018, by invitation

**Proposed Amendments**

- WQAA specific criteria
  - Possibility to revise certain due dates for end of calendar year, rather than anniversary of the Act (October 19<sup>th</sup>).
  - Possibility to revise Hydrant labelling criteria.
- Water Loss Audit Requirements
  - Would likely request select metrics from AWWA Free Water Loss Audit Software to serve as metric for success of Asset Management programs
  - Replace Unaccounted for Water in Water Allocation Permits with above metrics
- Asset Management Plan Requirements
  - Self reporting of select metrics including Water Main Breaks per mile, among several others.
- Amendments that would allow DEP to request TMF from water systems in additional circumstances.
- Water Systems should follow Department guidance for the WQAA until regulations have been fully enacted.


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## Valves & Hydrants


### VALVES

Component	Requirement
Valves ≥ 12"	Inspect every 2 years - by 10/19/2019
All other valves	Inspect every 4 years - by 10/19/2021
All valves	GPS to the extent possible
Repair all valves	Beginning 10/19/2017



### HYDRANTS


Component	Requirement
All fire hydrants	Test Annually - by 10/19/2018
	Implement a plan for flushing hydrants and dead mains
	Label each with purveyors name and number with paint, brand, or soft metal plate
	GPS to the extent possible



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## CYBERSECURITY PROGRAM

- By February 16, 2018, all purveyors with internet-connected control systems should have developed a cybersecurity program in accordance with the March 2016 NJBPU Administrative Order.
- 60 days after developing the program (by April 17, 2018 if developed by February 16, 2018), the purveyor must join the New Jersey Cybersecurity and Communications Integration Cell (pursuant to EO No. 178 (2015)) and create a cybersecurity incident reporting process.
- The NJCCIC considers "internet connected control systems," as referred to in the Act to include any Internet Protocol (IP) addressable industrial control system (ICS) directly or indirectly connected to the Internet.



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## CYBERSECURITY PROGRAM SUBMISSION

- NJOHSP's NJCCIC has developed a fillable Cybersecurity Program Template, which should have been received by water systems on October 2, 2018.
- Note: issues with "personal" non-business email addresses (i.e. gmail, yahoo, etc.), therefore submissions should be made using email accounts using domains associated with your system.
- The directions for submission were provided with the email.
- The form must have been submitted by **November 16<sup>th</sup>, 2018**.
- Questions about the form or Cybersecurity Program should be directed to NJCCIC at [njccic@cyber.nj.gov](mailto:njccic@cyber.nj.gov)

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## VIOLATIONS

A mitigation plan is required for:

- Three notices of violation within any rolling 12-month period for any reason or:
- Two notices of violation related to an exceedance of a MCL within a rolling 12-month period.

A mitigation plan must include:


- Implementation schedule
- A report by the Licensed Operator and Engineer
  - Including technical analysis explaining how the plan will prevent recurrence

**NOTE: DEP will notify a system if a Mitigation Plan is required to be submitted.**

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## CERTIFICATIONS

- Certification required:
  - Annually – starting in 2018, by **October 19, 2018**
  - By Corporate Officer (private), Executive Director (MUA), Mayor (public)
  - Stating compliance with:
    - All Federal and State drinking water regulations
    - WQAA – Sections 3, 5, and 7 (Asset Management Plan (not for year 2018))
- Certifications must be submitted to DEP and if applicable, BPU.
- The certification form is posted on the website and submission instructions were emailed on September 7, 2018.
- MUST BE SUBMITTED THROUGH THE PORTAL OR THEY WILL NOT COUNT.**
- Due on October 19, 2018.**
- DEP will still accept certification forms even if they are late.**



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## ASSET MANAGEMENT PLAN

Implementation of Plan required by April 19, 2019 must include:

- Water main replacement schedule (150 years or engineered analysis)
- Supply and treatment program designed to inspect, maintain, repair, and renew its infrastructure consistent with AWWA standards
- The highest priority projects identified in the plan, must have funds dedicated on an annual basis

Asset Management Plan Guidance

- The goal is to have evolving plans
- Water Loss Audits- Not explicitly stated in the Act, but DEP and Stakeholders noted they were a key component of Asset Management
- DEP has existing Asset Management Plan guidance at: <http://www.nj.gov/dep/assetmanagement/>



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## ASSET MANAGEMENT PLAN REPORT


Asset Management Plan Report must be submitted every 3 years (April 19, 2022) to Department and BPU/DCA as applicable.

The Report should:

- Contain Metrics
- Contain an Implementation Plan
- Contain a Progress Report
- Contain an Improvement Plan/Mitigation Plan
- Be completed in accordance with AWWA standards (ex. M28 rehabilitate water mains & M36 Water Loss)
- Be submitted via centralized portal – DEP, BPU & DCA




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Look for updates on the WQAA website:  
[http://www.nj.gov/dep/watersupply/g\\_reg-wqaa.html](http://www.nj.gov/dep/watersupply/g_reg-wqaa.html)


Questions?  
 Email: [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov)  
 Phone: 609-292-7219

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# DWSRF


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## STATE REVOLVING FUND (SRF) DWSRF LOAN ELIGIBILITY...

- DWSRF
  - **Public community water systems** - publicly and privately owned- including water commissions, water supply authorities, water districts
    - Federal and State owned facilities are not eligible (e.g. State Police, Corrections)
  - **Nonprofit noncommunity water systems** - Churches, schools, etc.
- CWSRF
  - **Publicly owned treatment works** (towns, boroughs, municipal utilities authorities, counties, other local government units, etc.)


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Drinking Water	DEP 0%*	L-Bank Market Rate**	Principal Forgiveness	Funding Cap per project
Base DWSRF – Public	50%	50%	0%	Not applicable
Base DWSRF – Investor-owned	25%	75%	0%	\$10 Million (remainder at L-Bank market rate)
Small System ("Nano") ≤ 10,000 customers	75%	25%	0%	\$1 million (remainder at 50/50 or 25/75)
"Nano-lite" <500 customers	25%	25%	50%	\$500,000 (in principal forgiveness)
Affordability (publicly-owned water systems only) <sup>1</sup>	75%	25%	0%	\$10 million
Lead Line Replacement <sup>2</sup>	10%	0%	90%	\$ 1 million per eligible municipality; remainder at base rate)
Planning and Design	100%	0%	0%	NA

<sup>1</sup> Systems serving municipalities with MHI ≤ 65% State MHI (2010 census).  
<sup>2</sup> Water systems that exceed the lead action level are eligible to receive the lead line replacement funding, in project priority order according to ranking assigned by the priority ranking system (see Appendix 3).


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## CHANGES PROPOSED TO DWSRF PROGRAM

- Funding priorities outlined in the Proposed FFY2018/SFY2019 IUP for DWSRF Program
- Funding drinking water projects in the project priority order, not readiness to proceed, based on ranking methodology listed in Proposed FFY2018/SFY2019 IUP for DWSRF Program
- Modifications to the loan rates for publicly-owned water systems, privately-owned water systems, small water systems and water systems that do not meet the affordability criteria
- Elimination of 100% principal forgiveness asset management set-aside program for small drinking water systems
- Proposed revisions can be found at <https://www.nj.gov/dep/dwa/pdf/njwb-iup-18.pdf>
- Close of comment period was October 24th

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## QUESTIONS ON DRINKING WATER SRF PROJECT LIST AND POLICIES?

Contact one of the following at (609) 292-5550

Sandy Krietzman  
 Linda Doughty  
 Kristin Tedesco  
 Nina Odunlami

Division of Water Supply and Geoscience Loans Webpage  
[https://www.state.nj.us/dep/watersupply/dws\\_loans.html](https://www.state.nj.us/dep/watersupply/dws_loans.html)

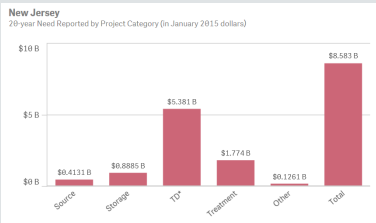
Division of Water Quality Municipal Finance and Construction Element Webpage  
[https://www.state.nj.us/dep/dwa/mface\\_njeifp.htm](https://www.state.nj.us/dep/dwa/mface_njeifp.htm)

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## DRINKING WATER INFRASTRUCTURE NEEDS SURVEY AND ASSESSMENT

**NEXT SURVEY SCHEDULED FOR 2019**

- The 1996 Safe Drinking Water Act Amendments mandated that EPA conduct an assessment of the nation's public water systems' infrastructure needs every four years and use the findings to allocate DWSRF capitalization grants to state



Category	Value (\$ B)
Source	\$0.4131 B
Storage	\$0.8885 B
D/I*	\$5.381 B
Treatment	\$1.774 B
Other	\$0.1261 B
<b>Total</b>	<b>\$8.583 B</b>

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# REVISED TOTAL COLIFORM RULE

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## PRIMACY

- Federal Revised Total Coliform Effective April 1<sup>st</sup>, 2016
- NJ adopted state specific requirements November 6<sup>th</sup>, 2017
- EPA granted primacy to NJDEP July 2018
  - NJDEP demonstrated the ability to enforce all aspects of the rule; NJDEP can run compliance and enforcement action for RTCR

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## RTCR SAMPLE SITING PLANS


NJ is continuing to review and call in RTCR Sampling Plans

Systems must collect total coliform samples at regular time intervals throughout the month

Exception: ground water systems serving <4,900 persons can collect all required samples on a single day if taken from different sites.

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## RTCR SAMPLE SITING PLANS



Systems must collect total coliform samples at sites which are representative of water throughout the distribution system. This means all required RTCR samples cannot be collected from only one portion of your system.


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## EC+ NOTIFICATION TABLE

System Type	BSDW/ Hotline	Health Dept.	Owner/ Superintendent	Licensed Operator	Client or Entity requesting analysis
CWS	X		X	X	
NTNC	X	X	X	X	
TNC	X	X	X		X

Notification phone calls should be made to the NJDEP at 609 292 5550 during business hours, or, if outside of normal business hours, to the Department's hotline at 1-877-WARNDEP (1-877-927-6337)

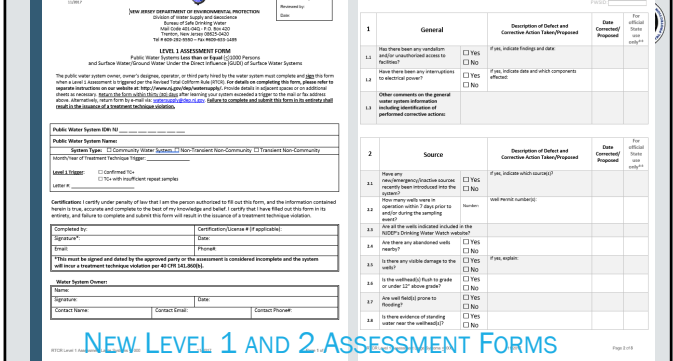
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## INVESTIGATION OF SANITARY DEFECTS

- When monitoring results show vulnerability to contamination, water systems must investigate and correct sanitary defects.
  - Level 1 assessment (basic, self-assessment)
  - Level 2 assessment (detailed)
- Level of assessment is based on the severity and frequency of potential contamination

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**NEW LEVEL 1 AND 2 ASSESSMENT FORMS**

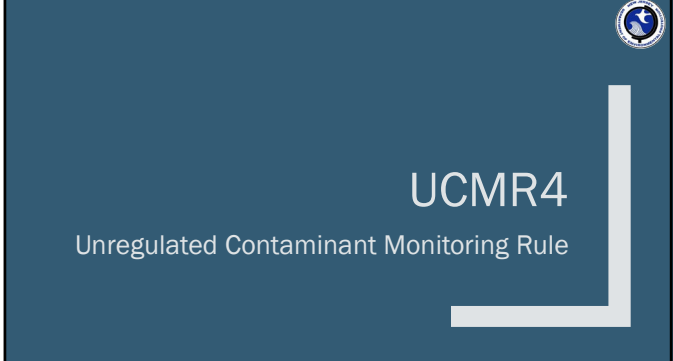
The document shows a 'LEVEL 1 ASSESSMENT FORM' for Public Water Systems. It includes sections for 'General' and 'SOURCE' with various checkboxes and a table for recording findings. The table has columns for 'Description of Defect and Corrective Action Taken/Proposed', 'Date Completed/Response', and 'For Official Use Only'. The 'General' section includes questions about whether there have been any violations and if there have been any interruptions to electrical power. The 'SOURCE' section includes questions about whether any new/renovated/abandoned sources have been introduced, whether any new or abandoned wells have been introduced, whether any new or abandoned tanks have been introduced, whether any new or abandoned lines have been introduced, whether any new or abandoned valves have been introduced, whether there is any visible damage to the wellhead, whether the wellhead is flush to grade or under 12" above grade, whether the wellhead is prone to flooding, and whether there is any evidence of standing water near the wellhead.

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## RTCR COMPLIANCE NOTES

- Level 2 Assessments:
  - Must be conducted **ONSITE** by an approved party
  - Appropriate party must complete the assessment (see table, NJAC 7:10-5.8(e))
  - Every question is required to be completed. Majority of the Level 2 are incomplete.
  - Third party submissions are not accepted
  - Clearly identify a corrective action plan
    - All proposed actions must be completed if approved by NJDEP
    - Disinfection per AWWA standards and NJ regs: must include documentation
  - One opportunity to address deficiencies within allocated timeframe, otherwise you will receive a violation
- Joint inspections with CEHAs
  - Deficiencies identified must be addressed

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## UCMR4

### Unregulated Contaminant Monitoring Rule

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## UCMR: WHAT IS IT?

### UNREGULATED CONTAMINANT MONITORING RULE

- U.S. Environmental Protection Agency
  - New list of up to **30 unregulated contaminants** every 5 years
  - Public water systems > 10,000 must monitor
  - 800 small systems nationwide
  - Few very small systems for micro
- To provide baseline occurrence data that the USEPA can combine with toxicological research to make decisions about potential future drinking water regulations.

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## UNREGULATED CONTAMINANT MONITORING RULE

- UCMR 1: 2001-2005
- UCMR 2: 2008-2010
- UCMR 3: 2013-2015
- UCMR4: 2018-2020

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### PROPOSED UCMR4 ANALYTES

- 10 cyanotoxins
- 2 metals
- 8 pesticides
- 1 pesticide manufacturing by-product
- 3 brominated haolacetic acid groups
- 3 alcohols
- 3 semivolatile chemicals

<https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>

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### UNREGULATED CONTAMINANT MONITORING RULE 4 (UCMR4)

- Three Types of Assessment Monitoring Schedules:
  - AM1 - Metals, pesticides, alcohols and semi volatile organic compounds (SVOCs);
  - AM2 - HAAs and Total Organic Carbon/Bromide (TOC/Br);
  - AM3 - Cyanotoxins

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### CYANOTOXIN MONITORING

- 111 community water systems monitoring their finished water
- One year of bi-weekly sampling for 4 consecutive months (totaling 8 sampling events)
  - Staggered to begin May, June or July of 2018, 2019, or 2020.
  - Breakdown of the number of systems sampling based on month and year:

	May	June	July	
2018	7	11	13	
2019	8	20	13	
2020	7	12	20	
Total	22	43	46	111

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### CYANOTOXIN RESULTS

Preliminary Results:  
Received 11 sampling results from 5 water systems

Total Microcystin	}	<b>All Results Non - Detect</b>
Cylindrospermopsin		
Anatoxin-a		

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### CYANOTOXIN REPORTING

- Potential for 180 days to report results
  - Labs have 120 days from sample collection
  - Systems have an additional 60 days to review and approve
- Cyanotoxins are acute parameters!
- Highly recommend expedited analysis and faster notification

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### UCMR4 REMINDERS

- SDWARS (not DWW)
- Cyanotoxin Schedules
- Raw/Influent GW points
- Linda Walsh, NJDEP [Linda.walsh@dep.nj.gov](mailto:Linda.walsh@dep.nj.gov)
- EPA: [UCMR4@glec.com](mailto:UCMR4@glec.com)  
[ucmr\\_sampling\\_coordinator@epa.gov](mailto:ucmr_sampling_coordinator@epa.gov)

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 Slide 38 has a light gray background with a dark blue vertical bar on the left and a white L-shaped graphic in the bottom right. The title "SOC WAIVERS" is in dark blue. The content is a bulleted list of updates. A small circular logo is in the top right corner.
 

### SOC WAIVERS

- Important Updates:
  - Required monitoring for 123-TCP (as discussed earlier - new NJ MCL)
    - While this compound is an SOC, it will not be included in SOC waivers; waiver eligibility may be considered in the future pending evaluation of data.
- Required monitoring for EDB and DBCP
  - These 2 analytes will no longer automatically be included in SOC waivers.
  - Concurrent with implementation timing for 123-TCP sampling, systems will be required to monitor for these 2 SOCs at the same time as 123-TCP (same analytical method used). Waiver eligibility may be considered in the future pending evaluation of data.
- 2017-2019 Compliance Period
  - NJDEP's SOC Screening Sampling Program is wrapping up (conducted each 3-yr compliance period as part of the waiver process)
  - Waivers will be issued following completion of the sampling program; letters expected to be sent before the end of this year.
  - Waiver status will also viewable on DWW once issued.

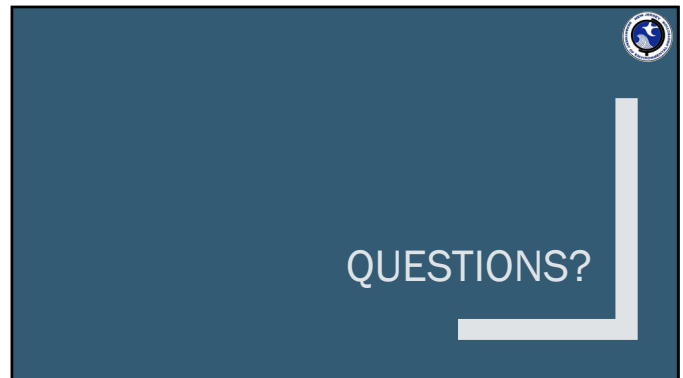
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### OTHER COMPLIANCE NOTES

- Nitrate precautionary Tier 1 PN required if a confirmation sample is collected within 24 hours but results will not be available within 72 hours of collection
- Tracking public notices and public education (PE) (lead) more closely and issuing violations
  - ALL Tier 1 PNs and PE MUST be approved by BWSE/WSA before distribution
  - Tier 2 PNs: Strongly recommend you pre-approve with BWSE/WSA
- Licensed operators are the responsible parties - held accountable for third party submissions
  - Required to be onsite for a sanitary survey and site inspections
- Remedial Measures Report Form (BWSE-40)
  - "1 year" return to compliance: includes completion of remedial actions and follow-up monitoring to support the remedial actions were effective (i.e., 2 quarters of data).

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