MCL DEVELOPMENT

NJ Safe Drinking Water Act N.J.A.C. 7:10
Private Well Testing Act N.J.A.C. 7:9E

Kristin Tedesco
Bureau of Safe Drinking Water
Division of Water Supply & Geoscience
March 12, 2019
PUBLIC PARTICIPATION IN MCL DEVELOPMENT PROCESS

**DWQI SUBCOMMITTEES:**
- Health Effects
- Testing
- Treatment

- Request for Presentations to Subcommittee (Chair)
- Post ‘Priority List’ on DEP website & request relevant information

**RECOMMENDATIONS:**
- Health-based MCL
- PQL
- Treatment Technology

- Meetings are Public
- Public Comment Period
- Minutes posted on Website

**FULL DWQI**
- Draft Recommendation Documents posted on website
- Web & LISTSERV Notice for Oral & Written Comments (prior to DWQI Vote)

**RECOMMENDED MCL**
- Detailed Technical Support Documents for recommended MCLs posted on Website

**DEP COMMISSIONER**

**STAKEHOLDER PROCESS**
- Publication in NJ Register
- Public Comment Period & DEP Response

**MCL RULE ADOPTION**

**KEY**

**GROUP DEVELOPING RECOMMENDATION OR RULE PROPOSAL**

**RECOMMENDATION OR RULE PROPOSAL**

**OPPORTUNITIES FOR PUBLIC REVIEW/INPUT**
New Jersey Rule Process

- Stakeholder process
- Draft rule proposal
- Proposal published in NJ Register
- Public hearings and comment period
- Adoption within one year
- Effective date noted upon publication
<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>STAGE IN PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFNA 1,2,3 - TCP</td>
<td>MCL of 13 ppt adopted and effective September 4, 2019</td>
</tr>
<tr>
<td>PFOA</td>
<td>DWQI recommended MCL of 14 ppt; Anticipated Spring 2019 Proposal</td>
</tr>
<tr>
<td>PFOS 1,4 dioxane</td>
<td>Under Review by DWQI</td>
</tr>
</tbody>
</table>
A NJ MCL for PFNA of 13 ppt was adopted on September 4, 2018

- Monitoring started in 1st quarter 2019 for community water systems <= 10,000 & non-transient non-community water systems.
- Monitoring starting in 1st quarter 2020 for community systems >10,000 and all surface water systems.

Stakeholder meetings:

- PFOA only; December 19, 2017
- PFOA/PFOS; January 18, 2019
- Discussed implementation of MCL for PFOA/PFOS and establishment of monitoring requirements for PWTA
PFOA/PFOS

- EPA Method 537 used to test for PFNA, PFOA and PFOS
- Water systems reporting data for PFNA are 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.
VOC MONITORING FRAMEWORK

- If three consecutive annual samples have no detections system can be placed on triennial monitoring
- Monitoring period in the three year cycle is determined by population and type of water system (N.J.A.C. 7:10-5.2(a)7)
Letters have been sent to all water systems confirming monitoring schedules

- 100% bulk purchase systems received initial letter but no monitoring schedule letter
### Monitoring Schedules

<table>
<thead>
<tr>
<th>Sample Point ID</th>
<th>Analyte Name</th>
<th>Schedule Starts</th>
<th>Sampling Year</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS</td>
<td>PH</td>
<td></td>
<td>2018</td>
<td>20 Sample(s)/Every 6M</td>
</tr>
<tr>
<td>001004</td>
<td>1,2,3-TRICHLOROPROPANE</td>
<td>07/01/2018</td>
<td>2018</td>
<td>1 Sample(s)/QT</td>
</tr>
<tr>
<td>001004</td>
<td>1,2-DIBROMO-3-CHLOROPROPANE</td>
<td>01/01/2020</td>
<td>2020</td>
<td>1 Sample(s)/QT</td>
</tr>
<tr>
<td>001004</td>
<td>CARBON, TOTAL</td>
<td>01/01/2002</td>
<td>2018</td>
<td>1 Sample(s)/Month</td>
</tr>
<tr>
<td>001004</td>
<td>ETHYLENE DIBROMIDE</td>
<td>01/01/2020</td>
<td>2020</td>
<td>1 Sample(s)/QT</td>
</tr>
<tr>
<td>001004</td>
<td>NITRATE</td>
<td>01/01/2003</td>
<td>2018</td>
<td>1 Sample(s)/YR</td>
</tr>
<tr>
<td>001004</td>
<td>PERFLUORONONANOIC ACID (PFNA)</td>
<td>01/01/2020</td>
<td>2020</td>
<td>1 Sample(s)/QT</td>
</tr>
<tr>
<td>001004</td>
<td>PH</td>
<td>07/01/2018</td>
<td>2018</td>
<td>1 Sample(s)/Every 2W</td>
</tr>
<tr>
<td>001004</td>
<td>TURBIDITY</td>
<td>01/01/2002</td>
<td>2018</td>
<td>1 Sample(s)/Month</td>
</tr>
</tbody>
</table>

- Monitoring Schedules are available on Drinking Water Watch
Lab MDL Guidelines

- Conduct an MDL study where they need to obtain an MDL of 2 ng/L or less
- Demonstrate they can meet the MRL of 5 or less performing a MRL Confirmation for a MRL of 5 ng/L
- Collect field blanks and analyze if the MRL of the PFNA is over the lab’s MRL of 5 ng/L
- Indicate a result is between the MRL and MDL by putting a “J” in the result comment field not the sample comment field
- An FAQ document specifically for certified labs is forthcoming
SAMPLING REMINDERS

- Store bottles in “clean” box or cooler
  - (e.g., do not place on seat of car, in clothing pocket, or other temporary storage)
- Wash hands with PFAS-free water and PFAS-free soap/detergent
- Wear clean, disposable nitrile gloves while filling and sealing the sample bottles
- Sample for PFAS and associated blanks first if collecting other samples
- Do not use “blue ice” packs in sample cooler
COMMON PRODUCTS TO AVOID DURING SAMPLING

- Packaged food and fast food
- Blue ice/chemical ice
- Aluminum foil
- Adhesives (e.g., sticky notes, labels, tape)
  - Wash hands after applying labels
- Waterproof paper and notebooks
- Permanent markers
- Cables and coated wires, windshield wipers
- Plumber/thread sealant tape and plumbing paste

- Water or stain resistant clothing, shoes, bags, and upholstery
- Rain gear
- Flame resistant clothing
- Coated Tyvek® suits

- Recommended to wear clothing that has been washed at least six times
- No fabric softener
IMPORTANT RESOURCES – TREATMENT FUNDING

- **Spill Funds Claims under the Spill Compensation and Control Act**
  
  NJDEP Site Remediation Program: [https://www.nj.gov/dep/srp/](https://www.nj.gov/dep/srp/)
  
  Fund Management Section at 609-984-2076 or
  
  Publicly Funded Response Element at 609-984-3074

- **New Jersey Drinking Water State Revolving Fund**
  
  Bureau of Safe Drinking Water at (609) 292-5550
IMPORTANT RESOURCES

- EPA Rule Actions: [https://www.epa.gov/pfas/epa-actions-address-pfas](https://www.epa.gov/pfas/epa-actions-address-pfas)
- Interstate Technology and Regulatory Committee Factsheets: [https://pfas-1.itrcweb.org/fact-sheets/](https://pfas-1.itrcweb.org/fact-sheets/)
Ground Water Quality Standards Development for PFOA, PFOS

Sandra Cohen, GWQS Rule Manager
Bureau of Environmental Analysis, Restoration and Standards
Division of Water Monitoring and Standards
Ground Water Quality Standards (GWQS) Overview

<table>
<thead>
<tr>
<th>Designated Use</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| • Class I: Ground Water of Special Ecological Significance  
  • Class I-PL (Pinelands Protection Area):  
  • Class I-A and Class I-PL (Pinelands Preservation Area): | • “Background water quality”  
  • “Natural quality” |
| Class II: Ground Water for Potable Water Supply     | • Specific  
  • Interim Specific  
  • Interim Generic |  
| Class III: Ground Water for Uses Other Than Potable Water Supply | Site-specific (implementing program) |
Class II GWQS (Specific and Interim Specific)

- **Criterion:**
  1. The health-based level for a promulgated MCL; **OR**
  2. Derived from best available toxicological information using formulas for carcinogens or non-carcinogens at N.J.A.C. 7:9C-1.7(c)4

- **Practical quantitation level (PQL) =** lowest concentration reliably achieved during routine laboratory operations
  - Derived from Method Detection Limit (MDL) data x 5
  - Derived from laboratory performance data that has been evaluated by the Department using Sanders, P. et al. (1996)
Draft interim specific ground water quality criteria (ISGWQC) and draft interim PQLs (IPQLs) for PFOA and PFOS

- Published by DSR on January 17, 2019 along with technical support documents on DSR’s website
- Public comment period closed 2/19/2019

https://www.nj.gov/dep/dsr/ISGWQC_Public_Comment_PFOS_PFOA.html
Interim Specific GWQS for PFOA, PFOS (cont’d)

- Draft Interim Specific Criteria derived using formula for non-carcinogens; rounded to one significant figure
- Draft Interim PQL derived from laboratory performance data using Sanders, P. et al.; rounded to one significant figure

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Draft ISGWQC</th>
<th>Draft IPQL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFOA</td>
<td>0.01 µg/L = 10 ng/L</td>
<td>0.006 µg/L = 6 ng/L</td>
</tr>
<tr>
<td>PFOS</td>
<td>0.01 µg/L = 10 ng/L</td>
<td>0.004 µg/L = 4 ng/L</td>
</tr>
</tbody>
</table>
Interim Specific GWQS for PFOA, PFOS (cont’d)

- Interim specific ground water quality standards
  - Higher of interim specific criterion and interim PQL
  - Become established when posted on the DWMS website at https://www.state.nj.us/dep/wms/bears/gwqs.htm.
  - Serve as minimum remediation standards
  - Replaced with specific GWQS through rulemaking “as soon as reasonably possible.”
PFOA and PFOS Stakeholder Meeting: Maximum Contaminant Levels and Ground Water Quality Standards

Friday, January 18, 2019
10:00 AM - 03:00 PM

Categories:
Ground Water Quality Standards
Transformation

Location:
NJDEP-Public Hearing Room
401 East State St.
Trenton, NJ 08625
USA

Website: Click to Visit

Event Contact Info
Email: watersupply@dep.nj.gov
Phone: 609-292-5550


Stakeholder Meeting
PFOA & PFOS
New MCLs and GWQS and Related Rules
Implementation Through Regulatory Programs

New Jersey Department of Environmental Protection
Specific GWQS for PFOA, PFOS based on DWQI-recommended MCL

- Specific criteria = health-based level of MCL
- PQL = Derived from laboratory performance data using Sanders, P. et al.; rounded to one significant figure
- Specific GWQS = higher of criterion and PQL

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Criterion</th>
<th>PQL</th>
<th>Constituent Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFOA</td>
<td>0.014 µg/L (14 ng/L)</td>
<td>0.006 µg/L (6 ng/L)</td>
<td>0.014 µg/L (14 ng/L)</td>
</tr>
<tr>
<td>PFOS</td>
<td>0.013 µg/L (13 ng/L)</td>
<td>0.004 µg/L (4.2 ng/L)</td>
<td>0.013 µg/L (13 ng/L)</td>
</tr>
</tbody>
</table>
PFOA and PFOS – Next Steps

1. Consider Stakeholder Feedback
2. Proposal published in NJ Register
3. Public hearings and comment period
4. Adoption within one year
5. Effective date noted upon publication
ADDITIONAL NOTE: 1,4-DIOXANE

- DWQI will review basis of NJDEP GWQS including Health-based Criterion & PQL
- Call for Information – January 20\textsuperscript{th}, 2019
- Evaluate additional information
  - More recent studies
  - Submitted in response to Call for Information
- Need input and data on treatment!

ADDITIONAL NOTE: 1,4-DIOXANE
QUESTIONS?

watersupply@dep.nj.gov