Drinking Water and Groundwater Study Group Meeting

Fitchburg
November 2, 2017
Status of Rock County Groundwater and Nitrate Work Group

Rick Wietersen
Environmental Health Director for the Rock County Public Health Department
High Capacity Well Update

Adam Freihoefer
Water Use Section Chief
Replacement, reconstruction, and transfer of high capacity wells

Model and evaluate hydrology of specified water bodies to determine whether existing and potential groundwater withdrawals are causing significant impacts to water bodies

High capacity wells constructed, replaced, reconstructed, or transferred within the study area after June 3, 2017, must submit metered water use to DNR

Lake associations allowed to obtain a high capacity well to assist in study of lake within study area
2017 Act 10 Update

Guidance for the reconstruction, replacement, & transfer of high capacity wells

Update DNR’s high capacity well website

Begin project scope and timeline for Act 10 study
High capacity wells

A high capacity well is a well that has the capacity to withdraw more than 100,000 gallons per day, or a well that, together with all other wells on the same property, has a capacity of more than 100,000 gallons per day. Residential wells and fire protection wells are excluded from the definition of a high capacity well, and their pumping capacities are not included in the calculation of a property's well capacity.

In accordance with Sections NR 812.09(4)(a) & (b), Wis. Adm. Code [exit DNR], prior department approval is necessary for the construction or operation of a high capacity well system, school well or wastewater treatment plant well.
Central Sands Lakes Study

Evaluate and model hydrology of Pleasant Lake, Plainfield Lake, Long Lake “to determine whether existing and potential groundwater withdrawals are causing or are likely to cause a significant reduction of the lake’s water level below its average seasonal levels”
Central Sands Lakes Study

Data Collection

- Groundwater Flow Modeling
- Resource Evaluation for Significance

Field Study

If significant impacts are identified and special measures required...

- Study findings, identify potential special measures, and economic impact analysis
- Public Hearing
- Reports to Legislature
Central Sands Lakes Study

Key Dates:
- June 3, 2017 - Act 10 becomes law
- November 2017 - Scope of work is released
- June 3, 2021 - Deadline for the DNR to submit deliverables to Legislature

- December 2017: Scope of Work Completed
- June 2018: Modeling and Evaluation
- Potential Field Study (2018/2019)
- Spring 2021: Public Hearing on DNR Decision Report

- Periodic Updates via Teleconferences, Meetings, and Webpage
- 30-day Public Comment Period
- Response to Comments
- Report to Legislature
Contact Information

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(608) 267-7638
Break
Beyond RTCR Assessment Requirements: Identifying Microbial Contaminants to Suggest Corrective Actions

Alyssa Beck and Sharon Kluender
Wisconsin State Laboratory of Hygiene
Program Update:
Cross Connection Control Workgroup

Eileen Pierce
Drinking Water and Groundwater Field Supervisor
Goal

Achieve consistent implementation of cross connection control program requirements across Wisconsin, s. NR 810.15, Wis. Adm. Code.

Optimize efficient use of resources by DNR and the regulated community.
Feedback from Third Party Inspection Agent:

*DNR is inconsistent in determining which commercial properties are of “similar or lesser risk” to residential properties. This affects how often surveys are required; every 2 years or every 10 years.*

s. NR 810.15(1)(c), Wis. Adm. Code.
Scope

- Update DNR Operations Handbook
- Update Annual Report Form, if necessary. Explore electronic reporting.
- Develop templates for DNR use.
- Develop training for DNR.
Workgroup

• Include internal and external stakeholders.
• Provide regular updates to the DG Study Group
• Post any proposed changes or new guidance for public review and comment.
How you can help ...

• Suggest external participants
  – Municipal Water System Representative
  – Third Party Inspection Agent
  – Large Industrial/Commercial Representative (High Risk)
  – Licensed Plumber Representative
  – Other?

• Monitor progress

• Provide Input
Contact Information

Eileen Pierce

eileen.pierce@wisconsin.gov

(608) 275-3311
Program Update:
Lead & Copper Monitoring Updates

Adam DeWeese, Public Water Supply Section Chief
and
Cathy Wunderlich, Public Water Engineering Section Chief
Number of Active Sites

NR 809.547(3), Wis. Adm. Code

<table>
<thead>
<tr>
<th>Public Water System Size (# People Served)</th>
<th># of sites (Standard Monitoring)</th>
<th># of sites (Reduced Monitoring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;100,000</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>10,001–100,000</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>3,301 to 10,000</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>501 to 3,300</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>101 to 500</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>≤ 100</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Site Selection

**Tier 1**
- Single Family Home
  - Constructed in 1983 or 1984 and has copper plumbing with lead solder
  - Lead plumbing
  - Lead service or lead gooseneck

**Tier 2**
- Building with multiple users (multi-family building or business)
  - Constructed in 1983 or 1984 and has copper plumbing with lead solder
  - Lead plumbing
  - Lead service or lead gooseneck

**Tier 3**
- Single Family Home
  - Constructed prior to 1983 and has copper plumbing with lead solder

**Exceptional**
- Doesn’t meet Tier 1-3 criteria
Monitoring Site Plans and Revisions

State of Wisconsin
Department of Natural Resources
PO Box 7021, Madison WI 53707-7021
dnr.wi.gov

Notice: Pursuant to s. NR 809.547 Wis. Adm. Code, each water supplier or public water system (System) shall complete a materials evaluation of their distribution system in order to identify a pool of targeted sampling sites that meet the requirements of the aforementioned code. The Department of Natural Resources (DNR) is providing this form for proper documentation when changes to the list of targeted sampling sites or re-evaluating the pool of targeted sampling sites is being requested. This includes the addition of new monitoring sites, inactivation of existing monitoring sites, changes in service line or plumbing materials, monitoring faucet, tier designation, or address. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin’s Open Records Law (ss. 19.31-19.39, Wis. Stats.). Citations refer to Wisconsin Administrative Code.

SECTION A – MONITORING SITE PLAN REQUIREMENTS

In accordance with 809.547(2)(d), Systems monitoring for lead and copper must collect samples from the same sampling sites from which they previously collected samples. Given this requirement, Systems may only have a limited number of Active Sites in their Monitoring Site Plan (up to 1.5 times the lead/copper sample requirement). For example: if a system must collect 30 lead/copper samples, only 45 Active Sites can be maintained in the Monitoring Site Plan. The 15 additional sites serve as a back-up pool for monitoring in the event that one of the other Active Sites cannot be accessed. Systems may have an unlimited number of Inactive Sites in their Monitoring Site Plan available for back-up use. All Active and Inactive sites must meet Lead-Copper Rule Sample Site Criteria. If a site no longer meets LCR Sample Site Criteria, it will be permanently ended.

Please Note: Systems must request and gain approval from their DNR Representative to activate an Inactive Site prior to conducting any sampling at that location.

**Lead and Copper Rule Sample Site Criteria:**

<table>
<thead>
<tr>
<th>Tier 1 Site:</th>
<th>Tier 2 Site: Multi-family Structures or other buildings with:</th>
<th>Tier 3 Site:</th>
<th>Exceptional Site: Sites where plumbing materials are representative of water system:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Structures with:</td>
<td>i) Full or partial lead service lines; or ii) Lead gooseneck; or iii) Lead plumbing within the home; or iv) Copper plumbing with lead solder; constructed between Jan 1983 and Sept 1984</td>
<td>i) Copper Plumbing with lead solder; constructed before January 1983</td>
<td>i) Copper plumbing without lead solder; constructed after 1984</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ii) Tier 1, 2, or 3 sites with whole-house water softeners</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iii) Other, non-metallic plumbing materials (PVC, galvanized)</td>
</tr>
</tbody>
</table>

SECTION B – MONITORING SITE PLAN CHANGE REQUESTS

List monitoring site change requests in the table below. Include all of the details associated with building type/age, sampling location, and service line and plumbing materials using the change codes identified below. See Example Entry.

<table>
<thead>
<tr>
<th>Change Code</th>
<th>Tier Designation</th>
<th>Year Built</th>
<th>Cold Water Faucet</th>
<th>Building Type</th>
<th>Service Line Material - Street Side</th>
<th>Service Line Material - Customer Side</th>
<th>Building/Premise Plumbing</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>T1 = Tier 1</td>
<td></td>
<td>At a minimum, specify one of the following:</td>
<td>SF = Single Family Structure (Residence)</td>
<td>L = Lead Pipe</td>
<td>L = Lead pipe</td>
<td></td>
</tr>
<tr>
<td>AA</td>
<td>T2 = Tier 2</td>
<td></td>
<td>= 1983</td>
<td>MF = Multi-Family Structure*</td>
<td>C = Copper Pipe</td>
<td>C = Copper Pipe without Lead Solder</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>T3 = Tier 3</td>
<td></td>
<td>$ or 1983/1984</td>
<td>O = Other, describe*</td>
<td>GN = Lead Gooseneck</td>
<td>GN = Galvanized</td>
<td></td>
</tr>
<tr>
<td>Al</td>
<td>TE = Exceptional</td>
<td></td>
<td>&gt; 1984</td>
<td>P = Plastic, describe*</td>
<td>G = Galvanized</td>
<td>G = Galvanized</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td>O = Other, describe</td>
<td>P = Plastic</td>
<td>P = Plastic</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O = Other, describe</td>
<td>O = Other, describe</td>
<td></td>
</tr>
</tbody>
</table>
**Triggered Action Level Exceedance**

1. **PWS completes PBCU monitoring requirement**
2. **DWS calculates 90\textsuperscript{th} percentile**
   - **PWS has ALE**
3. **PWS collects additional compliance sampling beyond minimum requirement**
4. **Dept. in accordance with 809.547 (5) must accept additional compliance sample s**
   - **DWS re-calcs 90\textsuperscript{th} percentile - reduces to value < ALE**

**809.547 (5)** Additional monitoring by water suppliers. The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the water supplier and the department in making any determinations, i.e., calculating the 90\textsuperscript{th} percentile lead or copper level, under this subchapter.

**333Letter vs. Intent**

**Dept. in accordance with 809.547 (4)(d)2. Returns system to reduced annual monitoring until further notice**

**Process includes:**
1. **DNR rep phone call to system – notification that sampling process did not meet that which is most protective of public health – co support**
2. **Letter from dept notifying PWS of return to reduced annual monitoring**

**809.547 (4)(d)2. .....the department shall review, and where appropriate, revise its determination when the water supplier submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.**
Contact Information

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Cathy Wunderlich
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Wrap – up and adjourn
Adjourn

Next Meeting Date:
January 31, 2018
GEF 2, State Natural Resources Building,
Madison, 9:30a.m. – 12:30 p.m.

Meeting minutes will be posted on the Drinking Water & Groundwater Study Group website